EXECUTIVE SUMMARY

Igniting the Learning Engine

How school systems accelerate teacher effectiveness and student growth through Connected Professional Learning

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“The needs of our students come first, and it is through collaboration that we as teachers grow and impact our students in the best way possible.”

— Teacher, Sanger Unified School District
THE CHALLENGE

For decades, education leaders have struggled to improve the quality of teacher professional development (PD) and its impact on student learning. Even in school systems that have adopted promising practices such as coaching and mentorship, peer assistance and review, and professional learning communities (PLCs), teacher PD does not seem to have significantly improved teacher effectiveness or student achievement.1

Now, more rigorous College- and Career-Ready Standards (CCRS) profoundly raise the bar for teaching and learning in American school systems. To help students reach this new bar, teachers must radically improve student learning and grow as professionals, often teaching more complex content than anything they have experienced before. In a CCRS world, it is more urgent than ever to make PD work.

PROMISING PRACTICES IN FOUR SCHOOL SYSTEMS

But some school systems are rising to the challenge and significantly improving instruction and seeing student learning growth. With the support of the Bill & Melinda Gates Foundation, we at Education Resource Strategies sought to understand not just what is happening in these systems, but how leaders have reorganized resources—including people, time, and money—to make it happen.

We identified four systems where instruction and student performance are improving even under more rigorous academic standards, where teachers are serving a relatively high-needs student population (e.g., at least 64 percent of students receive federal free or reduced-price lunch benefits), and where system leaders highlighted redesigned professional learning as a key driver of growth. These systems—District of Columbia Public Schools, Duval County Public Schools, Sanger Unified School District, and the charter management organization Achievement First—represent a range of sizes, regions, funding levels, and system types, enabling us to identify insights that we hope can be applied across the country.
IGNITING THE LEARNING ENGINE

When we took a close look at these case study systems, we found that the core elements of their professional learning look a lot like research-based strategies that some school districts have pursued for years. The difference is in how these system leaders have connected the daily work of improving instruction to teachers’ ongoing professional learning.

In many school systems today, teacher PD remains disconnected from everyday instructional work—disconnected from the particular material being taught, from the collaborative work of teacher planning time, and from observations by peers, mentors, and school leaders. In contrast, professional learning in the systems we studied is profoundly connected—really, embedded—into the teaching job, and teachers learn and grow through the daily work of improving instruction. We call that approach “Connected Professional Learning” and found that it was built on the following elements:

- **Rigorous, comprehensive curricula and assessments**: Ensure that all schools have access to rigorous and coherent curricula, assessments, and other instructional resources, aligned to College- and Career-Ready Standards
- **Content-focused, expert-led collaboration**: Organize teachers into teams, led by content experts, that have the time, support, and culture of trust and learning to collaborate on instruction
- **Frequent, growth-oriented feedback**: Provide regular feedback from content experts that helps teachers improve instructional practice

Each of these elements has value on its own, but the systems we studied connected them. Teacher teams engage deeply with the specific curricula and materials they use in the classroom, develop and review lesson plans, and analyze assessment results. When teacher leaders observe their peers, they focus on the themes raised during collaborative time and exactly how each teacher presents the material, with real-time feedback that can be applied in the classroom and during team time. Instructional experts work across the elements, adapting curricular materials, leading collaborative planning, and observing and providing feedback to teachers. Taken together, these elements are connected to the system’s overall theory of action for how teachers improve and, ultimately, how students learn.
How is Connected Professional Learning different from what we see in most school systems?

