ERS

Designing Schools That Work

Organizing Resources Strategically for Student Success

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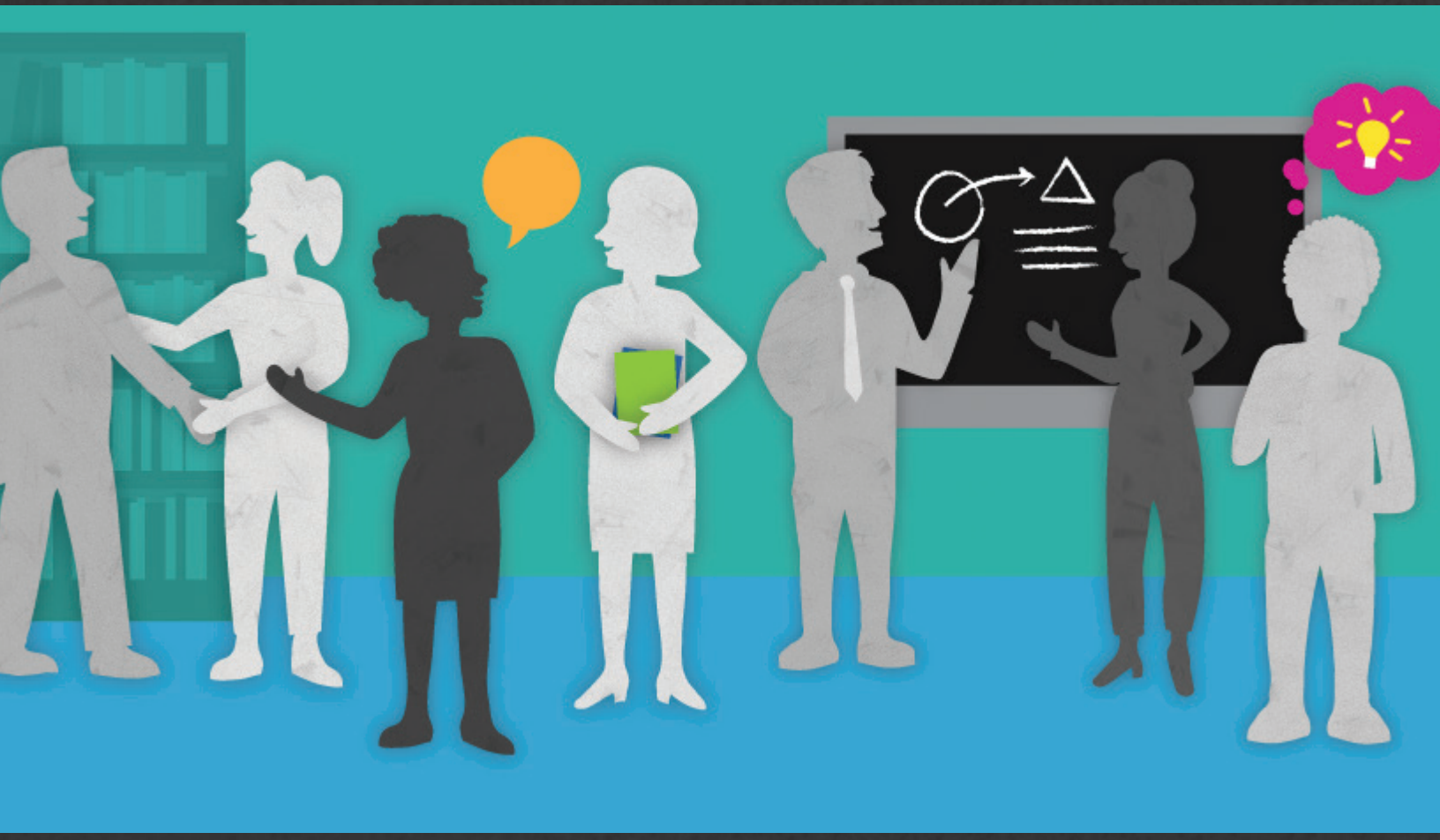
Education Resource Strategies (ERS)



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Through over a decade of research and practice in the area of strategic resource use, Education Resource Strategies (ERS) has found that high-performing schools begin with a clear vision of student success and instructional quality, and then deliberately organize resources—people, time, technology, and money—to implement a coherent set of research-backed strategies to reach this vision.

We call this **Strategic School Design.**

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Reinventing Revere High School

When Dr. Lourenço Garcia assumed leadership of Revere High School in 2012, he took responsibility for turning around a school that was ranked in the bottom 20 percent of all schools in Massachusetts. Over the next three years, Revere High School went from a Level 3 to a Level 1 school in statewide rankings and was the only high school awarded a Gold Medal by the National Center for Urban Transformation, based on its growing achievement scores, high attendance, and high graduation rates for every demographic group of students.[1] What happened?

Revere High School faced challenges that many schools are up against today. Students entered at a wide range of proficiency levels, but the school's structures were standardized: all students moved through a seven-period schedule in similar class sizes, teachers delivered new content in class, and students were expected to extend and apply work independently after school. Dr. Garcia recognized that this traditional school design would need to change if he and his team were going to reset the trajectory of their high-needs student population.

