



Better Evidence, Better Choices, Better Schools

State Supports for Evidence-Based School
Improvement and the Every Student Succeeds Act

By Steve Fleischman, Caitlin Scott, and Scott Sargrad August 2016

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Part of a Series on Implementation of the Every Student Succeeds Act

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Introduction and summary

The Every Student Succeeds Act, or ESSA, renews America’s national commitment to public education and to the belief that all children and youth in the United States deserve a high-quality education regardless of their background or circumstances. Signed into law in December 2015, ESSA offers state education agencies significant opportunities to use evidence to support the improvement of schools and ensure better outcomes for all students.

Much will change in practice and policy as ESSA replaces the law, regulations, and guidance established through the 2001 No Child Left Behind Act, or NCLB,¹ but two elements of the new legislation stand out: the shift away from federal mandates toward greater state and local authority and the emphasis on evidence-based school improvement practices. This report addresses this second element by clarifying the definition of “evidence-based” that ESSA uses, distinguishing it from the “scientifically based research”² provisions of NCLB and providing a framework for how state education agencies can maximize collaborative efforts to implement evidence-based school improvement practices.

Briefly, the evidence-based approach encourages state and district leaders to consider multiple tiers of evidence and examine the strength of the evidence in making decisions. On the other hand, scientifically based research sets a very specific, narrow standard for acceptable evidence. These two terms will be examined in greater detail later in the report.

Most of the early media attention given to ESSA has focused on its clear attempt to address the criticisms leveled at NCLB, including perceived federal overreach.³ Unlike NCLB, ESSA does not mandate particular school improvement activities. Furthermore, there is no separate so-called school improvement funding stream within Title I. Instead, states must now set aside 7 percent of their Title I funds—or the amount the state previously received under Sections 1003(a) and 1003(g) of NCLB, whichever is greater—to support school improvement, and they have significant flexibility in terms of how these dollars are used.⁴ States may also set aside 3 percent of Title I funds for direct student services, such as tutoring and credit recovery.

These provisions offer new opportunities and new challenges for states. States must now plan the use of Title I funds in a way that balances an ongoing commitment to a statewide system of improvement for low-performing schools, including high schools, with other identified needs. Unlike previous versions of the law, ESSA does not specify the school improvement strategies that a state must pursue in support of district, or local education agency, efforts to improve low-performing schools. However, it does require states to approve and monitor local education agency plans for these schools to ensure that they include evidence-based approaches.

Veteran educators and policymakers will recall that NCLB introduced the requirement that improvement policy and practice should be grounded in “scientifically based research.” This standard brought both advances and frustration to the field. It seemed over the past decade that decision-makers were constantly hearing from researchers and experts that almost nothing works, while at the same time product and service providers were all saying that their offerings worked and were supported by scientifically based research. It was hard for policymakers and educators to make the best choices in this environment.

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?

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.

Authors' note: To assist state education agencies and other leaders, this report provides early information to clarify the definition of "evidence based" in ESSA, distinguishing it from the scientifically based research provisions of NCLB; discusses the promise of evidence-based school improvement; and suggests ways that state education agencies can maximize collaborative efforts to implement evidenced-based practices.

While the term "evidence based" is used throughout ESSA, this report focuses on the use of this concept in relation to state and district school improvement activities. Readers who are interested in the latest and most authoritative ESSA guidance from the U.S. Department of Education should consult the department's website.⁵

This report does not attempt to provide a detailed list of conceptual and methodological issues related to the implementation of ESSA evidence tiers. Others, such as Rebecca Herman and her colleagues at the RAND Corporation, have raised some of these early questions and issues.⁶

Such issues will have to be addressed by the U.S. Department of Education and state education agencies as provisions in the law are translated into regulations and guidance. It is too early to predict what this guidance will say, but it is not too early to think about identifying important considerations for state education agencies as they work collaboratively with local districts to implement evidence-based policy and practice. This report identifies some of these considerations.

