

State Support Helps Districts Use Evidence Locally To Improve Education



States have a responsibility to help local education agencies use evidence to make decisions to support student learning. Proving Ground is a research–practice partnership based at Harvard University’s Center for Education Policy Research that gives local agencies deeper insight into the effectiveness of the strategies they are using to improve student outcomes and support to implement improvements. This collaboration empowers those closest to students to build and use evidence for decisionmaking. States can draw inspiration from this effort in their work to support evidence-based continuous improvement.

Improving schools relies on ensuring that those closest to students can make better decisions with evidence about what is working—and what is not. School and district administrators and their staff make numerous decisions every day that affect teaching and learning, including how to allocate limited resources, which learning programs to pursue, and when to make changes to existing practice. They track many different kinds of data that help them make these decisions but do not always have the tools they need to evaluate the impact of the decisions, such as whether new strategies are having the intended effect on improving student outcomes.

Evidence is information produced by collecting and analyzing data that serves a statistical purpose, including historical, trend-based information that helps identify areas that require intervention. Evidence can reveal patterns and build knowledge about the impact of teaching strategies, school practices, or other factors on student outcomes. It can be a powerful tool in the hands of school and district decisionmakers, allowing them to pinpoint relationships among strategies and outcomes, identify best practices, and make informed decisions to help all students succeed.

The Every Student Succeeds Act (ESSA) created an opportunity for states to promote and model a culture in which evidence, rather than hunch or anecdote, is used to make decisions at all levels. Under the federal law, local policymakers have new flexibility to choose the types of evidence that are most helpful in selecting school improvement resources and interventions suited to their communities’ needs—acknowledging that local administrators need

to know which strategies work for their *own* students in their *own* schools. This flexibility means that districts and charter management organizations have more freedom to determine what information is most useful to guide school improvement decisions. Rather than relying on a limited number of national studies, districts can use research in new ways through information that better reflects their own students and circumstances. **In a landscape that finds many schools adopting new, innovative practices, this flexibility holds tremendous promise to seed a culture of evidence-based decisionmaking in education, with more and better information getting into the hands of those striving to improve student outcomes.**

While locally grounded evidence can hold enormous value, most districts and charter management organizations cannot do their own research. Even districts with full-time researchers often lack the data analytics capacity, expertise, and tools to conduct and interpret the relevant research they need to make informed decisions. Some districts also do not have an adequate number of students to draw meaningful conclusions about patterns in the data, especially about specific populations of students.

Local agencies cannot go it alone in the pursuit of useful evidence for school improvement. States must invest in opportunities that allow schools and districts to use evidence that is relevant to them. States are charged with not just supporting schools that are struggling but also promoting a culture of evidence-based decisionmaking statewide.

Spotlight: Proving Ground

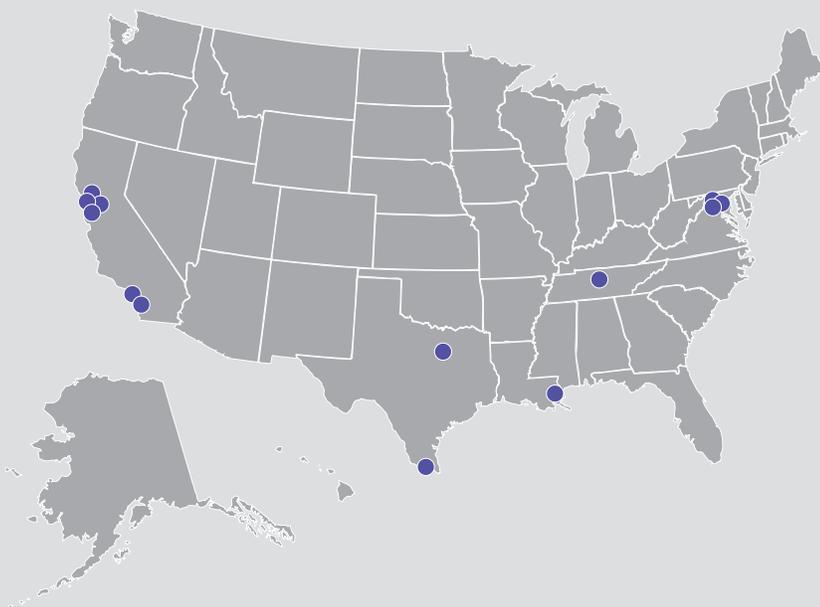
Proving Ground is one pioneering effort to help local agencies build and use evidence. Proving Ground is a research–practice partnership in which a network of districts and charter management organizations facing a common obstacle, such as chronic absenteeism, work with Harvard researchers to analyze data about the effectiveness of program implementation over several months and make incremental changes in practice to boost student outcomes. Proving Ground is an effort to promote evidence-based decisionmaking in education by putting it into action; the initiative provides local agencies with timely, useful evidence that helps them address their real questions about the impact of specific strategies on student learning.