The team began by introducing a new Freshman Academy, with much-reduced class size and flexible student grouping to personalize instruction. Teachers received training to implement flipped classroom instruction, enabling students to exercise greater choice in how they accessed new content and spent more time problem solving with their peers and teachers in class. To support these changes, the master schedule shifted from traditional periods to longer, 80-minute blocks, which created more time for applied practice and small-group instruction during the school day. Professional Learning Groups now met twice weekly to collaborate around shared curriculum and analyze student assessment data to determine how to adjust instruction. To respond to social-emotional needs and ensure academic progress toward college, each student was assigned an advisor who led a weekly advisory program and supported them through all four years. Revere High also added supplemental programs that encourage community service and target additional supports to students in need. Truly student-centered learning—and the academic growth that comes with it—is increasingly the norm for all students at Revere High School.

Dr. Garcia started with a clear vision of what student success and instructional quality would look like at Revere High School, and then deliberately reorganized resources—people, time, technology, and money—to implement a coherent set of research-backed strategies to reach his vision. We call this Strategic School Design.

Revere High School is not an isolated case. In more than a decade of working with urban school districts nationwide, we have seen the transformational impact Strategic School Design can have on student achievement. This paper explores the research-based common essentials of strategically designed schools and shows the concrete shifts in resource use that are required to make them work.

Transforming Schools through Strategic School Design

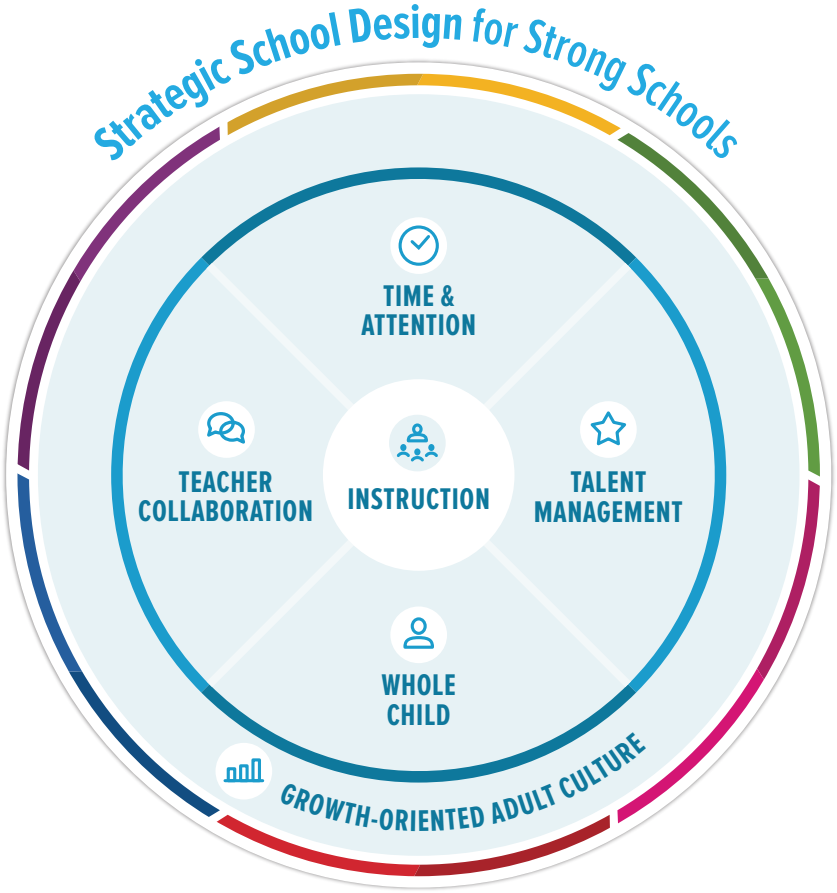
As a nation, our vision for success in schools—the way we think about the needs of our students and the resources we bring to bear—has changed significantly over the past 50 years. We now have clear, rigorous standards designed to ensure that students graduate ready for college and careers, as well as heightened accountability and urgency around helping all students meet them. We have more timely data on what students need, and on teachers' skills and expertise. Workforce demands have changed, requiring graduates to be prepared as critiquers of information, rather than simply knowers of facts. Educators have different aspirations. They want opportunities to learn quickly and advance their careers in measurable ways. They want to work in teams with trusted colleagues. They want high-quality instructional materials that are aligned with new standards and to be supported in leveraging these materials. And they want flexible job arrangements that allow them to better integrate their work and personal lives. Finally, new technologies that support learning are advancing every day.

Yet despite these significant changes, resource use in schools looks very much the same as it did 50 years ago. Students are divided into classrooms of 20 to 30 students, and they study a particular subject for a set period of time—usually about 50 minutes per day for 180 days—instructed by one teacher. Teachers have roughly the same set of responsibilities on day one of their job as they will have on the last day of their career. And they usually work alone to plan and deliver instruction, rather than as part of a highly functioning team.

