



# Addressing the Gap Between Education Research and Practice

## The Need for State Education Capacity Centers

By Ulrich Boser and Abel McDaniels

June 20, 2018

Research alone does not change practice. This is true in every field, be it engineering, education, or law. Studies are not enough to shift the day-to-day practice and habits of professionals; just putting information into someone's hands does not help them understand how to use that information to improve their work.

Part of the reason is human nature; change is difficult. Another reason is that it takes work to make a study relevant to what's happening on the ground. Plus, practitioners are often skeptical of experts. Academics, after all, often seem far-removed from the daily work experience.

This issue brief attempts to address the research-practice gap in the education space. First, it describes some challenges in applying research to educational practice. It then outlines research-practice partnerships (RPPs)—mutually beneficial collaborations between research scientists and education leaders that can narrow the gap between research and practice.

Finally, the brief proposes the creation of state-level education capacity centers, which would help leaders in state and local education departments use research to inform practice. Although there is a wealth of education research, most studies do not reflect the context in which district and state education leaders operate. Several state education agencies already have their own research offices, but these offices often do not have the money or personnel to fulfill the state's many research needs.<sup>1</sup> Especially at the district level, education departments often do not have the capacity to interpret and try to implement the latest research in a timely way. For one thing, education departments struggle to attract and retain research scientists on staff.<sup>2</sup> Second, research offices are often the first to be cut when budgets decline. And because education departments are subject to rapidly evolving local, state, and national political contexts, the priorities that they face are constantly changing, and the majority of time is spent fulfilling accountability reporting requirements, not research on how to improve teaching and learning.

Education capacity centers would address these barriers by facilitating and supporting RPPs between education leaders and external researchers. Nearly every state has at least one premier research institution, but not enough is done to promote collaboration between research systems and school systems.

Education capacity centers would bridge the divide by matching researchers and education leaders; supporting collaborative projects around problems or practice; and engaging practitioners across a given state on the implications of the findings for their districts. The centers could be funded through a mix of public and private funds and administered either in or outside the state education agency. Legislation that establishes the centers could identify a dedicated revenue stream or earmark a reasonable amount of an existing appropriation to support them.

RPPs have proven to be useful in helping leaders improve student outcomes. State education capacity centers would expand these partnerships, as well as direct more government funding beyond the private sector—to instead support RPPs—to serve a larger public good.

---

## Background

Thirty years ago, Chicago Public Schools embarked on a bold experiment. Following a major teacher strike and massive public dissatisfaction, the district dismantled itself and gave decision-making power to community-led local school councils. To accompany this experiment, local and state leaders established the University of Chicago Consortium on School Research to study the impacts of the local school councils and every major reform thereafter.<sup>3</sup>

Chicago's experiment with decentralization did not last long, with decision-making authority shortly restored to the city.<sup>4</sup> But the consortium has withstood the test of time; it continues to provide local leaders in Chicago—and in the rest of the country—with independently produced, timely information on how its range of policies and programs are performing in the city.

Unfortunately, Chicago is unusual in having such strong research capacity—many of today's school districts do not have robust in-house research and evaluation efforts. More often, school districts struggle to apply lessons from research, largely because their organizations do not have the adequate personnel or time to do so.<sup>5</sup>

To be sure, schools want to engage with the latest research to help them improve. But state and local education departments are responsible for every aspect of operating schools, from hiring and supervising staff to deciding how and which subjects students learn. These agencies are largely set up to complete these functions in compliance with state and federal laws, not to respond to the latest research findings.

Yet to an increasing degree, state and local education departments are trying to apply the latest research to improve the quality of education that students receive. Federal lawmakers have incentivized efforts to expand research use by requiring state and local leaders to use evidence when designing interventions to improve their lowest-performing schools and districts.<sup>6</sup> But local education agencies need support behind simple incentives to incorporate research into their work more effectively.

Across the country, several districts have followed Chicago's example and built relationships with their local research communities to better understand and learn from what is happening in their schools. But geographic distance between education leaders and research institutions, as well as a lack of interested researchers, prevent many communities with struggling schools from taking the same action.

