# SPENDING MONEY WISELY GETTING THE MOST FROM SCHOOL DISTRICT BUDGETS 


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## SPENDING MONEY WISELY Getting the Most from School District Budgets



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## INTRODUCTION

Public school systems in the United States face a tough reality: the challenges, student needs, and complexities are greater, but greater resources are not likely to be available. Many districts are struggling to implement the strategic plans they believe will raise student achievement, but feel hampered by limited resources. Innovative approaches and comprehensive solutions are needed to align scarce resources to support student success.

But there is good news. There are opportunities for districts to realign resources and free up funds to support their strategic priorities. A number of districts are already doing so, proving it is possible to do more with less. This volume attempts to codify and share the collective wisdom of those who have done it.

We began by brainstorming about resource reallocation opportunities with many leading thinkers, district leaders, and education researchers from across the country. This culminated in a long list of 71 opportunities. Then, we systematically assessed each opportunity across four factors: 1) financial benefit, 2) impact on student achievement, 3) political feasibility, and 4) certainty of gain, relative to the complexity of implementation. Based on this assessment and feedback from district leaders from around the country, we narrowed the list to the best 21 ideas. The final screen, based on feedback from superintendents and district CFOs, winnowed the list to the top ten opportunities that districts could implement - and see the benefits of -in the next few years. (The complete list of the original 71 opportunities and the intermediate list of 21 opportunities are included in Appendix I and II.)

The screening and financial analysis focused on the benefit to urban districts, and much of our analysis was based on a typical urban district of 50,000 students. However, many of the strategies and lessons learned apply to districts of all sizes, contexts, and student demographics.

The top ten opportunities for resource realignment discussed herein include:

1. Calculating Academic Return on Investment
2. Managing to Existing Class-Size Targets
3. Adding Precision to Remediation and Intervention Staffing Levels
4. Finding Politically Acceptable Ways to Increase Class Size or Teaching Load
5. Strategically Spending Federal Entitlement Grants
6. Ensuring More Students Read on Grade Level
7. Improving the Cost-Effectiveness of Professional Development
8. Rethinking Purchasing
9. Lowering the Cost of Extended Learning Time
10. Targeting New Investments

To be sure, no district could or should attempt all ten opportunities, and some will be more relevant to some districts than others. The following pages shed light on these opportunities from several different perspectives. Opportunity Briefs describe the opportunity, why it exists, and its potential impact. Each Getting Started identifies key first steps for district leaders interested in implementing the opportunity. Most of the opportunities also have companion Lessons from the Field, which incorporate real-world stories from districts and schools that have implemented - or are in the process of implementing - the top ten opportunities. Examples from published research, case studies, and interviews with district leaders and authors from across the country are included.

The goal of these materials is to provide district leaders undertaking comprehensive resource realignment with a toolkit of innovative, research-based ideas and lessons learned from their colleagues around the country. None of these opportunities is easy to achieve. If they were, most districts would have already implemented them. The necessary changes will require district leaders to be steadfast and visible in their resolve; but they are, we believe, both doable and worth doing.

## METHODOLOGY

To identify the top ten opportunities for resource realignment in public school districts, we began by casting a wide net. We drew upon the experience and expertise of education leaders and thinkers from around the country - including current and former superintendents, policymakers, and researchers - to brainstorm a list of possibilities. This comprehensive list of 71 opportunities for resource realignment represents the collective wisdom of centuries of experience.

Some of the ideas may raise academic achievement and create significant cost savings, but are extremely difficult to achieve. Other ideas of similar impact seem to be much easier to implement politically and operationally. Practical realities often limit the range of options, and can determine whether or not an opportunity will, in reality, make meaningful change for students.

We therefore sought to narrow our list to the few opportunities that raise student achievement and have a significant financial impact while still being feasible and practical for most districts. We methodically and rigorously assessed each option. The screening and analysis focused on the benefit to urban districts, and much of the analysis was based on a typical urban district of 50,000 . However, many of the opportunities apply to districts of all sizes, contexts, and student demographics. Each of the 71 opportunities was analyzed based on financial benefit, impact on student achievement, political feasibility, and certainty of gain relative to the complexity of implementation:

1. Financial benefit: Using a large sample of real district budgets and a database of staffing levels from districts around the country, we estimated the cost savings of each opportunity for a typical district of 50,000 students.
2. Impact on student achievement: Based on existing research, we weighed each opportunity's potential impact on student achievement.
3. Political feasibility: Based on The District Management Council's experience with districts around the country and feedback from superintendents, we assessed each opportunity's political feasibility. All resource reallocations encounter pushback, so the assessment was made on a relative scale.
4. Certainty of gain, relative to the complexity of implementation:

The quality of implementation often determines the success of district programs and initiatives. For some opportunities, gains are nearly assured, analogous to installing energy-efficient lighting. For others, gains require deep implementation that can be difficult to achieve. We assessed each opportunity based on the relative difficulty to implement in a manner that would bring about the intended academic and/or financial gains.

While not a perfect science, our assessment of each opportunity across these four factors led us to narrow the list of 71 opportunities to 21 high-impact and feasible opportunities. (The lists of 71 and 21 opportunities are included as Appendix I and II.) Finally, we again sought the input of district leaders and leading thinkers from around the country in order to narrow the list of 21 to the top ten opportunities. We prioritized opportunities that could be implemented - and have an impact - over a two to threeyear timeframe. On the first page of each Opportunity Brief, we have included a simplified representation of our assessment across these four factors (Exhibit l).

## Exhibit 1

> FINANCIAL BENEFIT

Negative/ No Benefit


## IMPACT ON STUDENT ACHIEVEMENT



POLITICAL FEASIBILITY


CERTAINTY OF GAIN, RELATIVE TO IMPLEMENTATION COMPLEXITY


## OPPORTUNITYBRIEF

# CALCULATING ACADEMIC RETURN ON INVESTMENT: <br> A Powerful Tool and a Great Investment 



## DISTRICTMANAGEMENTCOUNCIL®

## "Don't keep spending money on things that aren't working," and "Don't spend more, if less is just as effective."

No advice for making the most out of limited education funding is more obvious or more difficult to implement. No superintendent or school board knowingly adopts a new program with the expectation that it won't help students. No one purposely continues to fund an ineffective program. No one willingly spends more when a less expensive solution would yield the same or better results. Despite a nearly universal desire to spend only on what works, few districts have the tools, infrastructure, data, or processes to do anything but make educated guesses and hope for the best.

Budget debates sometimes include the all-too-common refrain, "Mr. Smith strongly supports this program, so we can't get rid of it" or "The teachers really like this program." These considerations are not irrelevant to decision-making - especially since teachers might like certain programs because they feel they help students. But, relying solely on such arguments does not serve students or the budget well.

FINANCIAL BENEFIT
Negative/
No Benefit


IMPACT ON STUDENT ACHIEVEMENT

Negative $\qquad$ Positive

POLITICAL FEASIBILITY
Very Politically Difficult
 Feasible

CERTAINTY OF GAIN, RELATIVE TO IMPLEMENTATION COMPLEXITY

Uncertain


Anecdotal evidence can be far off the mark, as it often confuses correlation and causation. Some programs, like Gifted and Talented, seem very successful because so many students in these programs have high grades and test scores and matriculate to college at high rates. But many gifted students are likely to succeed regardless of such programs. The key is to figure out which programs contribute to student success; instinct is usually not enough.

In a world of tight resources, persistent achievement gaps, and rising expectations, a rigorous system of academic return on investment (A-ROI) is a powerful lever to make the wisest use of limited funds. By providing information on
effectiveness and cost-effectiveness, the A-ROI approach can help districts determine which programs to terminate and which programs to expand. The district can save millions of dollars being spent on less-effective programs, and can redirect these funds to more-effective programs and thereby raise student achievement. Fortunately, districts need to make only a very small investment in technology and manpower to create a deep understanding of what works. Ensuring that these analyses are used effectively to guide the budget is more challenging, and in many districts, requires new skills and lots of planning ahead.

