Critical Drivers of Performance Among School Districts and Charter Management Organizations

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Kevin Kelly, Veronica Severn, Ramya Tallapragada, and Matthew Johnson

Executive summary

School districts and charter management organizations (CMOs) aim to best facilitate students' learning and growth by supporting the schools within their networks. However, given the large number of potential supports available, leaders might struggle to identify which practices or policies will most effectively set schools and students up for success. This study seeks to better understand which levers school districts and CMOs can use to most effectively improve student achievement. Through a partnership between the Charles and Lynn Schusterman Family Foundation and Mathematica, we examined existing literature on the drivers of school district and CMO performance, conducted a correlational analysis to understand the relationship between growth in student achievement and district and CMO policies and practices, and developed case studies of three districts and one CMO that we identified as high-performing.

Key conclusions

Although not an exhaustive list of the ways in which districts and CMOs can support students' success, three themes consistently emerged across study activities as ways in which districts and CMOs can drive improvements in student achievement:

Teachers play a key role in determining students' success. The importance of high quality teaching came up across study activities. Existing literature shows that teachers explain more of the variability in students' learning than other levels of the educational system, and the correlational analysis found that two policies significantly correlated with high student achievement growth are related to using evaluations to remove ineffective teachers. In addition, each case study site prioritized retaining effective teachers and training teachers to become more effective.

School leaders should be viewed and trained as instructional leaders. Studies have shown that principals' time spent on instructional leadership activities is positively related to student achievement growth, and our correlational analysis supports this finding. The high-achieving districts and CMOs in our case studies also emphasize the importance of instructional leadership abilities when hiring school leaders, and they implement programs to train teachers with foundational knowledge in teaching and instruction to be future school leaders.

Shared and well-communicated mission, vision, and goals are critical. Research on high-achieving school districts emphasizes the importance of setting a clear mission, vision, and goals across the organization. The district and CMO case study sites in this report also highlighted the importance of their mission, vision, and goals to drive culture, allocate resources, and provide greater autonomy to schools.

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Background

School districts and charter management organizations (CMOs) are tasked with ensuring that their schools are set up to best support students' learning. However, with a large range of potential supports available, district and CMO leaders might struggle to identify which practices or policies will most effectively set schools and students up for success. Through a partnership between the Charles and Lynn Schusterman Family Foundation (CLSFF) and Mathematica, we sought to better understand which levers school districts and CMOs can use to most effectively improve student achievement. To do so, we engaged in the following activities:

1. Examined existing literature on the drivers of school district and CMO performance

2. Conducted a correlational analysis to understand the relationship between growth in student achievement and district and CMO policies and practices

3. Carried out case studies of three districts (Metropolitan School District of Lawrence Township, St. Charles Parish Public Schools, and Chicago Public Schools) and one CMO (DSST, previously known as Denver School of Science and Technology) that we identified as high-performing.

In the remainder of this report, we will describe our findings from each of these activities and share conclusions across all activities. Appendix A includes additional information on the existing literature we examined, Appendix B contains the full list of district policies and practices that we analyzed as a part of the correlational analysis, and Appendix C includes additional information on the identification and selection of case study sites.

Takeaways from existing literature

We examined existing literature to determine what research has shown to be critical levers for success for district and CMO performance, defined as key practices or policies that are associated with student achievement. To do so, we examined literature on how different levels of the educational system, including school districts, schools, and teachers, affect student achievement, as well as research on the key characteristics of high-performing districts. Although not an exhaustive list of the ways in which districts and CMOs can support student achievement, district and CMO staff should consider four takeaways that the literature indicates are crucial responsibilities of central offices to best facilitate student success. In the following, we describe these four takeaways, along with particular considerations for each.

Studies with different designs have different levels of evidence.

Studies vary in terms of their level of rigor, and it is important to keep this in mind when drawing conclusions from existing literature. Some studies, such as random assignment evaluations, use rigorous designs that produce well-trusted conclusions. Other studies, such as those using qualitative data, generate insights that are helpful to consider but are not thought of as establishing causal relationships. More information on the strength of the evidence behind each of the studies discussed in this section is in Appendix A.

Takeaway 1: Prioritize hiring and supporting effective teachers.

In recent years, researchers have aimed to better understand how different levels of the educational system (school districts, schools, and teachers) affect student achievement.[1] These studies consistently show that a student's teacher is the most influential level in the educational system, followed by the school and district levels (Chingos et al. 2014, 2015; Whitehurst et al. 2013; Rethinam et al. 2007). District and CMO staff should therefore ensure that they have effective teachers who are well-equipped to support students' learning.

Initiatives to improve teaching success could occur at several key points along teachers' career trajectories, including when training prospective teachers, hiring and integrating early career teachers through an onboarding process, developing and expanding the roles of mid-career teachers, and preparing transitions for retiring or exiting teachers. Through a review of the literature on effective teaching, we identified four key areas in which districts and CMOs can focus their efforts to support effective teaching:

1. **Hire teachers who are more likely to succeed.** Although knowing which applicants will ultimately be more effective teachers can be challenging, some characteristics have a clear connection with student success. For example, experienced teachers have a more positive influence on student achievement than novice teachers (Papay and Kraft 2015; Clotfelter et al. 2007; Heilig and Jez 2010). This is particularly true for teachers with more experience at a certain grade level (Huang and Moon 2009).

   In addition, teachers who exhibit similar demographic characteristics as their students, particularly teachers of the same race as their students, can more positively impact students' academic and nonacademic outcomes (Egalite et al. 2015; Egalite and Kisida 2018; Lindsay and Hart 2017). Finally, studies have shown that undergraduate grade point averages of new teacher applicants are strong predictors of their effectiveness as teachers (Bruno and Strunk 2019; Jacob et al. 2016; Klassen and Tze 2014).

2. **Deeply invest in teachers' professional development.** Teacher professional development can take many forms, but our literature scan suggests certain activities are particularly promising for improving teachers' effectiveness. Early career professional development is especially important, as evidence clearly indicates that strong mentoring and induction opportunities lead to lower teacher attrition (Ronfeldt and McQueen 2017; Sutcher et al. 2016; Kang and Berliner 2012). Reducing teacher attrition is key, because teachers' years of experience relates to their effect on students' achievement and the disruptive effect of turnover itself can lower student achievement (Ronfeldt et al. 2013). In addition, studies that have evaluated the impact of teacher mentoring and induction programs have shown that teachers who participated in these programs for two years positively affected students' achievement (Schmidt et al. 2017; SRI Education 2018; Glazerman et al. 2010).

   Beyond early career professional development, studies have shown that professional development opportunities that are collaborative and embedded during the school day, such as professional learning

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[1] The most established method for doing so uses a statistical procedure (hierarchical linear modeling) to estimate what percentage of the variability in students' achievement is attributable to different aspects of students' educational experience. In other words, to what extent does the school district in which a student is enrolled affect that student's achievement, compared to the extent a student's school or teacher affects that student's achievement?

communities, can improve teachers' instructional skills and students' learning (Krasnoff 2014; Vescio et al. 2008).

3. **Create a culture of collegiality and autonomy for teachers.** Teachers who feel supported by their administrators have higher job satisfaction and are more likely to remain in the profession, though this research is correlational in nature (Tickle et al. 2010; Johnson et al. 2012). Although resources and preparation time are also significant predictors of satisfaction and retention, teachers should feel like they can rely on their colleagues and school leaders. In addition, providing teachers with more autonomy and decision-making power significantly predicts teachers' job satisfaction and likelihood of remaining in the school and in the teaching profession (Borman and Dowling 2008; Guarino et al. 2004).

4. **Consider changes to the structure of the teaching profession.** In recent decades, the education field has implemented several strategies to modify the traditional structure of teaching and instruction. The evidence for these strategies is mixed, yet positive impacts identified in some studies hold promise, and these changes should be explored further.

    – **Class size reductions.** Many teachers and educational advocates have argued for reduced class sizes (National Education Association 2008), and research has indicated that these reductions can positively support students' learning. For example, impact studies of two policies on reducing class size in Tennessee and New York demonstrate some positive effects of reducing class sizes (Nye et al. 2000; Isenberg 2010).

    – **Alternative teaching certification models.** Alternative or nontraditional programs, such as Teach For America (TFA), have grown in prominence. Rigorous studies that use random assignment methods to evaluate TFA impacts have found that students in classrooms led by TFA teachers perform better than they would have with a non-TFA teacher (Clark et al. 2013; Glazerman et al. 2006; Xu et al. 2011). However, others have found that other alternative certification models have little impact on student achievement compared to traditional certification models (Darling-Hammond et al. 2005; Kane et al. 2008).

    – **Increased teacher salaries.** Many have urged for higher teacher salaries to attract, retain, and incentivize higher quality teachers (Shapiro et al. 2018). Higher teacher compensation can attract higher quality teachers and reduce teacher attrition (Figlio 1997; Clotfelter et al. 2008; Imazeki 2005). For example, a study evaluating the impact of increasing teacher salaries in San Francisco found that the policy resulted in more people applying for teaching positions, and higher quality English language arts (ELA) teachers in the city (Hough 2012).

    – **Teacher bonuses tied to student performance.** Studies that examined the impact of policies awarding bonuses to teachers based on student performance have found mixed results. Some have found that these policies did not lead to substantial, lasting changes in student achievement (Springer et al. 2010; Marsh et al. 2011; Glazerman and Seifullah 2010). Others, though, have found positive effects (Chiang et al. 2015; Fryer et al. 2012). This literature suggests that certain approaches that financially award teachers for students' performance could be more successful than

others, such as ensuring that the structures of the programs are fully and clearly communicated to teachers or inverting policies so that bonus compensation is removed if students do not meet certain growth targets.

Takeaway 2: Establish and support a shared mission, vision, and goals focused on student achievement.

Research on the role of school districts emphasizes the importance of the districts' central offices in setting and communicating a clear mission, vision, and goals (Shannon and Bylsma 2004; Briggs et al. 2017; Leithwood 2010). Effectively doing so ensures that everyone in the district's schools and community have a shared sense of priorities and expectations. The literature indicates, though, that goals should primarily center on student success and achievement. For example, case studies of three large school districts that had realized academic gains at a pace beyond their state's trends revealed that these districts set and held themselves accountable to goals connected to student achievement (Snipes et al. 2002). To support the realization of the district or CMO's mission, vision, and goals, leaders should consider the following strategies:

1. **Align budgets, resources, and procedures to realize established goals**. In their meta-analysis of 27 studies that examine the influence of district leaders on student achievement, Waters and Marzano (2006) found that a key element of creating goal-oriented districts is investing in resources to accomplish the district's goals. Shannon and Bylsma (2004) echoed this finding, identifying two key characteristics of school district improvement as (1) strategically allocating resources and (2) implementing policies and programs that coherently reinforce and attain common goals.

   In addition, a district that clearly shares its mission, vision, and goals can modify its procedures to allow for greater school decision making, as school leaders will understand expectations and can align resources to help their school reach those objectives. For example, a qualitative study comparing high- and low-performing districts in New York found that the high-performing districts established clear educational goals and granted schools greater autonomy (Iatarola and Fruchter 2004).

2. **Use data to make evidence-informed decisions that accomplish goals.** Using data to identify and address needs has increasingly become an area of interest among educators at all levels. However, districts and CMOs should take the lead in prioritizing data use among their schools, developing and maintaining systems where school staff and the greater community can review data, and using data to hold themselves accountable to the goals they established and communicated.

   A study that examined California districts' school reform efforts found that effective approaches used data to hold district staff, principals, teachers, and students accountable to their strategic goals (McLaughlin and Talbert 2003). In addition, Dougherty (2015) reviewed relevant literature and conducted case studies with two Texas school districts to identify 10 steps that district leaders can take to improve data use among their schools. These steps included developing and refining goals, identifying users' information needs, and creating timely and user-friendly reports.

Takeaway 3: Emphasize instruction through aligned curriculum, instructional leadership, and robust professional development.

To support students' learning, districts and CMOs should ensure that instruction is a core focus in their schools. Our review of the literature indicates that the following practices and policies are essential to ensure that instructional materials and staff are in place to support students' academic growth.

1. **Ensure that schools have instructional resources that align with testing standards and district priorities.** Instructional resources, including curricula and other educational materials, affect students' learning. For example, evidence has suggested that curricula that align with testing standards can positively influence student achievement (Squires 2012; Thompson 2009; Riordan and Noyce 2001). However, a past review of standards and assessments found that, across most states and subjects, alignment was lacking (Polikoff et al. 2011).

    Districts and CMOs should carefully consider the evidence of effectiveness of instructional resources as well as how those resources align with testing standards.[2] In addition, districts and CMOs should ensure that curriculum decisions reflect their priorities, as stated through their mission, vision, and goals (Council of the Great City Schools 2017). It is not clear in the literature, however, what is more effective—for districts and CMOs to be the selectors of instructional resources in their schools, or if school leaders and teachers should make these decisions (Steiner 2017; Shannon and Bylsma 2004).

2. **Equip and hold principals accountable as instructional leaders in schools.** Rigorous research indicates that principals play a key role in influencing students' learning and achievement (Dhuey and Smith 2018; Branch et al. 2012; Leithwood et al. 2004). Further, studies that have examined principal time use show that time spent on instructional leadership activities positively relates to student achievement growth (Grissom et al. 2013; Shatzer et al. 2014; Robinson et al. 2008). Therefore, districts and CMOs should offer professional development and growth opportunities for principals to strengthen their abilities to be instructional leaders (Goldring et al. 2015).

    In a cross-case analysis of five preparation programs for principals, Davis and Darling-Hammond (2012) identified six critical abilities that principals should possess. These abilities, including promoting and supporting teachers' instructional abilities, could be included and assessed in principal preparation programs.[3] Further, a qualitative study including interviews from a variety of education leaders found that respondents agreed that principal preparation programs should include various elements of building

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[2] The What Works Clearinghouse (WWC; https://ies.ed.gov/ncee/wwc/FWW) is a tool available to districts and CMOs to assist with this process. Operated by the U.S. Department of Education, the WWC tracks and interprets the impacts of various educational interventions so that educators can better understand the evidence behind the programs and curricula they are considering.

[3] The other five qualities are the ability to (1) influence teacher feelings of efficacy, motivation, and satisfaction; (2) establish the organizational and cultural conditions that foster a positive environment for teaching and learning; (3) promote professional collaboration; (4) focus resources and organizational systems toward the development, support, and assessment of teaching and learning; and (5) enlist the involvement and support of parents and community stakeholders.

principals' instructional leadership capabilities, such as their teaching assessment skills and their ability to plan professional development aligned with instructional needs (Backor and Gordon 2015).

3. **Emphasize at all levels professional development that develops capacities to achieve stated priorities.** Studies examining key characteristics of high-performing districts consistently emphasize the importance of professional development across levels of the educational system (Leithwood and Azah 2017; Briggs et al. 2017). Although research on professional development for district and CMO leaders is limited, a few features emerge as important elements of professional learning that are applicable to any educator.