---

### A disconnect between research and practice

There is not a linear pathway from evidence to decision-making. Officials in school districts or state departments of education often struggle to find research relevant to their specific contexts. This issue is not necessarily a concern of the researchers producing the studies, and studies on a particular subject may have contradictory findings. Further, previously held professional experiences or beliefs, organizational priorities, and political demands influence how education leaders interpret this evidence and ultimately make decisions.<sup>7</sup>

Furthermore, a lot of attention has focused on “effectiveness” research to evaluate whether a specific practice or program, once implemented, affects an education outcome.<sup>8</sup>

Federal policymakers have tried to encourage district- and state-level leaders to use research—largely by trying to improve the quality of research produced, making research more available to state and local leaders, and adopting evidence requirements.<sup>9</sup> The logic behind this approach makes sense, but primarily focusing on research production and dissemination has done little to address the real-world challenges that keep education departments from using research. Evidence does not suggest that dissemination of effectiveness research in and of itself actually changes what practitioners do.<sup>10</sup>

In order for state and local leaders to use research-based interventions to improve schools, there need to be policies that reflect how these leaders actually use research to make decisions. Studies have shown that practitioners prefer research that can inform their own improvement efforts, rather than effectiveness research.<sup>11</sup> This type of research can include traditional improvement science, but also descriptive analyses of how national issues affect a specific district or school, as well as the development of student on-track indicators or school climate measures to assess how students and schools are faring. Research focused on improvement is co-constructed by practitioners and researchers, and it is rooted in the challenges of practitioners' everyday work. Policy should support the creation of this type of research, as well as develop school districts' and state education departments' capacity to use findings to implement changes.

## The Philadelphia School District's Office of Research and Evaluation

Philadelphia's Office of Evaluation, Research, and Accountability houses the Office of Research and Evaluation, which builds partnerships throughout the city's research community and beyond, leveraging these relationships to improve the district. Philadelphia is home to a range of world-class research institutions such as the University of Pennsylvania, various research consortia, and independent research organizations.

The district's Office of Evaluation, Research, and Accountability pursues and maintains partnerships with personnel from these organizations and provides information to inform day-to-day decision-making in the district. It supports the district's central office and school staff.<sup>12</sup>

---

### Research-practice partnerships

RPPs can help produce actionable research and help practitioners interpret and apply findings. Cynthia Coburn, William Penuel, and Kimberly Geil, who are established leaders in this field, define RPPs as “long term, mutualistic collaborations between practitioners and researchers that are intentionally organized to investigate problems of practice and solutions for improving district outcomes.”<sup>13</sup>

When operationalized, RPPs can take several forms. Some are partnerships between district research leads and outside researchers who study the impacts of district policy while producing independent, generalizable, and publicly available studies. Other RPPs consist of researchers and senior leaders working together to use research to design new interventions and test their effectiveness. RPPs could also help multiple practitioners and researchers form a network in which they develop and test new programs, then share findings among the larger network.<sup>14</sup>

Regardless of the specific form that an RPP takes, however, these relationships have several overarching commonalities. In all types of RPPs, researchers and practitioners work together to decide on a research agenda that addresses both practitioners' needs and researchers' interests.

Equally important, members on both sides of the relationship are committed to working together for the long term. In an RPP, the emphasis is on working together to build knowledge over time, through an iterative process of implementation and evaluation, rather than just producing one product.<sup>15</sup> Because of these specific features, RPP relationships can better align the effectiveness knowledge that researchers tend to produce with the more applicable, improvement research that practitioners seek out.<sup>16</sup> The research that RPPs generate can be more useful than effectiveness research conducted in other districts because it is conducted under local conditions with the district's own students and schools.

RPPs have a strong potential to help local and state education departments build capacity and better use research to ultimately improve student outcomes, but several obstacles prevent their widespread adoption. This is primarily because school districts and state departments of education have missions and purposes that are fundamentally different from those of research universities, where many researchers who support RPPs are housed. These researchers may also work in nonprofit research organizations. This results in conflicting organizational structures between these two types of institutions, which make it difficult for members to come together to develop and sustain RPPs.

### The UChicago Consortium for School Research

The University of Chicago Consortium for School Research was established in 1990. After Chicago experimented with decentralizing governance of its public schools, the consortium was created to study the impacts of that decision and of subsequent reforms.

Researchers from the University of Chicago, Chicago Public Schools, and other local organizations make up the consortium, and a nonpartisan steering committee with multiagency representation oversees it.<sup>17</sup> Recently, the consortium has evaluated the city's high-school student assignment system to help policymakers better understand the impact of various criteria involved in the assignment algorithm.<sup>18</sup>

In addition, research conducted through the consortium has helped school and district leaders focus their attention on high school students' ninth-grade coursework, after determining that students' grades were more predictive of high school success than were test scores.<sup>19</sup> An independent study found that Chicago public school students learned the most when compared with their peers in any other school district in the nation from 2009 through 2014, and stakeholders broadly agree that the consortium contributed to this success.<sup>20</sup>

---

## Barriers and obstacles for RPPs

In September 2017, the Center for American Progress convened nearly 30 experts involved in RPPs to assess the field's present state and identify areas where policy interventions could facilitate the creation and maintenance of these relationships.

