Evidence for School Improvement

One of the key roles advocates can play in school improvement is to urge and support school and district leaders to select evidence-based interventions — programs, practices, or policies that research shows have improved student outcomes.

Advocacy guide roadmap

This guide offers:

- **Key questions to ask district** and school leaders about any proposed intervention or strategy
- **Key questions to ask** about how the **state** will prompt and support district and school leaders to take an evidence-based approach to school improvement
- Ways advocates can **use ESSA** to push state, district, and school leaders to develop an evidence-based approach to school improvement
- **Examples** of states, districts, and schools that are rising to the challenge by using evidence wisely to inform their school improvement efforts

What do we know?

- **We know a lot about what works.** After decades of education research, there is a wealth of practices, policies, and programs that have been shown to be successful at raising achievement for all students. And there are many examples of schools and districts that are serving students of color and low-income students well from which to learn.
- Education leaders can — and should — **leverage this knowledge** to develop their approaches to school improvement, rather than spending precious dollars on new or flashy programs and practices that have no proven impact on student achievement or that are not appropriate for their context, as often happened in the past.
- Just because a study shows that a particular program or intervention improved student outcomes doesn’t mean it will work in all schools with all students. To maximize the success of school improvement efforts, education leaders should choose interventions that:
  
  - Address the most pressing challenges in that school, and are shown to be **effective in schools with similar characteristics and student populations**
  - Are **supported by the necessary conditions** to be implemented successfully
  - Include a cogent, ongoing professional development plan to ensure schools have the knowledge and capacity to successfully implement the intervention
  - Include a **plan for monitoring progress** and adjusting course if necessary

**KEY QUESTIONS ABOUT ANY SCHOOL IMPROVEMENT INTERVENTION**

1. What interventions have school leaders tried in the past and what were the results?
2. Why do district or school leaders think the proposed intervention will work?
3. How will district or school leaders plan for and implement the intervention?
4. How will district or school leaders know if this approach is working?
5. What will district or school leaders do if it doesn’t work, and when?
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<th>QUESTIONS TO ASK DISTRICT AND SCHOOL LEADERS ABOUT evidence-based interventions</th>
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Ask these questions about how district and school leaders will use evidence to guide their improvement efforts.

1. **What interventions have school leaders tried in the past and what were the results?**

   **Look for:**
   *District and school leaders to:*
   - Name specific interventions and describe the short- and long-term goals of each
   - Describe how teachers were trained and how the intervention was implemented
   - Show data on early indicators of success (e.g., increased collaboration among teachers, improved benchmark reading scores) and progress toward goals

   **Watch out for:**
   - A long list of interventions without clear goals for each
   - No data on implementation quality or outcomes

2. **Why do district or school leaders think the proposed intervention will work?**

   **Look for:**
   *School or district leaders to explain:*
   - How a proposed intervention is different from strategies the school has tried unsuccessfully in the past
   - How a proposed intervention addresses the most pressing needs of the school or the students for whom the school is struggling
   - The research behind the intervention, including positive impacts in schools with similar characteristics (e.g., urbanicity, grade level, size) and student populations (e.g., race, income, disability status, English learner status)

   **Watch out for:**
   - No explanation for how the intervention addresses the school’s needs or differs from current strategies
   - No evidence or evidence from a very different context

3. **How will district and school leaders plan for and implement the intervention?**

   **Look for:**
   - Clearly outlined roles and responsibilities to support the intervention
   - Up-front training and ongoing support for teachers and principals, possibly including coaches who can provide regular feedback
   - Necessary conditions (e.g., leadership; staff skills and buy-in; support from families and broader community; alignment with other state, district, and school policies; funding) for successful implementation

   **Watch out for:**
   - No clear roles
   - Failing to consider fiscal, time, and financial resources
   - No concrete professional development plan
   - No buy-in from staff
4. **How will district or school leaders know if this approach is working?**

**Look for:**
- Well-defined, measurable short- and long-term goals and early indicators of success (e.g., decreases in chronic absenteeism, improved working conditions)
- Regular analysis of data on progress toward goals and the degree to which the intervention is being implemented as intended
- Engagement with students, families, staff, and community about their experiences with the intervention

**Watch out for:**
- No goals or goals that are vague or unrealistic
- No plan to monitor progress
- No engagement with families or community

5. **What will district or school leaders do if the selected intervention doesn’t work, and when?**

**Look for:**
- A plan to regularly reflect on data and adapt the intervention to the particular school context, as needed
- A timeline for determining whether the intervention should continue, be modified significantly, or discontinued, based on timelines used in places where the intervention was successful

**Watch out for:**
- No clear timeline for reviewing whether the intervention is working
- No plan to revisit whether to continue the intervention
QUESTIONS TO ASK STATE LEADERS ABOUT evidence-based interventions

Ask these questions to state leaders about how they will prompt and support district and school leaders to take an evidence-based approach to school improvement.

