**The Challenge:**
The move to Common Core State Standards has changed what teachers are expected to do. It should also change how schools and districts support teachers in their work. In the past, professional development (PD) efforts have largely been separate from a teacher’s daily work, often taking place outside of the school day, on designated PD days, delivered by non-school-based trainers, and about topics that aren’t directly related to what teachers are working on at the moment. This type of PD is unlikely to significantly improve teaching effectiveness.¹

Recent research suggests that job-embedded strategies for professional growth—including both highly effective team collaboration and regular coaching organized around cycles of observation and debrief—can be extremely effective. In this type of collaboration, teachers work together with expert support to implement new curricula and instructional strategies and revise their plans based on evidence of student learning. An oft-cited study by McKinsey & Company highlights that top-performing educational systems ensure this happens across all schools by providing access to job-embedded, one-on-one coaching, as well as working to create the structures and culture for teachers to plan together and help each other continuously improve.² Numerous studies cite frequent collaboration with colleagues as one of the most important factors contributing to effective professional development.³ Given these findings, how can districts target resources to better support their teachers?

At ERS, through our work with districts, we have seen that effective job-embedded professional growth requires a coordinated investment in three types of resources: 1) collaborative time for teachers to work together, 2) instructional experts to lead collaborative time and individual coaching sessions, and 3) formative assessment and reporting systems. All three of these—plus an adult culture that values collaboration and growth—are critical pieces. We focus the rest of this brief on instructional experts because they are the lynchpin; without the right expertise, the other two investments will be far less valuable.
The Data:

ERS has worked with many districts over the years to diagnose current spending on instructional expertise. Our diagnostic data shows some common challenges across districts:

**Districts inconsistently invest in experts:** Even though we know that providing teachers with job-embedded professional support is extremely important to teacher and student success, ERS has found that districts vary significantly in their investment in the necessary resources to support job-embedded approaches. For example, District H (located on the East Coast, with 44,000 students) invests in one instructional coach to work with every 16 teachers on average, but in District N (located in the Southeast, with 26,000 students) there is only one instructional coach for every 73 teachers.

<table>
<thead>
<tr>
<th>DISTRICT</th>
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<tbody>
<tr>
<td>Ratio of Teacher to Instructional Coach*</td>
<td>16:1</td>
<td>16:1</td>
<td>19:1</td>
<td>19:1</td>
<td>21:1</td>
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<td>26:1</td>
<td>34:1</td>
<td>35:1</td>
<td>43:1</td>
<td>48:1</td>
<td>73:1</td>
</tr>
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*Includes full time instructional coaches (excludes teacher leaders who provide coaching)

Regions: E=East, NE=Northeast, SE=Southeast, SC=South Central, MW=Midwest

It’s important to note that measuring the ratio of teachers to instructional coaches is only a proxy for measuring investment in instructional expertise. It could be that some districts that invest less in expert coaching invest more in teacher leaders who provide coaching as part of their job. In this scenario, highly effective teachers are paid a stipend or given release time to work with their peers, providing expert support during collaborative planning time and guidance on instructional practice. Additionally, administrators such as assistant principals might also be playing the role of instructional expert. Practically speaking, however, we have found that the teacher-to-coach ratio is a good starting point for understanding the district’s investment in instructional expertise.

**Investments frequently aren’t targeted to the areas of greatest need.** Given limited resources, it might make sense to pair instructional experts with teachers in struggling schools. We found this in District O (located on the East coast, with 20,000 students) where instructional coaches in the lowest-performing quartile of schools support less than half the number of teachers as instructional coaches in the highest-performing quartile of schools. Unfortunately, many districts are not as strategic in their coaching assignments as District O.
In addition, we typically see that districts deploy more instructional coaches to elementary schools, even though secondary schools typically face greater performance challenges. At 10 of the 11 districts represented in the table below, instructional coaches in elementary and K–8 schools support fewer than half (or about half) the number of teachers as instructional coaches in high schools support (all except District N).

The specific activities performed by instructional experts and who plays this role matter greatly. To get the most out of the investment in instructional experts, districts should ensure they have carefully selected the right staff to fill these positions and that they have provided guidance in how they spend their time, as well as ongoing support. At ERS we have found that instructional experts provide the most value when their role includes planning and leading collaborative planning sessions that rely on student data, observing and providing feedback to teachers, leading PD sessions on subjects of interest to teachers, and modeling good teaching. Our anecdotal experience suggest that it is often hard for schools and districts to protect the time of instructional experts for these high leverage tasks. Instead, they are often deployed for small group instruction, test administration/coordination, disciplinary issues, etc.