## Applying an A-ROI approach

A rigorous system of A-ROI is a powerful lever to make the wisest use of limited funds. A-ROI is a system that regularly asks and answers for every major expenditure or strategy the following questions:

## How much are we spending per student on this effort or strategy?

How much learning is being achieved for each dollar spent?

How does this "learning per dollar spent" compare to alternatives?

Taking these questions and turning it into a formula is straightforward:

## A-ROI $\left.=\frac{\begin{array}{c}\text { (Increase in } \\ \text { Student } \\ \text { Learning) }\end{array} X \text { Spent }}{\text { (Number of }} \begin{array}{c}\text { Student) } \\ \text { Helped }\end{array}\right)$

Making these calculations requires hard work, but is relatively straightforward. However, obtaining the benefits from A-ROI analysis requires creating a culture and protocols that facilitate quick and decisive shifts of resources based on the findings from this analysis.

## Alternatives to A-ROI?

Over the last few years, a number of organizations such as Broad Foundation, the Government Finance Officers Association (which actually awards honors for great school budgets), The District Management Council, the Center on Reinventing Public Education, the Wisconsin Center for Education Research, and school finance reform experts have been searching for districts who formally apply a return on investment approach to evaluating programs, staffing models, and strategies. The list is very short.

## A-ROI In Action

## Fulton County Public Schools

The Fulton County Public Schools sought to measure the effectiveness of a new program aimed at improving college attendance. ${ }^{1}$

A team of data analysts had uncovered a substantial "summer melt" problem, meaning that many students who had planned to go to college at the end of their senior years ended up not attending college the following fall. The district therefore decided to create a new program, the Summer PACE program, where graduating seniors were offered col-lege-focused counseling over the summer to help ensure that they actually enrolled in college in the fall. They started by offering the program as a pilot and randomly selected students to participate. Using this approach, they could be sure that better outcomes for those in the program were really due to the program and not due to selfselection with more motivated students opting to participate in the program.

The results revealed that the program worked. Those students who received the additional PACE counseling enrolled at a $4.8 \%$ higher rate than those who did not. The effect was particularly pronounced for low-income students who enrolled at a 9.2\% higher rate than those in a similar comparison group.
${ }^{1}$ Lynn Jenkins and Michelle Wisdom, with Sarah Glover, "Increasing College-Going Rates in Fulton County Schools: A Summer Intervention Based on the Strategic Use of Data," The Strategic Data Project (Cambridge: Harvard Education Press).

To be sure, it's not that districts don't want to use this approach. In fact, nearly all districts attempt to apply the broad concepts of A-ROI, but they are hampered in their efforts. Lacking the tools and data to thoroughly analyze spending decisions, districts often rely on three surrogates:

1- Research-based best practices: NCLB requirements, the What Works Clearinghouse, and published research from education school professors have all fueled a growing reliance on adopting best practices, such as teacher collaboration, using common formative assessments, a focus on mastering reading by third grade, or specific purchased programs such as READ 180. If the research says it works, it is a safe bet it will be a wise use of funds.

2- Learning from the stars: The writer Charles Colton said in the early 1800s, "Imitation is the sincerest form of flattery," and this holds true for public schools today. The tactics and strategies of high-profile, successful school districts are often copied with confidence, such as professional learning communities from Adlei Stevenson High School (Lincolnshire, IL), extra resources for needy schools from Montgomery County, or principal empowerment from New York City.

3- Anecdotal evidence: First-hand evidence and first-person experiences can be compelling. Many budget discussions include stories like, "Johnny couldn't read until we switched to XYZ program," or "My teachers have really seen a big difference since switching to ABC ."

All three approaches have some significant shortcomings, including:

- A program with solid research could be ineffective if implemented poorly.
- Copying one strategy from a successful district does not assure success. It is likely that many other components also contributed to the district's "star status."
- Teacher enthusiasm is not the same as student success. Sometimes there is ample praise for a strategy or approach despite no change in student achievement.
- Success for a few students doesn't necessarily mean it will work across a broader group.

Moreover, missing from all of these is the measure of cost effectiveness. Even if it is known that a program is researchbased, has worked elsewhere, and is helping students in the district, a district still does not know if other alternatives are equally effective but less costly, or if the cost of a successful effort can be reduced without diminishing its effectiveness.

## Why so uncommon?

A valuable first step to building and implementing an effective system for using A-ROI is to understand some of the reasons why so few districts have done so to date.

First, district budgets often don't make it easy to calculate the relevant costs. Most budgets are so called "line-item budgets." This type of budget lists salaries by department and purchases by broad categories. The cost for math teachers and math curriculum materials are listed, but not the portion of these costs associated with a specific program, such as remedial math effort for students who are English language learners. This problem is further complicated by the fact that districts have many budgets such as the Title I budget, Title III budget, IDEA budget, etc. Many programs are funded by multiple budgets, and it is challenging to roll up costs from multiple budgets. Creating further obfuscation is the fact that staff, which accounts for $80-85 \%$ of most budgets, are typically assigned to just one line item; often, one person works on many different programs, so a true costing requires splitting some teachers' salaries across multiple programs.

## Data is not the same as insight. Simply delivering a six-inch binder of student results and cost figures will not lead to wiser spending.

A-ROI requires a program budget which collects all the costs (and only the costs) associated with a particular program. A greater obstacle to using a system of A-ROI is that many expenditures worthy of the approach aren't programs, but are strategies, which can be even harder to calculate. For example, a district that has an average elementary class size of 21 has, de facto, adopted a small class-size strategy. No rollup of salaries and materials alone will calculate the cost of this strategy. The same is true of many other common strategies, such as paying more for years of experience, co-teaching, or principal empowerment.

Fortunately, with a little planning and some expertise in financial modeling and cost accounting, districts can calculate the costs for nearly anything. More daunting than measuring the cost of an effort is measuring the impact of a given program or strategy. Few districts have at their fingertips data that
links academic gains to specific programs or strategies. Tracking the ups and downs in learning is possible through state tests, common formative assessments, and semester grades, but connecting these changes to specific efforts is not easy. Student mobility and the fact that students start at different levels of mastery further compound the challenge, but it is doable.

Perhaps the biggest barrier to implementing and managing resources via A-ROI is the cultural reluctance among many school and district leaders to measure student achievement or place a cost on learning. One assistant superintendent for curriculum and instruction chose to leave his district rather than "place a dollar value on kids' learning." He explained that if we spend a million dollars and only help one student, he would be proud. A principal in another district thought it "unethical" to calculate the per-student cost of the various remediation programs in her school. She insisted they are all "equally valuable," despite dramatic differences in per-student costs and overall low and declining student achievement.

In a culture that often prides itself on paying all staff the same (regardless of outcomes), and staffs all schools equally (one social worker per building regardless of school size or need), this ranking of effectiveness can be very unsettling.

The desire not to know what is effective or cost-effective can run deep. In one district, a director of data and accountability was privately reprimanded by the superintendent for sharing an analysis which pinpointed effective and ineffective reading programs across their many elementary schools; in another district, the data guru was forbidden to share with principals a report that calculated student growth normalized for social-economic status (it showed many schools with more well-off students achieved very little growth in learning). In both cases, fear of embarrassing the principals or teachers led to the data's being permanently withheld.

## Implementing A-ROI: overcoming the obstacles

Districts that push past the queasiness of measuring results and costs will be able to target time, money, and effort to where it does the most good for the most students. Four steps can help overcome the obstacles:

## Build A-ROI into nearly every aspect of budgeting, teaching and learning, and central office work

Districts must weave A-ROI into the day-to-day fabric of how they operate. This includes revising financial reporting and budgeting to capture program costs, tracking student attendance by program and strategy, and designing program evaluation into all new efforts.