Through years of research and practice around school resource use, ERS has found that high-performing, high-growth schools such as Revere are responding to the changing context in education by using people, time, technology, and money in ways that look significantly different than the status quo. While there is no one "right way" to organize resources, high-performing schools serving high-need students organize around six common design essentials. We argue that to sustain high performance, a school must eventually address all of the essentials. However, the specific way any leader chooses to organize staff, time, programs, and students is very different across schools, and it changes over time to fit unique and evolving student needs, teacher capacity, and lessons learned. These six design essentials are:

1. **Instruction:** Uphold rigorous, college- and career-ready standards and use effective curricula, instructional strategies, and assessments to achieve them
2. **Teacher Collaboration:** Organize teachers into expert-led teams focused on the design and delivery of instruction, and provide ongoing growth-oriented feedback
3. **Talent Management:** Attract and retain the best teachers and design and assign roles and responsibilities to match skills to school and student need
4. **Time and Attention:** Match student grouping, learning time, technology, and programs to individual student needs
5. **Whole Child:** Ensure that students are deeply known and that more intensive social and emotional supports are integrated when necessary
6. **Growth-Oriented Adult Culture:** Grow a collaborative culture where teachers and leaders share ownership of a common instructional vision and student learning

FIGURE 1.



At the center of any strategic school design sits a specific model for delivering **Instruction**. This design essential typically shapes the path for what types of investments are needed across all other aspects of a school's broader design. For example, a school's choice of curriculum, assessment schedule, and shared beliefs about how instruction should be delivered often drive the length of periods or blocks in a student's schedule. These choices also influence the amount of time that teaching teams need for collaboration and how that time needs to be used. Meanwhile, the implementation of high-quality, standards-aligned curriculum in turn depends on the effective implementation of the other design essentials. For example, without expert-led collaboration during which teachers refine lessons or analyze student work together, even highly effective curricula will be more limited in its effect on student learning.

An underlying foundation for strategic school design is a **Growth-oriented Adult Culture**. Research suggests that strong adult culture creates the fertile ground for schools to thrive, and that weak behavioral norms among adults often compromise other school improvement efforts.[2] Strong norms, in contrast, set the stage for successful implementation of other design essentials. Strong relational trust between staff members, for example, directly supports effective teaching teams: trust makes it easier for teachers to respectfully disagree with each other and ultimately arrive at an idea or solution that is better for students because different perspectives were shared. Trust also sets the stage for productive conversations between teachers and instructional experts, so that teachers are comfortable discussing areas for growth and the support they need.[3]

The remaining four design essentials in Figure 1—**Teacher Collaboration, Talent Management, Time and Attention** and **Whole Child**—define the most critical transformations to the use of resources in the service of improved student outcomes. We explore these essentials in more detail in the next section.

It is crucial for school leaders to ground their decisions about design essentials in a rich data cycle. In this way, school leaders make each decision from a strong understanding of student need, and can monitor and adjust through ongoing assessments of student outcomes.

School Design Transformations

As we've worked with schools to implement strategic school designs, we've learned that they require significant transformation in the way educators and students think about, practice, and engage with learning—including how the student day is organized to best facilitate learning and the support teachers need to deliver instruction that is fully aligned to college- and career-ready standards. In this section, we leverage the broader research on effective schools and school improvement and turnaround as well as our direct experience working with schools to describe in more detail how we've seen resources shift in the context of these transformations. We focus on the following four design essentials that require schools to

make deliberate decisions about how to organize people, time, and money differently (also see appendix, where we've laid out the must-haves for each design essential).

- Teacher Collaboration
- Talent Management
- Time and Attention
- Whole Child

For each, we provide a case of how a real school has successfully implemented changes to support the essential and seen dramatic results. It is important to note that while the strategies we describe here are framed at the school level, creating strategic designs at scale also requires complementary strategic systems in the central office. We begin here by describing school-level transformation because we believe that only by being clear about what we are trying to achieve in schools can we envision the types of systems we need.

Teacher Collaboration

Traditionally, much of teaching has been practiced in isolation. Teachers most often operate within the confines of the four walls of their classrooms, rarely collaborating deeply with peers or experts on instructional planning or delivery. While many teachers may meet in teams, we find that they much more rarely view team meetings as a critical part of the work of effective instruction. Yet research consistently shows the value of taking on work to plan, deliver, and improve instruction collaboratively, with one another, and with high-quality, content-specific experts. Not only is it a critical part of the system for professional learning in systems that are getting results,[4] but teachers also like their jobs more when they have the opportunity to work with their peers and learn from their experiences.[5] This is especially important when needing to make a big change in practice, such as that required in many schools with the transition to college- and career-ready standards.

We've consistently seen that instruction in high-performing schools is not performed by individual teachers, but by teams of educators who all work together to achieve the best possible results for their collective students. High-functioning teams result in high-quality daily instruction, and they function as a critical part of job-embedded teacher learning and professional development. In other words, they are both about doing the work and getting better at it.

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But while learning happens in the context of teacher collaboration, it isn't sufficient by itself. In a recent study of districts that are achieving student and teacher learning results through a deliberate professional learning strategy, we found that these systems had invested in three common elements:[6]

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

Each of these elements has value on its own, but the systems in the study connected them. Teacher teams engage deeply with the specific curricula and materials they use in the classroom, develop and review lesson plans, and analyze assessment results. When teacher leaders observe their peers, they focus on the themes raised during collaborative time and exactly how each teacher presents the material, with real-time feedback that can be applied in the classroom and during team time. Instructional experts work across the elements, adapting curricular materials, leading collaborative planning, and observing and providing feedback to teachers. Taken together, these elements are connected to the system's overall theory of action for how teachers improve and, ultimately, how students learn.[7] *See story on Ashley Park on page 7.*

