HOW RESEARCH-PRACTICE PARTNERSHIPS CAN SUPPORT ESSA IMPLEMENTATION FOR EDUCATIONAL IMPROVEMENT AND EQUITY

A guide for school districts, state education leaders, and researchers

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INTRODUCTION

This guide for school district and state education leaders shows how research-practice partnerships can play an important role in implementing the Every Student Succeeds Act (ESSA). ESSA places new responsibilities and opportunities on State Education Agencies (SEAs) for promoting equity and supporting the improvement of teaching and learning in school districts. As states submit plans to the U.S. Department of Education, the attention of state and local leaders turns to questions of how to implement these plans. The autonomy that ESSA provides to states offers opportunities for energizing local reform efforts and building local capacity. External researchers can contribute to these efforts, particularly when they are engaged in long-term partnerships with districts and states to support implementation of local reforms.

ESSA carries forward some elements of No Child Left Behind, while leaving many behind. There is a continued focus on academic tests as a foundation for accountability and a requirement to disaggregate data to monitor achievement gaps. Title programs and signature programs like the 21st Century Community Learning Centers remain in ESSA (although funding priorities have shifted). At the same time, the law grants more latitude to states in developing accountability systems and includes provisions for a “fifth indicator” in these systems that focuses on school quality or climate. ESSA also requires that districts and states choose or adapt “evidence-based” programs when spending federal dollars.

There is still a great deal of uncertainty regarding ESSA regulations and funding. Congress overturned regulatory guidance developed by the Obama administration for ESSA in February 2017, and early feedback on states’ ESSA plans provides little clarity on what policy expectations of states are likely to be. For the time being, states must follow the broad guidance of the law in developing plans and planning for implementation. This latitude presents both opportunity and a challenge to states, especially with respect to implementing ESSA’s new provisions for non-academic indicators and use of evidence.

ESSA gives states autonomy to support local reform efforts and building local capacity. Research partners can contribute to these efforts when they engage in long-term work with schools and districts.

In this guide we build off of the Revised State Template for the Consolidated State Plan released by the U.S. Department of Education in March 2017. To inform district and state leaders, we present possible scenarios that illustrate how long-term research practice partnerships might help develop the capacity needed to implement and test improvement strategies related to ESSA’s key provisions.
What are Research-Practice Partnerships?

RPPs are long-term collaborations between practitioners and researchers that are organized to investigate problems of practice and solutions for improving schools, school districts, and other educational organizations\(^1\). Partnerships bring the expertise and commitments of researchers, educators, and policy makers together to address persistent challenges and improve educational opportunities and outcomes. Partnerships can be formed between researchers and leaders in State Education Agencies (SEAs), leaders in a single school district or multiple districts (LEAs), or educators in community organizations that serve youth.

What roles can external research partners play?

An external research partner can be an individual or team from a university, a nonpartisan research organization, or Regional Educational Laboratory who works with you to:

- Understand and define complex problems by drawing on knowledge bases from research and practice
- Identify ideas and findings from educational research that can help you strengthen your own efforts to address state and district problems
- Study state and local policies and programs to help you improve their implementation, evaluate their effectiveness, and design adaptations that best fit your local context
- Study, reflect on, and improve your own efforts to improve education

An external research partner is different from a researcher who comes to your state or district asking to conduct a study they have defined ahead of time. Traditionally, schools or districts are mainly research sites in which researchers pursue their own questions, but in a research-practice partnership the external researchers develop questions to ask with you, about problems you care about. A research partner can become a thought partner, a trusted source of information about evidence-based practice, and a source of feedback and reflection. A partnership with researchers should be a “win-win” arrangement where you benefit from their work and expertise, and the external partner benefits by being able to conduct more meaningful research that has a potential for broad impact.

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Research-Practice Partnerships Take Different Forms

There are different types of partnerships that involve different distributions of roles and responsibilities, and also different goals and desired outcomes. Coburn et al. identified three types of RPPs: Research Alliances, Design Research Partnerships, and Networked Improvement Communities (NICs). Although these types referred to partnerships at the school district level, regional and state-based partnerships can also use them to think through the benefits and constraints of different types of arrangements.

**RESEARCH ALLIANCES** are long-term partnerships between a district or state and an independent research organization focused on investigating questions of policy and practice. In the past, within an alliance, researchers have studied policies and programs designed by others, such as district and school leaders or curriculum developers and professional development providers who serve schools and districts. Today, alliances engage in policy and implementation research, developmental evaluation studies, and occasionally, intervention research.

**Examples:**
- Research Alliance for New York City Schools
- University of Chicago Consortium on Chicago School Research
- Baltimore Education Research Consortium
- Regional Educational Laboratories
- John W. Gardner Center for Youth and their Communities

**DESIGN RESEARCH PARTNERSHIPS**
Design research is a form of educational research that is similar to engineering research. Partnerships aim to simultaneously build and study solutions in real world contexts. In design research partnerships, both researchers and education leaders design the innovations they are testing.

**Examples:**
- Strategic Education Research Partnership
- Vanderbilt MIST Project
- University of Washington and Bellevue School District
- Inquiry Hub

**NETWORKED IMPROVEMENT COMMUNITIES** (NICs) are networks that seek to leverage diverse experiences in multiple districts or schools. The goal is to understand what works where, when, and under what conditions and to revise innovations so that they can work in a variety of contexts. The roles of researchers and educators are blurred in a NIC.

**Examples:**
- Building a Teaching Effectiveness Network
- Carnegie Math Pathways

In addition to these three types of partnerships, partnerships may resemble a combination or hybrid of activities or evolve over time. For example, partners might begin working with each other as a research alliance, and then in a next phase engage in co-design of professional learning experiences, which is more characteristic of Design Partnerships. They also may tackle different types of problems at the state level than at the district level.

Each partnership should choose arrangements that best fit their goals and capacity. What matters most is creating a theory of action with partners that specifies how the partnership's ways of working are expected to help accomplish their goals.
Where to Start: Selecting a Good Research Partner

Education leaders may wonder how to initiate a partnership if they are not already engaged in one. The following steps provide some practical guidance for how to identify and approach researchers who can help with addressing local problems of practice.