It is very difficult to assess A-ROI after the fact if the district does not first create the required budgets, data-collection systems, and other systems needed to calculate accurate
per-student costs. It is even harder to measure the relevant academic gains if the district does not plan for A-ROI measurement from the outset. This includes having "before and after" student achievement data or control groups to compare results against a baseline level of achievement.

When the Food and Drug Administration wants to know whether a new medicine is effective, they spend a great deal of time reviewing and approving how the test will be structured before the test begins, not just looking at the results when the trial is completed. School districts must also take some time upfront to plan to measure cost-effectiveness in the future.

## Ensure strong support from the superintendent and school board

Because it is critical that a district be "designed" to manage based on A-ROI, the superintendent and school board must strongly support the effort. Without such support, it becomes unlikely that consolidated budgets are built, that costs will be keyed to specific programs, that pilot programs will have a control group against which to make appropriate assessments, and that accurate growth data will be available. Only the active support of the superintendent will allow all the necessary pieces to be put in place across the many departments involved.

This effort cannot be championed by the head of data or accountability or the CFO. School boards can help strengthen the effort by letting the data drive their decisions. Academic return on investment is as much a mindset as it is a set of analytical tools, data points, and protocols. A district has to want to make A-ROI a key tool for managing the budget and achieving student outcomes.

## Implementing A-ROI:

Overcoming the Obstacles

## Build A-ROI into nearly every aspect of budgeting, teaching and learning, and central office work

Ensure strong support from the superintendent and school board

Create a small staff with the skillset and clout to make data actionable

Establish new ways of making decisions

## Create a small staff with the skillset and clout to make data actionable

Even when all the required data is available, simply delivering a six-inch binder of student results and cost figures will not lead to wiser spending. Data is not the same as insight. Making meaning of the numbers is a skill. Not every district has someone with this important skill set. Sometimes the district "data person" is an administrator or central office staff member responsible for submitting data to the state, or is the "assessment person" responsible for compliance. Both are very valuable to the district, but they may not have the needed skillsets to turn mounds of data into actionable information, which is a key goal of A-ROI. This is the realm of Ph.D. statisticians, cost accountants, or other highly analytical people with training and aptitude for finding cause and effect from statistical data.

These experts must be skilled at running multi-variable regression analyses and ensuring data accuracy and comparability. It is not enough to know that a program is effective; through statistical analysis, a district can learn which elements contributed to success and which types of students benefit most. For example, a dropout prevention program might be effective and cost-effective, and thus worth expanding. However, a deeper look into the data might reveal that it was not helpful for students struggling to learn English or that meeting three days a week was as effective as meeting every day.

These types of skills require specialized training more typically found in college research offices or program evaluation consulting firms than in school districts. Fortunately, this is starting to change. For example, the Strategic Data Project at the Center for Education Policy Research at Harvard University has trained over 100 analysts since 2008, many of whom now work in more than 30 large school districts. The organization Education Pioneers is also attracting and training people with deep analytical skills.

Beyond the obvious benefit of bringing needed skills and experience, these data analysis experts also bring objectivity. In many districts, the director of math, for example, is asked to evaluate the effectiveness of the math program. Certainly, they should be interested in the results, but it is likely they championed the programs that are in place, are friends with the program staff, and may have a subconscious bias towards looking for good news. The bias can grow if it means that a

> At its heart, A-ROI is a system of identifying winners and losers (things to keep funding and things to stop or change).
program found to be ineffective or not cost-effective is terminated or changed significantly. It is asking a lot of one's staff to ask them to analyze their own work.

One very important thing to remember in bringing in an analyst is that for the analysis to be important, so must be the analyst. They will need access to senior leadership and some clout and respect in the organization as evidenced by their place in the organizational hierarchy and their inclusion in key meetings. At the end of the day, senior district leaders will need to make hard decisions based on the results of the data. If the data analyst has little visibility within the organization and runs the numbers with little input and feedback from the district leaders, it is unlikely that the results will drive change.

Fortunately, having high-caliber data analysis expertise is not costly. For a typical district of 50,000 students, just one or two highly skilled professionals, reporting directly to senior leadership, can support a robust A-ROI system. This is not to suggest that simply hiring two people will create the needed culture, but it can provide the analytical horse-power. Effecting the necessary shift in culture is harder, but does not cost money.

## Establish new ways of making decisions

With experts on staff, good data, and support from leadership, all that is missing is thoughtful procedures for incorporating A-ROI findings into the budget decision-making process.

This might include a new budget development calendar that spans more than one school year. Since not every aspect of a district budget can be evaluated every year, planning out a schedule for what gets analyzed two or three years out can be helpful and allow time to create robust evaluation plans. As noted earlier, evaluation plan design is critical and needs input and buy-in from key stakeholders before beginning the review. An end-of-school-year retreat to review the A-ROI data gives time to digest the findings and ask for additional statistical analyses to be run. Evaluating program effectiveness in the midst of budget development tends to decrease objectivity and raise tensions.

Districts might consider adding, at some point early in the budget building cycle, a formal process of program abandonment. Too often, next year's budget assumes the continuation of all of last year's programs, plus new efforts. Cuts are only considered to close a gap in funding. With an A-ROI mindset, abandonment is desirable, even if funds are available; ending

## Data Necessary for Calculating A-ROI

With the right information in hand, measuring A-ROI is fairly straightforward. Getting the required information is the tricky part. The following data can smooth the way.

## Student Data

- Number and names of students in a specific program or strategy
- Demographics for each student lgrade, ELL status, school, etc.)
- Student attendance in a specific program lIf a student doesn't actually participate or moves away, they shouldn't be counted.)


## Cost Data

- Staff costs, fully-loaded lincluding benefits) that include all funding sources
- Portion of each staff member's time dedicated to a specific program
- Materials, supplies, transportation, and
other ancillary costs associated with the program
- Variable support costs, such as leadership or facilities. Only include these if they increased as a result of this program, or could be reduced or redeployed if the effort ended. There is no need to apportion fixed costs.


## Achievement Data

- Since student growth is the key, some form of "before and after" data is required. The data collected must be connected tightly to the goal of the program. For example, a new phonics program should be assessed based on a student's mastery of phonics, not a broader measure such as an NCLB state achievement in ELA.
- Results from a control group or alternative approach make it easier to compare. Did students grow more than those who got nothing extra? Did one approach create more growth than another?
or changing ineffective efforts is a student-centered decision, not just a financial one. Creating a routine for abandonment can help depersonalize it.
As the name implies, data-driven decision-making is a lot about the numbers, but it often feels very personal to those involved. When the data shows that a new math program was no more effective than the old one, it can feel like a personal assault on the director who championed it. District leaders need to create a culture that celebrates knowing what is effective and that regularly ends or modifies programs without devaluing the program leaders. In time, a new cultural norm can develop. No school leader would allow ineffective medicine to be dispensed by the school nurse; the same concern for eliminating ineffective programs would also serve students well.


## Where to begin?

As new programs and efforts are considered, decisions about when and how they will be evaluated should be built into the initial approval process. As we all know, districts already have
most of their spending committed to programs and strategies, and do not have the capacity to analyze everything right away (if ever). Prioritizing which elements of the budget are studied via A-ROI is an important decision.