Evidence-based approaches as defined in the Every Student Succeeds Act

To implement ESSA effectively, education leaders in state education agencies and other supporting organizations need a firm understanding of the new legislation and the specific language it uses. The law establishes three levels of evidence to use when choosing an approach to school improvement. These evidence levels are commonly referred to as Tier I, for “strong evidence”; Tier II, for “moderate evidence”; and Tier III, for “promising evidence.”⁷ The creation of these tiers implies that—all things being equal—districts and schools should use improvement approaches with the strongest level of evidence. As discussed later in this report, the level of evidence is one of several important factors that state education agencies must help districts and schools weigh as they implement the new law.

The law also mentions a fourth tier, based on providing what is termed a “rationale” regarding the merit of an approach and requiring a commitment to “examine”—that is to say, evaluate—the effects of the approach.⁸ However, approaches in this fourth tier cannot be used for the purpose of school improvement supported by Title I school improvement funds under Section 1003(a). Districts and schools can use strategies in this fourth tier for other school improvement efforts.

Excerpt from ESSA regarding evidence-based approaches

Section 8101 (21) EVIDENCE-BASED—

(A) IN GENERAL—Except as provided in subparagraph (B), the term “evidence-based,” when used with respect to a State, local educational agency, or school activity, 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.

(B) DEFINITION FOR SPECIFIC ACTIVITIES FUNDED UNDER THIS ACT—When used with respect to interventions or improvement activities or strategies funded under section 1003, the term “evidence-based” means a State, local educational agency, or school activity, strategy, or intervention that meets the requirements of subclause (I), (II), or (III) of subparagraph (A)(i).

Source: *Every Student Succeeds Act*, Public Law 95, 114th Cong. 1st sess. (December 10, 2015), pp. 289–290, available at <https://www.congress.gov/bill/114th-congress/senate-bill/1177/text>.

Evidence-based vs. scientifically based research

Before the advent of evidence-based approaches, the No Child Left Behind Act required that scientifically based research serve as the standard to determine which approaches could be used for school improvement. At that time, the concept of scientifically based research represented a significant advancement in public policy. It put evidence use at the center of the school improvement process.

However, the approach offered a fairly narrow set of criteria for what evidence should count in school improvement decisions. In principle, it 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 scientifically based requirement for RCTs and QEDs may prove to be similar to Tier I and Tier II requirements under ESSA once the Department of Education issues guidance.

In practice, the scientifically based research approach created a number of difficulties, including the fact that few commonly implemented school improvement approaches had undergone RCTs or eligible QEDs. In addition, many school improvement approaches that were examined through studies that met the scientifically based research standards were not found to have consistent positive effects in terms of student outcomes. Particularly, in the early years of scientifically based research, effective school improvement programs that met the requirements were in short supply. Although the past decade has seen an increase in the number of approaches studied using RCT and QED methodologies—and more programs have been found with positive effects—the scientifically based research standard proved challenging. In addition to limiting the types of studies that could provide evidence, it perhaps encouraged decision-makers to focus too narrowly on research design issues.

In effect, the scientifically based research standard created a so-called thumbs-up/thumbs-down system, with the main question being: Will the evidence count or won't it? In contrast, ESSA's evidence-based language suggests a different

approach that broadens the range of acceptable evidence for improving low-performing schools and effectively asks: On a scale from 0 to 3, how strong is the evidence? 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.

When considering what approach to take with federal school improvement funding, decision-makers now have the flexibility to consider any of the strategies that meet at least Tier III standards. This broader array of choices may help them find approaches that are best suited to local needs and improvement plans. However, with this greater flexibility comes a greater responsibility to make choices that reflect local needs and yield improved results. In essence, state and local education agencies must use their own judgment regarding available evidence across the three tiers. Coupled with ESSA's greater latitude for state and local education agencies, the demands on states and districts to support and implement evidence-based school improvement have increased.

The benefits of an evidence-based approach to school improvement

If well-implemented, the Every Student Succeeds Act has the potential to bring all levels of the U.S. education system together under the banner of evidence-based approaches that work for children and youth—from policy leaders in state houses to classroom teachers. Researchers Kara Finnigan and Alan Daly 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. Improving education will require that policymakers and educators alike reject whims, fads, and promotional claims in favor of reliable evidence. The provisions of ESSA offer the opportunity for educators to implement school improvement that is informed by a shared understanding of evidence and its appropriate application. Over time, particularly if coupled with a robust evaluation effort, evidence-based school reform offers the opportunity for continuous improvement in education.