Policy experts from all levels of government, RPP leaders, and research leaders from the nation's largest school districts were in attendance. Aside from the clear reality that in some places, there simply are not enough researchers to partner actively with local and state education agencies for the long term, participants identified the following as the most significant structural challenges that inhibit the use of RPPs:<sup>21</sup>

- **Education agencies vary in their capacity to use research.** For a variety of reasons, school districts and state departments of education can have limited capacity to participate in an RPP. It can be challenging to find qualified researchers to work in education agencies, and it has been difficult for school districts to maintain research positions when subject to budget cuts, as research is less of an immediate concern.<sup>22</sup>

And even when education departments have research personnel, these personnel often do not have the time to engage in long-term projects and analyses, focused instead on their short-term compliance work.

- **Education agencies and research institutions have conflicting priorities.** Education agencies oversee schools or districts, while research universities are focused on producing research. Although not all researchers who participate in RPPs work at a university, many do. The tenure incentive system from which university-based researchers benefit encourages them to produce generalizable research, while education department leaders need clear answers to immediate, pressing local concerns.<sup>23</sup>
- **It is difficult to secure consistent funding.** It is hard for members on both ends of RPPs to find adequate funding to support capacity-building and infrastructure for research. Right now, private foundations are a major funding source, but RPPs need stable funding that can withstand leadership changes on the public sector side of the partnership.<sup>24</sup>

Despite these shortcomings, RPPs have a strong potential to bridge the gap between research and practice. Researchers use their expertise to collect, compile, and analyze information, and they support practitioners engaged in the day-to-day work of using the data and research to make decisions. Because these relationships are long-term in nature, researchers can compile a significant amount of data and research over time. This enables them to bring a unique knowledge of institutional history to districts.<sup>25</sup> In this way, RPPs help school districts and state departments of education build their own capacity to use and generate research effectively.

---

## Creating state-level education capacity centers

Because of the challenges outlined above, it can be difficult for RPPs to succeed without considerable support. Specifically, RPPs need an adequate infrastructure, both in terms of physical resources and ample staff time, to coordinate and overcome potential organizational barriers. Right now, many RPPs depend primarily on private philanthropy for support, even though there are limited sources for federal funding.<sup>26</sup> But since these relationships can meet a pressing public need, the state level of government should do more to support RPPs.

At the federal level, the Institute of Education Sciences' Regional Educational Laboratory (REL) Program partners researchers with practitioners to conduct and use applied research.<sup>27</sup> But the RELs are not able to cover all the education-research needs of states and localities. Moreover, RELs are dependent on federal appropriations for support, and bureaucratic regulations somewhat constrain the work RELs are able to do. A state-level entity designed to bridge institutional divides and foster long-term collaboration

between researchers and education department leaders would make RPPs a more realistic, attainable option. State-level education capacity centers would serve as RPP incubators. They would support education departments' capacity for greater research use by:

- **Facilitating a process to match researchers with local or state education agency personnel:** Geographic distance between research institutions and education agencies can make it difficult to develop and sustain an RPP. Other times, it may be that there are not enough suitable researchers to partner with every education agency in need. A state's education capacity center would match education department leaders with researchers based on a state needs assessment and the education department's ability to participate in an RPP effectively.
- **Soliciting and evaluating joint proposals for long-term collaborative agendas that address local or state priorities:** Trust is essential to developing and maintaining an RPP.<sup>28</sup> A state's education capacity center would oversee an application process that would require all members of the potential RPP to come together to create a joint agenda and collaborative projects. The center could also assist education leaders in preparing to work with researchers.
- **Awarding initial funding to develop infrastructure:** It is easy for members of an RPP to obtain funding for specific projects but fairly difficult to secure funding for the startup costs necessary to support collaborative work.<sup>29</sup> A state's education capacity center would provide the funding necessary to build the infrastructure to support RPPs and would cover the cost of usable databases and other physical equipment, as well as coordinating staff members' time and finalizing partnership agreements or memoranda of understanding.
- **Providing technical assistance to structure the partnership and identify long-term funding sources:** After developing infrastructure for an RPP, the researchers and practitioners would need funding to support specific projects. A state's education capacity center would help connect members of the RPP with sustainable, long-term funding sources, as well as provide any additional technical assistance necessary to sustain the relationship.
- **Fostering a statewide network to use the findings to improve local systems:** A state's education capacity center would bring together those participating in an RPP from across the state to create an improvement community network. Members of this network would meet periodically to share findings from their collaborative projects, allowing practitioners who are not in an RPP supported by an education capacity center to benefit from this work as well.