**IDENTIFY WHAT YOU WANT TO LEARN.** Researchers can help to answer a clearly formulated question like, “Can our school success indicator reliably distinguish schools that differ in school climate?” or “How easy is it for schools in our state to implement this school turnaround model?”

**START WITH PEOPLE YOU KNOW AND TRUST.** Once you have your question, think about the researchers in your state or region that people already know and trust. Ask trusted colleagues for recommendations about who might help you answer your questions.

**REACH OUT.** Initiate the conversation by phone or email, even if you don’t know the researcher. Share your question and what you hope to get out of the partnership from the start. Examine prior work of potential research partners and think about what expertise fits your need. Remember, most researchers specialize in one thing, so you may need to form a partnership with multiple researchers to address the full range of questions you have. Work on a 5th accountability indicator, for example, is likely to require both expertise in assessment design and in school climate.

**DECIDE WHO WITHIN YOUR EDUCATIONAL ORGANIZATION SHOULD BE INVOLVED.** Given the focus of your driving questions and problems of practice, who in your district or state education agency should be at the table? Consider people at different levels who bring expertise and also the authority to support the partnership work and its potential impact on policy and practice.

**START SMALL.** Negotiate the focus of a small project first, rather than jumping right into a bigger endeavor. Some researchers might have relevant expertise but lack experience partnering and putting your questions first. Look for a researcher who shows an interest in collaboration and making an impact. A small project can help you figure this out and work out any kinks.

When a partnership is working, plan beyond the current project. Partnerships that are long-term and built on trust can be enduring sources of support for education improvement.

**VISIT THE RPP TOOLKIT:** [www.researchandpractice.org/toolkit](http://www.researchandpractice.org/toolkit)

The Research + Practice Collaboratory has created an RPP Toolkit that includes readings, exemplars, and practical tools for creating and sustaining partnerships.
How Partnerships Can Support Educational Improvement in the ESSA Era

There are many different ways that a research partner can support educational improvement. Below, we highlight five key areas where partners can support programs and strategies for improvement that meet the requirements in ESSA.

CAPACITY BUILDING FOR EDUCATORS. Although many aspects of ESSA require capacity building, Title II has always been a key resource for educator preparation and recruitment, although budget negotiations under the new administration suggest these resources may no longer be available. In ESSA these funds were intended to expand professional development (PD) to include teachers in every subject, as well as other school staff like paraprofessionals and principals. There were also new teacher professional development opportunities included under ESSA to enhance clinical preparation based upon the knowledge of high quality educator development. These include teacher residencies for beginning teachers, job-embedded professional growth opportunities, and support or compensation for teachers who assume leadership roles.

How can RPPs support educator capacity-building?
• RPPs can uncover particular professional learning or recruitment needs using available data and tailor strategies based upon these needs.
• RPPs can work with state and district leaders to jointly develop research-based approaches like a teacher residency program or professional learning for teacher leaders to ensure that they are grounded in research-based evidence and fit the needs of the particular context, particularly for rural or high-needs schools.

SCHOOL IMPROVEMENT. Under ESSA, states must reserve funds for targeted supports to struggling schools under their accountability systems, but they have greater flexibility that can allow for more innovative responses. This is a critical juncture for how struggling schools are identified and supported that allows states and districts to shift the emphasis away from sanctions and toward continuous improvement. Improving the most challenging schools has been an ongoing challenge for educational leaders across the U.S. RPPs can serve a critical role in this area by working with educators to better learn from the data from struggling schools and broader systems to identify new and creative targets.

How can RPPs support school improvement efforts?
• RPPs can conduct an initial needs assessment to identify and analyze problems and their root causes, which is a key step in identifying potential solutions while also customizing them to fit the local context.
• RPPs can help state or district leaders as they sift through the many interventions at the classroom, school, or district level to consider which are evidence-based and which align with local needs and contexts.
• RPPs can help states and districts by sharing the lessons learned from the prior School Improvement Grants from instructional practices, to professional development and ways to remove structural barriers to develop stronger cultures to support improvement efforts.
• RPPs can work to facilitate difficult conversations about equity at the district and state level and support educators in engaging in iterative cycles of designing and testing new approaches to addressing persistent problems.
**SCHOOL QUALITY AND SUCCESS INDICATORS.** As part of state accountability systems, states must establish long-term goals for achievement including two indicators of academic achievement, a measure of graduation (for high schools), a measure of English language proficiency, and an indicator of school quality or success, often referred to as the “fifth indicator.” This fifth indicator is expected to be able to distinguish high- from low-performing schools and can address a number of possible aspects of success, such as student engagement, educator engagement, student access to advanced coursework, postsecondary readiness, and school climate. This new indicator requires attention to measurement and research in these areas.

How can RPPs support the refinement of school quality and success indicators?
- RPPs can work to identify existing measures of school quality that foreground equity and have strong validity and reliability.
- RPPs can help states design new measures and develop validity and reliability evidence for them.
- RPPs can help districts and states interpret findings from these new measures and understand the implications of these findings for practice.

**ENGLISH LEARNERS.** Under Title III of ESSA, states are required to ensure that English learners (EL), including immigrant youth, both attain English proficiency and achieve at high levels in academic subjects in English. In particular, states and local districts are required to establish, implement, and sustain effective language instruction programs to increase the English proficiency and student academic achievement of English learners. In addition, states and local districts are required to provide effective professional development to build the capacity of teachers, principals, and other leaders so that they provide effective instruction to prepare ELs. Finally, they must promote and support the involvement of parents, families, and communities in related programs. Many states have not attended sufficiently to these areas.

How can RPPs support improvement of English Learner education?
- RPPs can help by using available data to help identify particular challenges that need addressing.
- RPPs can identify particular research-based practices that might serve short and long-term needs.
- RPPs can help by drawing on external partners with expertise about linguistic diversity and learning who can act as thought partners.
- RPPs can help to operationalize proficiency and effective instruction and develop measurement tools to ensure states and districts are making progress in serving English learners and building the capacity of educators through targeted supports or professional development.