Each district will have different priorities, but a few key areas for more immediate review might include the following:

- As districts invest heavily in efforts to improve teacher effectiveness, measuring the A-ROI of instructional coaching and professional development can be critical. For example, high-level questions like, "Do teachers who receive coaching in a particular topic raise student achievement in this topic more than teachers who do not get coached? How much coaching is needed to have an impact? Are some types of coaching more effective than others?" This review could also shed light on which individual coaches are more effective than others, while evaluating the coaching effort as a whole. For comparison, the cost-effectiveness of other forms of professional development can be weighed against each other.
- Since the advent of RTI (response to intervention), districts have a wide array of "extra help" offerings from reading teachers, Title I support staff, paraprofessionals, afterschool, summer school, and many more. As discrete programs, they are somewhat simpler to evaluate, and it is critical to ensure that these students in need are in fact receiving effective extra help.
- Given the size and importance of special education and ELL services, these are tempting areas for study. Given their complexity, evaluating aspects or strategies will be more actionable than a global review. For example, does co-teaching or resource room have a higher A-ROI for students with special needs? Is ELL instruction for newcomers more effective and cost-effective in smaller or larger groups?
- Having a robust A-ROI process might allow districts to pilot some more controversial ideas to assess if they are worthy of wider adoption. This could include larger class sizes or trading down - the concept of utilizing non-certified staff in non-core subjects like art or library.


## An approach and a tool

In a world of tight resources, persistent achievement gaps, and rising expectations, a rigorous system of academic return on investment is a powerful lever to make the wisest use of limited funds. Districts need to know how much is being spent, how much learning is being achieved for the amount being spent, and how this compares to alternatives, i.e. is there a more cost-effective way to achieve the same or better results? Districts already have their spending committed to programs and strategies, and clearly can't analyze everything in one fell swoop. However, regardless of what is studied first, with time and practice, districts can build their capacity to do the most good for students with their limited funds.

## GETTING STARTED

## CALCULATING ACADEMIC RETURN ON INVESTMENT: A Powerful Tool and a Great Investment

As budgets shrink, districts can't afford to not know which programs, strategies, and efforts are raising achievement and which are not. Equally critical is the ability to identify the most cost-effective options. Academic return on investment (A-ROI) can provide these answers.

HERE'S HOW TO GET STARTED:

## 1 FIND OR HIRE STAFF WITH THE KEY SKILLS

A-ROI is built upon detailed cost data and somewhat sophisticated measures of student learning. Any effort must start with a few key people with experience and expertise in calculating costs, measuring student growth, and conducting program evaluation.

## 2 SELECT JUST A FEW HIGH-PRIORITY TOPICS

Starting small and staying focused helps ease implementation and helps the district gain comfort and confidence in A-ROI. Assessing just a few topics in the first year is a reasonable expectation.

3 USE THE DATA YOU NEED, NOT THE DATA YOU HAVE
Sometimes the data at hand isn't sufficient to provide true costs or meaningful student growth. Don't settle for inadequate data. Build a system to collect the required information, even if it delays the analysis by a year.

## 4 LET KEY STAKEHOLDERS HELP SET THE MEASURES OF SUCCESS

Getting stakeholders involved in helping develop the research and analysis plan upfront helps ensure that the program can be properly assessed later on, and that there will be buy-in for the findings.

## 5 EMPOWER THE PROCESS

Don't let this effort drift into the shadows. It must be nurtured and championed by senior leaders, including the superintendent.

## A word to the wise: PLAN AHEAD

Calculating academic return on investment is easiest when systems to measure both costs and student growth are designed before the activities take place, not after. This includes tracking student attendance in the efforts to be studied, capturing cost data like teachers' time, creating controlled experiments, and conducting baseline assessments. This ensures the right data is available and the program can be assessed accurately.

## DISTRICT MANAGEMENTCOUNCIL®

## LESSONS FROM THE FIELD

# CALCULATING ACADEMIC RETURN ON INVESTMENT: <br> A Powerful Tool and a Great Investment 

DISTRICTMANAGEMENTCOUNCIL®

Implementing a robust system of Academic Return on Investment (A-ROI) can be the foundation upon which nearly all budget, program, and strategic decisions are built. Virtually every aspect of a district or school improvement plan would benefit from a rigorous A-ROI analysis.

While the ideas behind A-ROI are simple to understand, they are challenging to implement in the typical school district. As a mindset, it means weighing both cost and benefit when dollars are scarce, and spending money only on what works. District leaders have been making these tradeoffs since the first


## LESSON Design budgets and programs

 2Lesson Incorporate observations 3

Lesson 4

LESSON
5
Provide clout to A-ROI staff and results

| LESSON <br> 1 | Build an A-ROI infrastructure first |
| :---: | :---: |
| $\begin{gathered} \text { Lesson } \\ 2 \end{gathered}$ | Design budgets and programs to facilitate A-ROI analysis |
| $\begin{gathered} \text { Lesson } \\ \hline \end{gathered}$ | Incorporate observations into the analysis |
| LESSON <br> 4 | Be inclusive when designing each study |
| $\begin{gathered} \text { Lesson } \\ 5 \end{gathered}$ | Provide clout to A-ROI staff and results | public school opened in Boston in 1635, but for most of this time, the decisions were made based on professional judgment. Formal A-ROI analysis requires student growth data, controlled studies, teacher data, and detailed cost information. Unfortunately, much of this data is not readily available to many district leaders.

Fortunately, A-ROI itself has a great A-ROI. A small investment of roughly $\$ 250,000$ a year for a typical district of 50,000 students could help shift and improve the impact of tens of millions of dollars, and be one of the longest levers for district reform. Knowing that a particular program or strategy is costly and ineffective or marginally effective creates more than a financial opportunity to shift funds. Stopping an inefficient program or strategy is an opportunity to provide a better alternative to meet student need - a double victory.


In technical terms, A-ROI is calculated as shown above. More broadly, it means knowing how much gain students are making because of a given effort and the cost to achieve the gain. Drawing on lessons from the field, an A-ROI process can help districts do the most good with their limited funds.

## LESSON <br> 1 <br> Build an A-ROI infrastructure first

Many efforts to embrace A-ROI seem to falter almost from the start. Excited by the power of the idea, some districts rush to begin crunching numbers before they have assembled the skills, talent, and data required to do the task well.

A difficult lesson learned is not to take shortcuts when implementing this type of analysis. The goal of A-ROI is to make the wisest use of limited funds, which means expanding programs and ending programs, and making other high stakes decisions. If the A -ROI process is not rigorous, then opponents of the change will have ample fuel to resist and slow any changes, thus defeating the purpose. A rigorous A-ROI process requires that districts build a strong analytical infrastructure first. Doing the best you can with the tools, staff, and data available seldom leads to sweeping impact.

The most critical building block to creating the necessary infrastructure is to have staff with the right skill sets. One or more staff members with strong analytical skills and comfort with regression analysis and research design is a strong start, but not sufficient. Staff leading A-ROI efforts also require a deep understanding of schools, school culture, and the particular context of the district. A common pitfall is to anoint a so called "quant jock," a strong numbers person, who has limited understanding of the nuances of school life and may focus only on the numbers, ignoring the

> Stopping an ineffective program or strategy is an opportunity to provide a better alternative to meet student need - a double victory.
complex realities of a large school district.
For example, one analytically strong but not-too-schoolsavvy analyst presented a report showing that a former high-growth, high-performing school had recently seen all its reading gains evaporate. It was an important finding for sure, but it was only part of the story. Due to changes in demographics, the school had many empty classrooms; over time, the school became a centralized location for programs for students with severe disabilities. The students who had attended the school all along had continued to make huge gains, but the analyst wasn't aware of the relocation of special education programs to the school. Although it was an oversight, an unfounded recrimination like this can undermine faith in A-ROI for years.
Some of the most successful A-ROI efforts have been led by former principals who have deep analytical expertise and training. They bring a wealth of experience that heightens their sensitivity to issues like student mobility, redistricting, district policy, and a host of other factors that need to be incorporated into the A-ROI analysis if it is to have impact.

An effective A-ROI team also needs someone with financial savvy and an intimate knowledge of the district's budget. Academic Return on Investment measures cost effectiveness, not just effectiveness. District budgets can be very misleading to the average researcher. Many of the costs associated with a particular program or strategy are buried within multiple line items and spread across many budgets. For example, if the analyst searched the budget for all expenses related to professional development or reading instruction, they would likely miss $90 \%$ or more of spending.