Investments in instructional expertise are not coordinated within a broader and coherent professional growth strategy. As we noted above, providing instructional experts is the lynchpin of an effective professional growth investment, but it is not the only important investment. It’s necessary, but not sufficient. Schools and districts also need to structure the
teacher workday in such a way that actually gives instructional experts time to work with teachers, for example, via one-on-one coaching, observation and debrief sessions, and the ability for instructional experts to push into team collaborative planning time. Schools and districts also need to provide teachers with data and formative assessments. Although we did not focus on these elements here, it’s important to note that sufficient time and data are critical to success.

For example, District C (located in the Midwest, with 38,000 students) was considering investing in more instructional coaches to improve its ratio of 48 teachers to one coach, until ERS noted that very few schools in District C actually offered time in their schedules for collaborative planning time. This would have made any additional investment in coaching only marginally effective. Instead, District C first worked with its schools to build in more opportunities in the school day for teacher-to-teacher and teacher-to-coach collaboration, thus allowing the district to maximize the impact of its existing coaching staff.

The Solution:

Districts should consider investing in job-embedded professional development for teachers, which includes:

- **Curriculum, materials, and assessments.** Teachers need tools for instruction to use every day that reflect the rigorous, new standards most states are moving toward.

- **Expert support** in the form of instructional coaches, administrators, or teacher leaders who have a specific and highly leveraged set of activities they perform (such as observing and providing feedback to teachers, modeling high-quality teaching and leading collaborative planning sessions). Districts should provide ongoing training and PD for these experts that is aligned with Common Core curriculum and assessment tools.

- **90–180 minutes per week** of time for teachers who teach the same content (e.g., 6th grade math) to collaborate with one another and with experts. Higher amounts of time are likely necessary if a school or district is transitioning to a new curriculum or approach (e.g., introducing data-driven instruction).

- **A culture and organization** that promotes collaboration and ongoing learning among adults.

District of Columbia Public Schools (DCPS) is an example of a district that has made a strong effort to push more professional development into the school day. DCPS’ ratio of one coach to 16 teachers is among the lowest ERS has seen, and it is a critical part of the district’s strategy to develop expert teacher leaders in the long term and to provide support for the district’s significant population of novice and struggling teachers in the short term.
In some cases, existing union contracts do not give schools the flexibility to provide teachers non-instructional time for collaborative planning. Districts should work with their unions to develop a more flexible interpretation of teacher planning time. ERS has found that while individual planning is important, collaborative planning time among colleagues who teach the same subjects and students that is facilitated by an expert leader can be even more effective in helping teachers develop and grow.

**Calculate the Ratio of Teacher to Instructional Coach:**

**Step 1:** Identify the total number of teacher full-time equivalents (FTEs) and “school-based” instructional coach FTEs.

1. School-based teacher FTEs
2. “School-based” instructional coach FTEs

*Note: This does not include instructional coaches who work at the district level. The only instructional coaches counted in the ratio should be instructional coaches who work directly in supporting teachers.*

**Step 2:** Calculate the ratio of teacher to instructional coach.

3. Divide the total teacher FTEs by “school-based” instructional coach FTEs

**Calculate the Ratio of Teacher to Teacher Leader:**

**Step 1:** Identify the total number of teacher leader FTEs.

1. School-based teacher FTEs
2. Calculate the teacher leader FTEs
   a. Number of teachers who are teacher leaders and provide expert support
   b. Average percent of time teacher leaders spend on coaching as % of their total time

   Multiply a and b

**Step 2:** Calculate the ratio of teacher to teacher leader.

3. Divide the teacher FTEs by the teacher leader FTEs

*Note: You may want to analyze these ratios by school level (such as elementary versus middle versus high schools) or by school performance to see if struggling schools have more expert coaching support.*
School System 20/20 includes both a vision for transformative change as well as a methodology for charting a path and measuring progress toward that change across the seven areas of transformation. Using a data-driven approach, it enables districts to see exactly how resources—people, time, and money—are deployed, and identify where they can better meet student and teacher needs.

School System 20/20 assessment tools help district leaders measure and track the conditions for change and their resource use. Based on our experience working with districts, on our extensive district database, and on published research, the tools use qualitative and quantitative metrics to evaluate progress.

Education Resource Strategies (ERS) is a non-profit organization dedicated to transforming how urban school systems organize resources—people, time, and money—so that every school succeeds for every student.

For more information on this topic see ERS’ Professional Growth & Support series of reports and tools which include:

- A New Vision for Teacher Professional Growth & Support
- Professional Growth & Support System Self-Assessment
- Professional Growth & Support Spending Calculator
- Professional Growth & Support Interactive Presentation
- Promising Practices in Professional Growth & Support: Case Studies of Aspire Public Schools, Teach Plus, Achievement First, and Agile Mind

ERStrategies.org/system2020