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To read more, see this 2017 chapter on “Research-practice partnerships and ESSA: An agenda for the coming decade.”

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RURAL EDUCATION. Although there are several components of ESSA that prioritize rural districts, Title V, in particular, provides dedicated funding and allows flexibility through the “Rural Education Achievement Program” (REAP). REAP is designed to focus on the unique needs of rural districts, particularly low-income and small rural schools. REAP funds could be used for a variety of school and district approaches from hiring additional teachers to purchasing new technology or extending course offerings. Given the unique challenges facing rural districts and schools this area of ESSA has important potential for partnerships.

How can RPPs support rural education initiatives?

- RPPs can help by working with local districts or states to identify high priority areas to target using existing or newly collected data.
- Once these are identified RPPs can help by synthesizing research on rural schools, working with local leaders to develop implementation plans around research-based approaches, and building the capacity of educators around particular improvement initiatives.

In this guide, we present scenarios that illustrate how long-term research-practice partnerships might help develop the capacity in each of these areas while implementing ESSA’s provisions.
The term “evidence-based” appears throughout the ESSA, 61 times in all. Seven different competitive funding programs require education providers to adopt evidence-based strategies, programs, and interventions to improve schools, teacher quality, and student achievement. The law reflects a continued commitment among policymakers to the idea that research evidence has an important role to play in supporting educational improvement efforts. To succeed, local leaders may need support to make the vision of evidence-based policy and practice a reality.

ESSA puts new demands on local decision makers for identifying evidence-based strategies, implementing them, and--in some cases--designing them. Local education providers are expected to have expertise in evidence-based strategies when states determine evidence is “reasonably available.” In some sections of the new law, providers are called to follow “best practices” in designing or implementing evidence-based programs.

The law defines four categories of evidence that provide some clarity on what is meant by an evidence-based program that can help local decision makers. Those tiers are based on the strength of evidence available for programs:

The top tier (“strong evidence”) is comprised of strategies and interventions for which there is evidence of a positive and statistically significant effect on student outcomes from at least “one well-designed and well implemented experimental study,” that is, one that uses random assignment to estimate the causal impact of programs.

The second tier (“moderate evidence”) is comprised of strategies and interventions for which there is evidence of statistically significant, positive outcomes from at least one well-implemented quasi-experimental study.

The third tier (“promising evidence”) is comprised of strategies and interventions for which there is correlational evidence of positive effects, once potential sources of selection bias are accounted for statistically.

A fourth tier comprised of programs that have a “research-based rationale,” that is, where there is a body of evidence from research and evaluation that the strategy or intervention is likely to improve student outcomes. Also, an evidence-based program is one in which there are “ongoing efforts to examine the effects” of the strategy or intervention.
These distinctions between levels of evidence can guide local decision makers as they seek out research evidence related to educational problems they are trying to solve.

Long-term research-practice partnerships are a good way for state and local decision makers to gain access to and adapt evidence-based programs. RPPs can help leaders identify and select evidence-based programs that are appropriate for their context and address the needs of their schools and districts. The benefit of relying on partnerships is that researchers often have a broad lay of the land of relevant and rigorous programs and practices, and they can serve as neutral thought partners when considering programs and practices to adopt or adapt. Researchers can also help sift through the full body of evidence relevant to the problem of practice under consideration.

A list of evidence-based programs is not sufficient when selecting programs. Identifying evidence-based programs requires knowing where to look for programs that have a strong evidence base and that match the needs of a particular school, district, or community. Intervention reports from the What Works Clearinghouse, which are summaries of evidence related to specific programs, typically provide little guidance on the resources required to implement programs or on the processes that educators might need to undertake to select programs based on a careful balancing of needs and resources.

RPPs can do more than just help with identifying programs: they can help with adapting and evaluating evidence-based programs, too. For example, a research-practice partnership team might take an existing program for promoting social and emotional learning and help refine it to fit to a particular district context or statewide need. As part of the adaptation process, researchers can study its implementation and effects, to make sure that in the new contexts, its effectiveness is not diminished.

In this guide, we present several different scenarios of how RPPs might help with ESSA, and each of them either directly or indirectly addresses the evidence provisions.
SCENARIO #1: CAPACITY BUILDING FOR EDUCATORS

How RPPs can help districts and states understand and solve the teacher shortage problem

Some school districts across the U.S. are experiencing a teacher shortage due to declining enrollment in teacher preparation programs, a rise in the number of K-12 students attending public schools, and high teacher attrition, especially in low-income schools. Many districts are struggling to find qualified teachers in fields like mathematics, science, special education, and bilingual/English language education. Instability in the teaching force is a challenge for school improvement efforts as it impacts both student achievement and the efficacy of professional learning practices.

The Every Student Succeeds Act (ESSA) recognizes the importance of a stable, qualified teacher force. First, for districts, ESSA focuses on improving educator quality under Title II (although funds for this are currently in jeopardy). Second, for states, ESSA requires states to develop meaningful frameworks for what constitutes a highly-qualified teacher. There are also provisions, rules, and regulations asking states to engage in yearly analysis of equitable access, connected to the state equity plans updated in 2015.

How might district and state education leaders find support through Research-Practice Partnerships? Researchers with expertise in teacher induction and professional development can help identify evidence-based strategies that address specific needs related to retaining and developing teachers. State and district leaders have different needs and opportunities related to issues of teacher shortages and pipelines. Districts need to recruit, develop, and retain high-quality educators. Some consider these issues as a problem of the teacher pipeline. States need to plan for how teachers are being prepared or providing incentives for recruitment in shortage areas or disciplines. Here are two scenarios that illustrate how local and regional teacher pipelines could be better understood and enhanced through RPPs.

Start a partnership

A district administrator in a high needs district has struggled with hiring teachers for the last five years. The administrator has hired emergency certified, alternatively certified and long-term substitutes to fill the gaps. At this point, the administrator is increasing class sizes instead of filling positions. The teacher shortage is exacerbated because the remaining teachers are being asked to do more and are experiencing high levels of fatigue and stress. The district leadership team suspects the hiring challenges will only continue to grow, with detrimental effects for students and teachers. A longer-term policy strategy is needed to attract, retain, and support qualified teachers.