Using evidence to meet the needs of all students—particularly those who have been traditionally underserved—is both a moral imperative and a practical one. 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. School improvement expert Rebecca Herman and her colleagues make this point when they write:

Investments in education must produce results. Students' efforts, teachers' time, and scarce financial resources are more likely to be well spent when education-improvement activities are selected because there is evidence that they are effective. To select education-improvement activities without considering their prior, proven impact may be seen as an irresponsible use of limited resources.

CAP report provides an example of how evidence can support school improvement

In March 2016, CAP issued a report that identified strategies to improve low-performing schools under ESSA.¹² The report—“Strategies to Improve Low-Performing Schools Under the Every Student Succeeds Act: How 3 Districts Found Success Using Evidence-Based Practices”—examined the success of schools in three districts implementing a set of five policies that researchers Will Dobbie and Roland Fryer identified: frequent teacher feedback; data-driven instruction; high-dosage tutoring; increased instructional time; and a relentless focus on academic achievement. The researchers found that this set of policies “explains almost half of the variation in school effectiveness” in charter schools they studied.¹³ The authors note, “While there are important caveats to the conclusion that these five policies can explain significant variation in school effectiveness, our results suggest a model of schooling that may have general application.”¹⁴

The CAP report focused on a subset of seven improving public schools across three districts that used the five policies identified by Dobbie and Fryer in their high-performing charter school study. Through interviews with key stakeholders in each district, the authors tried to identify what it takes to implement these policies effectively. The strategies identified were:

- Allot a sufficient amount of planning time
- Implement school-level budgeting and strategically reallocate funds based on student needs
- Aggressively recruit, hire, and train innovative school leaders and teachers
- Obtain stakeholder investment via data and word-of-mouth

This suggestive study may help district and school leaders use these evidence-based practices successfully to improve outcomes in their own schools.

Recommendations

Implementation of the evidence-based provisions of the Every Student Succeeds Act will be a complex and challenging undertaking. If done right, effective policy implementation will help yield significant and sustained school improvement and better outcomes for students.

Many of the implementation considerations will be technical in nature, such as providing greater clarity regarding the types of evidence that do or do not meet Tier I, Tier II, or Tier III standards; determining whether every aspect of a school improvement approach or only a subset of elements need to be evidence based; and deciding which outcomes are eligible for review in determining whether an approach is evidence based. These questions will be answered in due course and are beyond the scope of this report. However, suggestions about collaborative implementation may be timely and can help state education agencies work in partnership with local education agencies and the Department of Education to begin implementing evidence-based school improvement strategies.

The following eight recommendations are based 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. The recommendations encourage state education agencies to work with national and local governmental and community agencies to act as a single, cohesive system that promotes clarity and coordination to achieve the promise of evidence-based school improvement.

1. Define roles in the policy implementation process and create a theory of change

State education agencies should start work on a theory of change that clearly specifies the roles of leaders at each level in the system and the steps each must take to make this policy initiative work. While each institutional level—national, state,

and local—should clearly define what role it will play in the process, state education agencies are positioned at the center of the system and are best equipped to articulate connections between their role and the federal role, as well as between their role and that of the local education agency. Many state education agency leaders already have experience creating theories of change and may have created these as part of their statewide systems of support prior to ESSA. Others may be new to creating theories of change. For those new to this work, documents from The Aspen Institute, Organizational Research Services, and ActKnowledge may prove useful.

Although the implementation of evidence-based ESSA provisions is new, many state education agency administrators have prior experience in rolling out complex initiatives, including those that use evidence to drive the improvement process. To foster coordinated and effective action, veteran administrators at the state level should mobilize to help identify and apply the positive and cautionary lessons learned in the implementation of prior federal programs and initiatives such as Comprehensive School Reform, Reading First, supplemental educational services, the Investing in Innovation Fund, Race to the Top, and School Improvement Grants. The challenges and successes that each of these initiatives experienced—for example, in establishing partnerships with external service providers or in identifying who would serve as the authoritative source to answer questions as they emerged—can be applied to this policy implementation challenge.

