



Leading  
Educators

# Scaling What Works

Research Highlights from a Landmark  
Study of Systems that Improved





**Leading  
Educators**

Potential, ignited.



# Scaling What Works: Proven Pathways to Results That Matter

Findings from Leading Educators' landmark study on the professional learning design features that drive student learning at scale

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## Reliable Evidence Matters.

Our world is changing rapidly, and school systems face their toughest test yet: how to raise student achievement and sustain instructional improvement amid tightening budgets, staffing challenges, and new demands for future readiness.

Since the adoption of college and career readiness standards more than a decade ago, billions have been spent on professional learning (PL) to help educators shift their instruction. However, learning has not improved as significantly as hoped. In 2020, the global pandemic disrupted learning, erasing gains and leaving school systems searching for proven ways to accelerate outcomes.

Now, according to a [2025 analysis by the Research Partnership for Professional Learning \(RPPL\)](#), districts across the U.S. spend roughly \$37 billion annually on teacher PL, or about \$7,700 per teacher. The 100 largest school districts spend significantly more—about \$12,000 per teacher.

As learning gaps grow, leaders are asking: *How do we know what works, and how can we make it work here?*

That's why **Leading Educators**, through the support of RPPL, partnered with researchers from the University of Passau, ETS Research Institute, and Civilytics Consulting to conduct one of the most comprehensive mixed-methods studies of professional learning ever completed in K-12 education. Together, they examined **42 partnerships** across school systems nationwide



from 2015 to 2024 to identify places where students have made gains and uncover the “recipes”—the specific combinations of conditions and supports—that lead to meaningful student growth.

This effort yielded **21 positive cases** of student impact after professional learning from Leading Educators with ESSA Tier 3 or higher evidence. It suggests that even with imperfect conditions, professional learning can improve student learning when it’s *coherent, sustained, and connected* across roles.

Schools supported by Leading Educators began with clear areas of need, with scores below those of 70–93% of schools in the state.

Following the intervention, the positive cases outpaced the gains in similar schools, experiencing an impact equivalent to **9 months of additional learning** on average.

- **In math**, supported schools improved **8 to 34 percent**, outpacing growth in similar schools.
- **In ELA**, supported schools improved by **12 to 18 percent**, outpacing growth in similar schools.
- Districts that implemented the Leading Educators’ approach systemwide gained **1 to 3 NAEP points** more than comparable large-city districts.

Overall, impact was achieved at a relatively low per-student cost, ranging from **\$10 to \$300 annually**.

## What This Study Uniquely Offers

Most studies assess *whether* a program worked on average. This research additionally sought to identify *why* an intervention worked—revealing the precise and scalable combinations of leadership, focus, and support that make improvement repeatable.

- Using **Qualitative Comparative Analysis (QCA)**, a well-established research methodology used in political science and sociology to bridge quantitative and qualitative analysis, the researchers generated comparative evidence on the implementation, effects, and resource requirements of well-defined professional development programs, providing essential information for informing policy decisions about resource allocation.
- QCA is especially useful in situations where the outcome depends on the complex interplay of conditions. In schools, many complex factors intersect to influence student outcomes. Sometimes, a strategy that works in one school backfires in another. QCA is designed specifically to anticipate and address this type of complexity.

It also demonstrates how nonprofit partners can bridge the gap between research and practice by rigorously testing their findings, sharing both successes and null results, and continually refining their approaches to improve outcomes. Leaders, support providers, and policymakers alike can use the findings to make investment and design decisions with greater confidence.

## Beneath The Findings

Across the positive cases, the researchers found three common professional learning ingredients that were key to improvement. Success was not reliably achieved without them.

1. **Engaging leaders at multiple levels** in learning alongside teachers on the same focus areas.
2. **A focus on subject-specific pedagogy** and instructional routines—not just generic instructional strategies.
3. **At least eight hours of individualized coaching** per year for at least one role.

When those three elements were in place, student growth followed.