As the administrative team considers the magnitude of the challenge of creating such a system that addresses both the needs of the traditionally prepared teacher and those that are alternatively trained, they agree that there is a need to seek out support. A district administrator reaches out to a faculty member in the School of Education at a local university who she knows has expertise in teacher induction. They discuss possibilities for creating a working group across institutions to better understand what led to this situation so as to more effectively address it. The group they convene considers strategies that...
might 1) promote retention by encouraging and supporting professional growth opportunities and 2) support the onboarding and growth of new alternative and emergency certifications in the district and region. The administrator’s initial goal in contact the researcher was to develop a system of multiple pathways into teaching in the district, including traditionally trained and alternative teacher preparation routes.

**Bring the right people and resources together to understand the problem**

The researcher and district administrator meet and identify a set of questions related to the needs of the district. Together, they identify the need to consider the experiences of teachers and examine the school-based supports in place for new teachers in the district, so the administrator tasked the researcher with developing a survey of new teachers and principals. They also put monthly meetings on the calendar. The researcher invites two colleagues with expertise in professional development, teacher mentoring, and teacher retention, and the district administrator invites a couple of district leaders with responsibilities for hiring and district professional development policy and strategies. The researcher shares with the district leaders key synthesis reports on teacher shortages that highlight correlations between retention and strategies districts can use to increase it (Evidence Tier 3) and then leads an activity to identify the root causes in the district using a fishbone diagram for identifying root causes of problems. In one of the meetings, the researcher presents survey results for the group to discuss together.

Through this process, the emerging partnership identifies the following issues:

- Negative downstream consequences of large class sizes such as student disengagement
- Alternative certified teachers with content expertise but lacking pedagogical knowledge to support student learning
- Alternative certified teachers entering the profession without the necessary preparation to effectively teach the diverse students served by the district, and often lack content and pedagogical knowledge to support student learning

**Learn from existing and partnership-collected data**

The researchers continue to gather information from different sources to understand the problem better. In surveying teachers who left the district, the members of the RPP find that many teachers left because they felt they were not supported with effective teaching practices to overcome the challenges they faced in their classrooms. They also find that the teachers had been overwhelmed by large class sizes. District administrators and researchers then reached out to school districts with similar demographics that were not facing teacher shortage issues, or had productively addressed similar challenges, to learn about their contexts and strategies. Their analyses yield many significant correlations between strategies the district leaders think they can use to retain teachers and improve retention outcomes (Evidence Tier 3). In doing so, the members of the RPP needed to decide what aspects of the system made other districts and state contexts useful comparisons to learn from.
At the conclusion of their needs assessment process, the RPP decides that the following issues are most pressing:

- Lack of teacher pedagogical content knowledge
- Need for productive professional learning communities for teachers and teacher leaders

As they began to co-design a long-term plan to address these issues, they struggle to find pathways with traditional models because traditional professional development models often require teachers’ time away from students. The administrator vocalizes a concern with this, worrying that the original problem may be exacerbated, because the students may be exposed to long-term substitutes who have fewer skills and the students may suffer from inconsistency in their classrooms.

**Pilot and study promising strategies**

The district leaders, with help from their research partners, continue to learn more about teacher pipeline issues, community contexts and the downstream consequences for both teachers and students in the district. They review timely resources like a set of one-pagers put out by the National Board for Professional Teaching Standards on ESSA Opportunities for Accomplished Teachers and develop some short-term strategies to address the sub-shortage. Together they also start looking into longer-term solutions by partnering with additional community partners and institutions of higher education, and design and study piloting programs to incentivize, grow, and retain excellent teachers in the district. They settle on three initial strategies to develop, pilot, and study:

- Developing a stronger relationship with local teacher preparation programs in order to design and pilot an intensive mentoring program for beginning teachers
- Initiating a “teacher residency” program in the district
- Piloting changes to time allotted for teacher collaboration or professional learning communities, as well as substantive guidance to leaders about using that time to focus on core instructional issues

The district uses ESSA funds to provide incentives and increased support within the teacher residency and new teacher mentoring programs. The researchers write and are awarded a small grant to support their participation in the pilot programs, which are co-designed by district leaders and research partners and implemented through a partnership between the district and a local teacher preparation program. After one year of partnering, the RPP is ready to implement and study the pilot programs. The researchers work with district partners to identify a matched comparison group of new teachers that they can study to generate evidence of the promise of the approach (Evidence Tier 2).

Challenges like teacher preparation, professional learning, and pipelines ultimately need to be addressed at local, regional, state, and national levels. Progress can be made at different levels, simultaneously, when RPPs focus on one component of the system, in order to make impact, while also strategically attending to implications at broader and local scales.
Problem of Practice at the State Level

Rural areas of the state are losing teachers. Many are leaving the profession after two or three years in the job. Attracting new teachers who are qualified is difficult for rural superintendents. Several rural counties petition the state to form a collaborative to investigate the problem, and they succeed in convincing several legislators about the need for such a collaborative. The legislature passes a bill authorizing the creation of a part-time position at the state department of education to head up the effort. This person is charged with ultimately reducing attrition from rural schools.

The state leader tasked with heading up the collaborative quickly realizes it is a complex problem. The data on who is leaving and who is staying is organized differently in each county, and even though the state keeps records of licensed teachers in the state, there is not much data on reasons teachers leave or stay, or how teaching conditions vary across counties. They decide to call up their Regional Educational Laboratory to see if they can help.

Start a partnership on educator capacity at the state level

A researcher there meets with the state collaborative that is just forming, and together they identify key data needs of the collaborative and ways to move forward. On the basis of the meeting, they decide to explore forming a partnership that also includes rural district leaders from a nearby state facing the same problem. At a subsequent meeting with all interested partners, they develop a mission statement for the partnership and a commitment to conducting research on why teachers are staying and why they are leaving rural areas, and helping state leaders strategize about policy solutions around teacher attrition in rural communities.