Over a two- to three-year period, partner agencies work with Proving Ground staff, Harvard academics with expertise in research and practice—including former district administrators—and each other to see trends that reveal obstacles to success, identify and test potential solutions, and determine next steps based on findings. By providing direct access to researchers, resources, and timely information, this partnership allows districts to quickly and reliably assess impact, act on evidence to continuously improve implementation, and learn to use new and better evidence to make decisions about how to invest resources—which will contribute to the goal of improving outcomes for all students.

Proving Ground’s inaugural network participated in the initiative through the 2015–16 and 2016–17 school years and included 13 local education agencies serving close to 300,000 students across five states. Proving Ground staff contacted agencies that were using the same personalized learning software to provide support for learning in English language arts and math classes. Leaders at the partner agencies signed on because they saw value in the potential of this collaborative work. While these partner agencies varied in size and geography, they were seeking to answer the same set of questions, including:

- **Is our use of this personalized learning software having an impact on student outcomes?**
- **Which groups of students are benefitting most from using the software?**
- **What adjustments and strategies might increase its effectiveness?**
- **How are our students performing compared to students in other districts that use the same software?**

PARTNER AGENCIES FOR PROVING GROUND’S 2015–17 COHORT



- Aspire Public Schools—Oakland, CA
- DC Prep—Washington, DC
- District of Columbia Public Schools—Washington, DC
- Firstline Schools—New Orleans, LA
- IDEA Public Schools—Weslaco, TX
- KIPP Bay Area—Oakland, CA
- KIPP DC—Washington, DC
- KIPP LA—Los Angeles, CA
- LEAD Public Schools—Nashville, TN
- Oakland Unified School District—Oakland, CA
- Rocketship Public Schools—Redwood City, CA
- Santa Ana Unified School District—Santa Ana, CA
- Uplift Education—Dallas, TX

Answering these types of specific questions requires sophisticated data analysis, which would normally be costly and timely, and practitioners may not see the results for months or years. The results might be useful to inform changes in practice but not for the students who participated in the original study. Moreover, research and policymaking have traditionally operated on different timelines. While large national studies are important for identifying trends that affect the conversation and federal and state policy decisions, a different type of evidence is needed for district staff who are required to make quicker decisions.

The Proving Ground process

Recognizing this need, Proving Ground offers the opportunity for local practitioners to look at data in real time, allowing agencies to make adjustments based on data and then test the results. And Proving Ground embraces a model of research that includes interpretation and data use as part of the process. Proving Ground supports its network of local agencies by providing data analysis, strategic advice and hands-on assistance, and peer networking opportunities. Local agencies agree to be equal, contributing partners and work collaboratively with Proving Ground staff to make improvements that will lead to better outcomes for students.

“A major goal of Proving Ground is to help improve student outcomes by bringing evidence-based practices to scale. When districts work together to solve a common problem, we can learn and improve faster.”

—Bi Vuong, Director, Proving Ground, June 2017

For the inaugural network, the basic steps in the Proving Ground partnership included the following:

- **Diagnose.** Partner agencies were seeking to learn more about a specific challenge related to the personalized learning software they were using. On a bi-weekly basis, partner agencies shared data from their student information systems and other relevant sources—data that was already being collected. This data was encrypted and transferred via a secure network to a highly secure system that only designated Proving Ground staff were able to view, using the utmost precautions to protect the privacy, security, and confidentiality of the data. Harvard’s researchers then used the data to conduct analyses and identify key trends in student and school performance.
- **Understand.** Partner agencies received detailed, easy-to-use data reports based on the researchers’ analyses to identify areas for potential improvement or targeting. This information was available on a data dashboard so agencies could view their own data side by side with the rest of the network and see how they were performing by comparison. Proving Ground staff supported partner agencies through structured workshops and strategy meetings about these findings to ensure the information was relevant to each agency’s students, and together the agency and Proving Ground worked to uncover potential root causes for the areas that needed improvement.

“Before, it was challenging to get to the ‘what.’ Now we have the capacity to assess the software’s impact on a larger scale.”