   First, studies indicate that effective professional development incorporates learning communities so that people with similar roles can collaborate with and learn from one another (Desimone 2011; Darling-Hammond et al. 2009). For example, these collaborative communities could be teacher professional learning communities, or networks of superintendents who regularly meet to discuss challenges and share potential solutions (Elmore 2007). Second, professional development opportunities should be job-embedded. A study examining different forms of principal professional development and teachers' perceptions of the principals' effectiveness found that principals who invested in university coursework were considered less effective, whereas principals who participated in formal mentoring were viewed as more effective (Grissom and Harrington 2010). Other studies have found similar benefits of job-embedded coaching supports for teachers (Kraft et al. 2018; Neuman and Cunningham 2009).

Takeaway 4: Maintain effective communications and positive relations with both external and internal stakeholders.

School district and CMO central offices often maintain communications with stakeholders both inside and outside of their networks. In doing so, staff should consider the following:

1. **Support district and CMO leaders in maintaining collaborative relationships with one another, school staff, and external stakeholders.** An examination of five diverse school districts recognized for improving student achievement across grades, races, and ethnicities found that stakeholder engagement was a critical piece of their strategies (Togneri and Anderson 2003). For example, one district conducted 18 focus groups with internal and external stakeholders before building its district's vision. Across the districts, superintendents visited schools regularly to observe and discuss how the schools' strategies were working to accomplish the vision.

   Districts and CMOs should also consider how relationships with outside agencies, such as government agencies or partner organizations, can accomplish their mission, vision, and goals. Kronley and Handley (2003) examined partnerships between school districts and external agencies and found that one key to making the partnership work is that district staff, such as the superintendent, must ensure that the external agency understands the district's vision and how the partnership advances it.

2. **Strategically engage with partners, including governments and community organizations, to maximize resources.** In their review of literature examining the characteristics of high-achieving districts, Leithwood (2010) found that high-performing districts engage strategically with governmental agencies' initiatives and associated resources to obtain supplementary funding for existing programs or undertake new initiatives.

   Increased engagement with nongovernmental agencies, often referred to as community–school partnerships, is another strategy that districts can use to receive additional resources to further support their students. In their review of successful community–school partnerships, Blank et al. (2012) found that a key benefit of these collaborations is schools' abilities to leverage community resources to fund programs and activities that meet their vision. Similarly, Bosma et al. (2010) identified that each partner's willingness to share resources, including grant funds, training and curriculum, and classroom time, led to the successful partnership of a service-learning program in middle schools in the Minneapolis Public School District.

Correlational analysis

We used data from the 2015–2016 National Teacher and Principal Survey (NTPS) to identify school and district policies and practices that correlate with high growth in student achievement. Student achievement data are based on average math and ELA growth in grades 3 through 8 from the Stanford Education Data Archive (SEDA).

The results of this analysis do not imply causal relationships. Instead, the results should be interpreted as exploratory and correlational, and are intended to complement the case studies (which are also correlational) and literature scan (which includes both correlational studies and rigorous impact studies) included in this report.

Methods

Data preparation. We first identified a subset of the NTPS survey questions that we hypothesized could be related to student achievement growth. The full list of questions we analyzed, grouped into five domains— district structures, staffing and time use, principal goals, teacher development and evaluation, and teacher and principal areas of influence—is in Appendix B.

Next, to obtain district-level measures of policies and practices, we averaged together teacher, school, and principal responses to NTPS questions within each district. We excluded charter schools from our sample and included only districts that had at least two traditional public schools responding to the survey.

From the SEDA data, we used average yearly growth for each district in grades 3–8 math and ELA, pooled across the 2008–2009 through 2014–2015 school years. Additional details about the SEDA data used in this analysis are in Appendix C.

Statistical model. We used separate linear regression models to relate each survey question to the outcome on student achievement growth. We included control variables for district size, urbanicity, and student demographic characteristics to account for differences in district settings that might be related to student achievement growth.

Because we analyzed a large number of district policies and practices, we used a *p*-value of 0.01 as our cutoff for assessing statistical significance. This reduces the likelihood that we would incorrectly identify significant relationships due to random chance.

Robustness checks. In addition to our primary analysis, we performed multiple robustness checks to test how sensitive our results are to different variables and samples. First, we used achievement growth of Black students as the outcome in place of the growth of all students in the district. Second, to better reflect the types of districts included in the case study section of this report, we restricted the sample to large (> 5,000 students), high-minority (> 30 percent Black), and predominantly low-income (> 30 percent eligible for free or reduced-price lunch) districts. Finally, we included all policies and practices that showed statistically significant relationships with student growth individually in the same regression model, to assess whether they were independently related to student achievement growth.

Results

We found one district practice and two district policies that were significantly related to higher growth in student achievement. In this section, we present those findings and describe the results of our three robustness checks.

Principal time spent on instructional leadership. One practice—principal time spent on instructional leadership—showed a statistically significant relationship with growth in student achievement. Details about how to interpret the strength of that relationship are in Table 1. Across schools and districts in our sample, principals spent an average of 31 percent of their time on curriculum and teaching-related tasks, including observing classrooms and mentoring teachers. A 10 percentage point (approximately equal to one standard deviation) increase in time spent on instructional leadership was associated with 0.012 more grade-level equivalents of growth. This can also be thought of as students receiving an additional 2.2 days of learning per year.

Table 1. One practice showed a significant relationship with growth in student achievement

Practice	Average percentage across districts	Association between a 10 percentage point increase in this characteristic and student achievement growth, measured in …	
		Grade-level equivalents	Days of learning
Principal time spent on instructional leadership	31	0.012	2.2

Source: Authors' calculations using data from the Institute for Education Sciences (IES), National Center for Education Statistics (NCES), NTPS "Principal Questionnaire," 2015–2016; the IES, NCES, Common Core of Data (CCD), "Local Education Agency (School District) Universe Survey Data," 2013–2014; and the Stanford University, SEDA Version 2.1, 2013–2015.

Notes: The sample includes 660 school districts. We rounded the sample size to the nearest 10 to adhere to IES publication requirements for restricted-use data. The conversion from grade-level equivalents to days of learning growth is based on a 180-day school year.

Two policies were significantly related to growth in student achievement (Table 2). The second column shows how prevalent these policies are across districts, and the final two columns show the difference in student achievement growth between districts that have this policy in place and those that do not.

Table 2. Two policies showed a significant relationship with growth in student achievement

Policy	Percentage of districts with this policy in place	Difference in student growth between districts that have this policy in place and those that do not, measured in …	
		Grade-level equivalents	Days of learning
Use of teacher evaluations to sequence potential layoffs	20	0.039	7.0
Use of teacher evaluations to terminate employment for cause	70	0.037	6.7

Source: Authors' calculations using data from the IES, NCES, NTPS "Principal Questionnaire," 2015–2016; the IES, NCES, CCD, "Local Education Agency (School District) Universe Survey Data," 2013–2014; and the Stanford University, SEDA Version 2.1, 2013–2015.

Notes: The sample includes 660 school districts. We rounded the sample size to the nearest 10 to adhere to IES publication requirements for restricted-use data. The conversion from grade-level equivalents to days of learning growth is based on a 180-day school year.

Use of teacher evaluations to sequence potential layoffs. On average across districts, 20 percent of principals reported using teacher evaluations to sequence potential layoffs (in place of, or in conjunction with, teacher seniority). Districts with this policy in place had student achievement growth that was, on average, 0.039 grade-level equivalents higher than districts that did not, which is equivalent to receiving 7.0 additional days of learning per year.

Use of teacher evaluations to terminate employment for cause. On average across districts, 70 percent of principals reported plans to use teacher evaluation results to inform decisions about dismissing or terminating teachers for cause. The magnitude of the relationship between positive responses to this question and student achievement growth is similar to the question about the sequencing of potential layoffs.

Results of robustness checks. Two of our robustness checks (analyzing achievement growth of Black students as the outcome and including all three of the policies and practices in the same regression model) showed relationships that were similar in magnitude to those listed in Tables 1 and 2. However, these results were not always statistically significant at the 0.01 level.

In the third robustness check, in which we limited the sample to 90 large, high-minority, and predominantly low-income districts, the coefficients measuring the relationship with student achievement growth were approximately twice as large for all three policy and practice variables. The relationships observed in the full sample are therefore stronger in the sample that is more representative of districts included in the case studies section of this report, though the results were not statistically significant at the 0.01 level due to the small sample size.

Takeaways from the correlational analysis

The one practice and two policies we found to be statistically significant are consistent with relevant literature. Multiple studies that have examined principal time use have shown that time spent on instructional leadership activities is positively related to student achievement growth (Goldring et al. 2015; Grissom et al. 2013; Robinson et al. 2008). In addition, a substantial body of research has demonstrated the importance of high quality teachers and that removing the least effective teachers can lead to substantial increases in student achievement (Hanushek 2011; Chetty et al. 2014; Gordon et al. 2006).

Many district policies and practices that we examined did not have a statistically significant relationship with student achievement growth, including many that the literature has shown to have a positive relationship. However, our results do not contradict existing literature, as there are multiple reasons why our analyses might not have identified significant relationships among these variables.

In some cases, responses to the survey questions lacked enough variation to produce a statically significant relationship with student achievement growth. For example, across districts, approximately 94 percent of principals reported that they use teacher evaluation results for providing teacher feedback, planning professional development for individual teachers, and developing performance improvement plans. However, because the NTPS only asked a yes/no question without providing details about the extent to which principals used teacher evaluation results to inform development, and because almost all principals answered yes, our analysis was highly unlikely to find a significant relationship between this practice and achievement growth.

In other cases, many factors likely jointly determined the extent to which districts exhibit the policy or practice of interest and the amount of student achievement growth. For example, although the literature has shown that substantial reductions in class size have boosted student achievement, we did not find that the student–teacher ratio measure in the NTPS correlated with achievement growth. This could be because available budgets and decisions about how to allocate resources affect both student–teacher ratios and student achievement growth.

Case studies of high-performing districts and CMOs

To better understand how high-performing local education agencies are supporting their students, we carried out case studies with three school districts and one CMO. The case studies involved interviews with the district and CMO leaders in each site as well as a review of publicly available documents describing the policies and practices in place at each site. Although the case studies cannot answer the question of why these districts and CMOs are high-performing, they provide insight into the policies and programs in place in local education agencies that have demonstrated substantial gains in student growth. Trends and commonalities across these sites, when combined with the insights gleaned from our review of relevant literature and correlational analysis, helps us to ultimately identify what might drive success in school districts and CMOs.

We selected these sites in partnership with CLSFF to ensure that the case studies included in the report are high-performing and align with the foundation's priorities. CLSFF is chiefly interested in supporting school districts and CMOs that are medium to large in size and serve large proportions of minority students from low-income households. Accordingly, we examined the following criteria when selecting sites:

- **Achievement growth.** We set thresholds for how well district and CMO students performed academically, to ensure that only those sites with exceptional performance would be considered for case studies. We also specifically sought out school districts where Black students showed high rates of achievement growth.[4]

- **Size.** To be eligible for case study consideration, districts needed to serve at least 5,000 students, and CMOs needed to operate at least 10 schools.

- **Student population.** We included districts where more than 30 percent of students qualified for free or reduced-price lunch and more than 30 percent were Black. These data were not consistently reported for CMOs, but we examined information reported on CMOs' websites to ensure that the networks' target student populations aligned with CLSFF's priorities.

Additional information on the identification of case study sites, including data sources used and thresholds for achievement growth, is in Appendix C.

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[4] Data on the academic growth of student subgroups were unavailable for charter schools, so we were unable to examine the achievement growth of Black students when selecting CMO case study sites.

Metropolitan School District (MSD) of Lawrence Township

District structures and supports

District strategy, vision, and goals

MSD Lawrence Township officials point to the district's strategic plan as the medium through which it executes its vision and mission. The current strategic plan was developed over a period of nine months with input from more than 150 stakeholders, including administrators, teachers, parents, business owners, and higher education representatives.[5] The plan encompasses five commitments:

1. Every student at every level in every neighborhood has access to a quality school.

2. Every student can find his or her passion and strength by encountering and exploring innovative and rich opportunities.

3. Every student is prepared for college or career upon graduation.

4. Every student's individuality is respected and celebrated.

5. Every student is inspired to do his or her best and be his or her best every day.

The strategic plan is updated every five years, allowing the district to adapt priorities and goals to meet evolving requirements from the state and the changing needs of its students. For example, district officials emphasized that a major piece of MSD Lawrence Township's story is the region's changing demographics, which drove the district's decision to evolve its programming and approach to instruction. When it became clear that the district was serving an increased number of bilingual students, the district integrated bilingual education

MSD Lawrence Township at a glance

Location:	Indianapolis, Indiana
Number of schools:	21
	11 elementary schools
	2 middle schools
	2 high schools
	6 schools serving specialized populations
Number of students enrolled:	16,165
Percentage of students who qualify for free or reduced-price lunch:	64
Percentage of students of color:	79
Overall gains in math and ELA:	1.11 grade levels
Gains in math and ELA for Black students:	1.19 grade levels
Teacher-student ratio:	16:1
Per-pupil spending:	$9,885

Source: Gains in math and ELA achievement figures are drawn from SEDA (see Appendix C). All other figures are obtained from the Indiana Department of Education, available at https://inview.doe.in.gov/.

MSD Lawrence Township's vision and mission

Vision: The district of destination where excellence empowers everyone to reach his or her potential.

Mission: Through innovation and dedication, we educate all students through graduation.

Source: https://www.ltschools.org/about/strategic-planning-initiative

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[5] More information on MSD Lawrence Township's strategic plan is available at https://www.ltschools.org/about/strategic-planning-initiative.

into its strategic plan. Defining this as a priority in the plan led the district to adopt a one-way immersion bilingual instruction program in addition to its two-way immersion program so a second option was available for the district's growing native Spanish-speaking community. This is now a cornerstone of instruction for both native English- and native Spanish-speaking students.

The district aims to use consistent messaging to communicate the strategic plan's goals and priorities so that school staff clearly understand their expectations. However, district leadership believe that the district's role is not to deliver edicts and mandates to schools, but to equip schools to drive decision making in executing the strategic plan. Thus, in a model that the district describes as "cascading leadership," the district central office receives requirements from the state, leads the development of a strategic plan using stakeholder input, and engages with bottom-up teams at each school by guiding and supporting them to be successful.

Though the strategic plan has served as a north star for the district, district officials reported that maintaining focus on the strategic plan has been challenging in the face of leaders' competing interests. In response, district cabinet members and the superintendent meet weekly to build accountability for keeping the focus "tight" on its agreed-upon goals. Then, staff from the office of the Chief Academic Officer provide school principals and teacher leaders with ongoing support to implement practices aligned with these goals. Supports include professional development and coaching, such as advisors with training in social and emotional learning who train teacher leaders in best practices. The leaders can then take those practices back to their schools. District officials report on these strategic activities and their outcomes to the district's board of education via quarterly reports, and the district maintains a publicly available data dashboard so all stakeholders can track progress against the strategic plan. District leadership reported that this process of maintaining a focus on the goals laid out in their strategic plan helps achieve results.

School improvement

MSD Lawrence Township prides itself on its data-driven school improvement practices. The district convenes all school principals once a month in a Rigor Leadership Academy, where principals work with their leadership teams to develop a 30-day action plan. These plans are based on a review of data from the previous 30 days and identify goals for the next 30 days.