Talent Management

It's become an oft-cited truth that having an effective teacher matters most and that having a strong teacher for multiple years in a row makes an even bigger difference.[8] Yet we've seen that in many schools, the urgent day-to-day work of implementing instruction, responding to behavior, and managing operations crowds out critical efforts to deliberately manage and organize available teacher talent. In most traditional schools, there is only one teaching job. The roles and responsibilities are the same for a first-year teacher as they are for a highly effective veteran, except that the veterans get more voice in which courses they teach. And regardless of skill and desire, each teacher teaches the same number of students in their daily interaction, and their core responsibility is to independently execute the full cycle of instruction, from data analysis to planning to instructional delivery and assessment. Often, school leaders prioritize minimizing disruption in existing grade and/or subject assignments (i.e., new teachers are assigned wherever there are openings), individual teacher preference, and seniority (i.e., more senior teachers get first pick of the best assignments). These practices compromise effective talent management efforts because they fail to optimize a school's available talent where it is most needed.

High-performing schools break from the tradition of a one-size-fits-all teaching job by differentiating teaching roles and assignments to match individuals' unique skills and expertise to the needed roles.

TEACHER COLLABORATION IN ACTION: *Ashley Park*

A critical component of making the family model work at Ashley Park PreK-8 School in Charlotte-Mecklenburg Schools was building highly effective teaching teams that met regularly to review data, plan instruction, and create student and teacher groupings for upcoming lessons in an environment where collaboration had not been the norm. Principal Tonya Kales took the following actions:

- She thought carefully about team assignments. Rather than balancing expertise across teams in the first year, she deliberately assigned her most effective teachers to the upper-grade teams so that she would be able to show quick wins on the state tests in her first year of turnaround and galvanize her community around her reforms. She later rebalanced teams to better spread expertise.
- She rescheduled students' four weekly specials periods (e.g., art, music, physical education) into two back-to-back blocks that met only two days per week to create two weekly 90-minute blocks of collaborative planning time (CPT) that was shared by grade-level teams. One 90-minute block focused on examining data from common assessment and individualized student learning needs, while the other provided time for joint lesson planning.
- To ensure that all teams had an expert facilitator, she restructured the role of Ashley Park's two instructional coaches to ensure that one was present at each planning block to facilitate the meeting and to plan and prepare the content.

As with all designs, Principal Kales had to make difficult trade-offs to prioritize the most important strategies. Eliminating daily teacher planning time to allow for longer blocks of CPT risked creating an unsustainable job for teachers but underscored the importance of using collaborative sessions to accomplish joint planning and data analysis work that teachers would otherwise use individual time to do. The unique schedule she created also required her to move from part-time to full-time specials staff in some areas to better control when specials teachers were in the building. When they weren't teaching their subjects, specials teachers pushed into literacy blocks within families.

Ultimately, the bet that Principal Kales made on the family model paid off. Teachers now say they feel accountable to each other for success and are able to bring the best thinking of their peers and experts to bear on the challenges they face. Most importantly, the focus on teaming, together with other aspects of the family model strategy at Ashley Park, had a big impact on student results.[9]

This includes designing teacher leadership roles that give excellent teachers opportunities to share their expertise and play a stronger role in schoolwide improvement efforts, and making sure they are rewarded for their additional contribution. Managing teacher talent also means assigning all teachers to grades, subjects, and individual students to deliberately match teacher strengths with student needs. These types of more deliberate roles and assignments can help increase the impact of the most effective teachers and help retain them at the school, while also better supporting developing teachers with less-challenging assignments better matched to their growth trajectory.

A key part of managing talent to support the empowering curriculum, instruction, and assessment that sits at the center of any design is organizing well-defined teacher leader roles for vetted content experts who support collaboration and growth-oriented feedback cycles across teams. In our recent study of leading-edge systems investing in professional growth with both teacher and student learning results, we found that in every case, schools and districts had organized content expert roles at the school level to support job-embedded professional learning and effective curriculum implementation.[10]

Developing teacher leadership, and more broadly, designing and assigning roles in ways that match teacher strengths, is one important aspect of a wider approach that strategic schools take toward maximizing teaching talent. These efforts also include a deliberate approach to strategic retention, wherein school leaders take deliberate steps to identify, continue to develop, and retain their highest performers, while also efficiently exiting staff who chronically underperform. This, in turn, is supported by a clear and fair evaluation process. And all talent efforts are undergirded by a rigorous approach to hiring that treats each new hire as an opportunity to maximize the collective knowledge of the teaching staff. *See story on Bancroft Elementary School on page 9.*

High-performing schools break from the tradition of a one-size-fits-all teaching job by differentiating teaching roles and assignments to match individuals' unique skills and expertise to the needed roles.

TALENT MANAGEMENT IN ACTION: *Bancroft Elementary School*

Bancroft Elementary School is a Title I school in the DC Public Schools where more than half of students are English language learners and a significant majority qualify for free or reduced lunch. Seeking to better align PD to school needs and develop teachers internally, Bancroft joined an innovative DCPS initiative called the Teacher Leadership Innovation pilot (TLI) in 2014. As part of TLI, six of Bancroft's 49 teachers became teacher leaders, spending 50 percent of their time observing and coaching teachers and facilitating weekly 90-minute instructional seminars.

The TLI program increased how frequently teachers received observation and feedback from three to five times a year to nearly 20. Teacher leaders observe every teacher at least every two weeks for 20 minutes, followed by a 45-minute debrief. Having more leaders also allows Bancroft to differentiate support for teachers and match teachers to coaches based on data.