Learn from existing and partnership-collected data

Through a survey and interview study, the researchers discover that the reasons for leaving vary from county to county. In more isolated, low-income counties, low salaries are primary reasons why teachers leave, as is the sense of having limited professional growth opportunities with other teachers. In other counties, weak principal leadership was identified as a factor related to why teachers didn’t stay. Not wanting to limit their analysis to attrition problems, the partnership shift their focus to retention, or why people stay. They learn from the survey that positive leadership and opportunities to meet regularly with not just colleagues in their school, but also at conferences and online are reasons why teachers remain in their schools. The correlational evidence the partnership generates of factors that are associated with retention in rural counties (Evidence Tier 3) provides an initial empirical basis for how to intervene.

Set up working groups to move solutions forward

The partnership decides that it will explore a strategy of having regular online convenings of new teachers and facilitate in-person meetings. They also create a principal study group focused on literature related to teacher induction to identify research-based strategies that could inform their own intervention design (Evidence Tier 4). The partnership, moreover, decides to study whether these strategies can make a difference, surveying participants in the online
meetings about their feelings of belonging in the profession and desire to continue teaching in their posts. Some of the principals agree to have their staff surveyed anonymously about working conditions, to see if these are getting better over time. The partnership recruits people with additional expertise to help the state analyze how differentiated pay structures impact recruitment and retention, as well as how teacher movement within regions affects educational opportunities for students.

Over the course of the following year, the state works with regional facilitators to design and implement a statewide strategy, and researchers design a study of the effectiveness of the strategy. Because more principals want their schools to be a part of the initiative than the state has resources to support, researchers propose using a lottery to assign schools to either participate in the project or get an alternative, low-cost professional development related to retention. That way, they can conduct a study that generates trustworthy evidence of the strategy’s impact (Evidence Tier 1).

Research-Practice Partnerships often use tools to help teams identify problems of practice to address. One such tool is a Fishbone or Ishikawa Diagram, which can help teams identify policies and practices that make problems persist in an educational system. This tool was first developed in industry to help address problems in complex work activities that require extensive coordination.
To Learn More


QUESTIONS TO CONSIDER

What does your state or district already know about the existing teaching force?

What questions do you need answered? Do these questions require collecting new data or analyzing existing data in new ways?

What researchers or research organizations might you reach out to who could help you better understand the issues or support local initiatives to retain and support excellent teachers? Who at local and state colleges and universities? How might a Regional Education Lab play a role?
SCENARIO #2: SCHOOL IMPROVEMENT
How RPPs can help districts with school improvement

As part of the Every Students Succeeds Act (ESSA), local education agencies are required to set aside 7% of their Title I budget for low performing schools. States will distribute these funds to school districts, and school districts will develop plans for school improvement for the schools based on a criteria selected by the state.

Start a partnership

When school district leaders develop their school improvement plans, they can draw on the expertise and capacities of their partnerships with researchers. Take as an example one large urban school district administrator who has a strong partnership with multiple researchers from a large university within their community and is now charged with developing a plan to improve its schools in the lowest performing 5% of the schools in the state. This district leader convenes a diverse team of key district leaders, school leaders, teacher leaders, parents, community partners as well as research partners to participate in a process of developing this plan for the ten identified schools which serve students from Kindergarten through 12th grade.

The partnership can help with three different tasks the district leader facilitates:

- Discuss and identify the problems experienced by these low performing schools by examining a body of existing research evidence and by studying the low performing schools in the district
- Identify and discuss research frameworks to guide the search for solutions to the problems identified
- Design and implement a study with the school district team that will help evaluate the proposed school reforms outlined by the plan

Bring the right people and resources together to understand the problem

During initial meetings, research partners review evidence from prior research about what contributes to persistent low achievement in low-performing schools. The leaders draw on findings from research conducted in the district, as well as on research published in peer-reviewed journals (Evidence Tier 4). In addition, district leaders present data on perspectives from teachers, principals, students, and community members about factors contributing to persistent low achievement.

The diverse team led by the district leaders use this body of evidence to name the challenges or problems experienced by these low-performing schools. Some people on the team think that the schools struggle with students not coming to the school. Other people think the instruction and interventions the schools provide are not having their intended effect on students’ outcomes. Finally, others in the team think that the schools are most challenged because of the 20-30% of the teachers a year that leave the school.

To narrow in on one of these three problems, the research partner re-examines the school’s attendance data, and reveals to the team that students are arriving late for school and generally have significantly lower levels of attendance than
other district schools with similar characteristics. With further analyses of school data, the research partner finds that once students arrive at school, they become disengaged in their classes. At the high school level, students are not attending specific classes based on the time of day and the characteristics of the teachers (students more often skip class with less experienced teachers). The research partner presents these data to the team in a meeting, offering the interpretation that the problem to be solved is not only getting students to come to school, but also engaging students in school once they arrive.

Develop a plan

The team decides to adopt a research framework for school quality, which would address both student attendance and student engagement, as well as low levels of student achievement. The research framework the team adopts is one outlined by the University of Chicago Consortium on School Research (CCSR). That framework posits a set of five essential supports for school improvement: leadership, parent-community ties, professional capacity, student-centered learning climate, and ambitious instruction. The district wanted to support student attendance, student engagement, and the schools across all five of these school qualities. They developed a plan for improving these low-performing schools that is centered on developing the school’s student-centered learning climate.

Learn from existing and partnership-collected data

The district leaders along with school leaders and teachers in the five lowest performing schools decide to engage with a researcher who specializes in Design-Based Implementation Research to develop strategies aimed at strengthening the five essential supports with special attention to developing students-centered learning climates. The researcher, working with the school and district leaders, designs a survey of students’ perception of their school culture and climate which they plan to administer twice a year. In conjunction with the first administration of the survey, the researchers also design professional development and a network of coaching and learning supports for teachers and schools.

During the professional development with teachers on the use of this survey data, teachers see information suggesting that students don’t feel engaged with the general approach to instruction across the school, which is mostly teacher centered instruction. The teachers propose the need to explore better approaches to engaging students. The researchers suggest the district and school leaders discuss with their teachers the research about the benefits of project-based learning, an approach the district had been exploring with this research partner at a small set of schools. The school leaders and teachers in the struggling schools like the idea of exploring project-based learning because of the possibility of addressing students’ negative perceptions of instruction.