The district uses a few guiding principles when creating these plans. First, it uses a variety of data sources to identify and explore areas of improvement, including student achievement data, parent feedback data, and data on discipline in school culture. This enables the district to better understand challenges facing its schools and target resources to those schools most in need of support. Second, the district aims to address individual challenges through the lens of addressing more systemic concerns. How will one problem or solution affect other elements of the system? Third, the district goes beyond analyzing data to identify challenges that need to be resolved, but also explores what has worked well and how to build on those successes. Finally, a large part of the district's role in facilitating school improvement is connecting schools with one another. Solutions that work well in one school can help solve a problem in another school. In general, district staff reported that the core engine of change for school improvement has not been through the direct involvement of the district, but instead professional learning committees (PLCs) of teachers and school leaders, which we describe in more detail below.

"If you [just] solve individual problems, it's like a wall with leaks. You have to look at the system."

Funding and resource allocations

In general, district staff make school staffing and salary decisions. However, school leaders have autonomy in making other financial decisions in their schools. Within the past five years, the district has shifted to a model where principals have a discretionary budget for hiring vendors and making purchasing decisions. The district also allocates a specific pool of funds to each school for instructional resources to meet its individualized needs. For example, if data show that a specific grade level in a school is falling behind in reading comprehension, school and district staff will collaboratively identify and secure specific reading resources for that grade level, rather than providing additional resources for the school as a whole.

Financial struggles during the recession forced the district to close a school, endure budget cuts, and experience a hiring and salary freeze between 2009 and 2014. District respondents describe this experience as pivotal in how they and building staff address challenges. Rather than "throwing money at a problem" by hiring people or procuring additional resources, the district-wide philosophy is, "This is what we've got, so what are the things we need to do to improve outcomes for kids?"

"When there is an issue, I don't think 'What do we buy?' I think, 'What do I have?'"

Talent pipelines and evaluation

School leaders

In hiring principals and assistant principals, MSD Lawrence Township prioritizes three characteristics. The first, which district leaders reported as non-negotiable, is an understanding that all students *can* achieve. Given the region's rapidly changing demographics, the district "unapologetically" seeks school leaders who approach their work with a firm belief that all students deserve to achieve at a high level. Second, school leaders must maintain a service mentality. The district looks for leaders who are committed to serving the school community and its teachers. Finally, school leaders must view their work through an instructional lens. School leaders are expected to be instructional leaders in their daily work by considering classroom needs at every juncture, whether it is in developing the master schedule, evaluating teachers, or analyzing data. In the past decade, the district made a concerted effort to ensure that leadership teams focus on what happens in classrooms and are held accountable to outcomes.

"Instruction has to be at the core of who you are as an educator and has to be your core focus."

In general, MSD Lawrence Township has low turnover among school leaders. As a result, openings typically emerge when a principal or assistant principal retires or is promoted. To fill principal positions, Lawrence taps its own pipeline of assistant principals and other school leaders. To hire assistant principals, district staff rely on classroom observations to identify teacher candidates who demonstrate the characteristics described previously. Training for school leadership occurs through monthly meetings with district staff and through the Rigor Leadership Academy.

"As a district, we looked at implicit bias [in professional development sessions]. [We believe] all students deserve to be at a high level of achievement... If you make excuses for that, you won't be successful."

Principals are evaluated through the district central office, supported by the directors of elementary and secondary education. These staff use the RISE rubric as the standard of success.[6] Principals with positive evaluations are eligible to receive bonuses, while the district works with principals who are less successful to develop a comprehensive support plan. Assistant principals are evaluated by their principal, also using the RISE rubric.

Teachers

Teacher hiring and retention have emerged as core components of the district's current strategic plan. This priority has grown in importance, as district leaders reported teacher turnover in recent years as a key challenge. Specifically, the district faces teacher shortages in certain content areas: science, math, and special education. In addition, the district has experienced a substantial uptick in teachers leaving in the middle of the year, which they believe has affected student achievement as well as school culture and climate.

As with principals, the district emphasizes hiring teachers who believe that all students can succeed. To fill open positions, district and school leaders first consider strong instructional assistants and substitutes, who could transition to teaching positions. When those pipelines do not exist, the district and principal seek candidates from universities, job fairs, and local teacher networks. Increasingly, the district hires people who have a degree in an unrelated field and want to transition to the teaching profession. Neighboring districts are also a source of teachers for Lawrence. Though the district does not actively seek these candidates, teachers from neighboring districts venture to Lawrence because of its somewhat higher salaries.

The district's teacher retention strategy is a priority for district officials. As Indiana legislation on teacher salary increases has shifted, the district has broadened options for teachers to take on leadership roles and receive compensation for teacher leader positions. Additionally, it has placed greater emphasis on its mentoring programs where teachers receive support. However, district staff reported that the most important factor in retaining teachers is generating a positive school culture. District officials noted that schools that struggle to maintain a positive culture have experienced higher teacher attrition.

The district evaluates teachers mainly through classroom observations, which examine instructional strategies and student engagement. The RISE rubric and legislative standards guide evaluations. In addition to using evaluations to guide promotions from teacher to teacher leader, the district uses state funding to present teacher appreciation awards to those teachers who score highly on a legislative formula. When school leaders identify a teacher as underperforming, the school's principal works collaboratively with the teacher and the office of the chief of human resources to develop an individualized improvement plan with specific, time-bound goals; however, district staff noted that this is a rare occurrence. In general, the district's emphasis in the evaluation process is teacher growth and helping principals provide teachers with the support they need to improve.

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[6] Additional information on the RISE evaluation rubric is available at https://www.doe.in.gov/sites/default/files/evaluations/rise-handbook-principals.pdf.

Professional development

School leaders

Professional development goals for school leaders are driven by the district's strategic plan, statewide standards, and needs of the school's surrounding community. In addition, the district identifies specific capabilities needed to carry out the school's school improvement plan, which is based on achievement data, discipline data, and data on the school's culture and climate.

Focusing primarily on leadership skills, business skills, and instructional supports, the district uses a range of tools to deliver ongoing professional development, including the following:

- Consultant-facilitated professional development sessions that focus on what the district identifies as research-driven, rigorous learning topics, including standards alignment, formative assessments, equity, implicit bias, and the needs of students of color

- Principal mentors for new principals

- Formal support plans for principals failing to meet expectations that include guidance from consultants, support from the Teacher Leadership Academy (see below), and other individualized supports

- Monthly principal PLC meetings designed to share experiences and identify areas for improvement

- Monthly meetings between principals and the superintendent

Principals are responsible for mentoring and developing assistant principals to become future school leaders, including developing an instructional lens and building the technical capacity to lead a school. Principals are also expected to provide ongoing opportunities for assistant principals to step into leadership roles.

In addition, principals can nominate teachers with an interest in administrative roles to receive training through the Teacher Leadership Academy. This is a yearlong training that teaches aspiring school leaders proficiencies aligned with national standards for administrators. The Teacher Leadership Academy is facilitated by the superintendent and chief human resources officer, and culminates in a final presentation that demonstrates the proficiencies gained. District staff reported that this academy serves as the launching pad for the school leadership pipeline.

Teachers

Teacher professional development at MSD Lawrence Township stems from two components: teacher PLCs and teacher leaders. Together, they create what the district describes as an environment of "learning together." Rather than being driven by top-down mandates, the district empowers teachers to work collaboratively on solving problems and developing solutions.

District officials cite teacher PLCs as fundamental to the district's high performance. The district integrated PLC time into each teacher's workday. Elementary schools have a PLC for each grade level, while secondary school PLCs are organized by grade and content area. PLCs provide a forum for teachers to discuss changing requirement; review academic, discipline, culture, and climate data; share their classroom experiences; and adapt curricula and programming as needed with their peers. Instructional coaches for each major content area participate in PLC meetings to provide support for any instructional changes.

Teacher PLCs at MSD Lawrence Township

MSD Lawrence Township started using professional learning committees (PLCs) about 10 years ago, and they have since become a "vehicle for change" for the district amid fast-paced statewide educational reforms. Evolving standards from the state have required the district to be "visionary and reactive at the same time." One district official noted that "the PLC process is what allows [the district] to be adaptive and flexible as things [change in the] state and community." Schools use PLCs as a tool to quickly adjust their strategies to meet new requirements.

District staff reported viewing teacher leaders as extensions of principals and assistant principals in implementing the strategic plan and key to improving and maintaining student performance. Teacher leaders provide instructional improvement for teachers, actively participate in PLCs, and support learning for students. They are expected to teach half the workday and dedicate the second half to coaching teachers, typically via individual appointments.

Additionally, each new teacher in the district is paired with a mentor. Teachers new to the profession are paired with a certified mentor for two years, and teachers who are experienced but are new to the district are paired with a mentor for one year. Each mentor must obtain a teacher mentor certification, offered annually during the summer through a local university.

More general professional development supports for teachers over the past 10 years have centered on two major areas: alignment of standards and the transition from teacher-centered instruction to student-centered instruction. Though professional development for new teachers varies depending on the school, all new teachers receive orientation and targeted support from teacher leaders.

Lawrence believes in differentiating formal teacher evaluations from ongoing feedback. One district official said that "feedback happens daily and constantly, and evaluation is more the documentation of the journey and process, and celebrating the work that the teacher has done." Each school strives to create a culture of trust between teachers and evaluators. This type of culture makes it clear that evaluators are present to learn with the teacher and provide feedback so that the formal evaluation is not a surprise.

Curriculum and instruction

Instructional supports

To guide instructional decisions, the district sets district-wide standards aligned with state assessments and recommends instructional resources that meet those standards. Specific curriculum decisions, however, occur at the school level and are driven by the PLCs. Teachers in each PLC review data on student

achievement, consider district-recommended curricula, identify those curricula that match the needs of their students, and provide recommendations to their principals, who make the final curriculum decisions. Thus, while districts provide the framework and resources based on priority standards, each school has autonomy in selecting and implementing in the way it sees fit.

The district developed this process for making changes to the curriculum to achieve two objectives. First, ensuring that recommended resources align with statewide standards confirms that instruction matches how students are assessed. Second, providing teachers with the autonomy to make curriculum decisions acknowledges teachers as professionals. In the context of changing demographics, the district believes that this is increasingly important to ensure it meets specific student needs and enables student success. As one district official noted, "[MSD Lawrence Township is] a very diverse district…. Each school needs to have autonomy for how they're teaching, [while] priority standards need to be consistent across the district."

"We believe that our teachers know the students better than the district knows the students."

Use of data

To monitor improvements and address areas of weakness, the district uses diagnostic assessments, universal screeners, and progress monitors. It maintains these data through a district-supported platform, where schools are expected to collect and submit student achievement data in three data collection systems: (1) a short-cycle data collection system, in which teachers monitor students' daily progress toward priority standards; (2) a mid-cycle data collection system, based on the universal screener and benchmark assessment; and (3) a long-cycle data collection system with data from yearly testing.

The data collected from these systems help teachers monitor the progress of their students. Teachers use the short- and mid-cycle data to identify whether they need to reteach a concept to the whole class or to a particular group of students. For example, a teacher can compare a student's daily performance (short-cycle) with his or her performance on the benchmark assessment (mid-cycle), to determine whether the student requires a programmatic intervention. Teachers generally conduct this analysis and make this determination in collaboration with their colleagues in the PLC. The assistant director for data integrity and other district staff train and provide ongoing support to principals and teacher leaders in using and learning from the data system to inform instruction, guide student placement, and structure interventions.

Separate from academic data, the district collects data on discipline and attendance, and, at the secondary level, data on student participation in extracurricular activities. In addition, the district provides a data-tracking system for teachers to note anecdotal information on students' disposition, mood, and strengths and weaknesses that might indicate a need for nonacademic support, such as a family liaison.

School choice

MSD Lawrence Township does not have any charter schools within district boundaries, and district officials reported a lack of community support for charter schools. The area includes some private schools.

Following a dip in student enrollment, the district adjusted its school choice policy in 2014. Since then, the district accepts students from other school districts. In addition, the district allows families to send their children to any elementary or high school, rather than requiring students to attend the schools in their geographic area. Over the past five years, district enrollment has increased by about 2,000 students.

Although the district attributes this increase mainly to its strong student achievements and programs, it believes its school choice model also played a role.

Culture and community engagement

MSD Lawrence Township characterizes a positive school culture by the way staff and students treat one another, the way a school uses data to celebrate success and learn from failures, and the way a school seeks and gathers input from a range of stakeholders.

The district monitors school culture in three key ways. First, the office of the chief academic officer hires a contractor to conduct focus groups at the start and end of each school year. Second, the district conducts "rigor diagnostics," which are classroom visits and observations of instructional processes. Finally, the district regularly administers a survey on culture and climate to each school. The survey enables teachers, parents, and students to provide feedback that the district can use to both gauge school culture and shape school improvement processes. In the past, the district has also used input from these stakeholders to recommend changes regarding the district data system and curricular resources.

Family and community engagement in Lawrence is primarily school-driven, with each school developing and executing its own plan for community engagement. District staff reported that this model is successful because families are more likely to participate in school-led rather than district-led initiatives, as school staff engage more directly with the students.

St. Charles Parish Public Schools

District structures and supports

District strategy, vision, and goals

Staff from St. Charles Parish Public Schools cite the district's long-standing vision as critical to guiding their decisions and building a culture of commitment. The district's vision has been in place for about 25 years, and district leaders, many of whom are former students of the district, noted that the St. Charles Parish community holds pride in the established vision and wants to protect the district's legacy. In addition, all current board of education members have served in their roles for at least 12 years. District leaders noted that this stability has been an asset in guiding the district's strategic direction, as board members have developed deep expertise in carrying out their responsibilities as well as a common understanding of the district's long-term priorities. Community members, government agencies, and district and school staff initially came together to set the district's mission, vision, values, and beliefs and periodically review and modify them. Although these guiding documents have evolved somewhat over time, district staff recognize them as important in establishing a shared culture focused on students' success.

The district identifies itself as a "Triple A" school system, focusing deeply in academics, athletics, and the arts. The St. Charles Parish Public Schools community identified these areas as important, and the district has used consistent messaging to build awareness and understanding of these aims. District staff recognize the importance of consistently and frequently communicating their vision and priorities to both internal and external stakeholders and typically build speeches and presentations around the Triple A talking points. District leaders noted that staff across the district should know the vision and that this builds a sense of organizational belonging among district staff that then trickles down to students, families, and community members.

St. Charles Parish Public Schools at a glance

Location:	Near New Orleans, Louisiana
Number of schools:	15
	9 elementary schools
	4 middle schools
	2 high schools
Number of students enrolled:	9,797
Percentage of students who qualify for free or reduced-price lunch:	53
Percentage of students of color:	45
Gains in math and ELA:	1.10 grade levels
Gains in math and ELA for Black students:	1.06 grade levels
Teacher-student ratio:	12:1
Per-pupil spending:	$14,382

Source: Gains in math and ELA achievement figures are drawn from SEDA (see Appendix C). All other figures are obtained from the district's profile, available at https://www.stcharles.k12.la.us/domain/509.