This frequency of feedback from fellow teachers improved the culture of feedback at Bancroft. As one teacher described, "Before, teachers weren't really receptive to feedback and siloed themselves. Now we have teachers that are willing to share their best practices and be more vulnerable. I think it's making teachers more collaborative."

The combination of the coaching and seminars has also led to improved instruction and teacher retention. The principal reports that instructional rigor has increased and classroom management has improved. The support, as well as the opportunity for leadership, also helps to retain talented teachers. In the past year, only four teachers left Bancroft, instead of the usual 10 to 14.

Bancroft's principal made strategic choices to maximize the impact of the teacher leadership program. He has structured each of the teacher leader roles as interventionists, rather than having two teacher leaders share one homeroom class, to minimize the disruption for students and provide the leaders with more flexibility in their schedules to conduct observations.

Due to the success of schools like Bancroft Elementary, DCPS expanded its teacher leadership pilot as part of a districtwide adult learning program called LEAP. All teachers can now receive frequent coaching, through a combination of teacher leaders, instructional coaches, and assistant principals. For its leaders, the district provides support at scale with a two-week summer intensive plus quarterly full-day workshops. Potential leaders take a centrally administered exam to assess content expertise, and principals look at the results when hiring leaders for their buildings. Principals also receive guidance from the district in building their master schedules around the program.

Time and Attention

One of the most difficult parts of a teacher's job is differentiating instruction among students with diverse learning needs and helping them access rigorous, grade-level content while also meeting them where them enter. Further, research suggests that ideally, teachers wouldn't stop at differentiating on the basis of what students know, but would also adapt tasks to allow for greater student agency and choice, fostering the type of deeper learning associated with better outcomes.[11] In traditional, one-teacher classroom settings that offer only standardized uses of time and staff, this is a truly daunting task.

As discussed above, high-performing schools begin addressing the challenge of personalizing program time and attention through expert-led collaborative work where teachers can think through how to create the right tasks that are rigorous and differentiated, and speak to students' interests. As with any design essential, instruction also plays a key role here in offering the right sorts of tasks and assessments as well as clarifying the vision around what good personalized teaching and learning looks like. Critically, high-performing schools also build schoolwide systems that support more targeted and flexible use of the resources that support differentiated and individualized instruction: people, time, programs, and technology. This means tailoring schedules, class sizes, teacher loads, and technology use to the specific needs of individual students, content areas, and lesson types. For example, writing teachers might have student loads of 60 versus the school average of 90 so they can provide meaningful and applicable feedback several times a week. Students studying key subjects in important transition grades, such as Algebra I in 9th grade, might be given additional time in the master schedule, smaller group sizes, and/or access to the school's most expert teachers. Biology students may have extended time blocks each week to enable hands-on lab work.

In addition to organizing to ensure that learning resources are flexible across different students, high-performing schools also ensure that resources are flexible for any individual student over time, allowing constant adjustment to each student's changing needs. For example, students placed into the extra reading block might exit at midyear or sooner based on performance, just as new students might enter. Or schools might build in flexible blocks of time during the day to allow resources to vary more frequently, such as tutoring or intervention/enrichment blocks. In some of the most sophisticated approaches, the entire day might be organized flexibly, with students proceeding at their own pace through a series of competencies and receiving ongoing support tailored to their individual needs. This sort of approach is often facilitated through technology. *See story on Adams Elementary School on page 11.*

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TIME AND ATTENTION IN ACTION: *Adams Elementary School*

Adams Elementary in the Oklahoma City Public Schools is piloting personalized learning to improve student engagement and success. Sixth-grade students struggled not only academically, but also with attendance and suspension, so the team of two 6th-grade teachers decided to rethink their approach.

The teachers started with a vision, "multisensory instructional-based learning," and developed it with the help of numerous partnerships into a robust pilot program that is seeing results. In year two of the pilot, they further personalized their curriculum through the Summit Learning program. Summit, a non-profit, provides a free online learning platform, standards-based curriculum, and professional development to cohorts of schools seeking to implement project-based personalized learning.

Students spend the bulk of their day working on projects in groups, interspersed with personalized learning time on computers. Teachers therefore take on the role of facilitators. Teachers meet with each student for 15 minutes over the course of the week to set goals. The teachers then monitor student progress through data that the Summit program compiles and decide when to reteach lessons or what small groups to work with.

To see success with personalized learning, the Adams Elementary teachers changed how they used their time and resources. Teachers continually modify the student schedule to fit learning needs and students gained additional time to learn at their own pace through optional Saturday schools, extended before- and after-school hours, and sessions during vacation weeks. Sixth-grade teachers also received their own collaborative planning time (previously it was combined with 5th grade). In addition, the teachers had monthly data and coaching calls with Summit Learning. With grants, partnerships, and strategic use of Title I dollars, the school purchased computers for a 1:1 student-technology ratio in grade six and installed wifi throughout the building.

While only in its second year, the program is already showing success, and the school is planning to expand personalized learning to 5th grade. The 6th graders are making gains on their interim assessments, attendance in 6th grade is the highest in the school, and disciplinary referrals are down. Most importantly, the principal says she sees "such a turnaround in how kids speak about learning. They ask each other, 'Have you passed a content assessment?' and encourage those who take the assessment again. None of them used to talk about learning before, and now some of them are."