Several districts, including **Detroit Public Schools Community District** and **Baltimore City Public Schools**, saw their first positive student outcomes in at least one subject in more than a decade as a result of the professional learning intervention. Others, including **Charleston County School District** and **District of Columbia Public Schools**, saw declining outcomes for schools with high populations of students of color and students experiencing poverty reverse and continue to grow in magnitude for subsequent years.

Furthermore, these results weren't confined to advantaged contexts. Many of the most impressive gains came from schools that started more than one standard deviation below state averages and served large proportions of multilingual learners and students from low-income backgrounds.

### A Brief Note About the Research Design

Each “case” consists of one set of schools or one school district that received support from Leading Educators with the goal of improving student achievement in a specific subject (English language arts or math) within a single school year. Each case included a comparison group and accounted for differences in the school environment to improve the likelihood that the results can be attributed to the intervention.

A series of case-specific narratives in the report appendix goes into further detail on unique partnership design features, results, and lessons learned.

## What the Evidence Signals

Across 42 cases, the researchers identified **15 distinct pathways** that led to student impact. These pathways varied by context (large urban districts, high-need schools, multilingual learner populations), but all highlighted the importance of coherence, leadership engagement, and sustained follow-through. Additional details are available in the appendix.

The takeaway is clear: impact is not accidental — it's *designed*.

| Context                                            | What Worked                                                                |
|----------------------------------------------------|----------------------------------------------------------------------------|
| <i>Lowest-performing schools</i>                   | Strategic advising + learning walks to align leadership and instruction.   |
| <i>Schools with many multilingual learners</i>     | District- and school-level coaching + learning walks + strategic advising. |
| <i>Very large districts (&gt;100,000 students)</i> | School-level coaching + leader engagement + curriculum-aligned focus.      |

## Why Coherence Works

RAND defines coherence as the circumstance in which all instruction-related messaging and supports — for example, via curriculum materials and professional learning — provide teachers and other instructional staff with explicit and mutually reinforcing messages about *what* to teach and *how* to teach it. District and school leaders have the primary responsibility for developing coherence by providing the necessary materials, making strategic decisions about resources and priorities, and providing the appropriate support.

That kind of alignment stood out in the study's findings. When teachers, school leaders, and system leaders speak the same instructional language and build shared perspectives, feedback loops accelerate.

- Coaching becomes sharper.
- PD aligns with classroom realities.
- System decisions support, rather than distract from, excellent teaching.

Often, the conditions that help teachers thrive are the same ones that help students catch up and accelerate. How coherence is realized in professional learning can take many forms and address a range of purposes; still, several replicable approaches have emerged from this research.

## System Advising — Aligning Policies, Resources, & Practices

Leading Educators often partners with chiefs, superintendents, and instructional leadership teams to align vision, curriculum, and professional learning so that every layer of the system reinforces the next.

This often involves robust diagnostics of current student learning and experience, educator practices, and professional support to understand the precise gaps in students' mastery of grade-level content standards and the factors contributing to their current state.

Context-specific findings then inform decisions about improvement priorities, enabling conditions to address, and focus areas for professional development and coaching. Leading Educators may then support foundational strategic initiatives, such as selecting a new curriculum, redefining the roles and responsibilities of district coaches to create alignment, or adjusting schedules to allow time for in-school collaboration.

When professional learning structures and arcs are established, Leading Educators supports leaders in developing coherent scopes and sequences of learning that focus on just a handful of high-priority instructional practices or routines embedded in their curriculum. Then, during observation and feedback opportunities, leaders and teaching teams calibrate on effective practices.

## Coaching — Translating Vision into Practice

Leading Educators offers various types of coaching tailored to different roles, with a primary focus on school-based leaders and district leaders as key drivers of coherent improvement.

In partnerships with positive student impact, coaching often occurred for multiple roles.