St. Charles Parish Public Schools' vision and mission

Vision: The citizens of St. Charles Parish place the education of their children as a top priority. Education is a shared responsibility of the schools, students, families, St. Charles Parish School System staff, school board, local government agencies, higher education, and the business community. There is a commitment from stakeholders to help all students become college and career ready, creating lifelong learners. Our schools foster a love of learning, and our schools equip students with the knowledge and skills required to lead productive and fulfilling lives in the changing society of the 21st century.

Mission: Provide high quality educational opportunities to enable its students to become responsible, productive citizens and enthusiastic lifelong learners.

Source: https://www.stcharles.k12.la.us/domain/513.

School autonomy/funding and resource allocations

The district's central office maintains most of the authority in funding and resource decisions, rather than schools themselves. The district determines staffing for each school and assigns leaders to schools; however, principals can request additional staff members, as needed, and have flexibility in assigning

"[Consistently sharing the vision] gets people to feel a sense of belonging to our organization."

responsibilities to the staff assigned to their school. For example, a high school principal could decide that an assistant principal assigned to his school will focus on ELA instruction and staff, or that the assistant principal will focus on a particular grade level of students. The district also generally determines salary and wage decisions; however, school leaders receive funds that they can use as they wish, such as paying staff an additional week of salary to help develop school improvement plans. The district's central office also regulates areas such as bus transportation and food services, so that school staff can direct greater attention to students and instruction.

School improvement

St. Charles Parish Public Schools has a keen focus on continuous improvement. Each school is required to develop an annual school improvement plan, which the central office supports in several ways. District staff review data to identify areas needing improvement within and across schools, as well as determine which schools need additional supports and resources. Staff from the Office of the Assistant Superintendent of Curriculum, Instruction, and Assessment act in supporting, rather than supervisory, capacities in schools. They work with school leaders to monitor

"The role of the central office is to support and serve schools."

teachers, examine the implementation of curriculum, offer feedback, and solve problems collaboratively. The district will also pay for professional development initiatives in schools' improvement plans. For example, schools with substantial populations of students who have experienced trauma included trust-based relational interventions (TBRIs) in their plans, and the district paid for TBRI professional development sessions for teachers and administrators.

The district also regularly engages with other stakeholders to inform continuous improvement efforts. A superintendent advisory council, which includes a diverse set of students in grades 10 to 12, meets monthly so that the superintendent can receive direct feedback from students on practices in the school system and hear ideas for improvement. The district also conducts an engagement survey with staff at three points in the year in order to understand staff's perceptions and inform decision making. In addition, the district conducts annual surveys of parents, students, and employees. District leaders reported that findings from the surveys are shared with principals and executive staff members and ultimately drive a large portion of the schools' improvement plans.

Talent pipelines and evaluation

School leaders

The district manages an administrative leadership pool that is open and advertised to both internal and external applicants. Rather than advertising for specific school leadership positions, people are considered and selected from within that pool. To be in the pool, applicants must interview with the superintendent, assistant superintendent of human resources, and either the executive director of elementary schools or the

executive director of middle and high schools. District leaders consider candidates who display leadership, relational, and change management skills, and applicants must possess or be pursuing a graduate degree in educational leadership. The district also recognizes the importance of principals as instructional leaders in their schools, and many principals are former teacher leaders. Principals are expected to regularly be in classrooms and offer written or verbal feedback to teachers.

District staff noted that principal vacancies are rare but occur occasionally when a principal is promoted or retires. When vacancies occur, principal positions are typically filled by current

"We believe that becoming a principal starts at teacher leadership."

assistant principals from the administrative leadership pool. District leaders reported that they believe the best way to develop a strong principal is for that person to work as an assistant principal under a strong principal.

To help build the administrative leadership pool, the district operates both a teacher leadership program for teachers and school staff who are interested in a teacher leader position, and an aspiring leaders program for administrators who are interested in serving in principal roles. Both of these programs offer professional development opportunities, such as trained mentors, so that program participants are ultimately equipped to fill these roles. Although the programs are open to anyone interested, principals maintain the pipeline of future school leaders by identifying and encouraging staff they believe would be strong candidates.

St. Charles Parish Public Schools does not use the state's principal evaluation rubric, but rather a rubric developed in North Carolina that it recognizes better meets its needs. The district has also recently designed an assistant principal evaluation rubric that aligns well with the principal rubric and the district's general expectations for school leaders. These school leader rubrics include several domains that the district views as critical to the success of its leaders, including leading the strategic direction of the school, creating an empowering and collaborative work environment for staff, and engaging with external stakeholders, such as families and community members. The district formerly used principal evaluations to determine performance pay, but district leaders noted that they felt this was ultimately ineffective at improving principals' performance. The district now primarily uses the evaluations to measure the effectiveness of the leader and recommend areas for professional development and support.

Teachers

District leaders noted the importance of maintaining a high quality teaching staff. They reported that the district generally has a relatively low teacher attrition rate, for which they credit several factors. First, the district compensates its teachers well and has higher salaries than neighboring districts. Second, the district offers professional development and other incentives that teachers value, such as paying a referral stipend to staff who refer people who remain in the district for at least a year. Finally, district leaders seek to maintain a close-knit connection among staff throughout the district. They noted that small gestures, such as sending birthday cards to all staff, help teachers better understand how they are appreciated.

Although principals are ultimately responsible for hiring their school's teachers, the district's central office manages teacher recruitment and applications. The district uses several strategies to build the pipeline of potential teachers in the district. For example, it uses teacher residency programs housed at universities to hire alternatively certified teachers. The district also maintains a pool of replacement teachers at each school level (elementary, middle, and high school) who can cycle into any position at that level if a teaching role opens during the school year. In addition, the district has taken on a "building-our-own" approach to promote the teaching profession to high school students. It offers courses at the district's Satellite Center to train students interested in becoming teachers. Some of the students trained through the Satellite Center enter teaching programs affiliated with local universities and take on paid internships with the district. Following their internship, the students are guaranteed employment.

> *"We've not really had an issue with [teacher] retention.... We believe that's because we are constantly providing professional development, we are constantly providing resources for them, we have good salaries. Overall, our teachers are pretty satisfied."*

Following state requirements, teachers' evaluations are based on classroom observations (70 percent) and student achievement (30 percent). The district uses the state's rubric for classroom observations, which includes elements of the Charlotte Danielson Framework for Teaching.[7] Teacher evaluations help the district determine tenure and inform salary increases. The district formerly gave teachers bonuses based on their students' growth but has stopped this practice because of inconsistency in growth metrics across grades and subjects.

Professional development

School leaders

St. Charles Parish Public Schools offers several opportunities for professional growth for both current and aspiring school leaders. Principals are managed by the executive director of their grade span (elementary or middle and high schools), who work with them to help recognize and meet professional growth needs. In addition, principals with fewer than three years of experience work with a trained principal mentor. Principals attend monthly meetings that include professional development components. To increase time spent on principals' professional development, the district has also added principal leadership training sessions every other month. The district also hosts annual administrative retreats that include professional development on specific topics, such as equity. Principals also have some opportunities for external professional development, such as attending relevant conferences. Assistant principals and other leaders aspiring to be principals receive many of the same professional development supports that principals do.

District leaders also emphasized the importance of school leaders working with their school's staff to grow their abilities as leaders. The district facilitates collaborative "study groups" in which teachers, school leaders, and district personnel come together to better understand curriculum that will be implemented in schools. Administrators also participate in personnel evaluation training where they learn how to more effectively evaluate, coach, and train their school's staff. District staff reported that this training has been

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[7] Additional information on the Charlotte Danielson Framework for Teaching is available at https://danielsongroup.org/framework.

particularly helpful to their leaders, as it has shifted the mindset of evaluations from "do this" to working side by side with the teaching staff.

Teachers

District leaders reported that they view teacher quality as critical to supporting students' success and recognize professional development as a key strategy for improving quality. Teachers' professional learning needs are primarily determined through feedback from principals and instructional coaches. The primary supports provided are teacher PLCs and collaboration with district-level instructional coaches. District staff reported that teacher PLCs have improved consistency across teachers, as there is a shared understanding of how to plan and deliver lessons. Instructional coaches, who are housed through the district's central office and support teachers across schools, join teacher PLCs as well as provide other supports, such as observing teachers and offering feedback. For example, a struggling teacher might record a video of himself or herself delivering a lesson, then watch that video with the instructional coach to understand how to adjust instruction. The district also facilitates trainings for teachers, including quarterly sessions with instructional coaches and trainings on nonacademic supports, such as anti-bullying training. A district-operated professional learning facility is another source of professional growth opportunities, as the district funds coverage for teachers to leave their classrooms and engage in targeted professional development workshops at the facility.

"Everyone in our organization is a learner. We provide...support so that you individually can be successful. And it trickles down to our kids, which is the focus of everything that we do."

Although the district offers most teacher professional development supports, school leaders have autonomy in providing additional professional development. For example, some school leaders have adjusted the roles of some teaching staff so that they teach for half of the day and provide teacher support during the other half. In addition, some schools have pooled professional development funds together to bring in an outside consultant to work with teachers. New teachers receive extra supports during their first three years of teaching, including district- and school-level trainings during the summer, trainings on classroom management, and quarterly professional development sessions.

Curriculum and instruction

Instructional supports

St. Charles Parish Public Schools uses district-wide curricula across schools. The state education agency identifies curricula that align with testing standards and provide resources to districts to guide curriculum selection. To determine which curricula it will implement, the district gathers a variety of stakeholders, including central office personnel, school leaders, select teachers, and community members, to vet and select state-recommended curricula. The district then maps out a plan for training teachers on the selected curriculum. Although some teachers have expressed resistance to using mandated curricula, the district feels that using a district-wide curriculum benefits students because they become accustomed to routines and practices as they progress through the school system. District and school leaders have responded to teachers' feedback by using professional development sessions to explain why they have chosen the selected curricula.

Use of data

District leaders reported that they use a "deliberate and intentional" approach to examining data in order to continuously seek improvement. Teachers, school leaders, and district-level instructional coaches use students' academic data, including performance on diagnostic, interim, and final assessments. Teachers use data to map out their supports for students in the classroom and identify students for additional academic interventions. Instructional coaches regularly review student data and work with teachers in their PLCs to determine strategies to help students be more successful. District staff reported that the teacher PLCs have contributed to the district's success, as the PLCs have helped establish a culture of continuous improvement and have helped teachers make data-based instructional decisions.

"What we do is very deliberate and very intentional. We look at the data and identify areas that we can improve, and we do that on a continuous basis."

Quarterly, the district also uses other student data, such as on discipline and attendance, to identify students who might need nonacademic supports. School counselors then review these data and meet with teachers and school leaders to align supports.

School choice

District leaders reported that the St. Charles Parish community has a strong sense of trust in the public school system, and that there has been little community interest in bringing charter schools to the area. Approximately 95 percent of the students living in the parish are enrolled in the public school system, with the remaining few students attending private or charter schools in nearby parishes. District staff noted their parish school system as an exception to the school choice landscape of many of the parishes around them, which have several charter or private schools. They are also aware that there is a lot of support for school choice policies in Louisiana, such as charter organizations and voucher programs. As a result, the district has felt a heightened sense of competition. District leaders have responded by recognizing a need to "market" themselves and showcase their schools' excellence to the public. For example, the district uses several social media platforms, particularly Facebook, to maintain stakeholder involvement and build support among the community.

"The community has put its trust in the public school system and we offer such comprehensive opportunities that it's difficult to compete with us."

Culture and community engagement

District staff shared a belief that their culture is a result of a history of excellence. They described their staff as dedicated and "in it for the right reasons." In addition, they recognize that the community's trust in their school system is due to the district's ability to deliver on past promises, such as construction projects or school renewals. District staff reported that the St. Charles Parish community has pride in what they recognize as a highly successful district, and both internal and external stakeholders aim to protect and sustain that tradition.

"We really have buy-in from our community because everything that the school system has expressed – all the leaders from the school district really have a vested interest in St. Charles Parish."

Part of the district's strategic plan has been to deepen family and community engagement, and the district has used several mechanisms to deliver on this goal. For example, the district offers weekly classes for community members with children who are not yet school aged. These classes help bring those families into the schools so they can become familiar with the campuses and staff and help prepare the children for kindergarten. The district also has a community education department that offers community classes on a variety of topics, including finance, photography, and Zumba. To deepen engagement with students' families, the district asks for feedback through parent surveys, produces well-designed information packets for students to take home, and creates monthly videos from the superintendent. The district also hosts community and family outreach events each semester. For example, the district organized an event for family and community members to experience a day in the life of a student in the St. Charles Parish Public Schools district, including riding the bus, eating school breakfast and lunch, and participating in class.

District leaders also noted the value of partnering with local businesses and government agencies and described how they interact with these entities to form mutually beneficial relationships. District leaders regularly meet with business leaders to keep them abreast of district happenings and needs. In addition, business leaders share with the district necessary skills that they wish to see in the future workforce.

Chicago Public Schools

District structures and supports

District strategy, vision, and goals

Chicago Public Schools (CPS) recognizes the tremendous success its students and families have experienced in recent years. Its five-year vision, called Success Starts Here, begins by pointing out the accomplishments and milestones that the district's students have achieved and notes a need to build on the momentum coming from this growth to continue to drive success.[8] To do so, CPS makes three key commitments to its students, families, and the greater Chicago community:

1. The district commits to a focus on **academic progress**, implementing supports so all Chicago students receive high quality instruction led by talented and empowered educators in a safe and supportive environment. CPS aims to achieve a vision where students love learning, solve problems creatively, and are prepared for a successful adulthood.

2. CPS is committed to **financial stability**. The district recognizes that to provide high quality education to all of the city's students, the district must achieve excellence in its operations and advocate for fair school funding to support the resources needed for a high quality educational experience.

3. CPS commits to acting with **transparency**. In its five-year vision, the district notes that it respects its students, families, and the diverse communities across Chicago and honors them as partners in accomplishing a shared mission. To build trust among this partnership, the district commits to communicating openly and consistently acting on the feedback it receives.

Chicago Public Schools at a glance

Location:	Chicago, Illinois
Number of schools:	642
	477 elementary schools serving students in kindergarten through 8th grade)
	165 high schools
Number of students enrolled:	355,156
Percentage of students who qualify for free or reduced-price lunch:	76
Percentage of students of color:	89
Gains in math and ELA:	1.19 grade levels
Gains in math and ELA for Black students:	1.15 grade levels
Teacher-student ratio:	17:1
Per-pupil spending:	$15,878

Source: Per-pupil spending (total spending divided by all students) is drawn from CPS's 2018–2019 Comprehensive Annual Financial Report. The FY2020 Resident's Guide to the Budget is available at https://cps.edu/FY20Budget/documents/ResidentsGuidetoFY2020Budget.pdf. Gains in math and ELA achievement figures are drawn from SEDA (see Appendix C). All other figures are drawn from CPS's Stats and Facts page, available at https://www.cps.edu/About_CPS/At-a-glance/pages/stats_and_facts.aspx.

Chicago Public Schools' vision and mission

Vision: Success Starts Here

Mission: To provide a high-quality public education for every child, in every neighborhood, that prepares each for success in college, career and civic life

Source: https://cps.edu/About_CPS/vision/Pages/vision.aspx

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[8] More information on Success Starts Here is available at https://cps.edu/About_CPS/vision/Pages/vision.aspx.