WHOLE CHILD IN ACTION: *The Generation Schools Network*

The Generation Schools Network is a nationally recognized non-profit that runs two schools that have high populations of minority and economically disadvantaged students, Brooklyn Generation School (BGS) and West Generation Academy. In 2007, when BGS opened as part of a districtwide turnaround strategy, only 20 percent of its incoming 9th graders entered at or above grade level. BGS leadership placed great emphasis on cultivating personal relationships among students and teachers as a part of their strategy to catch students up to their peers.

- BGS reduced core class size from approximately 35 to 18–22 by building a schedule in which most teachers teach core classes, which all meet in the morning. Then students meet in larger groups for elective courses in the afternoon; each core teacher teaches one of these courses in the afternoon.
- Traditional core courses were organized into interdisciplinary STEM and humanities courses; each student takes one of each type of course each morning. This means that core teachers teach only two sections of core instruction per day, with class sizes of 18–22, keeping their loads in core classes to just 40 students.
- To create even more opportunity for personal interactions, students were split into three smaller groups within each of their core courses that rotate through 20- to 30-minute stations of data-informed, small-group instruction, independent work according to skill, and small-group work and collaboration.
- Teachers who share students also share two hours of daily planning time to discuss individual students and adjust instruction and other intervention based on their needs.
- To complement its core instruction structure, BGS built in advocacy blocks each day. During these blocks, groups of nine to 12 students meet with teachers for 30–45 minutes, enabling teachers to identify issues and build relationships with their students.

BGS shifted resources to enable small group sizes in several ways. First, as described above, it significantly raised class sizes in elective courses. Second, it reduced its investment in noninstructional staff, reducing dedicated student-support staff in favor of student support embedded in student-teacher relationships, and freeing time in some teachers' schedules for them to take on administrative roles. Many of its general education staff are also dual certified in special education and a subject area or grade level, allowing a smaller investment in specialized support staff.

BGS's strategy to embed learning within the context of personal relationships, as a part of its broader reform approach, has shown strong results. BGS's first 9th-grade class graduated with a proficiency of 60 percent or higher in all state-tested subjects, and more than 85 percent of each graduating class has been accepted to college.

Whole Child

Students are more likely to thrive academically when they feel safe, known, and personally connected to school communities that value and promote diversity, equity, and inclusion, and set universally high standards for student learning. Yet we've found that deliberate investment in this type of whole child approach is not the norm. And in many schools, typical structures can actually prevent the development of caring relationships between students and adults, which is a foundational element of any positive community. This is often especially true at the secondary level, where the need for content specialization often results in teachers carrying high student loads (up to 150 or more individual students at a time), with little time or formal structures to know individual students personally. The consequences of underinvestment in this approach and the relationships that underlie it are far reaching. We often see that not only is there far less fertile ground for the learning of all students, but also that schools must invest more in reacting to ongoing discipline and behavior problems, which can begin to draw resources away from core instruction.

We've seen that leaders at high-performing schools view the work to create a whole child approach as the job of a broad group of stakeholders, including every staff member, students, and parents. They begin by working deeply with these groups to articulate common values to guide their work that include high expectations for all learners. They then invest in specific structures, processes, and routines that bring to life these shared values in the context of caring relationships between students and adults and students and students.

For example, at the secondary level, we see schools create schedules that lower teacher loads, create smaller teams with teachers that share a distinct group of students, and create dedicated time for advisory, mentorship, and/or SEL time through which students and teachers can get to know one another and practice the social-emotional learning skills and behaviors that support commonly held expectations for student learning and behavior. At the elementary level, where teachers are usually responsible for fewer students for longer periods of time, structures are often simpler, such as morning meetings that focus on helping students feel known and cared for, and reinforcing common behaviors and routines. And at any grade, "student support teams" composed of teachers and support professionals such as social workers who share responsibility for the same set of students can be a powerful support structure. These regularly scheduled meetings leverage teachers' deeper knowledge of and relationships with students to problem solve around specific learning, behavior, or social-emotional issues.

Finally, some students may need targeted social-emotional support that extends beyond these dimensions of a strong school community. Strategic schools identify what aspects of social-emotional support students need help with and deliberately build a network of resources—starting within the school and extending through partnerships outside of it—to address those needs. Importantly, these schools build in processes and routines to create a school environment in which

all students feel emotionally safe and have access to the social-emotional support they need. The environment creates better learning conditions and helps them in decision making outside of school.

Critically, the schools we've studied never treat investments in a whole child approach apart from the learning itself. Rather, the structures they create exist only in direct service of student learning, promoting maximum possible engagement, belonging, and joy in learning across the diversity of learners in the school. *See story on The Generation Schools Network on page 12.*

Strategic schools identify what aspects of social-emotional support students need help with and deliberately build a network of resources—starting within the school and extending through partnerships outside of it—to address those needs.