Education capacity centers would be established through state legislation and could either be part of the state education agency or operate independently, depending on a given state's needs or context. They could also be funded by private groups and exist as a nonprofit. In states that opt for a semipublic agency, a board with representation

from state education agencies, governor’s offices, and legislatures—as well as representation from the state teachers’ union, higher education, and district leadership—communities could govern the center. In states that already have a strong capacity for research use in the state education agency, the education capacity center would be a natural extension in that it would build the capacity of districts to use research better.

## EdCo

Last year, Maryland state Sen. Bill Ferguson (D) introduced S.B. 0908, which would create the Maryland Education Development Collaborative (EdCo). EdCo would be a quasi-public state-level agency that fosters innovative school designs and practices by funding and supporting RPPs in Maryland and by spreading findings from their research across the state. EdCo would make recommendations to the state Board of Education, General Assembly, and local school districts, as well as support studies consistent with pressing priorities. EdCo would be the first entity of its kind in the nation.<sup>30</sup>

---

## Conclusion

Education capacity centers that cultivate RPPs at the state level would help many more school districts leverage research to improve educational outcomes for students. RPPs provide a promising model, but the institutional obstacles—combined with geographic realities and a limited number of researchers—puts these relationships out of reach for too many schools and districts.

Research is an essential part of the school improvement process. The nation’s public schools have a long way to go to provide every child with the opportunity to obtain a great education, and an education capacity center would help more schools and districts take necessary steps forward.

*Ulrich Boser is a senior fellow at the Center for American Progress. Abel McDaniels is a research associate for K-12 Education at the Center.*