2. Support the use of evidence clearinghouses to identify promising approaches, rather than creating new state-approved lists

The goal of ESSA provisions should be to encourage local education agencies to make judicious choices among evidence-based options and then to implement these approaches well. ESSA does not ask state education agencies to produce lists of approved programs. The work of reviewing evidence-based approaches has already been done by a number of clearinghouses. Providing state education agency-selected lists of approved or preferred approaches may serve to narrow local education agency choices prematurely or to promote a compliance mentality in which making a good match receives insufficient attention and the goal becomes merely to check the box that indicates that the selection process has been completed. Rather, state education agencies should focus on developing clear guidance and useful guides, pointing to existing evidence clearinghouses, and offering supports to encourage a reflective decision-making process by local education agencies.

While state education agencies can promote positive decision-making among local education agencies, they are not in the position to define the terms in ESSA—such as the four tiers of evidence—or to issue official guidance about ESSA. Instead, the Department of Education is best suited to address many of the highly technical questions that have been raised regarding evidence-based elements of the law, which require a consistent answer across all states. Examples of these concepts can be found in the previously mentioned RAND Corporation report and include: What types of evidence qualify for Tiers III and IV? Can rigorous studies with some flaws be included? Can a body of evidence, rather than individual findings, be considered?

Even after these questions are answered, however, state education agencies will need to direct local education agencies to guidance and support. Fortunately, state and local education agency decision-makers are not left on their own to look for evidence-based approaches. In the nearly 15 years since the Institute of Education Sciences created the What Works Clearinghouse, the amount of evidence regarding the effectiveness of education approaches has grown significantly. Sources that offer evidence reviews that educators can consult include:

- **What Works Clearinghouse.** This is a first stop for many education decision-makers seeking evidence of program effectiveness. Funded by the Department of Education’s Institute of Education Sciences, the What Works Clearinghouse website offers more than 700 publications and catalogs and more than 11,000 reviewed studies in its database.
- **Results First Clearinghouse Database.** This website was created by Results First, a project funded by The Pew Charitable Trusts and the John D. and Catherine T. MacArthur Foundation to identify evidence-based programs in education and other related fields. It provides links to eight clearinghouses that review a total of nearly 1,300 programs for their effectiveness.
- **Best Evidence Encyclopedia.** Sponsored by Johns Hopkins University School of Education’s Center for Data-Driven Reform in Education, this “encyclopedia” offers access to research syntheses and program reviews of more than 900 programs and approaches in the areas of math, reading, science, early childhood, and whole-school improvement.

These sources for reviews of evidence-based approaches allow users to search by topic areas such as literacy, math, and science (in Best Evidence Encyclopedia); special populations (in Results First Clearinghouse Database); and English language learners (in What Works Clearinghouse). These searches produce a list of approaches tailored to each topic area and provide reviews for considering the quality of these approaches. Using this type of search to identify evidence-based approaches engages local education agencies actively in the decision-making process.

3. Encourage robust decision-making processes

Making a good match between available options and school or district needs is perhaps the most critical element in achieving good results from an evidence-based improvement approach. Writing nearly two decades ago, Sam Stringfield, school improvement researcher, pointed out that, “The key is to approach the choice of a school reform [approach] as an important and complicated consumer decision.” Therefore, it is not enough for schools or districts to ask: Which of the school improvement approaches we are considering has the strongest evidence? By itself, this question is much too simplistic and may make it more difficult to achieve the district’s desired outcomes. Rather, districts and schools should consider asking: Of the evidence-based approaches available to us, which one is most likely to meet our needs and align with our improvement plan?

Indeed, there are many factors beyond research evidence that influence a school improvement decision. (see Figure 1) Every choice in school improvement is likely to be influenced by multiple factors, including the preferences and values of the stakeholders, such as school board members, parents, and community members; organizational contexts, such as the size and capacity of a school district, regulations, and labor agreements; the professional experiences of district educators and administrators; and a host of other factors, including political considerations.