Creating a Strategic Design

Strategic designs don't happen by accident. They happen because school leaders and their teams deliberately organize resources—people, time, technology, and money—in a way that is deeply integrated with an effective academic improvement strategy, and school and student needs. They achieve this using a process that almost always includes five key steps (see below). Strategic designs created through this process have two key features. They:

- **Involve a deep focus on trade-offs.** At every step, school leaders thoroughly analyze and weigh the benefits they gain from their plan against what they have to give up. For example, a school that focuses on extending the reach of its best teachers to more students gains a measurable benefit in the number of students reached by an effective teacher, but that may mean larger loads for these teachers, which may influence the extent to which students are known.
- **Use an iterative process.** Designs are refined and adjusted as they are developed; new information during the budgeting process may require you to revisit the structure of your staffing plan or schedule. And, most important, strategic school design is never *done*. High-performing leaders and teams are constantly evaluating the success of their strategies and the changing needs of their students, and adjusting resources and implementation on the basis of new information.

Five Steps to Build Strategic Designs:

Before beginning the five steps to build a successful school design, you must lay the foundation by **ensuring that there are rigorous instructional materials and a strong instructional vision**. Research has shown the power of high-quality instructional materials on student learning.[12] And while through the steps of the design process, strategic schools build systems, processes, and routines to support the *implementation* of a great curriculum, no design process should begin without first ensuring that highly detailed, vetted curricular resources exist. School systems play a critical role in vetting and providing curricular resources to schools. Another key piece of a solid instructional foundation is a commonly held instructional vision that describes a shared agreement among teachers and leaders around what students should know and be able to do, tailored to each subject/grade combination.

STEP 1. Assess Needs and Resources

The first step in deciding how to use your resources strategically is to clarify the most urgent student learning needs your school will organize to address. This means using data to identify your students' most urgent needs, and then quantifying goals that will define your success in meeting these needs. Student shadowing and empathy interviews can also be an important part of building a qualitative fact base that can help support decisionmaking and the case for change. At the same time, it's important to dig deeper to define any changes in instructional practices that are necessary to

better support student learning needs. This should include a quantitative analysis of teacher performance and qualitative observation data. Finally, you must analyze how your *current* use of resources supports the needs you identify and is consistent with research-based strategies for improving teaching and learning.

STEP 2. Clarify and Communicate Priorities for Your New Design

With all this information, you can then set concrete priorities for reorganizing your school's design. While you want to select a *small number* of areas on which to focus in the first year, this should be in the context of a longer-term design vision that significantly changes the experience that students and teachers can have in your school. Too often, schools get started on an important change, such as creating time in the schedule for collaborative work in grade-level teams, but don't continue with the next steps, such as adding scheduled time for student intervention and shifting out staffing positions to reduce teaching loads in core subjects. The staging of goals for subsequent years and getting district and school community buy-in around them is a key to success.

STEP 3. Design the Strategy

Once you decide what needs to change the most, you have to determine what specific changes you will make. For example, you might decide to focus on expert-led collaborative work and professional learning, but what does that mean? How will you find the time, ensure expert support, and assemble the right teams? One option for change—or design building block—you might consider is a deep, one-on-one coaching model. Another could be to create teacher leadership roles and select and train highly capable teachers from your staff to do this work. Each of these has different implications for scheduling and teaming. The work in this phase is to define all the possible design building blocks you want to consider given the needs you've defined, weigh the trade-offs and benefits of each, and select the one that will work best for your school.

STEP 4. Reorganize to Make It Work

With your design building blocks chosen, you can then consider the specific resource reallocations that are required for full implementation. For example, to implement a coaching model, resource decisions could include:

- **Master Schedule:** What changes, if any, will need to be made to your master schedule to accommodate coaching? How will teacher professional development/planning time be restructured to create enough time for coaching observation and debrief, and will this require any broader schedule changes?
- **Job and Teacher Assignment:** Which staff members are qualified and available to serve as coaches? How will they be assigned across teaching teams?
- **Hiring Plan:** Will you need to hire additional staff? How will they be recruited, selected, and assigned?

- **Annual Professional Learning Plan:** What training will you need to provide to current or new staff who are playing the coaching role? Who has the expertise to lead professional development, and when should it occur?
- **Budget and Staffing:** What additional professional development for coaches might be required? How much might this cost, and how will you pay for it? This phase will require you to make deliberate trade-offs as you consider what lower-priority things you might have to give up to be able to pay for a design that meets the most urgent needs you have defined with the resources you have.

STEP 5. Implement and Monitor

Before you implement, you will need to put progress monitoring structures in place. These structures include regular check-ins, data analysis, and interim and annual-self assessments. Check-ins help keep communication lines open and help identify implementation breakdowns that can be addressed in real time. Data analysis can prove that implementation is or is not having its desired effect and whether the plan is being implemented with fidelity. Quarterly self-assessments highlight aspects of the strategy that are going well and could be celebrated to build stakeholder engagement and momentum, and they identify areas where the strategy is off track and needs to be addressed. The annual self assessment evaluates if the year's big milestones have been achieved and what this means for the coming year.

Every Situation Is Unique

This process reinforces the idea that there is no one right answer to strategic school design. Any school undertaking the strategic design process will choose unique areas of focus for improvement based on its own needs assessment. These areas would likely include some, but not all, of the six essentials (see appendix).

Within any given area of emphasis, two schools might choose to implement very different design building blocks to address the issue they're trying to solve. One school might choose to use looping—the practice of keeping students with the same teacher for more than one year of learning—to build relationships, while another might implement an advisory structure. Resource reallocations will also be customized to each school's context. Even two schools implementing advisory might choose to schedule and staff it differently, which will have different implications for student and teacher time reallocation.