- For example, school- or district-level coaches might receive coaching on assessing educators' mastery of the instructional routines embedded in their curriculum and using various coaching approaches to address gaps.
- With teachers, Leading Educators coaches might model lessons, co-plan units, and give actionable feedback grounded in high-quality instructional materials.

Together, these efforts support teams in reinforcing strengths and demystifying the *how* of standards-aligned instruction.

## Learning Walks & Instructional Rounds — Turning Observation into Collective Growth

During learning walks, leaders, coaches, and teachers typically visit classrooms together to observe trends and gather evidence to inform their goal-focused efforts. Then, once precise practice goals are set, they again observe student learning and educator moves in instructional rounds using standard tools to identify bright spots, pinpoint gaps, and plan future supports. The exact routines, participants, protocols, and frequency can vary based on goals and other contextual factors.

This carries value for several reasons. For example, in schools with many multilingual learners, joint observation cycles help calibrate feedback and ensure every student encounters consistent, rigorous instruction.

These activities—advising, coaching, and learning walks—bring coherence to the daily work of teaching. They turn improvement from a program into a **shared way of learning across the system**.

## The Bottom Line

Improvement isn't an accident—it's a design choice. Every system can build coherence, and every leader can scale what works. The evidence shows how. Let's use it.

### Partner with Us to Scale What Works

The findings in this report reflect what's possible when systems build coherence across every level of teaching and learning.

Leading Educators is eager to help more systems translate these insights into action—aligning vision, curriculum, professional learning, and leadership practices so that *every* student experiences excellent instruction every day.

If you're exploring ways to strengthen your instructional systems or invest in high-impact professional learning, we'd love to learn about your context. Together, we can design the conditions that make improvement predictable—and sustainable.

→ **Visit [leadingeducators.org/get-support](https://www.leadingeducators.org/get-support)** to start a conversation.

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## Appendix: Highlights from the Positive Cases

Below, we highlight a summary of key results from a select group of positive cases.

| Case & Data Period                                                                                                             | Key Findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Cost                                             |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| <b>Baltimore</b><br><i>2023–2024</i><br><i>119 schools</i>                                                                     | Fourth-grade NAEP reading scores in <b>Baltimore City Public Schools</b> increased by 1 point following system-wide support for the science of reading, the first uptick for the district in a decade.                                                                                                                                                                                                                                                                                                                                                                    | ~\$10 per student per year                       |
| <b>Charleston County</b><br><i>2021–2024</i><br><i>10 schools in Acceleration Schools; 7 schools in Transformation Schools</i> | <b>Charleston County School District</b> reversed a multi-year decline in math and literacy proficiency in its lowest-performing schools, exceeding pre-pandemic achievement after four years of partnership. <ul style="list-style-type: none"> <li>• ELA achievement in turnaround schools <b>increased by up to 18%</b> from 2021 to 2024, outpacing similar schools.</li> <li>• Math achievement in turnaround schools <b>increased by up to 34%</b> from 2019 to 2024 after systemic support from Leading Educators, outpacing growth in similar schools.</li> </ul> | ~\$277 per student per year                      |
| <b>Chicago</b><br><i>2020–2022</i><br><i>6 schools</i>                                                                         | Six schools in the <b>Chicago Public Schools</b> system <b>increased their math scores by 29%</b> from 2020 to 2022 after implementing school-based instructional support from Leading Educators, while achievement in similar schools declined by 8%.                                                                                                                                                                                                                                                                                                                    | ~ \$100 per student per year                     |
| <b>Washington, DC</b><br><i>2017–2019, 2022–2024</i><br><i>115 schools</i>                                                     | Achievement across <b>DC Public Schools</b> improved from 2017 to 2019 and from 2022 to 2024 after implementing a comprehensive, curriculum-based professional learning system district-wide. <ul style="list-style-type: none"> <li>• Math scores <b>improved by 4 points</b> from 2017 to 2019 and by 10 points from 2022 to 2024, after a period of steady decline.</li> <li>• Reading achievement showed steady growth, improving by 1 point from 2017 to 2019 and by 2 points from 2022 to 2024.</li> </ul>                                                          | ~\$60 per student per year between 2017 and 2018 |
| <b>Detroit Public Schools</b>                                                                                                  | <ul style="list-style-type: none"> <li>• A cohort of elementary and middle schools in <b>Detroit Public Schools Community District</b> saw a <b>12% gain</b> in</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                | ~ \$190 per student per year                     |