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<tr>
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<th>TRADITIONAL PD TEACHERS...</th>
<th>EVOLVING PD TEACHERS...</th>
<th>CONNECTED PL TEACHERS...</th>
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<tr>
<td><strong>RIGOROUS,</strong> <strong>COMPREHENSIVE CURRICULA AND ASSESSMENTS</strong></td>
<td>&gt; Receive textbooks and a high-level scope and sequence, with standards and substandards</td>
<td>&gt; Receive a few sample lesson plans with guiding questions and suggestions for culminating tasks and/or checks for understanding</td>
<td>&gt; Receive, adapt, and codevelop highly detailed, engaging, and rigorous curricular materials, including lesson plans, sample texts, and student project ideas, which include common student misunderstandings and examples of mastery</td>
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<td><strong>CONTENT-FOCUSED,</strong> <strong>EXPERT-LED COLLABORATION</strong></td>
<td>&gt; Collaborate in grade-level teams for 45 minutes each week, often discussing administrative issues or student concerns in addition to lessons</td>
<td>&gt; Collaborate in grade-level or shared-content teams for 45 minutes each week, reflecting on past instruction and student results, with periodic guidance from an assistant principal or other building leader</td>
<td>&gt; Collaborate in shared-content teams for at least 90 minutes/week, analyzing student work, adapting curricula for student and teacher needs, and building teacher skills. Sessions are led by a teacher leader with specific content expertise</td>
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<td><strong>FREQUENT,</strong> <strong>GROWTH-ORIENTED FEEDBACK</strong></td>
<td>&gt; Are formally observed one to two times per year by an instructional coach, building leader, or district-assigned evaluator</td>
<td>&gt; Receive feedback twice per year as part of the formal evaluation process</td>
<td>&gt; Are observed biweekly by their team’s teacher leader, followed by a 20- to 40-minute debrief conversation</td>
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<td>&gt; Receive feedback through their formal year-end evaluation rating</td>
<td>&gt; Are occasionally observed by an instructional coach who provides feedback on student engagement and lesson pacing</td>
<td>&gt; Receive feedback on the exact lesson that was discussed in collaborative planning time, with guidance on teacher actions such as how to scaffold students’ understanding of a text</td>
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<td>&gt; Work with teacher leaders who have sufficient time in their schedules to prepare for and give coaching</td>
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Importantly, Connected Professional Learning has the greatest impact on both teachers and students in a culture of trust and support, where adults at all levels seek and embrace genuine opportunities to improve their practice and deepen impact. But trust, it turns out, does not have to be a prerequisite for Connected Professional Learning. Rather, in the systems we studied, faithful implementation of Connected Professional Learning strategies is helping build and sustain a more trusting and supportive culture that directly supports ongoing growth.

**REORGANIZING RESOURCES FOR CONNECTED PROFESSIONAL LEARNING**

Connected Professional Learning means shifting from a world of one-off PD investments to an integrated approach that implies a significant change in people, time, and money. But as is often true, *how systems organize* these resources matters as much as the amount they spend on professional learning.

To better understand the magnitude and nature of these resource decisions, we analyzed the start-up and ongoing annual costs associated with Connected Professional Learning by comparing how professional learning resources are used in our case study systems against a set of nine urban districts with which ERS has partnered over the last 12 years. We found that our case study systems used their resources on professional learning quite differently than the comparison, “typical” districts, often investing significantly more than what we commonly see in other systems.

**Start-up costs.** In our case study sites, leaders sought out federal, state, and philanthropic grants to make important short-term investments. These included supplemental professional learning days for teachers and content experts to become familiar with new standards and curricular material; technical assistance to support new curricula, feedback and data systems; and funding to pilot new teacher leadership roles. In total, **start-up costs could account for up to 2 percent of a district’s annual operating expense**, depending on the system’s size and specific investments. Access to start-up funding was especially critical for covering transition costs that would otherwise be difficult for smaller districts to afford, as well as for piloting and refining new teacher leader roles and collaboration processes before implementing them systemwide.

**Ongoing annual investments.** Connected Professional Learning is only sustainable when the costs are incorporated into the annual operating budget. We found that comparison or “typical” districts from the ERS database devote 9-12 percent of their annual operating expense to professional learning activities, with most of these resources devoted to higher salaries for teachers with advanced degrees and coaching and workshops that commonly focus on general pedagogical practice with limited connection to specific curricula or instruction happening in classrooms.
In contrast, ongoing annual costs to support professional learning in our case study districts ranged from 8.9 to 16.2 percent of total operating expense, and 19.5 percent at the charter management organization Achievement First. Leaders in these systems shift resources from general to curricula-specific supports; where possible, they also spend less on lane pay and more on the elements of Connected Professional Learning summarized above. Productive collaborative planning time is a key investment: compared to a typical district, our case study districts invested more than two times as much (and our case study CMO more than five times as much) in content-specific, expert-led collaboration.