The goal when making a choice should be to weigh appropriately the evidence for various approaches within the local context in which the decision is made, based on a robust needs assessment and with consultation from stakeholders and practitioners. If multiple evidence-based approaches are an excellent fit, then the comparative strength of the evidence could determine the choice. But to focus too narrowly on a decision based only on the strength of evidence is to court failure in the acceptance and implementation of even the best program or practice. Instead, state education agencies should urge leaders to convene decision-makers and address each of the four circles in Figure 1 by answering the related questions, weighing the input, and finding an evidence-based intervention that fits best.

FIGURE 1
Factors that influence decision-making in education



4. Help ensure high-quality services from improvement providers

Services from curriculum and intervention providers can vary over time. For example, participation in a rigorous research study could raise the stakes for a provider to deliver results, while a later rollout might not exert the same pressure. Given the potential for fluctuation, below are a few things that state and local education decision-makers should keep in mind as they work with potential providers of evidence-based school improvement strategies:

- **Make sure the provider addresses local needs.** Throughout the process continually ask: How will the curriculum and/or intervention serve our school, district, and state goals? How will the provider make sure everything works well in our context? Make sure that the evidence-based approach chosen is well-aligned to the improvement goals that have been developed based on a data-driven planning process. Before choosing any school improvement approach, ask the provider to be clear about what actions need to occur at the state, district, or school level in order to achieve desired outcomes. The connection between the approach being considered and the desired outcomes must be explicit, coherent, and clear.

- **Exercise consumer power.** As decision-makers, state, district, and school leaders can demand to know more about an approach than is publicly advertised. Remind leaders that they should ask as many questions as necessary to be confident that they are choosing the right provider for their schools. This includes asking for references, recent financial audits, and management and staff capacity. Decision-makers should treat the inability or unwillingness of a provider to answer in-depth questions as a red flag.
- **Be appropriately skeptical.** Even proponents of the most well-meaning evidence-based approaches will have a tendency to provide the so-called best case picture of their evidence and how the approach operates. Decision-makers must make sure the evidence is convincing. And after adoption, all those involved in implementation should be open to adjusting their actions as the effort rolls out. See recommendation 8 below for additional suggestions related to continuous improvement.

In many states, state education agencies will make decisions about choosing providers and will therefore be the entity to ask questions and demand high-quality services. In other states, districts will take the lead on making these choices. When districts lead, state education agencies have a strong role in empowering districts to ask for the best possible services.

5. Promote and provide frequent, accurate, and timely communication

Even the most well-planned educational improvement initiatives can founder under the weight of inaccurate, inadequate, or incoherent communication or through the lack of appropriate engagement of the stakeholders who will be involved in the reforms. It is a long communications-and-action chain from the federal level to individual schools where the changes actually take place.⁹ State education agencies are at the center of this chain of communication and, therefore, have an essential role in ensuring high-quality and timely information sharing.

In particular, state education agencies should engage local education agencies early and often in the design of any statewide evidence-based school improvement initiative. The importance of this effort is highlighted by ongoing research on how individuals at the school and district levels understand the implementation of several state-level education policies. Researcher Jal Mehta recently wrote about his joint research with Renee Rinehart, saying, “Not surprisingly, from the teachers in particular, we have found absolute puzzlement and/or outright hostility about the

ideas and even motives of those further up the chain.”¹⁰ To improve implementation, they urge state education agencies to involve “the various stakeholders who would be affected by a given policy, with really careful attention paid to the voices of those who would be most affected by it.”¹¹

Three elements of communication are paramount for state education agencies early in the implementation process. First, states should communicate about the importance of using evidence for improvement. Second, states should engage stakeholders early and often to gather feedback, promote knowledge, and increase buy-in regarding the implementation of these provisions. Finally, states should make sure communication is a two-way process so that the state education agency can learn and adjust its policies based on the realities that districts and schools encounter.

6. Partner with intermediaries to promote and support effective implementation

State education agencies should make sure that they mobilize their systems and networks of intermediary organizations—such as technical assistance initiatives they sponsor and professional associations with which they interact—to support the implementation of the evidence-based provisions of the law. Intermediary organizations play a critical role in providing educators and policymakers with information and support that significantly influence their actions.