Planning for and implementing policies and practices that align with these commitments are further underpinned by six core values outlined in the vision:

1. **Student-centered**: We place students at the center of everything we do.

2. **Whole child**: We support our students so they are healthy, safe, engaged, and academically challenged.

3. **Equity**: We eliminate barriers to success and ensure equitable opportunities for all students.

4. **Academic excellence:** We provide diverse curriculum and programs with high academic standards to prepare students for future success.

5. **Community partnership:** We rely on families, communities, and partners in every neighborhood to shape and support our shared mission.

6. **Continuous learning:** We promote an environment of continuous learning throughout CPS for students, teachers, leaders, and district staff.

The five-year vision covers the years 2019 to 2024. It includes concrete and measurable five-year goals for early childhood, elementary school, and high school students that cover this period.

Success Starts Here was developed with input from approximately 10,000 community members, including both internal stakeholders, such as educators, parents, and students, and external stakeholders, including representatives from local nonprofit organizations, postsecondary institutions, businesses, and the government. District leaders reported a successful rollout of the vision to the community, attributing much of its success to the wide array of stakeholders included in the development process. In addition, CPS worked to build understanding and gain buy-in through intentional communication strategies, including carrying out in-person meetings with stakeholders, hosting public launch events, and

"People understand the importance and meaning to connect their work back to the vision."

sending personalized letters that thanked people for their contributions in developing the vision. As an example of its success, CPS leaders noted that staff across the district regularly use language from the vision as they align their work with the goals and commitments outlined in the strategic plan.

School autonomy/funding and resource allocations

CPS largely follows a decentralized model in which schools determine their own leadership structure, instructional vision based on the districtwide vision and goals, and funding allocations. Although schools are generally led by a principal, they are governed by a Local School Council, which includes the school's principal, parents, educators, community representatives, and (in high schools) a student representative. In addition, CPS schools are organized into groups, called networks, that are overseen by a network chief officer who supervises the principal and supports school improvement efforts. Although principals must abide by collective bargaining guidelines, district procurement processes, and contract approval requirements, they have autonomy to design their budgets and resource allocations. However, both the school's Local School Council and network chief officer must approve the final budgets.

School improvement

CPS's School Quality Rating Policy measures annual performance for all schools and identifies schools in need of additional support. Ratings are based on indicators across several dimensions, including students' performance on assessments, academic growth, preparation for postgraduation success, attendance, and graduation rates, as well as measures of the school's culture and climate. In addition, all CPS schools are required to develop a two-year Continuous Improvement Work Plan (CIWP) that uses a strategic planning process to help schools establish concrete goals, strategies, and milestones for improvement. Network chief officers assist schools in developing their CIWPs and meeting those goals by connecting school leaders with district supports and resources.

Talent pipelines and evaluation

School leaders

CPS leaders noted that school leadership is of critical importance to the district and that CPS deeply values its schools' principals. Recognizing the crucial role that principals play, CPS implements several strategies to intentionally and proactively identify, select, develop, and retain its school leaders.

In recent years, CPS has maintained an 85 to 93 percent principal retention rate. CPS typically fills vacant principal positions with candidates who have already been identified and developed for principalship. Many candidates are staff from within CPS, most of whom were previously assistant principals, who have gone through one of the district's programs to support the development of future school leaders.

Specifically, the district uses two principal residency pipelines to recruit and prepare internal candidates to lead schools. The first includes current CPS assistant principals who district leaders believe could be ready to lead schools in a short timeframe. These assistant principals are assigned a leadership coach, who helps prepare them to lead a hard-to-staff school (that is, a school that has historically faced staffing challenges) within 12 to 18 months. The second pipeline, called the Chicago Leadership Collaborative Residency, is a partnership with three local principal development programs aimed at preparing teacher leaders for principal positions. Participants in this program commit to a year-long residency and are mentored by high-performing CPS principals to build principal competencies. Participants in the Chicago Leadership Collaborative Residency generally enter a principal role within two years of completing the program.

District staff noted that people selected for either program must have demonstrated proven success in improving student achievement through their leadership roles. They receive training on becoming instructional leaders and are required to set and meet student achievement goals during their residency. In addition, candidates hired to be CPS principals must demonstrate that they are able to facilitate improvements in teachers' instructional practices through supports such as lesson observations and coaching. They must also show an ability to analyze data for the purpose of improving school performance.

Network chief officers and Local School Councils formally evaluate principals using the district's principal competencies framework.[9] The framework measures principal quality across five critical competencies:

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[9] More information on CPS's principal competencies framework is available at
https://cps.edu/PrincipalQuality/Documents/PrincipalEvaluationRubric.pdf.

1. Championing teacher and staff excellence through continuous improvement to develop and achieve the vision of high expectations for all students.

2. Creating powerful professional learning systems that guarantee learning for students.

3. Building a culture focused on college and career readiness.

4. Empowering and motivating families and the community to become engaged.

5. Relentlessly pursuing self-disciplined thinking and action.

The district also evaluates principals' success in building a strong culture and climate for families through the 5Essentials Survey, which captures teacher and parent feedback on key school success indicators and assesses the school's culture and climate.[10] Principal evaluations serve to inform the professional learning plans that network chief officers implement for school leaders, connect principals with professional development opportunities and leadership programs provided by external partners, and advise the district's retention and succession planning. The evaluations are also used for school remediation efforts.

Teachers

CPS moved to centralize the teacher recruitment process over the past four years. District leaders noted that the centralization allows principals to focus more on instructional leadership by alleviating some of the administrative responsibilities that principals face and helps ensure more equitable access to teacher talent across the district. Previously, principals were responsible for recruiting and hiring their own teachers. This resulted in some schools receiving many applications, while others struggled to identify strong candidates.

Principals continue to maintain autonomy to interview, select, and retain teacher candidates, but the district's systems now work to grow a pool of screened candidates who principals can hire through an early-offer process that allows the district to offer teaching jobs to strong candidates before teaching positions become open in the summer. For the 2019–2020 school year, nearly one-third of district new hires were secured through the early-offer hiring process. District leaders commented that this approach helped the district become more efficient in recruiting candidates, influenced the distribution of teacher talent across schools in support of those that have traditionally struggled to attract top teaching talent, and streamlined the hiring experience for candidates. Specifically, staff reported that retention of early-career teachers in traditionally hard-to-staff schools has increased and teacher vacancy rates on the first day of school have decreased.

> *"We pursued the [teacher recruitment] strategy because we thought it was imperative that every school have more equitable access to teacher talent."*

CPS aims to hire licensed teachers with previous teaching experience (including student teaching) in the district or another urban district and who have backgrounds and experiences that reflect the district's student population. Other key teacher attributes include a belief that all students can achieve at high academic levels regardless of their background and a demonstrated responsibility for implementing a rigorous curriculum that meets the needs of their students.

To build its pipeline of teacher candidates, the district maintains deep relationships with several educator preparation partners and hosts more than 750 student teachers each year. CPS also has its own year-long

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[10] More information on the 5Essentials Survey is available at https://uchicagoimpact.org/our-offerings/5essentials.

teacher residency program to prepare people in noneducation fields to teach high-need content areas. Through this program, residents work in a CPS school alongside a mentor teacher while pursuing a graduate degree in teaching, with the expectation that they will teach in CPS for four years upon completing the program. CPS also increases the pool of teacher candidates through partnerships with Golden Apple, Grow Your Own Illinois, and Teach For America.

CPS evaluates teachers on a variety of factors, including classroom observations, student growth on REACH performance tasks,[11] and, for ELA and math teachers in elementary schools, a value-added measure based on NWEA test scores.[12] Teacher evaluations are used to determine tenure and assign performance improvement plans. Evaluations also play a role determining the order of layoffs.

In recent years, CPS piloted various teacher retention strategies in some of its hardest-to-staff schools. For example, the district has provided professional development to principals focused on best practices for managing and retaining human capital (that is, encouraging staff to stay at the school). CPS also implemented strategies to retain targeted groups of teachers. It developed a mentoring and instructional coaching program for early-career teachers to support retention. The district also developed a distributed leadership program to create leadership opportunities for outstanding veteran teachers. In addition, district leaders reported that CPS recognizes the benefit that students receive when they share demographic characteristics with their teachers. As one response to a decline in people of color entering the teaching field, it launched intensive, retention-focused affinity groups with male educators of color.

Professional development

CPS strives to develop, implement, and share professional development opportunities that are based in research, taken from best practices, and address school improvement efforts. As such, the district works to continuously understand new research, identify practices that demonstrate success, and closely examine which areas are most in need of improvement through its continuous improvement efforts. These efforts underpin the district's approach to professional development for both its school leaders and teachers.

School leaders

In light of the district's recognition of the critical role that school leaders play, CPS has long invested in the development of aspiring and current leaders. These efforts, which district leaders noted as essential and important, are led by the Department of Principal Quality (DPQ), whose mission is to identify, develop, support, and retain high quality principals whose efforts significantly increase student outcomes. Under the leadership of this department, the district screens aspiring principals to determine their readiness to lead schools, as measured by the district's principal competencies framework. For more than 20 years, DPQ has supported the development of aspiring principals through three principal residency programs with National Louis University, the University of Illinois at Chicago, and New Leaders. Under these programs, participants spend a year developing their leadership skills in a CPS school, including leading instructional teams, evaluating teachers, and working on projects with families and the community. The resident principals

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[11] Recognizing Educators Advancing Chicago Students is Chicago's comprehensive evaluation system. Performance tasks can be written or hands-on and serve as opportunities for students to demonstrate mastery, or progress toward mastery, of a skill or standard. More information is available at https://cps.edu/ReachStudents/Pages/Reach.aspx.

[12] NWEA assessments are administered in some schools in addition to required state standardized assessments. More information on NWEA assessments is available at https://www.nwea.org/.

receive mentoring from the school's principal as well as coaching from the partner organizations and work toward demonstrating their ability to impact student achievement through continuous improvement.

First-year CPS principals receive yearlong professional development as well as mentoring from an established school leader. In addition, the Department of Principal Quality's partnership with the Chicago Public Education Fund, a nonprofit organization that provides CPS with funds and resources to support efforts to retain strong principal talent, co-sponsors two key principal programs: the Chicago Principals Fellowship program, where principals attend Northwestern University and engage with key district leaders to influence internal policy and practice improvements, and the Cahn Fellows program, where principals attend Columbia University's Teachers College and focus on specific improvements at their school.

In addition, CPS principals receive professional development support from both their network chief officer and a variety of district offices. The Office of Network Support provides professional development for school leaders and often leverages content departments, such as the Department of Literacy or the Department of STEM, to develop principal content expertise. Network chief officers meet monthly with their principals and use these meetings, in part, as a touch point for department officers to discuss district initiatives and deliver required trainings. As one example, the district launched an initiative, "Learn. Plan. Succeed.", which requires all students to have a postsecondary plan by the time they graduate high school. Network chief officers and the Office of School Counseling and Postsecondary Advising coordinated efforts to ensure that principals received supports to execute this initiative in their schools.

In addition, the Department of Principal Quality leads professional development for targeted groups of principals, such as new principals, principals in training, and principal mentors. Content for professional development for these groups is based heavily on district and initiative goals, as well as surveys of principal needs. For example, the Department of Principal Quality ensures that new principals receive district-led bimonthly development aligned with the principal competencies, as well as mentorship from other district principals.

For individualized support, network chief officers develop targeted professional learning plans based on principals' evaluation results. These plans may recommend individual coaching, participation in professional learning communities, or external learning opportunities.

The network chief officers are also responsible for the professional development of assistant principals, who are generally offered the same learning opportunities as principals. CPS staff reported that this is an intentional approach to achieve a strong pipeline of school leaders. The network chief officer may also request that the Department of Principal Quality design and deliver customized training for assistant principals. These sessions may, for example, involve in-role leadership development.

Teachers

Teacher development occurs at both the district and the school level. The district provides professional learning opportunities aligned to district priorities for all schools. These opportunities are primarily

delivered through two types of trainings: Summits, which are coordinated by network staff with guidance from the central office, and Framework Fests, which are coordinated by the central office and target teacher leaders. However, most targeted teacher development occurs at the school level. Principals are responsible for identifying and addressing learning needs and often convene Professional Learning Communities in support of this. In addition, district leaders and school principals can leverage outside organizations to support district, network, or school-level professional development initiatives.

"We believe leadership needs to support professional learning, and professional learning needs to happen in a team-based, school-based setting."

CPS teachers typically receive feedback through observations. The CPS Framework for Teaching,[13] which is adapted from Charlotte Danielson's framework, is used for formal evaluative observations and coaching conversations. It guides observations across four domains: planning and preparation, the classroom environment, instruction, and professional responsibilities. Both nontenured teachers and tenured teachers with low ratings are observed three times a year through two formal observations and one informal observation. Tenured teachers with high ratings are observed three times over two years. Aside from these formal mechanisms, school administrators and fellow teachers frequently conduct observations and provide informal feedback and coaching to teachers.

The district provides new teachers with a range of supports, including a new teacher orientation, summer onboarding activities, monthly professional development sessions, and one-on-one mentoring with teacher leaders. The district also offers support to teachers in hard-to-staff schools through a targeted mentoring program that provides centralized development and compensation of school-based mentors. Principals in these schools may also assign instructional effectiveness specialists from the district's central office to provide instructional coaching to new teachers.

Curriculum and instruction

Instructional supports

CPS is committed to the academic progress of its students and ensuring that all students, regardless of the school they attend, have access to a rigorous, urban curriculum that promotes achievement and reflects the needs and learning styles of digital natives. The district recognizes the success in student growth experienced in recent years but aims to continually improve its educational offerings. As a key component of its five-year vision, in 2019, CPS launched the Curriculum Equity Initiative, a three-year effort to create a standards-aligned, culturally responsive library of curricular resources for students and teachers across all grade levels and subjects. Over the course of the three years, through a partnership with publishing organizations, the district will design and develop a comprehensive pre-K–12 digital curriculum that reflects the cultural diversity of the district's students and combines rigor and support with strategies for addressing diverse learning needs, including those of English language learners and students with disabilities. The curriculum will be supported by robust professional learning. The district is simultaneously field-testing a suite of processes that will allow for maintenance and management of the curriculum, built on a continuous improvement model that relies heavily on teacher feedback and input.

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[13] More information on the CPS Framework for Teaching is available at
https://cps.edu/ReachStudents/Documents/FrameworkForTeaching.pdf.

Although schools will continue to have the autonomy to select their own curriculum, the curriculum will be a resource for all schools, including those seeking a full curriculum in critical content areas or those seeking to supplement an existing curriculum. All curricula, including those that schools select, are required to be aligned to Illinois state standards. Currently, any curriculum that the district recommends to schools is also generally supported by content teams at the central office.

"The Curriculum Equity Initiative is CPS' multi-year effort to build a coherent suite of digital curricular resources for teachers and students."

CPS principals are encouraged to spend most of their time on instructional leadership. For example, principals are encouraged to lead instructional rounds in their schools and conduct informal observations of teachers in order to support effective teaching practices and monitor progress toward the school's goals. In addition, principals develop and facilitate instructional leadership teams and teacher teams that focus on curriculum and instruction improvements. In general, these teams are comprised of teachers across grade levels, subjects, and roles. While membership is voluntary, school leaders often encourage specific teachers to participate.