1. How will state leaders help district and school leaders understand their specific challenges?

   Look for the state to:
   - Provide a needs assessment template for identifying school-based causes of underperformance — either overall or for any group of students
   - Prompt district and school leaders to look at how schools are serving different groups of students

   Watch out for:
   - No tool or one that does not ask schools or districts to look beyond readily available achievement data
   - A tool that only asks general, not equity-focused, questions

2. How will state leaders help district and school leaders select evidence-based strategies for improvement?

   Look for the state to:
   - Curate and distribute information on evidence-based interventions
   - Provide technical assistance to local leaders in evaluating and selecting evidence-based interventions that meet their needs and are appropriate for their context
   - Support better decision-making by creating networks of districts (or schools) or provide regionally based support from the state or intermediary organizations
   - Make clear that the state will not approve improvement plans for Comprehensive Support and Improvement (CSI) schools that do not include evidence-based interventions that are relevant to the school’s context and needs

   Watch out for:
   - A list of interventions without an evidence base
   - No support from the state for selecting interventions based on relevance to local context and need

3. How will state leaders help district and school leaders monitor implementation of school improvement strategies, evaluate the impact on student outcomes, and adjust strategies as necessary?

   Look for the state to:
   - Monitor and evaluate the progress of districts’ and schools’ improvement efforts annually or more often
   - Take advantage of resources such as Regional Educational Laboratories (RELs) and research-practice partnerships to examine the impact of interventions

   Watch out for:
   - No systems for supporting local leaders in monitoring and evaluating implementation of evidence-based strategies
4. How will the state use its allocation of federal funds to advance the use of evidence-based approaches?

**Look for the state to:**

- Award planning grants to give districts/schools the opportunity to identify appropriate evidence-based interventions
- Award at least some federal school improvement funds competitively, based, in part, on whether the proposed interventions are supported by evidence and include plans for ongoing evaluation
- Condition the renewal of funds at least in part on the success in implementing evidence-based interventions
- Take advantage of resources such as Regional Educational Laboratories (RELs) and research-practice partnerships to support smaller and lower-capacity districts to apply for competitive grants
- Set aside federal/state dollars and leverage existing resources for evidence-building (e.g., well-designed and well-implemented study of new approaches)

**Watch out for:**

- States approving and funding improvement plans without an evidence-based strategy
- Insufficient support in finding evidence-based interventions so that lower-capacity districts are disadvantaged in grant competitions

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**How can advocates use the Every Student Succeeds Act to ensure district and school leaders use evidence wisely in school improvement efforts?**

ESSA requires and encourages the use of federal dollars on evidence-based approaches that can improve student outcomes. The law recognized **four levels of evidence**, and requires that districts that receive federal school improvement funds align with the top three levels:

<table>
<thead>
<tr>
<th>1. STRONG EVIDENCE</th>
<th>2. MODERATE EVIDENCE</th>
<th>3. PROMISING EVIDENCE</th>
<th>4. “STRONG THEORY”</th>
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<td>Based on at least one well-designed, well-implemented experimental study</td>
<td>Based on at least one well-designed, well-implemented quasi-experimental study</td>
<td>Based on at least one well-designed, well implemented correlational study with statistical controls for selection bias</td>
<td>• Based on high-quality research findings or positive evaluation that the intervention is likely to improve outcomes • Includes ongoing efforts to examine the effects of the intervention</td>
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Required for school improvement plans funded by the **7 percent set aside**
**States, districts, and schools that are rising to the challenge**

**Tennessee** has established the *Tennessee Education Research Alliance*, a research-practice partnership with Vanderbilt University, to study how best to use evidence to drive improvement in low-performing schools. The state also plans to prioritize districts with a commitment to evidence-based strategies in its allocation of school improvement funds and to conduct evaluations of the fastest improving schools to inform and strengthen efforts in other schools.

In response to evidence from the University of Chicago’s Consortium on School Research, **Chicago Public Schools (CPS)** launched an effort to use data to monitor students’ attendance and grades throughout their ninth-grade year, allowing educators to intervene before students fall too far behind. Today, nearly 90 percent of freshman in CPS are on-track to graduate and the graduation rate has grown more than three times faster than the national average.

Through a collaboration with The Education Trust-Midwest’s Center for Excellence in Teaching and Learning and others, **Parkview Elementary School** in Wyoming Public Schools (Michigan) has adopted a continuous improvement approach, in which the principal and teacher-leaders implement research-based practices, monitor progress, and adapt, continue, or scale-up practices as necessary. **Parkview is now one of the fastest improving high-poverty public schools in the state.**

**Additional resources**

**Evidence for ESSA** (Johns Hopkins’ Center for Research and Reform in Education) provides easy access to information on programs meeting ESSA’s evidence standards and helpful information about how selecting a proven program should be incorporated into the improvement process.

**What Works Clearinghouse** (Institute of Education Sciences) reviews the existing research on different programs, products, practices, and policies in education.

**ESSA and Evidence: Why It Matters** (Chiefs for Change) provides recommendations for how state education agencies can build a culture of using evidence-based education policies.

**Leverage Points** (Results for America) describes promising state-level practices for using evidence to improve student outcomes.

**Using Evidence to Strengthen Education Investments** (U.S. Department of Education) lays out a process for maximizing the effectiveness of selecting and using proven programs.