State education agencies should actively request assistance from the Regional Educational Laboratories and the Comprehensive Centers funded by the U.S. Department of Education, and these entities should proactively provide guidance and technical assistance suggestions for state and local education agencies beyond those that specifically request support. ESSA already provides some guidance, specifying that the Regional Educational Laboratories “shall provide technical assistance” upon request to any “state or local educational agency in meeting the requirements of section 8101(21)” —that is, the section specifying the evidence-based provisions of the law.

In addition, state education agencies should reach out to their education service agencies, which exist in 45 states and reach more than 80 percent of public school districts,¹² to ensure that these agencies are knowledgeable about these provisions and effectively address or refer requests for assistance to the appropriate service providers.

State education agencies should also consider conducting extensive and ongoing outreach to national professional associations and organizations that represent critical stakeholder groups such as administrators, teachers, state agency leaders and staff, school boards, state policymakers, and education-focused policy organizations. The importance of connecting to these groups is highlighted by the findings of a recent study from the National Center for Research in Policy and Practice, which surveyed a nationally representative sample of district and school leaders working in large and medium-sized local education agencies regarding their use of research. The survey explored “how these educational leaders use research to inform their decision-making,” as well as “leaders’ attitudes toward research, their efforts to acquire it, and the culture of research use in their organizations.”¹³ One of the most significant findings is that of the 14 identified sources of research that administrators use, respondents reported that they “were most likely to access research through professional associations and professional conferences.”¹⁴

7. Facilitate effective implementation in districts, schools, and classrooms

Implementation has a profound effect on program impact. Choosing an evidence-based program is like making any complicated consumer decision—that is to say, what you do after you buy a product and open the box makes a difference too. If, for example, there are instructions about assembling and using your purchase, it’s generally a good idea to read and follow those instructions. State education agencies need to help local education agencies build effective implementation plans that get down to the school and classroom levels. This can be part of existing school improvement planning.

A recent evaluation conducted by Education Northwest illustrates this point. A large school district implemented a new reading program that had evidence of effectiveness. Despite the program’s past success, after a year of implementation, the evaluation data showed that students in the comparison classrooms did better on reading tests than those in the program classrooms, and these differences were statistically significant in one of the three grades examined.¹⁵ So what went wrong?

Observations showed that only about half of the teachers implemented the program as intended. Further investigation in the grade with statistically significant negative results showed that in classrooms with low or medium levels of implementation, students had significantly lower achievement. Meanwhile, in classrooms with high

levels of implementation, student achievement did not differ significantly from that of students participating in the regular curriculum. End-of-year survey data showed that many teachers believed the program was ineffective, and interview data showed that several key administrators and teachers questioned whether the program was a good fit for the district. In short, implementation failed.¹⁶

For this particular district, the implementation failure was fatal. After rolling out the program with poor implementation, it seemed extraordinarily difficult to retrain the teachers and get their full participation. It was just too hard to reassemble the product and restart it, using it as intended. Leaders wisely chose to start over with a different evidence-based reading program.¹⁷

State education agencies need to require implementation planning as part of district and school improvement plans and support these plans with technical assistance as needed. The text box below provides more information about what studies conducted by Education Northwest have shown regarding the ways districts and schools can ensure effective implementation of improvement initiatives right down to the classroom level.

Effective local implementation: The engine of school improvement

Materials and training are important components of evidence-based programs, but local implementation drives the program. A recent Education Northwest evaluation of implementation of an evidence-based program showed a surprising negative impact on student achievement. Closer examination through classroom observations, teacher surveys, and interviews showed that implementation was the likely problem. In fact, school staff members had such a negative view of the program that district leaders wisely decided to end it and choose a new evidence-based program.

In light of the discontinuance of the program—and to guide future actions—the district and its funders asked Education Northwest to provide them with a new study identifying the factors that contribute and detract from implementation success. The report included a review of the research literature on program selection and implementation and in-depth interviews with representative district stakeholders. The two sources of information suggested similar success factors, which can act as a guide for anyone pursuing evidence-based school improvement.