<table>
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<tr>
<th>Typical District</th>
<th>9-12%</th>
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<tr>
<td>Duval County Public Schools</td>
<td>8.9%</td>
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<tr>
<td>DC Public Schools</td>
<td>15.0%</td>
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<tr>
<td>Sanger Unified</td>
<td>16.2%</td>
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<tr>
<td>Achievement First</td>
<td>19.5%</td>
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Is there a “best” amount to spend on professional learning?

Each of our case studies has made different strategic choices within its context. For example, Duval County Public Schools made the strategic choice to invest less in “lane pay” (i.e., compensation for advanced degrees, a practice that research suggests is not linked to teaching effectiveness). Achievement First has invested heavily in extra time in the school year, which may not be possible for many districts. No particular number is “correct”—what is important is that districts make deliberate choices within their context to support the elements of Connected Professional Learning.

See the full report for a more detailed explanation of district spending.
Case study districts vary in how much they spend on lane pay.

- Duval County Public Schools: 0.5%
- Sanger Unified: 3.8%
- DC Public Schools: 4.2%

* Case study districts vary in how much they spend on lane pay.

**FIGURE 2** SPENDING ON PROFESSIONAL LEARNING ACTIVITIES, AS A PERCENT OF ANNUAL OPERATING BUDGET

Case study systems invest more in curricula-specific activities and instructional leaders than typical districts.
HOW COULD A TYPICAL SCHOOL DISTRICT TRANSITION TOWARD MORE CONNECTED PROFESSIONAL LEARNING?

Wherever possible, leaders in our case study systems have found opportunities to repurpose existing resources from low- to high-impact professional learning activities. From their experience and ERS’ work with large urban school systems across the country, we have identified five strategies for organizing resources in support of Connected Professional Learning:

1. **Repurpose teacher pay** from spending on advanced degrees toward increased compensation for teacher leaders
2. **Repurpose teachers’ time** outside the classroom before extending the teacher day or year
3. **Increase flexibility over school-level schedule period/block length**, class size, and staffing mix
4. **Repurpose school administrator time** away from non-instructional work and towards supporting teachers and instructional leaders
5. **Repurpose resources from traditional textbooks** to an array of curricular materials that are fully aligned with College- and Career-Ready Standards and towards expert support

System leaders’ ability to reorganize their existing resources significantly impacts the overall investment they need to make to shift to Connected Professional Learning. To test this idea, we created a sample large, urban school district and assessed how resource use might shift with a move to Connected Professional Learning. Assuming virtually no flexibility to repurpose current resources, we estimate that the total annual investment in professional learning **could increase by up to 4.5 percent of annual operating expense**. Districts that can reduce lane pay (which research indicates is not connected to teacher effectiveness) or repurpose existing teacher time and other important school-level resources can significantly reduce the annual incremental cost of Connected Professional Learning. Lane pay can account for as much as 5 percent of a system’s operating expense; these resources can be more strategically applied to Connected Professional Learning. Similarly, 15 minutes of daily teacher time is worth about 1.3 percent of a typical district’s annual operating budget. If that can be repurposed from non-instructional duties or independent planning to collaborative planning time, that would reduce the estimated maximum cost of transitioning to Connected Professional Learning by over 25 percent.
IMPLICATIONS FOR SCHOOLS AND SCHOOL LEADERS

Leaders in each of these systems acknowledged that there is no magic formula for teacher growth and student success, and that their work continues to evolve. They also recognize that regardless of system-level aspirations, Connected Professional Learning must be embedded in the core of every school.

One way these changes play out is in how school leaders and their teams organize people, time, and money within the school. We call this “strategic school design,” and it incorporates an array of school-level scheduling, staffing, and budgeting decisions that have a direct impact on the teacher experience and student learning. Connected Professional Learning requires school leaders to be deeply engaged in all aspects of professional learning in their schools and embrace distributed leadership. For many principals, this shift to a new role as a “leader of leaders” creates new challenges or learning needs. System leaders must address these needs to sustain the impact of a system-led professional learning effort.

DEFINING YOUR OWN PATH FORWARD

Setting up and supporting Connected Professional Learning is complex work, and it takes time. Leaders in the systems we studied have been building their professional learning engines over eight or more years, and have approached the elements as part of an integrated strategy.