One district, determined to build a robust A-ROI effort, formed a cross-functional team including a skilled K-12 data analyst, a building administrator, a finance person, and even a communications professional to help translate findings into a form that would be broadly understood and believed.

Once the right people are in place, the other prerequisite to implementing an effective A-ROI system is having the right kind of student data. School districts are awash in student achievement data, but many districts lack or overlook the type of student achievement information that can be most valuable for A-ROI.
A data scavenger hunt can be a good start to
determining what relevant data already exists in the district. Identifying all the student achievement data in a district takes some legwork. State tests are a key and obvious source, but much more is often available. What reading assessments are used by K-3 classroom teachers? What kindergarten screening tools (great for baseline data) are used across the district? Do high schools use common midterms and finals? Are common formative assessments given to students? Do most middle schools use the same end-of-chapter math tests? Typically, this data scavenger hunt requires conversations on an individual school basis; some of this information may not live in a centralized database, but is valuable grist for the analysis mill.

The data scavenger hunt is also a poignant reminder that having a nuanced understanding of the district is a must. In one school system, the analysis team based much of their work on the highly respected MAP scores (Measure of Academic Progress by Northwest Evaluation Association) for analyzing various programs and approaches. While the district routinely conducted formative assessments using MAP, many teachers in the district did not align their curriculum to these assessments, often failing to teach what was assessed by "central office." An A-ROI team holed up in central office didn’t know that most teachers disregarded the official curriculum. When they presented their findings, they were quickly dismissed by many as being not relevant, which in turn made A-ROI seem not very relevant either.

## LESSON

## Design budgets and programs to facilitate A-ROI analysis

After a thorough student achievement data scavenger hunt, the list of available information may be long, but lack of relevant data can still be an issue. If return on investment is going to influence big decisions, then it must answer the burning questions facing the district, not just the questions it can answer from existing data.

More than a few districts, for example, focus their analysis on fourth-grade reading. Why? Is it because grade four is a pivotal decision point for their planning? No. It is because the state begins to administer reading tests in grade three, and thus growth scores aren't available until the end of grade four. If the burning issue is to assess the effectiveness of the new K-2 literacy program, it is K-2 data that is needed - not fourth-grade reading scores.

Not having the right data, including baseline scores, growth, number of students served, student demographics, and relevant costs, cannot continue if A-ROI is to help students and the budget. Districts that are serious about getting the most impact from a return on investment process build A-ROI into how they create budgets, roll out new programs, and plan assessments.

Creating systems to ensure the right data is available for analysis can be done in steps. A common pitfall is attempting to capture costs and measures for every program and strategy in the district, including a multitude of small programs where change is very unlikely due to collective bargaining rules, state regulations, or context. A number of districts find themselves devoting enormous effort to costing tiny programs, rather than concentrating on just the important ones. A review of the district's strategic plan and the associated programs and initiatives detailed to implement the strategic plan is a great place for guidance on what is worth measuring. If ensuring all students can read by end of grade three is a district priority, then reading and cost data for kindergarten, first, second, and third grades seem a must; an afterschool, grant-funded civics program can avoid deep scrutiny.

Measuring, evaluating, and managing key initiatives and strategies require building an "A-ROI-ability" into many aspects of how the district functions. Many districts have found it difficult to look back and analyze their top priorities, but they find it relatively straightforward when they plan in advance. This might include using more comprehensive pre-testing to ensure baseline data is available for key grades, subjects, or programs.

One district, determined to have actionable data for all students in key programs, incorporated into their registration process baseline assessments for students who move into the district after the start of the school year. Other districts have shifted to all schools using the same assessments for comparability. For example, in one district, some schools used DRA, others BAS, and yet others DIBELS to measure reading growth. All are good, but settling on one allowed better comparisons and allowed analysis for students who changed schools within the district, a cohort for which the district wanted to carefully track program effectiveness.

Another district made simple changes to enable powerful A-ROI analysis. They implemented first day and last day assessments in reading and math for all students attending elementary summer school. They also required the daily attendance sheets from the program be sent to the evaluation office. Prior to building in these data collection protocols, it was widely assumed summer school must be beneficial and "worth it" to reduce summer learning loss. The pre- and post-tests results were eye opening. Students, on average, made three months gain in reading over the summer, but virtually no improvement in math. The reading gains were biggest for students one to two years behind grade-level, but students further behind barely improved. Marrying the cost data to the various summer programs further revealed that money spent on more days yielded better results than longer days, and that the actual costs per student were double in some schools than in others, with no increase in learning. The higher costs were associated with different staffing models and the number of absences.

Not surprisingly, this information changed the following year's summer programs. Two hours of assessing, turning in daily attendance reports, and reviewing payroll records made A-ROI possible.

For very important strategies, some districts have run controlled tests, randomly selecting some schools or teachers to try a new program or effort, while others serve as a control. The idea of excluding some students access to a program often creates much anguish and strong pushback. "How can you deny students the new ABC program? It's wonderful!" is a hard question to confront. Two responses have helped reset the discussion. The first is to stress the importance of figuring out if ABC program is actually helping, and the second is to determine whether it helps all kids or just select students; this needs to be determined before the program is rolled out to all students. Reminding staff that the former program, now being abandoned, was once thought to be wonderful as well helps ground the discussion. The other tactic is to conduct a program audit in the district to bring to light the great variation that may already exist. Some schools or staff use different programs based on grants, history, or personal preference. The only difference this time is that the variation is intentional.

In order to accurately assess the cost and benefit of programs, cost data as well as student growth data are needed. Accurate, comprehensive collection of cost data also must be planned for in advance. Traditional district budgets are not designed to facilitate program costing. They are typically line-item budgets that categorize costs by role, not program. For example, at a high school, salaries for all math teachers are grouped together, as would be all special education teacher salaries. Nowhere would the budget indicate that a portion of each line is dedicated to a math remediation program, which is to be reviewed for cost-effectiveness. A bit of forensic accounting is required to identify all teachers participating in the program and prorate their salaries and benefits based on how much of their time is dedicated to the program. A number of districts have conducted large-scale lookbacks to create this type of program cost data. Typically this requires outside consultants and six-plus months of data crunching. Other districts, however, dual code their annual budget, creating program budgets as well as line-item budgets. Each line item is also apportioned to a menu of programs to be costed and tracked. To fully capture all costs, central office staff, like lawyers and accountants, can also track their time and allocate costs based on the major efforts they support.

## Fortunately, A-ROI itself has a great A-ROI.

Incorporate observations into the analysis

A-ROI is more than just crunching numbers. Having knowledgeable people observe the programs and strategies being studied can make the final data more actionable. To be sure, this type of anecdotal data cannot overwrite the A-ROI findings, but they can add much understanding.

In one district, analysts observed teachers to gauge whether new materials and strategies were being used. When they observed that many teachers had opted, under the radar, to stick with the old materials, corrective action was launched immediately. Relying on a small group of researchers and analysts to monitor implementation across a large district is a daunting task. Some districts embed data collection into existing structures and systems, particularly principal observations and instructional coaching visits. For example, with the growing acceptance of principal walkthroughs, mini-observations and the like, building administrators are making dozens or even a hundred classroom visits a month. By incorporating key program metrics into either the rubric or write-up form, all building administrators can help collect data that will inform program analysis.

A valuable side effect of principals or instructional coaches participating in program review data collection is that it can dramatically increase the effort by teachers to implement the program well, and focuses building leaders on ensuring strong implementation. This interaction between the act of measuring and the result being measured is called the observer effect. The symbiotic relationship of measuring success and achieving success is clear in the case of one district that had invested heavily in an effort for staff to reteach some lessons based on the results of common formative assessments. Having seen no overall increase in achievement after a year, the district decided to analyze the effectiveness of the program on a teacher-by-teacher basis. Such a detailed study required the participation of building administrators, who at first struggled to meet the time demands of this new effort. Only when re-teaching, a key strategic priority of the district, became part of the rubric for classroom observations, could the principals find the time - since it did not take any extra time. They also learned that many teachers struggled to reteach using different methodologies, and therefore used the same less-than-successful lesson again. A-ROI would show that the re-teaching effort had not met expectations, but the data from the
thousands of principal observations helped explain why, and guided a reboot of the effort.