The district and school leaders decide to add a mathematics curriculum using project-based learning into the school improvement plan for these schools and provide in the plan additional professional development for the skills needed.
by teachers to implement this curriculum. They select a project-based learning mathematics curriculum, which spans Kindergarten through 12th grade and is recommended by their research partners. They also include in the plan the continued administration of the student survey about school culture and climate to see if students’ perceptions about school change as these are implemented.

Pilot and study promising strategies

During this planning process, the schools supported by the improvement plan create an improvement community of elementary (K-5), and secondary (6-12) teachers to co-design and refine the plan for implementation. The group of about 10 elementary teachers and 10 secondary teachers across the 10 low-performing schools meets on a weekly basis with one of the research partners and district and school leaders to work on a pilot survey of school culture and climate as well as the project-based math curriculum with small populations of students within their school. For example, the teachers within the improvement community would be the first to implement the new survey and the new project-based mathematics curriculum, and would co-design the approach to implement the curriculum based on initial findings detected by researchers in these pilots.

District leaders and partners used rapid improvement cycles to pilot tools and programs, and over time began to see growth in student achievement in mathematics in these schools (Evidence Tier 3). They want to know which of the interventions or supports they had provided to teachers help make instruction more engaging and consequently improve student achievement in mathematics. The district leaders had anticipated they would have this question, and worked with research partner to not only survey students about school climate and culture but also survey all teachers across the district on an bi-annual basis starting from the first year of the reform.

Using the survey data and other district administrative data, the researchers used a treatment-comparison group design to understand the difference in perceptions of the teachers in the schools that are part of the improvement efforts to understand teacher’s uptake in the project-based math practices through the professional development and coaching provided (Evidence Tier 2). The findings were promising, showing their work with teachers in these schools was having a statistically significant effect on the teacher’s perceptions of support as well as the student attendance, student engagement, and math achievement. The district leaders used this research evidence and evidence from the other small tests conducted during the implementation of the reform to justify spreading some of these approaches to math instruction and teacher support district wide.
To Learn More


QUESTIONS TO CONSIDER

What is your district's theory of action for how to improve schools that are underachieving?

What is the research base for that theory of action?

What expertise do you have within the district for implementing that theory of action, and what expertise might you have or need from partners external to the district?

What research evidence can help you know whether the strategies for school improvement are working in the district?

How can research help inform the revision to school improvement strategies?
SCENARIO #3: SCHOOL QUALITY AND SUCCESS INDICATORS
How RPPs can help districts and states with school quality and success indicators

ESSA requires all states to choose a non-academic indicator to include in their accountability systems. The goal of such indicators is to provide complementary data on school quality and climate that can be used in evaluating schools. The indicator has to be valid, reliable, and fair. It also has to be able to distinguish schools across varying levels of performance on the indicator, in order to target schools for extra support to improve performance on that indicator.

The challenges to states in selecting a valid, reliable, and fair indicator are many. A counterproductive measure might end up unfairly blaming school-level problems on individual students in those schools. Systems may choose to lean on existing measures, but these may not be good for focusing on root causes of inequity in systems.

Start a partnership

A state committee has convened to help select that state’s indicator, and they have taken up some of the challenges already. Initially, the committee is comprised of 1-2 experts in assessments from local and state universities, district research coordinators, principal supervisors, and teachers from districts across the state. In reviewing the law, the committee decides that it needs to figure out a systematic process for researching and then selecting the indicator. A principal supervisor advocates for a process that names ease of administration as a central criterion. One of the assessment experts also raises concern about taking a measure used in basic psychological research and integrating it into an accountability system. She suggests that the state might want to test a few indicators and refine them over time. District leaders on the committee add that this would let teachers, principals, and district leaders give input on how they might use measures most productively.

Bring the right people and resources together to understand the problem

The committee agrees to read a few documents that have been prepared by different groups, including the Learning Policy Institute, the National Education Policy Center, the resources assembled at the Time for Equity website. After reading them independently, the group comes together for a meeting to discuss how these reports can inform their understandings and next steps. Using these resources, they come up with four guiding principles to help them assess the range of options and decide on the most appropriate indicator(s):

- There should be multiple indicators, each of which gets at something that is important to different stakeholders.
- The indicators should focus attention on equity, specifically on opportunity to learn.
- One of the indicators should be focused on school climate from a student perspective.
- The system of supports for improvement should be set up at the same time the indicator is developed to ensure that there are evidence-based practices that schools can adopt to improve scores on the indicator.
Develop a plan

The committee finishes its initial work to identify a range of promising indicator options, having gotten input from both the researchers on the committee and the district representatives. They decide that they will look at disproportionality in suspension rates, since that is closely tied to issues raised by African American educators and community members in the state about the school-to-prison pipeline. They also choose to test out a student safety survey that includes a focus, among other things, on how welcoming the school environment is to LGBTQ youth. Third, they pick an indicator focused on teachers’ experiences of workplace conditions, because working conditions have been linked to teacher retention levels, and retention is a major issue in large and rural districts in the state.

Even though the committee has concluded its work for developing an ESSA plan, the committee decides its work is not done. Two tasks remain: (1) to identify resources to support schools in addressing issues related to disproportionality, safety of LGBTQ youth, and working conditions for teachers, and (2) to develop a process to test the indicators out to make sure that when integrated into an accountability system, they function as intended—not as punishment, but as a way to get schools support they need to improve.

The committee decides that these issues, as well as others, could be productively addressed by forming a more formal and long-term research-practice partnership. They recognized the synergy of having a diverse group of educators and researchers work on these issues, and that this group had a better chance of making progress of these issues than current committees within the state or within individual districts. They also realized it would take diverse forms of expertise and multiple years to complete. The state leader convening the group therefore adds researchers and administrators with expertise in the areas of each of the indicators they identified as needing attention. The group becomes fairly large – 15 people in all – so they form three smaller working teams to carry the work forward. They agree to both as smaller working teams on a monthly basis and as a whole team four times a year to share what they are learning.