However, it’s clear that these leaders did not all start in the same place or introduce change in the same way. To define each system's path, leaders should assess both student and teacher needs; make creative use of all available resources from federal, state and philanthropic sources; consider how much and what types of flexibility exist to enable change; and assess how local stakeholders, including the state department of education, unions, the chief financial officer, and parents, could help shape the path.

Connected Professional Learning ultimately ties teacher development directly to student learning. It is more relevant, engaging, and energizing, because it helps teachers work on the problems they face today and the skills they’ll need tomorrow. By and large, this is what teachers say they want. And in a world of increasingly higher standards, it is one of the most promising tools we have to promote success for all students.
“We know that teachers greatly impact students, and therefore, I am very proud of our district and the intentional commitment we make to develop the professional capacity of our teachers through professional development.”

—Principal, Sanger Unified School District
DC Public Schools

**STRATEGY HIGHLIGHTS**
In 2007, DC Public Schools designed a human capital strategy with the goal to identify, attract, and retain effective educators and manage out chronically low-performing teachers. First, district leaders adopted a new teacher evaluation system called IMPACT and a new compensation system known as IMPACTPlus that tied evaluation and student performance results to pay, and offered significant salary increases to highly effective teachers. In 2010, the district adopted Common Core State Standards (CCSS) and began to explore new ways of supporting teacher development. A teacher leadership pilot began in 2012, which helped system leaders understand how to structure and support effective teacher leader roles in the context of more rigorous academic standards. In 2016, DC Public Schools rolled out a districtwide professional learning strategy called Learning Together to Advance our Practice, or LEAP. Through weekly, 90-minute seminars in content-focused teams and biweekly cycles of observation and coaching with content-specific LEAP Leaders, teachers have unprecedented support to improve instructional practice. LEAP is based on a curriculum that is rooted in the CCSS as well as principles of adult-centered learning.

**STUDENT OUTCOMES**
DC Public Schools was the fastest-improving large urban district on the 2015 NAEP-TUDA grade 4 reading assessment. Average student scale scores increased by eight or more points in grade 4 reading, grade 4 math and grade 8 reading from 2011 to 2015, all highs among large urban districts participating in TUDA. In 2016, DC Public Schools’ four-year graduation rate reached an all-time high at 69 percent, up 16 percent since 2011.

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Duval County Public Schools

**STRATEGY HIGHLIGHTS**
In 2011, Duval County Public Schools adopted a new teacher evaluation system to better understand and measure teaching effectiveness. When Florida transitioned to College- and Career-Ready Standards in 2014, district leaders took the opportunity to adopt new, more rigorous curricula. They adapted high-quality Open Educational Resources (OERs) to create Duval Reads and Duval Math for grades K-5, which include highly detailed unit and lesson plans. Additionally, in 2014, the district and teachers’ union changed the collective bargaining agreement to allow for 90 minutes of collaborative planning time per week for all schools. Instructional coaches and school-based administrators typically facilitate these meetings, which revolve around district-provided curricula. Starting in 2016, system leaders introduced a new five-step development cycle. School leaders, coaches, some teacher leaders, and content-specific district specialists meet for four to six full days per year as part of instructional implementation teams. District Specialists also support teacher team meetings through virtual sessions four times per year, where they help instructional coaches model best-practice lesson planning based on the district’s curricula. School leaders perform instructional walk-throughs to observe teachers and determine what support is needed, and teachers get early release periods to receive content and curricula-specific support that is tailored to their needs, often virtually.

**STUDENT OUTCOMES**
Duval County students have made progress specifically in the content areas with new, aligned curriculum and professional learning—K-5 literacy and math. In 2015-16, students outpaced statewide growth in math for grades 3-5 through five and in reading for grade 3 on the Florida Standards Assessment. Duval County Public Schools has also done well in national assessments, ranking fourth in the nation among large urban districts in fourth-grade reading and math on the 2015 NAEP. At 78.8 percent, the district’s graduation rate is up 11.1 points from 2011, nearly twice the statewide rate of growth.
Achievement First

**11,460** Students

**32** Schools

**$12,000** Per-Pupil Funding

**82%** Free and Reduced-Price Lunch Eligible

**STRATEGY HIGHLIGHTS**

When Achievement First adopted the Common Core State Standards (CCSS) in 2011, student achievement scores dropped, as they do in many districts. So Achievement First invested in new curricular resources, created a teacher leadership role to write units and lessons, and hired external reviewers to vet these materials for alignment to CCSS. Network leaders also created Intellectual Preparation Protocols, a resource to help teachers deeply understand how to prepare for rigorous, standards-aligned instruction.