Use of data

At all levels of the organization, leaders use student outcome data to inform decision making that is aligned to the goals outlined in the district's five-year vision. Leaders at the central office, network, and school level receive tools and resources to develop strategic plans that are informed by student outcome data and aligned to the vision. CPS provides dashboards, assessment reporting, and professional development on data use to empower stakeholders to meaningfully engage with data in monitoring strategy implementation and student progress.

CPS mandates the use of various student assessments, including REACH Performance Tasks, state standardized assessments, and the National Assessment of Educational Progress, that align with federal and state standards, inform teacher evaluations, or are required by specific academic programs (such as the International Baccalaureate). However, the district does not require that all schools use the same interim assessments. Teachers vote on an assessment plan that identifies the assessments schools will administer.

Network staff support principals in providing training to school staff on the use of assessment data and resources for using data to improve instruction. Each network is provided access to a data strategist, who supports the network chief officers in understanding data progress within the local context. They also work with principals, and sometimes teachers or teacher leadership teams, to provide additional supports around data use. Strategists provide schools and networks with support on interpreting data, understanding metrics, implementing strategic data inquiry, and making connections between different data points to see a larger picture. At a minimum, all teachers have access to students' test results, attendance, and behavior, but there is variation in how schools choose to monitor and use data.

School choice

CPS has maintained an active partnership with charter schools in Chicago for about 20 years, and there are currently more than 100 charter school campuses across the city. The district is the authorizer for charter schools in Chicago, and it oversees their academic, financial, and operational performance through the Office of Innovation and Incubation. The district's Charter School Quality Policy contains established academic

criteria to ensure that charter schools understand performance expectations and maintain high-quality schools. District staff noted that many charter schools use innovative approaches to educate their students but recognized that it can be challenging to ensure that best practices from charter schools are shared and integrated across other schools in the district.

In addition, GoCPS is a key feature of the CPS school choice landscape. This platform allows community members to research and apply to all district-operated elementary schools and all district- and charter-operated high schools. District leaders reported that integrating charter high schools into the GoCPS system was a major success, as it benefited Chicago's students and families. They added that although the system currently only includes district elementary schools, many charter elementary schools have expressed interest in being added to the system.

"[The GoCPS system] has been beneficial to all of our students and all of our families."

Culture and community engagement

CPS's community engagement efforts are led by the Office of Family and Community Engagement in Education (FACE[2]). This office uses Elevated Chicago's principles of engagement to support collaboration between the district and larger Chicago community.[14] The current CPS plan includes four levels of engagement with community members:

1. **Inform:** Every CPS parent and stakeholder should have a foundational understanding of the work the district is leading.

2. **Consult:** Parents and students are given opportunities to provide input into district work.

3. **Involve:** Community members are given opportunities to engage in dialogue and in district processes.

4. **Collaborate:** Community members are encouraged to collaborate with district actors—from school leaders to departments.

FACE[2] managers, Local School Council facilitators, and other family and community coordinators are responsible for carrying out engagement efforts. These include volunteer programs to enrich students' learning experience and a Parent University to provide training and resources to students' families, such as classes on Common Core standards, financial literacy, and career-building strategies. In addition, the district uses various strategies to collect and disseminate information across a range of stakeholders, including emails, text messages, digital apps, social media platforms, and townhalls.

CPS leverages several mechanisms to gather input and feedback on district policies, initiatives, and decisions. A key strategy is the use of advisory councils and fellowships that bring together representatives from diverse backgrounds to address and support the district's improvement efforts. For example, CPS convenes meetings with the Student Advisory Council, Teacher Advisory Council, and Chicago Principals Fellowship program to work on year-long policy and project proposals with district leaders that advise and inform improvements. In addition, the Principal Advisory Council and Local School Council Advisory Board provide feedback and input on policies and problems faced by district leaders. Finally, a Parent Advisory

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14 More information on Elevated Chicago's Community Engagement Principles and Recommendations
    is available at http://www.elevatedchicago.org/cep/.

Council meets regularly with the district's Office of Diverse Learner Supports and Services to help provide programming for parents that will support their children's academic success.

DSST Public Schools
Previously known as Denver School of Science and Technology

Network structures and supports

Network mission and values

DSST officials point to the network's commitment to the mission and values as key to students' success. DSST's mission statement was created with input from teachers and school and network leaders and has evolved as the network has grown and its priorities have shifted. In addition to its mission statement, DSST also has six core values that officials say are central to their everyday operations:

1. **Respect:** We appreciate each person and their story through our words, actions, and attitudes. We value their unique perspective and treat others with dignity.

2. **Responsibility:** We acknowledge that our actions and choices impact ourselves and our community. We take ownership for what we do and how we choose to do it.

3. **Integrity:** We act and speak with honesty, fairness, and thoughtfulness. We consistently align our words and actions.

4. **Courage:** We possess the confidence and resolve to take risks, push ourselves, and persevere in the face of pressure, adversity, or unfamiliar circumstances.

5. **Curiosity:** We are eager to learn, question, and explore. We have a thirst for knowledge, a love of investigation, and a desire to learn about ourselves, our community, and our world.

6. **Doing Your Best:** We put our best effort into everything we do. We know that individual and collective effort are required for our community to thrive.

DSST at a glance

Location:	Denver, Colorado
Number of schools:	15
	9 middle schools
	6 high schools
Number of students enrolled:	5,901
Percentage of students who qualify for free or reduced-price lunch:	71
Percentage of students of color:	86
Gains in math achievement:	0.30 standard deviations
Gains in ELA achievement:	0.22 standard deviations
Teacher-student ratio:	14:1
Per-pupil spending:	$12,654

Source: Gains in math and ELA achievement figures are drawn from the 2017 CREDO report (Woodworth et al. 2017; see Appendix C). Teacher-student ratio was derived from school-level data maintained by the National Center for Education Statistics within the U.S. Department of Education. Per-pupil spending was obtained from the DSST 2018-2019 Financial Statement, available at https://www.dsstpublicschools.org/financial-transparency. All other figures are drawn from DSST's By the Numbers site, available at https://www.dsstpublicschools.org/dsst-numbers.

Notes: Gains in math and ELA achievement are reported as estimates of the extent to which DSST improved student learning relative to similar students in nearby traditional public schools. The CREDO report estimates that 0.10 standard deviations is equivalent to providing students with an additional 57 days of learning per school year.

DSST's mission

DSST Public Schools transform urban public education by eliminating educational inequity and preparing all students for success in college and the 21st century.

Source: https://www.dsstpublicschools.org/about-us

School autonomy

DSST aims to empower its school leaders to make decisions for their schools and gives careful attention to how schools and the network's central office share responsibilities. Though DSST supports and encourages schools to drive their own success, as it has grown, the network has experienced challenges using this approach on a larger scale. Staff reported that they have been working to reevaluate which tasks can be managed centrally and which need to be driven by the schools to sustain performance.

Principals, which DSST refers to as school directors, have the autonomy to make staffing decisions and manage their budgets. Though DSST schools generally have similar leadership structures, principals can implement alternate staffing arrangements and deploy staff as they see fit. School leaders make decisions about wages and salaries, though they must adhere to limits set by DSST's teacher salary program, which outlines salary ranges for different types of teachers based on their experience and performance. Principals set and manage their own budgets and priorities as approved by the network. The network manages vendors and larger purchasing decisions, but schools handle purchasing of some smaller-scale resources, such as bringing in food for professional development sessions or ordering specific materials for classes.

School improvement

All DSST schools are required to submit annual school improvement goals and plans to the network for review. Each year, DSST identifies focus schools—schools that did not perform as well in the previous school year and require additional network supports. The network identifies focus schools based on academic results, including both student achievement and growth, student re-enrollment rates, and staff turnover rates. Focus schools typically have less autonomy and receive additional supports with planning and operations before the start of the next school year. Depending on the needs of the schools, the network might provide coaching to school leadership teams on how improve the school or take over management of finance and human resource decisions.

Talent pipelines and evaluation

School leaders

In hiring principals and other school leaders, DSST prioritizes several leader competencies. First, leaders must be mission-driven and value-driven. The network has a clear mission statement to end educational inequity and looks for leaders who are strongly aligned with the mission and DSST's core values. The network also seeks leaders who have a deep sense of self-awareness and understanding of both their areas of strength and opportunities for growth. Strong leadership qualities, including both an understanding of others and the ability to influence and motivate others, are key. Leaders must be able to leverage the strengths of their teams and mobilize them, but also have a clear vision of gaps and opportunities within their teams. Additionally, leaders must be able to drive results, meaning that they should be able to move from theoretical or strategic planning to producing results for the students.

Although DSST has high retention rates among school leaders, the network is constantly working to build its team to meet the demands accompanying the network's substantial growth in recent years. To fill principal positions, DSST has developed a School Director in Training (SDIT) program, which is a pipeline program that hires candidates to be "principals in residence" for one to three years. Although most SDIT candidates come from within the network, DSST also hires some external candidates. SDITs are placed in schools under principals who will accelerate their development or are well-suited to help the SDITs in specific areas of opportunity. The SDIT program uses a 70/20/10 model, a common adult learning framework in which 70 percent of learning happens on the job, 20 percent is through strong coaching and mentoring, and 10 percent is through formal instruction the network provides. As with other school leaders, the network requests that SDITs be the drivers of their own development, such that each SDIT develops an individual leader plan in which leaders set their own goals and think about how they can leverage their mentor and on-the-job experiences to accelerate their growth.

"We place [school directors in training] very strategically and under leaders that have the ability and capacity to help others grow."

Similar to principals, other school leadership positions, such as school deans and directors of curriculum and instruction, are filled by a mix of internal and external candidates. DSST does not use a pipeline program for other school leaders but has developed teacher-to-leader pathways that expose interested and promising teachers to leadership and development principles. In addition, the network has an emerging leaders program for school leaders interested in furthering their leadership roles. Both the teacher-to-leader pathways and emerging leaders program focus on building adaptive skills, such as emphasizing effective feedback, engaging in crucial conversations, navigating conflict, and following general people management skills that are essential to school leadership roles. As a universal practice, the network also asks school leadership to assign stretch opportunities to teacher and emerging leaders to continuously build their capacity to take on more responsibilities.

Principals are evaluated on multiple metrics, including student achievement data, student re-enrollment rates, staff retention, and principals' ability to serve all populations of students (such as English language learners). School leaders, including principals and other school leaders, are also evaluated on their ability to meet the goals they set for themselves each year. These evaluations primarily serve to focus professional development efforts and determine bonuses, but they also help staff adjust their goals for the next year and impact salary raises.

Teachers

DSST manages teacher hiring through the central office. The network screens every applicant on behalf of the schools and then allocates approved candidates to open positions in the schools with a focus on creating balanced content and course teams across schools. Principals or other school leaders at the schools then interview the network-approved candidates and make the official hiring decisions. DSST staff noted that they try to centralize much of the hiring process to alleviate burden on the schools, as hiring is time intensive and schools lack the capacity to manage all hiring activities in addition to their core work of serving the students.

As with school leaders, the network emphasizes hiring teachers who are aligned with its mission and values. To fill open positions, DSST relies heavily on referrals from staff and teachers and draws from their networks as much as possible. To promote this pipeline, the network offers bonuses to staff for any of their referrals who are hired. The network has had some challenges in finding strong teachers, as Denver has a teacher shortage, and the bulk of applications come from teachers with less than three years of experience. DSST uses an internal teacher residency program called the Apprentice Teacher Program to develop promising candidates who have limited teaching experience. It hires newer teachers as apprentices to co-lead a classroom under a mentor teacher for one year, after which they can then apply to become a full-time teacher.

"Values and mission alignment...are predictive of a teacher's ability to stay engaged and in the role longer term because if they have the sense of value and mission commitment, then they're going to stay engaged even if the work is hard, which it inevitably is."

The network uses a pay-for-performance model to retain strong, experienced teachers. DSST assigns teachers to different compensation brackets based on their experience and, using the multifaceted evaluation system described below, determines salary ranges for the teachers. High-performing teachers also receive bonuses. In addition, the network leverages elements such as professional development opportunities, its strong culture, and the commitment to the mission to maintain engagement among employees.

DSST's Culture Team Impact score

DSST evaluates team and culture contributions through a Culture Team Impact score, which measures how staff embody the network's values and what DSST believes are key components of a healthy team. This measure involves reviews from peers and managers. DSST staff noted that team and culture contributions are an important component of teacher evaluations, as the network aims to reward team players who contribute to a strong staff culture.

DSST uses what staff described as a "complex" teacher evaluation system that includes data on school and student performance, feedback from student and family surveys, observations from teaching coaches, and a Culture Team Impact score. In recent years, the network also added a component on teachers' commitment to equity, to evaluate how teachers serve students from all populations. These evaluations help leaders make compensation decisions as well as help focus professional development offerings and adjust job responsibilities. For example, strong, experienced teachers might perform instruction coaching work and teach fewer classes to leverage their strengths and share their expertise. When school leaders identify a low-performing teacher, they implement additional supports and develop improvement plans to help that teacher meet baseline proficiency; however, network officials noted that this is a rare occurrence because they conduct extensive screening during hiring and provide intensive onboarding processes and training to new hires.

Professional development

School leaders

School leaders are the primary drivers of their own professional development goals, which DSST officials said allows for more individualized professional growth. DSST encourages every school leader to develop an

individual leader plan, which outlines how leaders can actively leverage their strengths and address areas for growth. The network takes a tiered approach to professional development: school coaches from the central office provide support and development to principals. Principals work with network staff to develop other school leaders.

Network-wide training in professional development for school leaders is also available and is typically in response to common gap areas among leadership teams. Gaps are identified through evaluations and feedback from school leaders and central office-based school coaches.

"We believe that you have to be the driver of your own development."

DSST offers an annual School Leader Institute—an intensive three- to five-day network-led professional development opportunity for principals and their leadership teams. All school leaders (including principals and other school leaders) receive internal professional development that focuses on adaptive skill sets, particularly on leading and managing other adults. The network also maintains a budget to allow school leaders to attend external development opportunities, including the Relay Graduate School of Education, which provides opportunities such as courses designed to improve instructional coaching.

Teachers

Teachers' development needs are identified primarily using feedback from school leaders. The network's teacher performance and evaluation system also serves as a development tool, as it offers clear descriptors of capabilities an experienced teacher should demonstrate so teachers can use it to identify their own gaps. School leaders work collaboratively with teachers to help establish their individual development paths and determine needed supports. Teacher professional development at DSST primarily occurs through coaching within the schools, typically through the school leaders and more experienced teachers. Network staff commented that the network's emphasis on real-time coaching and observations has been especially effective in driving teacher improvement. The frequency with which teachers receive feedback through classroom observations is based on their experience, skill level, and needs, with most new teachers receiving feedback at least once per week. DSST also has structured teaching teams to leverage the experience of highly effective teachers to support and develop other teachers.

Each trimester, the network offers a cross-campus collaboration—an opportunity for teachers across the network to partner with and learn from others teaching the same grades or subjects. Each content area has a high-performing teacher responsible for leading a professional development course for their group. The DSST central office also employs content leads who help support curriculum planning and assist in coaching newer teachers who need additional support, although school leaders provide most teacher coaching.