Pilot and study promising strategies

With help from the assessment experts and an administrator with expertise in improvement science in the partnership, the teams agree on a process for using annual Plan-Do-Study-Act cycles to iteratively refine a system of measurement, reporting, and then identifying schools for support for each of the three measures. The partnership agrees on a specific aim in common, namely to ensure that every low-performing school gets support that actually results in improvement on the indicator for each school within three years. This is an ambitious aim, and they need to show improvements within the first year on some measures. Therefore, the team decides to come up with some practical measures that include leading change indicators for how they’ll know whether they’re on track to succeed at their long-term aim.

Over the course of the next two years, there are lots of ups and downs as the partnership teams
work, but they make some progress toward refining indicators and addressing issues with students’ “gaming” the climate survey that surfaced in some schools. They realize that although there are some good partnerships exploring how to address racial disparities in discipline, there are only a handful of partnerships working to develop teacher and administrator support for LGBTQ youth, and more evidence is needed to support the improvement of school climate. A team decides to write a proposal to the Institute of Education Sciences’ Researcher-Practitioner Partnership program at the US Department of Education to explore this challenge more deeply. The team working on improving working conditions decided to focus on strategies for building teacher-teacher trust and teacher-principal trust through professional learning committees. They’ve identified some practices with promising evidence for doing so from within partnership schools using correlational evidence (Evidence Tier 3). Some of the practices and indicators considered are less successful, though.

At the conclusion of the study, the partnership convenes to make formal recommendations to the state on what measures to adopt, along with what supports to include in the state’s revised ESSA plan.

This scenario illustrates how—over time, a partnership can develop to address a key challenge or task states face within ESSA, to develop not only a set of valid, reliable non-academic indicators of school climate and success, but also a set of supports integrated into the accountability system. Partnerships were critical to the success of the endeavor because they called on specialized expertise across different domains, including assessment of the indicator, intervention strategies, and local knowledge about on-the-ground implementation. The breadth of district leaders at the table - including administrators focused on equity and diversity, academic content leaders, principal supervisors, and leaders from student services - meant that the solutions developed could apply to a wide variety of district contexts.
QUESTIONS TO CONSIDER

What aspects of equity, school quality, and climate do different stakeholders—including families and community groups who are underserved by schools today—think are important for schools to address?

What might be some indicators of those aspects of equity, school quality, and climate that could signal to schools what is most important to focus on?

Are any of these indicators measured now? If so, how well do the existing indicators measure what stakeholders care the most about?

Who could be a partner in helping identify measures related to specific aspects of equity, school quality, and climate?

How will you know if your chosen measure is a good one? What evidence will you gather? Who or what is needed to gather that evidence?

To Learn More


State officials at the Department of Education are concerned about the progress that students classified as English Learners are making toward proficiency in reading and mathematics. Their concerns are two-fold: first, older students are struggling to meet proficiency standards, and second, students who spend more time focused on English Literacy Development classes are falling behind in core subjects like mathematics. They would like to be able to help schools and districts identify students earlier, using the state’s longitudinal database. At the same time, they are not sure of the scope of the problem or the thresholds to use to identify English learners who need targeted support.

**Start a partnership**

The state decides to reach out to its Regional Educational Laboratory (REL) for assistance. In an initial meeting, the team reviews the data in the state’s longitudinal database, and realizes that there could be a way to identify struggling students earlier given available data on English and subject matter proficiency. The state leader decides that they would like to broaden the team exploring the issue to include district leaders, and asks the REL leadership team if they would be willing to facilitate a meeting in which they review the fields in the database and define specific questions for this work. The REL leaders agree, and they organize a meeting in which the state leader lays out concerns and the team jointly develops questions to ask of the data.

**Learn from existing and partnership-collected data**

The team decides to focus on when English learners are reclassified as fluent English proficient. They wonder whether those reclassified earlier are more likely to succeed in mainstream classes. They also want to know at what age students who are reclassified struggle to catch up to their peers. Researchers on the REL team with expertise in longitudinal databases and early warning systems set up a data agreement with the state that will allow them to pose the questions developed by the RPP, as well as additional ones that emerge from this partnership.

The REL team performs a correlational analysis (Evidence Tier 3) and presents initial findings to the team including that older students had a hard time achieving proficiency in ELA and mathematics, especially if they were reclassified in middle school. Younger students who were reclassified, by contrast, had better odds of achieving proficiency. The team concluded that middle and high school students need a longer period of English language development support than the English learner students in the study received. They identified additional questions grounded in their experiences and other research on English learners: How do first- and second-generation English learners compare? What about Spanish speakers compared with speakers of other languages?
The REL team addressed these additional questions, finding little difference in the dataset between Spanish and other speakers, but noting that second-generation English learners struggled more than first-generation students. These results raised more questions that district leaders decided to pursue on their own, separate from the more formal report the REL team submitted to the U.S. Department of Education as part of their contract.

Meanwhile, the state leader worked with the team to develop a set of priorities for early identification of EL students to provide them with assistance and for targeting EL funding for older students to help them get the additional support they needed. The leader worked to develop bilingual programs that would allow older students to continue to receive instruction in their home language, so that they could keep up with their peers while learning English. The team agreed to monitor progress in two large districts in the state, to provide feedback on how the new priorities were working.
To Learn More


QUESTIONS TO CONSIDER

Where is expertise in serving English learners located in your state?

How can partners make use of different sources of expertise for supporting English learners?

What existing data can be used or combined to gain new insight into the needs of English learners? What new data should be collected locally or statewide based upon questions that emerge?

What analysis approaches can help with early identification of English learners who need extra support?

What are research-based supports that are appropriate for older students who are English learners?
SCENARIO #5:
RURAL EDUCATION

How RPPs can help districts and states improve rural education

The Every Student Succeeds Act (ESSA) offers both new and continuing opportunities to support rural education. For example, Title V, Part B offers targeted funding specifically for rural schools. ESSA also offers greater flexibility for state and local education agencies to address persistent challenges facing rural education, including by allowing rural schools and their local education agencies (LEAs) to coordinate on the submission of consolidated applications for federal grant programs.