Conclusion: Time to Act

In more than a decade of supporting districts and schools, we've learned that transforming resource use from more traditional approaches to create strategic school designs takes courage and perseverance. It requires dismantling the structures that have defined the way schools have used people, time, technology, and money for over 50 years—and changing the way we think about classrooms, the school day, and the teaching job. While much of this work is done at the school level, it cannot be done

successfully at scale without central office involvement. Central office leaders must work alongside school leaders to transform the systems that reinforce traditional resource structures and to build new systems in their place. This means redesigning school funding systems, budget and planning processes and timelines, central supports, and union agreements to enable the practices of strategic school design.

Despite these challenges, we've seen that strategic designs that better leverage resources to serve student needs are possible. When done well, they are powerful in driving the types of outcomes we want for our students. We are now able to describe the practices that define strategic resource use, and we know the specific steps schools have taken to prioritize, sequence, and implement these practices. School systems, school leaders, teachers, students, and communities must now come together to begin applying these ideas to their unique contexts and begin the work of scaling more strategic designs. We can't continue to use our resources in the ways we always have and expect fundamentally different outcomes for our students. The time to act is now.

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APPENDIX: WHAT DOES STRATEGIC SCHOOL DESIGN LOOK LIKE IN ACTION?

Within every design essential, the deliberate organization of resources is key to shifting away from typical, less effective practices to more strategic practices and better outcomes. We've laid out the must-haves for each design essential.

INSTRUCTION

- School leaders and teachers have collective ownership over a clearly articulated instructional vision that defines their approach to teaching and learning, includes subject-specific practices, and is informed by rigorous expectations for excellent teaching.
- All core teachers have access to (or sufficient time and support to create) and effectively use vetted CCRS-aligned curricular materials, including scope and sequence, unit plans, daily lesson plans, and student work exemplars.
- All teachers have access to (or sufficient time and support to create) and regularly use rigorous informal formative assessment tasks aligned to the CCRS and the curriculum.
- Common interim assessments are aligned with CCRS/end-of-year goals and administered by all same-subject teachers in a grade at least four to six times a year.
- Timely, useful data reports from interim assessments are made available to staff and used to adjust instruction.

TEACHER COLLABORATION

- Teaching teams are organized to collaboratively design rigorous CCRS-aligned instruction, target supports for students, improve culture, and deepen teachers' understanding of professional growth topics.
- Feedback systems with calibrated observation measures and tools ensure that teachers receive specific, actionable, sustained coaching from qualified instructional experts.
- Professional growth and teaming is supported by qualified instructional experts who focus on specific subjects and grade bands, and who are continuously building upon their own content knowledge and skills in order to support teachers in planning and teaching to college- and career-ready standards.
- Teachers and instructional experts are deliberately assigned to teams to maximize the collective learning and teaching potential of the group.
- Schoolwide professional growth support is focused on a few topics informed by student and teacher data, aligned to a CCRS-informed instructional vision, and realized through a comprehensive, year-long professional growth plan to ensure sufficient learning and practice time to achieve mastery.
- Individual professional growth support is differentiated based on teacher need, as measured through multiple data sources.
- Sufficient time is scheduled for collaborative work and professional growth.

TALENT MANAGEMENT

- The school vision and assets are defined and marketed to attract great teachers who fit hiring priorities.
- A rigorous selection process, as early as possible in the district's hiring cycle, guides hiring and assignment decisions, including demonstration lessons, faculty interviews, and reference checks.

- Staff assignment is based on the school's needs and individuals' strengths.
- Clear lines of supervision support the growth and development of all staff members.
- Teacher leader roles extend the reach and support the retention of highly effective teachers.
- Clear and fair evaluation processes accurately recognize and support the retention of the most effective teachers as well as the efficient exit of persistent low performers.

TIME AND ATTENTION

- Core content courses provide rigorous grade-level instruction for all students using CCRS-aligned curriculum and materials.
- Instructional strategies and supports are differentiated in all courses to ensure that students have the right supports to meet academic goals.
- School resources (people, time, money, technology) are deliberately matched to student need to ensure sufficient amounts of time and attention for content mastery for all students.
- Supports, interventions, and student groupings adjust frequently based on data on student progress.
- All students are enrolled in the learning environment that meets their needs, while maximizing opportunities for heterogeneous settings.

WHOLE CHILD

- Each student is known deeply by adults in the school.
- Students have deep and respectful personal relationships with other students.
- Consistent expectations for behavior and schoolwide routines are grounded in a vision for school values fully shared by students, families, and staff.
- Students have the opportunity to connect with their school community on the basis of their personal interests and motivations.
- Students have developmentally appropriate opportunities to learn and practice core social-emotional competencies, including self-awareness, self-management, social awareness, relationship skills, and responsible decision making.
- Students who need more intensive support are identified and linked to effective services quickly, using outside providers when necessary.
- A feedback loop on students' social-emotional needs exists among classroom teachers, external and school-based support providers, and students' families.

GROWTH-ORIENTED ADULT CULTURE

- There is collective ownership among faculty and staff over a vision for what effective teaching and learning looks like.
- There is collective agreement over school improvement goals and visibility into progress against these goals over time.
- Colleagues and leaders have a shared commitment to the continuous learning of adults and students.
- Colleagues and leaders are open to difficult conversations and engage in constructive conflict.
- Colleagues and leaders trust each other.
- Colleagues and leaders problem solve and work together in a collaborative environment.

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