## Be inclusive when designing each study

Change, not measurement, is the ultimate goal of A-ROI. Unfortunately, some common approaches to implementing A-ROI focus heavily on getting the measurement side of the equation right, and not enough on the change management issues. Having the right stakeholders involved in A-ROI projects and creating the right momentum can be as important as the findings themselves.

One district learned this lesson the hard way. They hired a Ph.D. statistician from a top university who also had K-12 experience. He conducted a thorough study of the effectiveness and cost-effectiveness of co-teaching. As luck would have it, an unplanned control group existed, since the program rollout had been stopped midway due to funding constraints. A near random group of schools did co-teaching and another group did not. Few A-ROI studies could be better positioned. The results, controlling for student demographics and other variables, were resounding. Despite spending more than $\$ 10,000$ per student vs. $\$ 3,200$ per student, co-teaching yielded no benefit in student learning over its traditional, lower-cost alternative. However, three years after presenting the findings, nothing has changed. The schools that used co-teaching continue to do so, with no modification to the program, pedagogy or staffing.

This discouraging example is a case of being right, but being alone. One smart individual, working mostly in isolation, designed and conducted a thorough study, but did not have key stakeholders involved in the process. When the results were shared, special education staff and principals, who favored co-teaching, aggressively attacked the validity of the study. It should have included X , excluded Y , and controlled for Z , they pushed back. Whether their concerns were valid or not didn't matter. They believed the study was flawed, rejected the findings, and fought the change.

A different district used an inclusive approach to designing an A-ROI review of dropout prevention efforts. They brought together guidance counselors, principals, staff who run dropout prevention programs, and other key stakeholders who might be impacted by the findings. The researchers asked how the stakeholders would measure success, what data they thought would be relevant and valid, and what factors should be controlled for. The researchers went a step further and probed as to what each person at the table believed was the root cause of dropping out. This was important because it revealed what drove current plan design and what preconceptions would need to be refuted if changes were proposed.

The first phase of the research found that none of the current efforts had reduced dropout rates, and that the district lagged behind many like-communities in graduation rates. The A-ROI was nearly zero. Change was clearly needed, and the inclusive planning effort would eventually ease the way. The researchers investigated each of the key stakeholder assumptions regarding root causes. The facts showed that most of the commonly-held assumptions were not true. Students dropping out were not disproportionately poor, did not have IEPs, were not significantly impacted by home life (based on a sibling analysis), and did not have lots of suspensions. The researchers were able to identify the true root causes. In middle school, students failing core classes were promoted without consequences; then, in high school, these students were shocked and discouraged to find that this same performance would delay graduation. Disheartened, they would drop out.

While the data was very disappointing to the stakeholders, the new understanding led to rapid change. Just two months after the findings were released, many of the key players, who had been told their cherished programs were not working, instituted major changes to address the true root cause. In fact, many of the changes were implemented by teachers and principals before central office could formally organize new efforts.

Stakeholders' believing A-ROI analysis is valid and accurate is as important as the analysis being valid and accurate. In most cases, it is easier to gain buy-in through up-front participation than after-the-fact persuasion.

## HESSON 5 <br> Provide clout to A-ROI staff and results

A-ROI is an important cornerstone to raising achievement, especially in times of limited resources. It is important that the district signals a belief in its importance. In a number of districts, despite strong analytical capabilities, good data, and sound findings, A-ROI has not created large-scale change. In these situations, opportunities were missed because the messengers and their messages were too easily dismissed. Inertia and human nature can tip the balance away from data-driven decisions.

If the bearer of bad news has little standing in the organizational chart, then it is easier to dismiss the findings. Sometimes, out of respect for seniority, other cabinet members will avoid siding with a mid-level researcher against a more senior peer. This power imbalance can turn a data-driven discussion into referendum on allegiances.

Often the researchers are not even present at cabinet meetings when big decisions are made. There is no one at the table to push back against a senior leader contradicting or
whitewashing the results presented in a written report. When leaders heap uncertainty on research findings, the research becomes ineffective, even if it is accurate.

The districts that take full advantage of cost-effectiveness research and analysis ensure that A-ROI staff and their findings have clout in the district. There are a number of ways to do this:

- Ensure A-ROI staff report to someone influential in the district. If the function lives three layers down below a cabinet level leader, it becomes easier for other cabinet members to overlook findings.
Bring the researchers to cabinet meetings to present the findings. When a surrogate, such as a department head, presents the findings, it is hard to answer all the questions and forcefully address any doubts. Bring the researchers back to the table when big decisions are being made. Their voice needs to be heard throughout the decision-making process.
- Build data collection into teacher observations and classroom walkthroughs. Engaging principals in the research signals importance, and deepens buy-in and understanding.
- Create a formal data-review process with senior leaders. Routinely looking at A-ROI data as a cabinet sends the message that performance and cost data influence how decisions are made.
- Minimize anecdotal defenses of spending during budget deliberations. Budget debates are always emotional, but giving airtime to a passionate defense of a program undermines the focus on results and cost-effectiveness. If there is disagreement on a program and strategy, then steer the conversation to "How can we create a study to determine the A-ROI?"
- Live by the findings. Nothing undermines the impact of A-ROI analysis than disregarding the results. If a program or approach is too cherished to change, then it may not be a good place to start a review.


## Not new, but taken to the next level

A-ROI is not a new idea. All leaders do this intuitively. They do it often and take it seriously. No district intentionally spends money on programs, strategies, or efforts that are not good for kids and are not a prudent use of limited funds. District and building readers consistently assess what is working, and wrestle with how best to allocate too few dollars.

A small investment in A-ROI infrastructure and systems, however, can supercharge district decision-making and student outcomes. By providing robust analytical tools, better data, and a process for review, leaders can do the most good for students, despite tight finances.

## OPPORTUNITYBRIEF

## MANAGING TO EXISTING CLASS-SIZE <br> TARGETS:

Systems and Tools to Staff More Closely to Current Policy

## DISTRICT MANAGEMENT COUNCIL ${ }^{\circledR}$

Most discussions of class size include a healthy debate of the merits and drawbacks of larger or smaller classes. Millions of dollars can be freed up with small increases in class size, but many parents, teachers, and administrators favor smaller classes. Fortunately, there is a far less controversial way in which to create significant savings without the political pushback.

This opportunity lies in achieving the class sizes that a district has already set, agreed upon, and approved. All school districts spend much time and thought debating, discussing, and eventually formalizing district policy for class-size targets. These class-size targets may differ for elementary and secondary classes, core versus non-core instruction, $K-2$ versus $3-5$, or a number of other variations. Class-size targets also differ from district to district. A number of considerations are factored into making these important decisions, ranging from very practical issues such as the size of classrooms to deeply-held philosophies. The end result may mean that a first grade classroom in one district may target 18 students while a first grade classroom in another district may target 30 students.

FINANCIAL BENEFIT
Negative/ No Benefit


IMPACT ON STUDENT ACHIEVEMENT


POLITICAL FEASIBILITY
Very Politically Difficult


CERTAINTY OF GAIN, RELATIVE TO IMPLEMENTATION COMPLEXITY

Uncertain


The opportunity of achieving existing class-size targets makes no claim as to whether 18 or 30 students is "better." Instead, it calls for creating mechanisms that increase actual class sizes up to the targeted size. As a result, in many large districts, millions of dollars can be saved.

The beauty of this opportunity is that the political battle of determining the class-size target is over. What is left is the often overlooked challenge of managing student enrollment with laser-like precision and with a number of tools and techniques to ensure that these class-size targets become reality.