Utilize existing networks to start a partnership

In a rural state, an existing collaborative of 15 LEAs located in a remote rural part of the state has convened to discuss how they can pursue additional funding under ESSA to support college and career readiness among students in the region. Since the collaborative’s inception two years ago, a group of superintendents from the 15 LEAs have met on a monthly basis to discuss shared challenges, and they regularly co-sponsor professional development for teachers from the member LEAs. When possible, the group meets in person, including at events such as the Rural School Superintendents Association annual meeting. Given the distance separating the districts, however, many of their meetings occur by phone or video conference.

During collaborative meetings, the group has consistently returned to the challenge of supporting their students in preparing for and persisting through some amount of postsecondary education or training. They decided to invite two researchers to join the collaborative as partners in thinking about, and studying, this challenge in the context of a remote rural region. Both of the researchers are known to several member superintendents, as both regularly attend the National Rural Education Association conference. One is on the faculty of a state university several hours away and has expertise in college and career readiness, and the other works at a non-profit research center in the state’s capital city and has expertise in rural education.

Bring the right people and resources together to understand the problem

As a result of their ongoing discussions and new flexibility under ESSA, the collaborative is interested in working together on a proposal under the Student Support and Academic Enrichment Grants program to secure additional funding for technology resources that would allow their high schools to offer more online courses. Many of the rural superintendents see online course-taking as a way to support college and readiness among rural high school students, particularly because it’s difficult to provide a comprehensive range of both college-preparatory and career and technical course options on site. However, one of the superintendents is urging the group to go a step further by offering online dual-enrollment courses; she shares a report she recently read from the What Works Clearinghouse (WWC) documenting the effectiveness of dual-enrollment programs (Evidence Tier 1). The group decides to reconvene after reading the WWC report along with another recent report summarizing research on online and blended instructional approaches.
When the group reconvenes, many of the collaborative members comment that they were surprised by the level of evidence supporting dual enrollment programs. Several superintendents also observe that blended instructional approaches, as opposed to purely online approaches, have greater research-based support. One member asks what is known about dual enrollment programs when the courses are offered online, which would likely be necessary in collaborative high schools given that the nearest college or university is a minimum three-hour drive from any of the 15 LEAs. This question leads the group to consider whether their grant proposal might include research that examines this question. As part of this conversation, two superintendents share that a set of teachers in their middle schools have been working with one of the collaborative researchers on supporting struggling readers in the content areas using a Plan-Do-Study-Act (PDSA) approach, which is a process for testing a change by planning it, trying it, observing the results, and acting on what is learned.

Develop a plan

The group moves forward with a grant proposal, led by a proposal development team that includes two superintendents, two high school principals, and the two researchers. Based on the research evidence they have reviewed, they decide that the proposal must incorporate the following three critical elements:

- A partnership with a state university that has agreed to offer a “blended” dual enrollment program that combines online instruction with face-to-face student and faculty interaction, including both faculty visits to the region and student enrollment in summer courses
- College and career advising, offered in coordination between the counseling departments at the state university and at each of the LEA high schools
- A research component that iteratively studies implementation of the first two elements, and changes to implementation, using a PDSA approach, and also studies the experiences and outcomes of students participating in the blended dual enrollment program relative to a control group (Evidence Tier 2)

A couple of years into the funded partnership, the project shows meaningful signs of success. Several iterative inquiry cycles have been completed, which the participants decided should test changes in the modes and frequency of interactions among university faculty, students, and high school teachers and counselors. And the researchers and practitioners involved in these cycles are observing real changes in both their own practice and in student engagement. Moreover, members of the collaborative, along with the researchers and practitioners involved in implementing the blended dual enrollment program, have described changes in their own thinking about the relationship between research and practice, and between researchers and practitioners—and they are confident that these changes are allowing them to better prepare students in the region for success in postsecondary education and in careers.
To Learn More


QUESTIONS TO CONSIDER

How might a new RPP build on and expand the capacities of collaboratives in rural areas that already exist?

What new kinds of collaboratives are needed to support pressing challenges for rural schools and communities?

How can partnerships be used to expand opportunities for dual enrollment and blended learning?
IMAGINING POSSIBLE SCENARIOS FOR PARTNERSHIPS IN YOUR DISTRICT OR STATE

The scenarios above are imagined ones, but they are based on the work of real RPPs. They speak to the ways that state and district leaders across the country in both urban and rural areas have benefited from long-term partnerships with researchers. Importantly, the research partners did not just help leaders identify research-based programs, they helped them to draw on research to adapt or even design programs that were customized to local, regional, or statewide needs. And, the researchers partnered with educational organizations to develop evidence of the effectiveness of strategies. It is possible, then, for RPPs to develop Tier 1 or Tier 2 evidence themselves, creating programs that meet the evidence provisions on their own.

Researchers and leaders seeking to form partnerships can use the scenarios in this guide to develop new research-practice partnerships or strengthen existing ones related to current problems of practice. The scenarios are intended to inspire and illustrate possibilities, rather than limit, what RPPs can do to support ESSA implementation. Developing scenarios can be a productive design strategy to help new teams build a common vision and sense of purpose. Scenarios generate and also concretize possibilities, and so they support the design of research studies, as well as solutions to be tested in research studies. What is needed is time for people to work closely together to develop an understanding of shared values, concerns, and aims. Spending time discussing the contents of this guide can, in our view, provide a solid foundation for a new partnership. In addition to this guide, the tools and routines on the Research+Practice Collaboratory’s RPP Toolkit (http://researchandpractice.org/toolkit) website may be valuable to new partnerships.

For more mature partnerships, these scenarios might help partners link their current work to the specific challenges of ESSA. While the patterns of working together may seem familiar, the topical foci may be new or the partnership may be able to evolve to a new level of trust and capacity. Studying and discussing the scenarios may inspire partners to bring new researchers and educators with practical expertise and knowledge of research to address new topics.

ESSA’s shift toward autonomy for states presents new possibilities for energizing ongoing state and local reform efforts. RPPs can support these efforts, infuse new ideas into them, and develop evidence to inform educators’ ongoing efforts to "get better at getting better."
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