In 2013, the network began providing four hours a week for teacher collaboration that focused on Achievement First’s common curricula and procedures for analyzing student work. Additionally, teachers attend content-based PD during the summer and throughout the school year. In total, teachers spend 35 professional learning days per year collaborating with each other and content experts.

Frequent observation and feedback for all teachers has long been a priority at Achievement First. In 2013, the network aligned its feedback systems with the CCSS-based observation rubrics, helped evaluators norm on instructional shifts, and introduced real-time coaching during observations. A typical teacher in Achievement First participates in roughly 25 to 30 hours of observation and coaching each year with content experts.

**STUDENT OUTCOMES**

Achievement First schools consistently outperform the schools in their host districts, including New Haven, Connecticut and New York, New York. Achievement First students scored on average within four points of their neighbors in Rye, New York (an affluent and high-performing district), on the 2015 NY Math Capstone. Additionally, Achievement First’s students are improving rapidly: proficiency rates have more than doubled since 2013.

Sanger Unified School District

**11,000** Students

**20** Schools

**$9,500** Per-Pupil Funding

**76%** Free and Reduced-Price Lunch Eligible

**STRATEGY HIGHLIGHTS**

In 2004, leaders in Sanger Unified began a concerted effort to improve instruction, adult culture, and student achievement. They focused on strengthening a pedagogical method called Explicit Direct Instruction (EDI), establishing rigorous Response to Intervention (RTI) protocols, and instituting 90 minutes every other week for Professional Learning Communities, protected in the collective bargaining agreement.

When California adopted the Common Core State Standards in 2013, schools had already established a supportive, collaborative culture within PLCs. In 2012, the district increased collaborative planning time to 90 minutes every week, in which shared-content teams learn about the new standards, analyze student work, and adapt instruction to students’ needs. In 2015, the district increased content-specific professional learning days from five to eight per year for additional time to review of student work and plan instruction.

Sanger Unified also developed new standards-aligned curricula and supplemental instructional materials, which teaching teams adapt for their needs. The district provided training on how to shift from an EDI lens to a CCSS lens, with a key focus on developing unit and lesson plans aligned to the new curricula.

**STUDENT OUTCOMES**

The district’s proficiency rates were two to three times those of peer districts on the 2015 Smarter Balanced Assessment Consortium (SBAC) state assessment. The district has maintained consistently high graduation rates—95.5 percent in 2015, 13.2 points higher than the statewide average.
Endnotes


3. Ibid


8. New York City Department of Education. NYC Data. New York State Common Core English Language Arts (ELA) and Mathematics Tests. http://schools.nyc.gov/Accountability/data/TestResults/ELAandMathTestResults.


Go Deeper

This paper is part of a suite of publications and tools to help school system leaders understand what Connected Professional Learning looks like, how resources are organized to enable it, and where to get started. Learn more through the following:

**PROFESSIONAL LEARNING DIAGNOSTIC ASSESSMENT**
Assess how your school system supports curriculum, collaboration, and feedback and compare yourself to strategic practices in our case study systems.

**PROFESSIONAL LEARNING CASE STUDIES**
Learn more about the elements of Connected Professional Learning from these in-depth stories of the case study systems, including detailed data on how each allocated resources like people, time, and money to make it happen.

**PROFESSIONAL LEARNING TOOLKIT**
Access the tools and resources used by our case study systems to support Connected Professional Learning (such as curriculum guides, collaborative planning protocols, sample schedules, and more).

**ALL PUBLICATIONS AND TOOLS AVAILABLE AT:**
[www.erstrategies.org/library/connected_professional_learning](http://www.erstrategies.org/library/connected_professional_learning)
Education Resource Strategies (ERS) is a non-profit organization dedicated to transforming how urban school systems organize resources—people, time, technology, and money—so that every school succeeds for every student. We have worked hand in hand with more than 20 school systems nationwide, including 16 of the 100 largest urban districts, on topics such as teacher compensation and career path, funding equity, school design, central office support, and budget development. We also share research and practical tools based on our extensive dataset—including our School System 20/20 framework—and we collaborate with others to create the conditions for change in education.

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