It turns out that in many districts, and for many unintended reasons, districts do not actually meet their stated class-size targets.

And, often, these targets are viewed as maximums instead of targets. Being below the class-size target is allowed, but going over is not. For example, while the target size of a first-grade classroom may be 25 students, a visit to first grade classrooms in a district might reveal a few classes of 16,17 or 18 , and perhaps only a small percentage with 25 students. Districts that have mastered actually achieving their classroom targets would instead have nearly all classes of 23,24 , or 25 . A few empty seats here and there is no small difference. As an example, an urban district of a little over 50,000 students hired an outside firm that determined that reducing empty seats and achieving the long-existing class size guidelines would save approximately $\$ 45$ million. Many districts might have smaller opportunities, but the opportunity is still typically quite significant.

## Why is achieving existing class-size targets so hard?

The reality of school enrollment is that students rarely enroll in nice and neat multiples of a district's class-size target.

Imagine a district that has set a class-size target of 25 students for third graders. If 75 students enroll in one of the district's schools, then there will be exactly three classrooms of 25 students. In this case, the actual class size equals the existing class-size target.

However, the probability of actual student enrollment working out this neatly is small. More often, the reality is that the school would likely have 44 or 53 or 77 students enroll, for example. These numbers of students do not make it possible to create two or three classrooms of 25 students. If the class size

## Exhibit 1

## VARIATION IN AVERAGE CLASS SIZE CAUSED BY FLUCTUATIONS IN ENROLLMENT

| TARGET CLASS SIZE: 25 STUDENTS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Actual Student |  |  |  |  |
| Enrollment | Number of <br> Classrooms | Average <br> Class Size | Variance |  |
| 50 | 2 | 25 |  |  |
| 44 | 2 | 22 | Students |  |

target of 25 is treated as a maximum, actual class size will be 22, 18, and 19 respectively (Exhibit 1).

For our typical urban districts of 50,000 students, the district will save roughly \$5-10 million a year as the average class size increases by a single student towards the targeted class size.

Most district leaders, CFOs , and directors of enrollment are well aware of the challenges of creating classes that closely match district targets, but the strategies to better manage class size are less well-known. Not all are applicable to all districts, and for districts in states with mandated class size caps, these five ideas may seem old hat, but for many, they offer a chance to effectively raise class size, free up significant funds, and minimize pushback.

## Manage grade configuration at the elementary school tevel

Grade configuration is the number and range of grade levels in a given school. For example, a K-5 school versus a K-8 school represents different grade configurations. While it is obvious that the K-5 school has fewer grade levels than the K-8 school, an important difference is that the K-8 school will have fewer classes at each grade. Given that there are a fixed number of classrooms in a building, as the number of grade levels increase, the number of classes per grade decreases. For example, a school with 18 classrooms would have, on average, three classes per grade as a K-5 school, but just two classes per grade as a K-8 school (Exhibit 2).

Why is this so important? The number of classes per grade makes a large difference in the ability to achieve existing class size targets. A small number of classes at a given grade can lead to classes well below targets. A large number of classes at a given grade can more easily accommodate swings in enrollment.

One district debated the value of having primary (K-2) and intermediate (grades 3-5) elementary schools instead of its existing K-5 schools. Interestingly, the debate centered on the benefits of keeping young children together in one school; the impact on the number of teachers needed was not discussed. In fact, it was assumed to be a cost-neutral decision, and they planned on just shifting teachers as needed. This, however, may not be the case. Assume two elementary school buildings have 18 classrooms each and the district is debating between two grade-level configurations:

- One K-2 building and one 3-5 building, or
- Two K-5 buildings

Having a K-2 and a 3-5 building increases the number of classrooms per grade as compared to having two K-5 buildings. The first option would allow for six first grade classrooms in the K-2 building while the other would have three first-grade classrooms in each K-5 building.

## Exhibit 2

VARIATION IN CLASSES PER GRADE IN AN 18-R00M SCHOOL


Source: The District Management Council

Although the total number of first-grade classes is the same in both scenarios, as enrollment changes, having more classrooms per grade can allow a district to more effectively achieve its existing class-size targets. For example, if 112 students enroll in first grade, grade configuration has a significant impact on class size and staffing. 112 first graders at the K-2 school would require five teachers and have an average class size of 22.4 students. If these same 112 first graders were split between two K-5 schools, each with 56 students attending, then six classrooms of 18.7 students would be required. In each case the class-size target was 25 . Neither school reached this target, but having
fewer grades at a given grade level reduced the number of staff needed by one teacher.

Since student enrollment at a given grade fluctuates, it is helpful to look at the impact on class size over a range of possible enrollments. If enrollment varies from 120 to 150 first graders in our example, the actual class sizes in the K-2 school would range from 21 to 25 students, with an average of 23 in the primary school. If the district decided to have two K-5 buildings, however, the class size would range from 17 to 25 students, with an average of 21 (Exhibit 3).

As districts consider the financial benefits of grade

## Exhibit 3

IMPACT OF GRADE CONFIGURATION ON ACTUAL CLASS SIZE AT VARYING LEVELS OF ENROLLMENT

ONE K-2 SCHOOL AND ONE 3-5 SCHOOL 18 CLASSROOMS 6 CLASSES PER GRADE


TWO K-5 SCH0OLS 18 CLASSROOMS 3 CLASSES PER GRADE


[^0]configurations, there is also clearly an academic component to this decision. Recent research has indicated that students who attend middle schools lose ground in both reading and math compared to their peers who attend K-8 schools. ${ }^{\text {. The number }}$ of transitions from school to school (e.g., moving from a K-5 elementary school to a 6-8 middle school) is an important consideration. Transitions between schools can be difficult for some students. Instructional practices may change; the textbook series used may vary; and rules and policies can differ. The more a district can vertically align its curriculum and other elements of school life, the more the impact of transitions can be reduced.

## Consider the impact of school size on class size

As the first strategy proved, increasing the number of elementary classrooms at a given grade level makes it more likely that target class sizes are achieved as enrollment fluctuates. Another way to achieve a similar result is to build larger schools, which allows for more rooms for each grade, regardless of grade level configuration.

While this strategy is not as applicable for districts that are not building new schools any time soon, many districts across the country, especially in the southern and western part of the United States ${ }^{2}$, are growing, and building new schools as a result. In districts with declining enrollment and school closure decisions at hand, these strategies can influence which schools to keep open.

Imagine a quickly growing district considering how best to meet increasing elementary enrollment. Two options are under consideration:

- Build one K-5 building with 36 classrooms to serve up to 900 students or
- Build two K-5 buildings with 18 classrooms to serve up to 450 students in each building
The cost of staffing a 900 -student K-5 school with teachers may not at first seem much different from the cost of staffing the two 450 -student schools.

However, as enrollment fluctuates, so would the actual class size and staffing needs. The two smaller schools are more likely to have smaller class sizes, as small as 17 students, despite a target class size of 25 . Over time, all else being equal, the larger school will have average class sizes two students larger than the two smaller schools, reducing elementary teacher and elementary specialist costs by nearly $10 \%$.

Districts may face pushback to building larger school buildings from stakeholders such as board members or parents who prefer smaller schools. Highlighting the cost differences might inform the debate, but school design features can also help. Some designs allow for school-within-a-school options or a sense of a smaller school by having self-contained wings so children stay in a smaller footprint.

Ensure student assignment policies mesh with classsize management strategies
The first two strategies help create schools that more efficiently manage variations in enrollment for a given grade. Student assignment policies have a direct impact on managing enrollment fluctuation, and can help create more classes closer to the district's target class size for neighborhood schools, school choice or magnet school models. Interestingly, the greater a district's student mobility (between districts or schools), the greater the potential benefit from this strategy. Each student that enters or exits the district provides an opportunity to ensure that class-size targets are being met.