The literature review on program selection and program implementation suggested that the following elements contribute to program success:

- Obtain strong buy-in from all involved in the initiative and create a sense of shared leadership, including strong community support and engagement.
- Schedule adequate planning time, including the collection of baseline data to better target the initiative, and create stable planning committees.
- Ensure adequate resources (staff, funding, time) and provide capacity building as needed.
- Provide strong leadership with internal oversight and accountability.
- Maintain clear communication with all involved.
- Remain adaptable as the initiative progresses.
- Provide a long-term commitment to adequate funding for sustainability.
- Obtain an external evaluator for the initiative and monitor and evaluate long-term initiatives at interim times during implementation, not just at the end.

In addition to these factors, district stakeholders pointed to three issues that states and districts should consider in the selection process:

- Follow established district processes. Many districts already have processes in place to adopt new programs and practices. It is important to ensure that the selection of an evidence-based school improvement process is aligned to these processes or, if a different selection process is used, to create conditions that make it clear why such a decision was made.
- Review existing evidence of the new program's effectiveness. States and districts should understand that the review process must be seen as objective and rigorous.
- Ensure that the new program aligns with current district policies, goals, assessments, and needs. This is a reminder that the degree to which an evidence-based improvement approach fits with the identified needs, processes, and culture within a district is a critical consideration in selecting an approach.

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. Available on request.

8. Promote continuous improvement and collective learning

States have new opportunities through ESSA for innovation and application of evidence to foster sustained and sustainable school improvement. These opportunities will grow out of federal policies and will, in turn, influence local school improvement efforts. State education agencies will play a central role in helping leaders engaged in evidence-based school improvement at every level take an approach that integrates continuous improvement.

Improving schools requires addressing many complex challenges at once. Given these challenges, even the most well-designed plan that is based on the best evidence-based approaches will take time to succeed. Evidence regarding this factor was provided in a 2006 report on a national, multiyear study of the Comprehensive School Reform Program. Researcher Daniel Aladjem and his colleagues concluded that the program “works when given enough time. We observed no effects until years 3–5 of implementation.”¹⁸ Based on this observation, once an evidence-based school improvement plan has been designed and implemented, decision-makers should monitor progress but also give the plan time to succeed.

State education agencies also should provide local education agencies with additional supports so that leaders can use data effectively for school improvement. Midcourse corrections will be necessary as any approach encounters the reality of the varied needs and contexts of schools in need of improvement. Ongoing use of data is critical for making these corrections.

In addition, evaluation plays a critical role in the effective implementation of evidence-based school improvement initiatives. State education agencies must build an evaluation component into every aspect of policy implementation. While informal data use can support many of the needed course corrections, only an independent, ongoing evaluation specifically designed to measure both implementation fidelity and program impacts can address the many issues of practice and policy that need to be answered systematically, such as: Does our approach seem to be working, for whom, and under what conditions? Should we make changes to improve results? In the long term, summative evaluations can also guide large-scale revisions to policy and practice. Without evaluations, billions of taxpayer dollars could be wasted because of failures to adjust in real time or to learn from successes and failures.

Finally, state education agencies can play a critical role in supporting collective learning about the effective use of evidence for improvement purposes. State education agencies should consider convening periodic large-scale meetings to share experiences and provide input for program improvement. In addition, they should consider networks or learning communities that can help address the needs of particular stakeholders. The federal Comprehensive Centers have proven to be strong partners to state education agencies in designing and supporting a variety of professional development and learning communities and can serve as partners to states as they promote collective learning about effective evidence-based school improvement.

Conclusion

There are no foolproof evidence-based school improvement approaches. Therefore, there are no perfect choices. Every decision a state, district, or school makes to improve student outcomes will be a trade-off among many priorities, options, and potential outcomes. Choices supported and guided by effective decision-making processes and strong implementation, however, will be better choices. State education agencies can start work now to ensure better choices that help create better schools.

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. This report and the information presented within it will hopefully help state educators and policymakers seize the opportunity afforded by the Every Student Succeeds Act and meet the promise of evidence-based school improvement.

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Endnotes

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