|                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                     |                               |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| <b>Community District</b><br>2022–2024<br><br>112 schools | <p>ELA achievement in one year—nearly triple the progress of comparable schools in 2023—after implementing system-wide professional learning.</p> <ul style="list-style-type: none"> <li>Math achievement in DPSCD <b>improved by 6 points</b> from 2022 to 2024, a relatively large improvement for the NAEP scale, narrowing the achievement gap with its closest peer by 54% after implementing system-wide coaching.</li> </ul> |                               |
| <b>Harlem District 5</b><br>2023–2024<br><br>16 schools   | <p>Over the 2023–2024 school year, <b>New York City Public Schools'</b> Harlem District 5 schools <b>improved ELA achievement by 13%</b> while similar schools' declined 7% after implementing curriculum-aligned professional learning through NYC Reads.</p>                                                                                                                                                                      | ~ \$300 per student per year. |

## Professional Learning Conditions

| Condition                                              | Description                                                                                                                                                     |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>High-quality instructional materials (HQIM)</i>     | Curriculum and assessment materials that are standards-aligned and effectively support teaching and learning according to EdReports                             |
| <i>Very large district size</i>                        | A district that serves 100,000 students or more, according to the National Center on Education Statistics                                                       |
| <i>Very large achievement gap</i>                      | A baseline achievement gap between the supported schools/district and the state of more than 1 standard deviation                                               |
| <i>Large proportion of multilingual learners</i>       | Schools where the percentage of students who identify as multilingual learners is above 12%                                                                     |
| <i>Focus on subject-specific pedagogical practices</i> | The program has a goal of building teachers' knowledge in how to effectively convey complex, content-specific concepts in ways that are accessible to students  |
| <i>Focus on teacher-student relationships</i>          | The program has a goal of enhancing teachers' skills in building positive and supportive connections with their students                                        |
| <i>Focus on teacher mindsets</i>                       | The program has a goal of helping teachers and leaders develop a growth mindset, recognize the potential of every student, and foster high expectations for all |

|                                                             |                                                                                                                                                                                                                 |
|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Leader engagement</i>                                    | The program provides school- and system-based instructional leaders with role-appropriate ways to participate in and reinforce teacher learning                                                                 |
| <i>Opt-in participations</i>                                | Whether participants chose to participate in programming or were required to enroll by district directive                                                                                                       |
| <i>Strong dosage of professional learning cycles (PLCs)</i> | The program provides ongoing, shared opportunities for teachers to engage in hands-on, participatory activities in shared learning to improve instruction, build relationships, practice, plan, and collaborate |
| <i>Learning walks</i>                                       | The program provides a structured process where educators, often in groups, visit classrooms to observe teaching and learning practices                                                                         |
| <i>Strong dosage of coaching for a school-level role</i>    | Experienced educators provide personalized support, guidance, and feedback for teachers and leaders to improve their practice                                                                                   |
| <i>Strong dosage of coaching for a district-level role</i>  |                                                                                                                                                                                                                 |
| <i>Strong dosage of workshops for a school-level role</i>   | Live, in-person or virtual, group sessions facilitated by a Leading Educators staff member                                                                                                                      |
| <i>Strong dosage of workshops for a district-level role</i> |                                                                                                                                                                                                                 |
| <i>Sustained learning</i>                                   | Ongoing, long-term support for teacher and leader learning, which may straddle multiple years                                                                                                                   |
| <i>Strategic advising</i>                                   | Providing expert guidance and recommendations to education leaders to help them achieve their long-term goals and improve educational outcomes                                                                  |