—Kyleigh Nevis, Instructional Technology Coordinator, Oakland Unified School District, June 2017

- **Act.** Partner agency representatives collaborated with Proving Ground staff to design interventions that would best meet the needs of their schools, teachers, and students. The evidence that resulted from Proving Ground’s data analyses enabled partner agencies to make informed decisions about which interventions could work best for them based on internal capacities and contexts. For example, one intervention involved sending teachers personalized emails about the amount of time students were spending on the platform—and tested whether those emails prompted teachers to change their practice and positively affect student outcomes. Another involved a modified software curriculum that provided additional supports to help students build up to their grade-level curriculum. Interventions such as these were a powerful reminder that improvements do not have to be complicated or costly.
- **Analyze.** Harvard’s researchers then conducted sophisticated impact analyses for individual partner agencies and the entire Proving Ground network. Combining data from all participating agencies created a larger sample size, allowing researchers to more confidently analyze impact and increasing the chances for reliable results. Examining the results for trends, breaking the information down by demographic group, and parsing out the implementation and impact allowed partner agencies to answer questions such as: If one group of students is outperforming another, what is the most feasible intervention or strategy to help the other group catch up?
- **Collaborate.** Partner agencies attended an annual in-person convening, during which they learned from each other’s successes and challenges and viewed their own data side by side with the rest of the network. They pinpointed exactly where they did and did not align with their peers and identified concrete strategies to try as soon as they returned home. In addition to the annual convening, partner agencies had opportunities to

connect via webinar to view data results, workshop ideas, share knowledge, and ask questions. Proving Ground also offered a secure online platform with helpful resources such as discussion threads, a calendar of events, and meeting documents.

“We can do data analysis and brainstorm interventions on our own, but it has been great to sit with other leading districts and charter management organizations, hear what they are thinking, confirm our thinking, and partner in building out and testing interventions with our pooled data. It has been valuable to use the blended learning data and our different interventions to brainstorm and be thought partners with each other.”

—Representative of Rocketship Public Schools, June 2017

- **Improve.** Partner agencies received evidence of the impact of their intervention. This information helped leaders determine which elements of the intervention should be scaled up, updated, or changed.
- **Repeat.** Researchers continued to perform analyses to see if interventions were working. Over the two years of the inaugural network, partner agencies learned what worked for their students and had time to try new things and build on the successes and lessons they learned.

Next steps for Proving Ground

One of the goals of Proving Ground is that these agencies will continue to seek out evidence to guide decisionmaking upon conclusion of the partnership, now that they have tangible proof of the value of investing in research and iterative improvement.

After its inaugural network, Proving Ground has continued to collaborate with partner agencies on using research and evidence to inform action and advance student outcomes. The current

network, which began in the 2017–18 school year, is focused on improving student attendance and reducing chronic absenteeism. This network of eight local agencies and one state agency (the Ohio Department of Education is partnering with Proving Ground to provide this experience to its districts, see [sidebar](#)) is seeking to answer questions such as: How many instructional days do we lose to absences? Is our problem clustered in certain grades, schools, or neighborhoods? How does this vary over time? They are gaining support to use evidence to analyze interventions such as family engagement strategies and public messaging campaigns. Modeling continuous improvement, Proving Ground has adjusted its program and process based on lessons learned from the first network—including more regular in-person site visits and a new analytic framework that allows data analysis results to be available every 8–10 weeks.

The agencies involved in Proving Ground’s inaugural network were seeking to answer a series of simple questions about the effects of using an instructional tool—personalized learning software—on student outcomes and what changes they could make to ensure that they were getting the most out of their investments. All local agencies have questions such as these, and having evidence helps them reallocate their limited time and resources to practices and programs that will have the most impact. This process allows agencies to make decisions without having to wait years to get the results or act on them.

For more information about Proving Ground, visit provingground.cepr.harvard.edu.

Take Action

As state leaders examine what can be done to support local evidence-based decisionmaking, they should consider taking these steps:

✓ Support local data analytics capacity.

- **Continue to invest in the statewide longitudinal data system so that governance bodies can ensure that the system is collecting the data indicators needed to answer state and district research questions.** Research that can inform practice relies on complete, accurate, quality data. States have invested time, talent, and money into building data systems. Ensure that these systems can be put to work for students by making sure that the data that is collected answers key state and district research questions.

- **Form or support a research–practice partnership.** High-quality and trustworthy education research can produce real-time data that can be used by school and district leaders to examine patterns and trends and decide which strategies and interventions are and are not working. States can support districts by forming or supporting partnerships to address important education questions that can be answered using research. Universities or other organizations can provide the analytical support needed to produce this type of data, which schools and districts are often unable to generate on their own. For more on how collaboration through research contributes to student success, see [Roadmap for Effective Data Use and Research Partnerships between State Education Agencies and Education Researchers](#).

✓ Support local agencies' ability to learn from each other and act on evidence.

- **Support data literacy training for school and district leaders, including how to use and translate research into practice.** School and district administrators need to be able to collect, analyze, and use data to inform decisions and take action. [Data-literate administrators](#) ensure that data use is

ongoing throughout the year and seek to establish a culture in which data is prioritized and embedded into everyone's day-to-day practice. State leaders are uniquely positioned to align policies and programs that train and support school and district administrators. State policymakers must lead the way by creating the conditions to ensure that administrators have the skills to effectively interpret and use data.