## Endnotes

- 1 Margaret E. Goertz, Carol Barnes, and Diane Massell, "How State Education Agencies Acquire and Use Research in School Improvement Strategies" (Philadelphia: Consortium for Policy Research in Education, 2013), available at <http://www.cpre.org/sea-brief>.
- 2 Ruth N. López Turley and Carla Stevens, "Lessons From a School District-University Research Partnership: The Houston Education Research Consortium," *Educational Evaluation and Policy Analysis* 37 (1) (2015), available at <http://journals.sagepub.com/doi/abs/10.3102/0162373715576074>.
- 3 Denisa R. Superville, "Chicago's Local Schools Council 'Experiment' Endures 25 Years of Change," *Education Week*, October 7, 2014, available at <https://www.edweek.org/ew/articles/2014/10/08/07chicagocouncil.h34.html>; University of Chicago Consortium on School Research, "About Us," available at <https://consortium.uchicago.edu/about> (last accessed April 2018).
- 4 Superville, "Chicago's Local Schools Council 'Experiment' Endures 25 Years of Change."
- 5 Meredith I. Honig, Nitya Venkateswaran, and Patricia McNeil, "Research Use as Learning: The Case of Fundamental Change in School District Central Offices," *American Educational Research Journal* 54 (5) (2017).
- 6 Mark Dynarski, "Using research to improve education under the Every Student Succeeds Act" (Washington: Brookings Institution, 2015), available at <https://www.brookings.edu/research/using-research-to-improve-education-under-the-every-student-succeeds-act/>.
- 7 Cynthia Coburn, Mary Kay Stein, and Meredith I. Honig, "What's the evidence on districts' use of evidence?" In John D. Bransford and Louis Gomez eds., *The Role of Research in Educational Improvement* (Cambridge, MA: Harvard Education Press, 2009), available at [https://www.researchgate.net/publication/242644678\\_What's\\_the\\_evidence\\_on\\_districts'\\_use\\_of\\_evidence](https://www.researchgate.net/publication/242644678_What's_the_evidence_on_districts'_use_of_evidence).
- 8 Dynarski, "Using research to improve education under the Every Student Succeeds Act."
- 9 Vivian Tseng, Lauren H. Supplee, and John Q. Easton, "Research-Practice Partnerships: Building Two-Way Streets of Engagement," *Society for Research in Child Development* 30 (4) (2017), available at [https://www.srcd.org/sites/default/files/documents/spr\\_30\\_4.pdf](https://www.srcd.org/sites/default/files/documents/spr_30_4.pdf).
- 10 Dynarski, "Using research to improve education under the Every Student Succeeds Act"; Steve Fleischman, "Research Matters/Moving to Evidence-Based Professional Practice," *Educational Leadership* 63 (6) (2006), available at [http://www.ascd.org/publications/educational\\_leadership/mar06/vol63/num06/Moving\\_to\\_Evidence-Based\\_Professional\\_Practice.aspx](http://www.ascd.org/publications/educational_leadership/mar06/vol63/num06/Moving_to_Evidence-Based_Professional_Practice.aspx).
- 11 Goertz, Barnes, and Massell, "How State Education Agencies Acquire and Use Research in School Improvement Strategies."
- 12 Philadelphia School District Office of Research and Evaluation, "Welcome to the Office of Research and Evaluation at the School District of Philadelphia!", available at <https://www.philasd.org/research/> (last accessed April 2018).
- 13 Cynthia E. Coburn, William R. Penuel, and Kimberly E. Geil, "Research-Practice Partnerships: A Strategy for Leveraging Research for Educational Improvement in School Districts" (New York: William T. Grant Foundation, 2013), available at <http://wtgrantfoundation.org/library/uploads/2015/10/Research-Practice-Partnerships-at-the-District-Level.pdf>.
- 14 Tseng, Supplee, and Easton, "Research-Practice Partnerships."
- 15 Ibid.
- 16 Dynarski, "Using research to improve education under the Every Student Succeeds Act."
- 17 University of Chicago Consortium on School Research, "About Us."
- 18 Lisa Barrow, Lauren Sartain, and Marisa de la Torre, "Selective Enrollment High Schools in Chicago: Admission and Impacts" (Chicago: University of Chicago Consortium on School Research, 2018), available at <https://consortium.uchicago.edu/publications/selective-enrollment-high-schools-chicago-admission-and-impacts>.
- 19 John Q. Easton, Esperanza Johnson, and Lauren Sartain, "The Predictive Power of Ninth-Grade GPA" (Chicago: University of Chicago Consortium on School Research, 2017), available at <https://consortium.uchicago.edu/publications/predictive-power-ninth-grade-gpa>.
- 20 Sean F. Reardon and Rebecca Hinze-Pifer, "Test Score Growth Among Chicago Public School Students, 2009-2014" (Stanford, CA: Center for Education Policy Analysis, 2017), available at <https://cepa.stanford.edu/content/test-score-growth-among-chicago-public-school-students-2009-2014>; Maureen Kelleher, "Progress and Promise: Chicago's Nation-Leading Educational Gains" (Chicago: The Joyce Foundation and the Spencer Foundation, 2018), available at <http://www.joycefdn.org/assets/images/1063JYC-CPS-Forum-Report-WEB-3.pdf>.
- 21 Dynarski, "Using research to improve education under the Every Student Succeeds Act."
- 22 López Turley and Stevens, "Lessons From a School District-University Research Partnership."
- 23 Information from a private convening with school district and state education leaders, researchers, and education policy experts, Center for American Progress, September 29, 2017.
- 24 Tseng, Supplee, and Easton, "Research-Practice Partnerships."
- 25 Coburn, Penuel, and Geil, "Research-Practice Partnerships."
- 26 Tseng, Supplee, and Easton, "Research-Practice Partnerships."
- 27 Regional Educational Laboratory Program, Institute of Education Sciences, "Putting Research into Action," available at <https://ies.ed.gov/ncee/edlabs/> (last accessed May 2018).
- 28 Coburn, Penuel, and Geil, "Research-Practice Partnerships"; López Turley and Stevens, "Lessons From a School District-University Research Partnership"; Tseng, Supplee, and Easton, "Research-Practice Partnerships."
- 29 López Turley and Stevens, "Lessons From a School District-University Research Partnership."
- 30 Maryland General Assembly Department of Legislative Services, "Senate Bill 908 Budget and Taxation, Fiscal and Policy Note: Enrolled – Revised," available at [http://mgaleg.maryland.gov/2017RS/fnotes/bil\\_0008/sb0908.pdf](http://mgaleg.maryland.gov/2017RS/fnotes/bil_0008/sb0908.pdf) (last accessed March 2018).