All teachers new to DSST participate in two separate onboarding components. First, they attend a network-wide teacher training that focuses on behavior management, educational management practices, and general DSST school procedures. Second, every school campus conducts an additional four-day campus-based onboarding event, called the Teacher Leader Institution, during which teachers learn about specific school culture and instructional practices.

Curriculum and instruction

Instructional supports

To facilitate greater school ownership, curriculum decisions are ultimately made by individual school leadership teams. However, DSST's Curriculum and Instruction (C&I) team guides instructional decisions by setting network-wide standards aligned with state and internal assessments and recommending curriculum and instructional resources that meet those standards. Content leads on the C&I team share recommendations with principals, who then work with their instructional leadership teams to identify the curriculum they want to use in their schools. In many cases, teachers are also involved in the curriculum selection process, but school leaders ultimately decide which to use.

"We really believe that the school leaders and the instructional leaders know what's best for their campus and we want to empower them to make decisions about instruction and what's happening in their classrooms."

To facilitate high quality instruction among its teaching staff, DSST uses a layered approach to train and equip school staff, similar to its approach to more general professional development. Key staff from the central office work together to identify development priorities and support school leadership according to their individual needs. Some school leaders have extensive curriculum expertise and need little support, while others have expertise in other areas and require more guidance in selecting curriculum. The network also provides monthly instructional leadership development in which the C&I team provides content-specific training to school leaders and employs its strongest teachers to serve as course leads and content experts to build the skill sets of other teachers across the network.

At the school level, school leaders regularly work with teachers to provide coaching and development. The network also employs its strongest teachers to serve as course leads and content experts. Schools can also request direct support from the C&I team, typically in the form of classroom co-observations, assistance facilitating teacher planning meetings, and coaching meeting observations.

"We know that strong curricula need to exist, but we know that it's not the only thing you need to have strong instruction. A lot has to do with how you implement that curriculum."

Network staff described their approach to C&I professional development as "curriculum agnostic" because they focus on standards alignment and best practices for lesson planning, rather than how to implement specific curriculum. Professional development primarily provides teachers with support around planning lessons from the assessments and developing teachers' understanding and internalization of their content standards and the level of rigor necessary for students to achieve mastery.

Use of data

The network uses data from a variety of internal and state assessments and has strongly aligned its assessments across the schools. DSST has network-wide interim assessments at the end of each trimester. After interim assessments, teachers of specific courses and grades (such as 6th-grade math) get together to norm and grade the work of other teachers' students to ensure an equitable standard for all students.

The network trains teachers on data use in the same way it trains on other topics. Network staff work with school leaders who then train the teachers. The network has a data team that manages school data use, focusing on how to leverage school and classroom data at both the school leader and teacher level. Schools have planned "data days" at the end of each trimester that are led by school leaders but often involve data staff from the network. These data days enable teachers to dive into the data analysis with support from school leaders and the network. Teachers review data to identify areas that need reteaching to help students succeed.

DSST also monitors multiple nonacademic data points to keep a pulse on school culture. Network staff review student attendance and suspension data as well as student participation and outcomes for various intervention programs, such as college preparation and mandatory tutoring.

School choice

DSST is authorized by Denver Public Schools (DPS) and is part of DPS' portfolio of schools. Staff characterized the network's partnership with DPS as uniquely strong. DPS has an open enrollment policy in which every child in a transitioning grade participates in the school choice process. This process allows parents to rank their school preferences for the following year. Families receive enrollment guides that describe all the schools in the district, with both traditional and charter schools presented alongside one another.

"As a whole, especially compared to talking to peers across the country, our partnership [with Denver Public Schools] is strong and quite amicable."

Culture and community engagement

DSST implements multiple layers of family engagement, beginning with recruitment and setting clear expectations at the parent level. Before opening new schools or offering new grade levels at existing schools, the network works extensively with the neighborhood community to determine demand for a school and garner support from parents. DSST works to recruit parents at the network level through its marketing staff, who communicate about the schools to families via digital media, social media, paper fliers, and radio announcements. The network also connects with families individually to provide more information about the schools.

"The start of our [new] grades and schools really start at the district level with parents asking the district to put in a school in their neighborhood."

Once families visit a school, the school staff take over the relationship building. DSST communicates network-wide announcements to families when needed, but school staff initiate the majority of communication. The network staff have found that families are more interested in hearing from their children's teachers or school leaders directly, rather than from the network's central office. In recent years, DSST has aimed to make communication with families more consistent across schools and teachers by hiring a family engagement manager to work with staff on communication best practices.

DSST staff reported that a key component to maintaining strong culture and family engagement is having a strong onboarding process for new students. DSST requires all students new to the network to attend a summer orientation, which involves one to two weeks of familiarizing students with the school's culture and setting clear expectations. Network staff noted that this has been vital to the onboarding process and the

overall success of their students. Teachers and school leaders also visit newly recruited families in their homes to ensure they feel welcomed and confident in their school choice. These approaches promote ongoing communication with the families and a sense of support.

Schools track family engagement through multiple components. They monitor attendance at parent–teacher conferences and back-to-school nights, as well as participation in the Science and Tech Parent Group and parent advocacy group. DPS also conducts annual surveys of all DPS families, and DSST tracks response rates along with data on parents' opinions on DSST's academics, leadership, and communication, as well as overall parent satisfaction.

Throughout interviews, staff repeatedly cited the network's commitment to equity as key to everything they do. Multiple staff commented that maintaining a high standard of excellence for students and staff, regardless of their backgrounds, has been vital to improving and maintaining students' performance in the network. However, network staff also commented that the level of trauma DSST students and communities have experienced poses a challenge to maintaining high standards. Despite these challenges, the network focuses on scaffolding instruction while maintaining high expectations for its students.

Conclusions

This study sought to identify critical drivers of performance among school districts and CMOs. We reviewed existing literature, conducted a correlational analysis to better understand the relationship between district policies and practices and students' academic growth, and carried out case studies with three districts and one CMO with high performance in student achievement. Each of these activities offers valuable lessons about ways in which districts and CMOs can operate to benefit their students.

Across components of the study, three themes consistently emerged as ways local education agencies can drive improvements in students' success. Although these themes are not revolutionary and are not an exhaustive list of the ways in which districts and CMOs can support success, they reaffirm and shed light on three areas that could benefit from a concentrated focus. District and CMO leaders should carefully consider their practices in each of these areas to ensure that their structures and policies are effectively facilitating environments for students to learn and grow.

Theme 1: Teachers play a key role in determining students' success.

The important role that teachers play in students' achievement is apparent across study activities. Existing literature shows that teachers' performance explains more of the variability in students' learning than other levels of the educational system, such as the district or school in which a student is enrolled (Chingos et al. 2015; Whitehurst et al. 2013). In addition, our correlational analysis found that two policies that correlate significantly with high student achievement growth involve using evaluations to remove ineffective teachers. These findings are consistent with both the substantial body of research demonstrating the importance of high quality teachers (Hattie 2003; Aaronson et al. 2007; Hanushek 2011) and that removing the least effective teachers can result in substantial increases in student achievement (Chetty et al. 2014; Branch et al. 2012; Gordon et al. 2006).

The focus on high quality teachers was also an important component in each of the district and CMO case studies. Leaders from each site reported that they prioritized retaining effective teachers. Although district leaders in both Lawrence Township and St. Charles Parish reported that their district has somewhat higher teacher salaries than neighboring districts and that this has contributed to their retention strategies, each case study revealed that a critical piece of retaining teachers is building a positive school culture and communicating the organization's mission to develop a deeper sense of belonging.

In addition to retaining effective teachers, the case studies and existing literature point to the importance of training and supporting teachers to become more effective. Rigorous studies of teacher mentoring and induction programs have shown that multi-year programs can positively affect students' achievement (Schmidt et al. 2017; SRI Education 2018; Glazerman et al. 2010). In St. Charles Parish Public Schools, new teachers receive three years of added professional development supports, and in MSD Lawrence Township, each new teacher works with a certified mentor for two years. CPS provides new teachers monthly professional development sessions and one-on-one mentoring, and the district has invested heavily in hard-to-staff schools by developing and compensating school-based mentors for new teachers. At DSST, new teachers receive additional coaching and support, typically receiving feedback based on classroom observations at least once per week. Beyond supports for new teachers, existing literature indicates that collaborative professional development opportunities, such as teacher PLCs that Lawrence Township, St.

Charles Parish, and CPS use, can improve teachers' instructional skills and students' learning (Krasnoff 2014; Vescio et al. 2008). District leaders at Lawrence Township, in particular, noted that its teacher PLCs have been a central factor in improving and maintaining student performance by creating opportunities for collaboration and allowing teachers to develop a sense of ownership in their work.

Theme 2: School leaders should be viewed and trained as instructional leaders.

A second theme that emerged across study activities is the role of the principal as an instructional leader. Principals play a key role in influencing students' learning and achievement (Dhuey and Smith 2018; Branch et al. 2012; Leithwood et al. 2004), and studies have shown that principals' time spent on instructional leadership activities positively relates to student achievement growth (Grissom et al. 2013; Shatzer et al. 2014; Robinson et al. 2008). In addition, our correlational analysis found that districts in which principals spent a larger amount of time on instructional leadership experienced significantly higher growth in student achievement.

The high-achieving districts and CMOs in our case studies also emphasized instructional leadership among their school leaders. District staff in MSD Lawrence Township, St. Charles Parish Public Schools, and CPS noted that a key quality they consider when hiring school leaders is the applicant's ability to lead the school's instructional efforts and view all of their responsibilities—from developing a master schedule to evaluating teachers—through an instructional lens. In addition, school leaders at St. Charles Parish participate in collaborative study sessions with teachers and district personnel to better understand curriculum and instructional resources that will be implemented in their schools. Each case study site also noted the importance of training and equipping teachers to ultimately be school leaders. The Teacher Leadership Academy at MSD Lawrence Township, administrative leadership pool at St. Charles Parish Public Schools, Chicago Leadership Collaborative Residency at CPS, and School Director in Training and Emerging Leadership programs at DSST emphasize each organization's priority of training people with a foundational knowledge in teaching and instruction to be future school leaders.

Theme 3: Shared and well-communicated mission, vision, and goals are critical.

Research that has examined the role of school districts' central offices emphasizes the importance of setting a clear mission, vision, and goals across the organization (Shannon and Bylsma 2004; Briggs et al. 2017; Leithwood 2010). In addition, each case study site highlighted the importance of its mission, vision, and goals embedded in its strategic plan. In St. Charles Parish, for example, district staff recognized that the district's long-standing vision has helped establish among both staff and community members a culture that focuses on maintaining a tradition of excellence. In all case study sites, the organization's guiding principles were set by collecting input from a variety of stakeholders. In addition, districts allocate resources that align with the organization's set goals. For example, in MSD Lawrence Township, district staff recognized a need to prioritize bilingual instruction in their strategic plan and then adjusted their instructional programming to meet this need.

Establishing a shared mission, vision, and goals across schools could also be a means of granting schools greater autonomy. For example, MSD Lawrence Township, CPS, and DSST allow schools to select and implement their own curriculum, rather than require schools to use district-selected curriculum. Because each organization has built a shared understanding of its mission, vision, and goals across schools, district and CMO leaders are more likely to trust school leaders to select curriculum aligned with their guiding principles. Although St. Charles Parish Public Schools uses district-selected curriculum, schools have other

forms of autonomy, such as stipends for additional resources and staffing structures, which might similarly indicate a shared alignment of priorities.

Policy implications

Our findings suggest a need for enhanced focus on the policies, programs, and actions taken within each of these three themes. However, district and CMO leaders should also consider how the themes interact with one another and address any gaps in the supports and processes within each theme. For example, districts and CMOs could aim to develop their teachers to become instructional leaders, giving them opportunities to lead professional development sessions or provide mentoring to others. In doing so, they would improve the strength of their teaching force while developing the next generation of school leaders, who would already be viewed as instructional leaders. Relatedly, a shared and well-communicated mission, vision, and goals could focus on the instructional abilities of teachers and the academic success of students. If a district or CMO works to build a shared understanding of the key role that teachers play in students' success, internal and external stakeholders may support and push for further investments in hiring and developing a strong teaching staff.

In addition, because schools and networks do not operate in isolation, districts and CMOs should consider how other stakeholders can support these themes. For example, district leaders at CPS attributed a growth in development among its funders to how well the district collaborated with its external partners in creating and promoting its vision. When developing the vision, the district sought input from a variety of external stakeholders, including nonprofit organizations, research institutions, city colleges, and local government officials. After the vision was ready to be rolled out, the district hosted targeted events for its external partners, such as a funder-focused launch event and forums. Staff across case study sites also discussed partnerships with local colleges and universities to recruit and train a cadre of effective teachers. For example, district leaders at St. Charles Parish Public Schools discussed their collaboration with local universities to train some of the district's graduating students via teaching programs, so that those students eventually return to the district as teachers themselves. Districts and CMOs should consider the variety of stakeholders that do or could play a role in supporting each of these themes to further the success of their initiatives.

Finally, these themes are not meant to be a checklist of how low-performing districts and CMOs can become high-performing. The findings are largely correlational in nature – for example, we cannot conclude that any of the policies or programs used in the case study sites caused the academic success that the districts or CMO experienced. In addition, the practices we have highlighted might be effective in some district contexts but not others. However, the three themes we present, which are a culmination of takeaways from existing literature, our correlational analysis results, and case study findings, can serve as a useful starting point for districts and CMOs to reflect on when examining their current policies and practices. *Does my district's or CMO's current strategies and investments reflect the critical role that teachers play in determining students' success? Do we recognize the importance of, train for, and celebrate instructional leadership among our school leaders? Do we gather input from a variety of stakeholders when developing our mission, vision, and goals, and align our resources accordingly so that our internal and external audiences have a shared understanding of our definition of success?* Asking these questions may benefit district and CMO leaders as they aim to improve their support of students' learning.

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Appendix A:
Types of Studies Included in the Literature Scan

Studies vary in terms of their level of rigor, and it is important to keep this in mind when drawing conclusions from existing literature. We reviewed the following types of studies in our examination of existing literature:

- **Randomized impact studies.** These studies use rigorous designs that produce well-trusted conclusions. Findings from these studies produce evidence that can establish causal relationships.

- **Quasi-experimental impact studies.** These studies also use rigorous designs that estimate the impact a policy or program has on outcomes, typically through the formation of intervention and matched comparison groups. However, the resulting conclusions are not as strong as those from randomized impact studies. Because it is possible that some of the difference in outcomes between the two groups could be due to unobserved variables that cannot be matched on, rather than the effect of the policy or program. Authors typically use quasi-experimental methods when they want to produce evidence that can establish causal relationships but a randomized design is not feasible.

- **Descriptive quantitative studies.** These studies analyze quantitative data to generate informative findings, but they do not establish causal relationships. Examples of descriptive quantitative studies include an analysis of change in outcomes over time without the use of a comparison group (that is, a pre/post design) or an analysis that examines correlations between outcomes.

- **Qualitative studies.** These studies generate helpful insights to better understand the implementation of policies or programs, but also do not establish causal relationships. A case study, for example, is a type of qualitative study.