- **Facilitate connections among districts by establishing avenues for them to share with each other.** Districts may share similar demographic characteristics and could be trying similar interventions. They may benefit from learning from their peers but have limited capacity and time to connect and share with each other. States should support all districts by establishing ways for them to share insights and best practices, such as through a state-convened meeting or an online best practices portal.
- ✓ **Lead by example and promote a statewide culture of evidence-based decisionmaking.**
 - **Seize the opportunity in ESSA to create a statewide culture of evidence-based decisionmaking.** State leaders should go beyond compliance by empowering those closest to students with contextual information that will help them make better decisions in service of student learning. They can find opportunities in existing state and federal laws or grant programs to emphasize the importance of evidence in decisions about which strategies or programs to pursue and provide supports to build and use that evidence locally. For example, they can provide districts with the flexibility to use state or federal funds to invest in research partnerships focused on continuous improvement.
 - **Create a statewide research agenda.** States should identify their most pressing questions and engage a research partnership to answer them. States can set the tone by helping districts view data as a flashlight that illuminates what is and is not working.

STATES' ESSA PLANS INCLUDE STRATEGIES TO SUPPORT LOCAL USE OF EVIDENCE

In their plans to implement ESSA, some states have explicitly committed to supporting districts to use evidence to support continuous improvement. One state chose to partner with Proving Ground; others are using different strategies.

Proving Ground has played a key role in **Ohio's** plans to build state capacity around evidence-based interventions through local action research. Beginning in the 2017–18 school year, the state formed a partnership with Proving Ground to support districts' ability to implement evidence-based research strategies under ESSA. Two Ohio districts joined Proving Ground to participate in the peer-to-peer network of districts from across the country looking to address chronic absenteeism, and more will be added in the upcoming cohort. Partner districts were provided with evaluations of the impact of strategies to address chronic absenteeism, which allowed them to better understand what was and was not working. The impact of this partnership extended beyond participating districts—the state shared results with other districts outside of the Proving Ground network, and Proving Ground led trainings to help district leaders use evidence to identify issues and test solutions. Leaders in Ohio describe this joint state–district participation in Proving Ground as one of several strategies through which the state aims to “[i]nspire a cultural change, emphasizing the use of data in driving school improvement; encourage opportunities that contribute to reduced chronic absenteeism rates at participating districts; and incorporate what we learn from Proving Ground into Ohio’s evidence-based resources, making those resources accessible to all Ohio districts.”

The **Tennessee** Department of Education’s existing partnership with Vanderbilt University resulted in the launch of the **Tennessee Education Research Alliance** (TERA) in 2016. TERA conducts its own independent studies and directs external research to provide information to state policymakers. Tennessee’s ESSA implementation plan highlights the partnership, which prioritizes “timely and accessible findings that help policymakers and education leaders make research-based decisions about how to address significant educational challenges.” To that end, TERA has selected “improvement in low-performing schools with evidence-based research” as one of its four areas of focus. TERA will provide support to the state and to districts to use research and evidence-based practices to advance ESSA implementation.

Rhode Island's ESSA implementation plan includes the creation of a centralized School Improvement Resource Hub to help its highest need schools with using evidence to decide on interventions. The state recognizes that “while [local education agencies (LEAs)] are best positioned to select and implement strategies to improve their students’ needs, not every LEA has the capacity to research and evaluate an exhaustive list of potential strategies nor . . . the resources to successfully implement those strategies.” State leaders see their role in showing the value of evidence-based decisionmaking and supporting each district’s needs with the flexibility, training, and assistance the districts need to answer questions and take action. The hub will consist of three main types of resources that districts can use based on their needs—evidence-based strategies, tools and resources, and school support partners.

When states support evidence-based decisionmaking in schools and districts, students excel. When choosing the type of evidence that can help determine which resources and interventions are best suited to the specific needs of a community, school and district leaders cannot do it alone. States have a role in supporting local use of evidence to understand student success, analyze trends, and turn insights into action. To ensure that this culture change happens, state leaders must equip districts with the resources they need to use evidence for continuous improvement.

Learn More

- To see what a partnership between policymakers and researchers looks like in action, see [When Researchers Have Access to Data, Students Succeed](#).
- For a closer look at key focus areas that researchers and education leaders should discuss when embarking on a specific research project or at the start of a longer term partnership, see [Improving Education Outcomes by Building Data-Driven Relationships](#).



The Data Quality Campaign is a nonprofit policy and advocacy organization leading the effort to bring every part of the education community together to empower educators, families, and policymakers with quality information to make decisions that ensure that students excel. For more information, go to www.dataqualitycampaign.org and follow us on [Facebook](#) and [Twitter](#) (@EdDataCampaign).