- **Literature reviews.** These studies review existing literature and present synthesized findings. Literature reviews vary in scope but often include both studies that establish causality (that is, impact studies) and those that do not.

- **Meta-analyses.** These studies use data from several analyses of the same policy or program to calculate an average impact of that policy or program across analyses. The studies included in meta-analyses are typically restricted to randomized or quasi-experimental studies, such that the results can be interpreted as the average estimated causal impact of the program or policy.

Table A.1 lists each of the studies included in our examination of existing literature along with its study type.

Table A.1. Literature included in literature scan and study type

Study	Study type
Aaronson, D., L. Barrow, and W. Sander, 2007	Descriptive quantitative study
Backor, K.T., and S.P. Gordon, 2015	Qualitative analysis
Blank, M.J., R. Jacobson, and A. Melaville, 2012	Literature review
Borman, G.D., and N.M. Dowling, 2008	Meta-analysis
Bosma, L.M., R.E. Sieving, A. Ericson, P. Russ, L. Cavender, and M. Bonnie, 2010	Qualitative analysis
Branch, G.F., E.A. Hanushek, and S.G. Rivkin, 2012	Descriptive quantitative study
Briggs, M., M. Buenrostro, J. Maxwell-Jolly, T. Flint, and K. Macklin, 2017	Literature review
Bruno, P., and K.O. Strunk, 2019	Descriptive quantitative study
Chetty, R., J.N. Friedman, and J.E. Rockoff, 2014	Quasi-experimental impact study
Chiang, H., A. Wellington, K. Hallgren, C. Speroni, M. Herrmann, S. Glazerman, and J. Constantine, 2015	Randomized impact study
Chingos, M.M., G.J. Whitehurst, and M.R. Gallaher, 2015	Descriptive quantitative study
Chingos, M.M., G.J. Whitehurst, and K.M. Lindquist, 2014	Descriptive quantitative study
Clark, M.A., H.S. Chiang, T. Silva, S. McConnell, K. Sonnenfeld, A. Erbe, and M. Puma, 2013	Randomized impact study
Clotfelter, C.T., H.F. Ladd, and J.L. Vigdor, 2007	Quantitative descriptive study
Clotfelter, C., E. Glennie, H. Ladd, and J. Vigdor, 2008	Quasi-experimental impact study
Council of the Great City Schools, 2017	Qualitative analysis
Darling-Hammond, L. R.C. Wei, A. Andree, N. Richardon, and S. Orphanos, 2009	Literature review
Darling-Hammond, L., D.J. Holtzman, S.J. Gatlin, and J.V. Heilig, 2005	Quasi-experimental impact study
Davis, S.H. and L. Darling-Hammond, 2012	Qualitative analysis
Desimone, L.M., 2011	Literature review
Dhuey, E., and J. Smith, 2018	Quasi-experimental impact study
Dougherty, C., 2015	Qualitative analysis
Egalite, A.J., and B. Kisida, 2018	Quasi-experimental impact study
Egalite, A.J., B. Kisida, and M.A. Winters, 2015	Quasi-experimental impact study
Elmore, R.F., 2007	Qualitative analysis
Figlio, D.N., 1997	Descriptive quantitative study
Fryer, R.G., S.D. Levitt, J. List, and S. Sadoff, 2012	Randomized impact study
Glazerman, S. and A. Seifullah, 2010	Randomized impact study
Glazerman, S., E. Isenberg, S. Dolfin, M. Bleeker, A. Johnson, M. Grider, and M. Jacobus, 2010	Randomized impact study
Glazerman, S., D. Mayer, and P. Decker, 2006	Randomized impact study
Goldring, E., J.A. Grissom, C.M. Neumerski, J. Murphy, R. Blissett, and A. Porter, 2015	Qualitative analysis
Gordon, R., T.J. Kane, and D.O. Staiger, 2006	Literature review
Grissom, J.A., S. Loeb, and B. Master, 2013	Quantitative descriptive study

Study	Study type
Grissom, J.A., and J.R. Harrington, 2010	Quantitative descriptive study
Guarino, C., L. Santibanez, G. Daley, and D. Brewer, 2004	Literature review
Hanushek, E.A., 2011	Quasi-experimental impact study
Hattie, J.A.C., 2003	Literature review
Heilig, J.V., and S.J. Jez, 2010	Literature review
Hough, H.J., 2012	Quasi-experimental impact study
Huang, F.L., and T.R. Moon, 2009	Quasi-experimental impact study
Iatarola, P., and N. Fruchter, 2004	Qualitative analysis
Imazeki, J., 2005	Quantitative descriptive study
Isenberg, E.P., 2010	Quasi-experimental impact study
Jacob, B., J.E. Rockoff, E.S. Taylor, B. Lindy, and R. Rosen, 2016	Quantitative descriptive study
Johnson, S.M., M.A. Kraft, and J.P. Papay, 2012	Quantitative descriptive study
Kane, T.J., J.E. Rockoff, and D.O. Staiger, 2008	Quantitative descriptive study
Kang, S., and D.C. Berliner, 2012	Quantitative descriptive study
Klassen, R.M., and V.M.C. Tze, 2014	Meta-analysis
Kraft, M.A., D. Blazar, and D. Hogan, 2018	Meta-analysis
Krasnoff, B., 2014	Literature review
Kronley, R.A., and C. Handley, 2003	Qualitative analysis
Leithwood, K., and V.N. Azah, 2017	Quantitative descriptive study
Leithwood, K., 2010	Literature review
Leithwood, K., K.S. Louis, S. Anderson, and K. Wahlstrom, 2004	Literature review
Lindsay, C.A., and C.M.D. Hart, 2017	Quasi-experimental impact study
Marsh, J.A., M.A. Springer, D.F. McCaffrey, K. Yuan, S. Epstein, J. Koppich, N. Kalra, C. DiMartino, and A.X. Peng, 2011	Randomized impact study
McLaughlin, M., and J. Talbert, 2003	Qualitative analysis
National Education Association, 2008	Literature review
Neuman, S.B., and L. Cunningham, 2009	Randomized impact study
Nye, B., L.V. Hedges, and S. Konstantopoulos, 2000	Randomized impact study
Papay, J.P., and M.A. Kraft, 2015	Quantitative descriptive study
Polikoff, M.S., A.C. Porter, and J. Smithson, 2011	Qualitative analysis
Rethinam, V., C. Pyke, and S. Lynch, 2007	Quantitative descriptive study
Riordan, J.E., and P.E. Noyce, 2001	Quasi-experimental impact study
Robinson, V.M.J., C.A. Lloyd, and K.J. Rowe, 2008	Meta-analysis
Ronfeldt, M., and K. McQueen, 2017	Quantitative descriptive study
Ronfeldt, M., S. Loeb, and J. Wyckoff, 2013	Quantitative descriptive study
Schmidt, R., V. Young, L. Cassidy, H. Wang, and K. Laguarda, 2017	Randomized impact study
Shannon, G.S., and P. Bylsma, 2004	Literature review
Shapiro, S.L. Partelow, and C. Brown, 2018	Literature review
Shatzer, R.H., P. Caldarella, P.R. Hallam, and B.L. Brown, 2014	Quantitative descriptive study
Snipes, J., F. Doolittle, and C. Herlihy, 2002	Qualitative analysis

Study	Study type
Springer, M.G., D. Ballou, L. Hamilton, V. Le, J.R. Lockwood, D.F. McCaffrey, M. Pepper, and B.M. Stecher, 2010	Randomized impact study
Squires, D., 2012	Literature review
SRI Education, 2018	Randomized impact study
Steiner, D., 2017	Literature review
Sutcher, L., L. Darling-Hammond, and D. Carver-Thomas, 2016	Quantitative descriptive study
Thompson, C.J., 2009	Quantitative descriptive study
Tickle, B.R., M. Chang, and S. Kim, 2010	Quantitative descriptive study
Togneri, W. and S.E. Anderson, 2003	Qualitative analysis
Vescio, V., D. Ross, and A. Adams, 2008	Literature review
Waters, J.T., and R.J. Marzano, 2006	Meta-analysis
Whitehurst, G.J., M.M. Chingos, and M.R. Gallaher, 2013	Descriptive quantitative study
Xu, Z., J. Hannaway, and C. Taylor, 2011	Quasi-experimental impact study

Appendix B:
Supplemental Information for the Correlational Analysis

Additional data preparation and details. As described in the report, we included only traditional public schools in our analysis and excluded charter schools. We also excluded special schools serving students with disabilities or serving only students outside the K–12 grade range.

Additional details about the statistical model. The linear regression model included controls for the following variables: district size; indicators for whether the district is rural, suburban, or in a town (with urban serving as the reference group); variables measuring the percentage of students who are Black, Hispanic, Asian, or Native American (with White students serving as the reference group); the percentage of students eligible for free- or reduced-priced lunch; the percentage of English language learner students; and the percentage of students receiving special education services. The percentage of students receiving special education services was missing for a small number of districts (less than 2 percent); for those districts, we set the value of this variable to a constant and included a missing indicator variable.

National Teacher and Principal Survey (NTPS) questions included in the analysis. Tables B.1 through B.5 list all the policy and practice variables we examined as part of this analysis, grouped by the five domains described in the Methods section. The columns in the tables indicate from which questionnaire(s) the variable was derived.

Table B.1. NTPS questions related to district structures

Question topic	Principal	Teacher	School
Collective bargaining and job protection			
Represented by a union	X	X	
Tenure is offered for teachers		X	
Technology			
Any online courses offered			X
All courses offered are online			X
Any instructional software used			X
Adaptive instructional software used			X
Assistance outside of school hours			
Academic help available before/after school			X
Academic enrichment available before/after school			X
Child care available before/after school			X
Teachers required to provide academic help outside of school hours	X		
Teachers required to provide nonacademic help outside of school hours	X		
Other characteristics and supports			
English language learner instructional support is available			X
Total instructional hours in school year			X
Percentage of teachers reporting looping		X	

Source: Questionnaires from the Institute for Education Sciences (IES), National Center for Education Statistics (NCES), NTPS.

Table B.2. NTPS questions related to staffing and time use

Question topic	Principal	Teacher	School
Student-staff ratios			
Student-teacher ratio			X
Student-aide ratio			X
Student-principal ratio			X
Student-assistant principal ratio			X
Student-instructional coach ratio			X
Student-data coach ratio			X
Student-counselor ratio			X
Student-professional support staff ratio			X
Coaches and specialists (school has at least one)			
Math specialist			X
Reading specialist			X
Science specialist			X
Math coach			X
Reading coach			X
Science coach			X
General coach			X
Data coach			X
Principal background			
Highest degree: Master's or higher	X		
Highest degree: Ed.S. or higher	X		
Highest degree: Doctorate	X		
Highest degree is in education	X		
Holds an administrator's license	X		
Principal and teacher time use			
Avg. hours worked per week	X	X	
Avg. percentage of time spent on instruction	X	X	
Principal has teaching responsibilities	X		
Avg. teacher contract hours per week		X	

Source: Questionnaires from the IES, NCES, NTPS.

Table B.3. NTPS questions related to principal goals

Question topic	Principal	Teacher	School
Basic literacy skills	X		
Academic excellence	X		
Postsecondary education	X		
Occupational or vocational skills	X		
Work habits and self-discipline	X		
Personal growth	X		
Human relations skills	X		
Specific moral values	X		
Multicultural awareness	X		
Religious or spiritual development	X		

Source: Questionnaires from the IES, NCES, NTPS.

Notes: Principals were asked if each item in this list was their top goal and if it was in their top three goals. We included both sets of questions in our analysis.

Table B.4. NTPS questions related to teacher development and evaluation

Question topic	Principal	Teacher	School
New teacher supports			
School's teachers are enrolled in a school or district induction program			X
Percentage of early career teachers who participated in induction		X	
First-year teaching supports			
Reduced teaching load or number of preps		X	
Common planning time with teachers in the same subject		X	
Seminars or classes for beginning teachers		X	
Extra classroom assistance (e.g., aides)		X	
Regular supportive communication with school leadership		X	
Extra observations and feedback		X	
Release time to participate in support activities		X	
Assigned a master or mentor teacher		X	
Teacher evaluation			
Student growth on standardized assessments used in teacher evaluations	X		
Teacher evaluation results used for …			
Teacher feedback	X		
Planning professional development for individual teachers	X		
Development of performance improvement plans	X		
Setting goals for student achievement	X		
Recognizing high-performing teachers	X		
Identifying low-performing teachers for coaching, mentoring, or peer assistance	X		
Determining annual salary increases	X		
Determining bonuses or other performance-based compensation	X		
Granting tenure or similar job protection	X		
Career advancement opportunities (e.g., teacher leadership roles)	X		
Loss of tenure or similar job protection	X		
Sequencing potential layoffs to reduce staff	X		
Dismissing or terminating employment for cause	X		

Source: Questionnaires from the IES, NCES, NTPS.

Table B.5. NTPS questions related to principal and teacher areas of influence

Question topic	Principal	Teacher	School
Setting performance standards	X	X	
Establishing curricula	X	X	
Determining content of in-service professional development programs	X	X	
Teacher evaluation	X	X	
Teacher hiring	X	X	
Discipline policy	X	X	
Budgets	X	X	

Source: Questionnaires from the IES, NCES, NTPS.

Notes: Respondents were asked to rate influence of each item on a scale of *No*, *Minor*, *Moderate*, or *Major Influence*. We performed separate analyses examining whether the responses indicated moderate or higher influence, and whether the responses indicated having major influence.

Appendix C:
Identification of Case Study Sites

To identify high-performing districts, we used data from the Stanford Education Data Archive (SEDA). SEDA contains detailed information on student achievement growth in grades 3–8 and demographic characteristics of school districts nationwide.[15] Specifically, we examined the average yearly growth across state standardized test scores in math and English language arts (ELA) for the school district's students, which represents the average number of grade-level equivalents (or grade levels for short) students grew each year. We used these same data for the student achievement measures in our correlational analysis. We defined high-performing districts as those with average yearly growth greater than 1.05 grade levels among Black students. At the time of our analysis, SEDA included data for the 2008–2009 through 2014–2015 school years.

There are no available data sets comparable to SEDA that contain information on CMO performance. Therefore, we conducted a literature scan to identify research on how various CMOs affect student performance. We determined that a 2017 report developed by the Center for Research on Education Outcomes (CREDO) at Stanford University is the most recent and reliable source containing this information (Woodworth et al. 2017). The CREDO report provides academic impact estimates for 240 CMOs across 26 states, using growth data for the 2012–2013 through 2014–2015 school years. CMO performance is expressed in standard deviation units. A value of 0 indicates that students in charter schools performed just as well as their similar peers in traditional public schools. Positive values indicate students in charter schools performed better than peers in traditional public schools. We defined high-performing CMOs as those that improved both math and ELA performance by at least 0.10 standard deviations, relative to similar students in nearby traditional public schools. The CREDO report estimates that 0.10 standard deviations is equivalent to providing students with an additional 57 days of learning per school year. Additionally, we required both estimates to be statistically significant at the 5 percent level, to provide strong confidence that CMOs positively affected students' performance.

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[15] SEDA uses the term "geographic school district," because charter school data are included in the measures in which the charter school is geographically located. For simplicity, we use the term "school district" in this report.