Student assignment policies govern which schools a student will attend. These are complex rules that require balancing many competing interests such as giving preference to nearby schools, keeping siblings together in the same school, and providing parents choices between different types of schools, all while balancing transportation costs. Most districts set a maximum enrollment for each school; many set maximum enrollments for each grade, often fine-tuning the number of classes per grade based on student enrollment patterns. A given school might be limited to 500 students, but the number of first-grade classrooms, for example, might fluctuate year to year.

Key to many student assignment policies and related staffing formulas is the concept of maximum class size. If no

## Strategies to better

## manage class size



## Manage grade configuration at the elementary school level

Consider the impact of school size on class size

Ensure student assignment policies mesh with class-size management strategies

Use part-time or shared staff at the secondary level

Design specialized programs with classsize management in mind
classroom can have more than, say 25 students, and 100 students get enrolled in a given grade, four classrooms will be needed, with an average class size of 25 , which exactly matches the target. If, however, 80 students are enrolled, four teachers are still required, and the average size will be just 20 students. If the district has one school, there are few cost-effective options available. Large districts, however, have many schools, and opportunities emerge. If a nearby school also had 80 first grade students, they too would need four teachers. If however, school assignment policies directed 100 students to the first school and just 60 to the other, only seven first-grade teachers would be required in total instead of eight (Exhibit 4).

If district assignment policies also incorporated minimum class-size targets as well as maximums, then the number of very small (and more costly) classrooms can be reduced. Imagine a K-5 elementary school with three classrooms per grade, and a district policy that set both a maximum class size of 25 and a minimum class size of 21 .

This would mean that under certain circumstances, students would be assigned to another elementary school in the district if that last classroom would have a smaller than tar-get-sized enrollment. For example, if 42 to 50 first grade students selected a school, the school would have two classrooms (Exhibit 5).

## Exhibit 4

IMPACT OF STUDENT ASSIGNMENT POLICIES ON GRADE-LEVEL ENROLLMENT

CLASS SIZE MAXIMUM: 25 STUDENTS ENROLLMENT: 160 STUDENTS PER GRADE


Source: The District Management Council

## Exhibit 5

## MAXIMUM AND MINIMUM CLASS-SIZE ASSIGNMENT POLICY



Source: The District Management Council

If enrollment climbed to 51 , the $51^{\text {st }}$ student to the $61^{\text {st }}$ student would be assigned to another elementary school in the district. If however, enrollment climbed to 63 students, another third-grade classroom would be opened.

Having maximum and minimum class sizes built into assignment policies effectively creates "no go zones" for a range of student enrollment.

Managing student enrollment is an already complex challenge, and this strategy adds to the complexity. One of the easier ways of utilizing this strategy is to apply it to managing new enrollments. As children enter the district or move within the district, it is relatively easy to permit enrollment only to schools where a few additional students will not create the need for an additional classroom.

A skeptical reader may be thinking that changing the student assignment policy through minimum and maximum class sizes may save hiring another teacher, but then ends up

## Achieving existing class-size targets in middle schools

Many middle schools have adopted the socalled "middle school model" which places a high priority on cross-subject, grade-level teams. This means that each grade has a team consisting of four teachers: one for math, English, science, and social studies. These four teachers teach all the same students, and meet often to discuss student needs.

The education community has lined up for and against the benefits of the middle school model. While the model has many merits, districts must realize that if the model is not managed closely, it can result in middle school classes being well below targeted class-size guidelines.

Here is why. High school teachers are flexible in terms of what grade they teach, but rigid in terms of what subject they teach. For example, a high school math teacher might be asked to teach math at any grade. This provides a level of flexibility in staffing. If a given teacher, who usually teaches ninth grade, does not have a full teaching load, they can be assigned tenth grade classes. By contrast, the middle school model creates rigidity as to the grade and subject that middle school teachers teach. With the middle school model, a sixth grade math teacher may only be expected to teach sixth grade math. Since the
seventh grade has its own team, with its own seventh grade math teacher, working across grades undermines the team approach, which is central to the model.

If each teacher on the team teaches five classes per the collective bargaining agreement, then actual class size is not easily controlled. A school with 125 (or any multiple of 125) sixth graders, will have an average class size of 25 . If only 90 students (or a multiple of 90 ) are in the sixth grade then class size will drop to 18.

Districts have a few options to maintain the middle school team model and carefully manage class size. Some schools with 90 or 180 students per grade would assign each teacher four classes averaging 22.5 students, and then ask them to teach a fifth extra-help class, thus eliminating the need for some extra-help teachers. Other districts have modified the team configuration based on student enrollment. For example, some have a cross-grade team that might have three seventh grade and two eighth grade classes one year, and two seventh grade and three eighth grade classes another year. Others have two- or three-member teaching teams in which teachers teach more than one content area.
increasing transportation costs. For most districts, this is a cost-effective trade-off. Hiring a new teacher costs roughly $\$ 75,000$ in salary and benefits. Transportation costs often run $\$ 1,000$ to $\$ 5,000$ a student. Even if ten students need to be bused, the savings are significant.

Rethinking student assignment policies to better manage class sizes across the district is mathematically straightforward, but requires sophisticated implementation. Districts
need good data and good data systems. Enrollment planners need to know in real time overall school, grade level, and classroom enrollment figures; and, these figures can change virtually daily as students move in and out of schools. Some districts have this data at their fingertips. Unfortunately, in some districts, central office planners have planned enrollment data, but not actual enrollment, or their data can be months out of date.

## Use part-time or shared staff at the secondary level

As the first three strategies demonstrate, managing elementary class sizes closely to meet district targets is impacted by grade configuration, number of classrooms at a given grade, and student enrollment. The number of teachers is an output of this process. At the secondary level, often the number of teachers is an input, and class size is the output.

Ideally, teacher staffing at the secondary level is driven by student course selection and district class-size targets. If 1,050 students in a high school sign up for ninth grade earth science and the district has a class-size target of 25 , then 42 sections of ninth grade earth science are required. If a full teaching load is five sections, then 8.4 FTE teachers $(42 / 5=8.4)$ are required, recognizing that scheduling decisions will result in some earth science classes over 25 students and some under. More often, however, nine or ten earth science teachers will be assigned because this number of teachers was budgeted or was assigned in years past. The 1,050 students will be split between ten staff, offering 50 sections, with an average class size of 21 students.

Districts often hire full-time staff when only part-time staff
is needed. Every time a district employs nine or ten teachers when 8.4 FTE are needed, class sizes are reduced to fill every teacher's schedule. Hiring exactly the staff required at the secondary level is key to reaching existing class-size targets.

Implementing this strategy requires staff that are willing to work on a part-time schedule for part-time pay. Sometimes this is possible, especially for open positions that have many candidates, or for staff that have child or parent-care obligations. For new teachers wanting to get their foot in the door with a district, part-time work can be very appealing. Many such recent graduates work as paraprofessionals, and a parttime teaching position can be more appealing and better compensated than a full-time paraprofessional position.

Another alternative is to share two "part-time" positions across two schools, thus splitting a 1.0 FTE to cover two partial needs. For example, if one high school has a need for two sections to be taught and another high school has a need for three sections, the high schools can share one full-time staff member. This does require each school to have a similar bell schedule. As budgets have tightened, this once highly unusual arrangement is starting to grow more commonplace.

Exhibit 6

GIFTED AND TALENTED PROGRAM IMPACT ON NUMBER OF CLASSES NEEDED


[^1]
## Design specialized programs with class size management in mind

As urban districts expand specialized programs like Gifted and Talented, Sheltered English Immersion, themed academies, or foreign language immersion to meet specific student needs or to retain students who might otherwise opt for a charter school, districts are unintentionally decreasing class size below targets and increasing staffing as a result.

In some districts, the guidelines for specialized programs fail to consider the impact on the rest of the school. Often, districts can make small adjustments to how these programs operate and not increase costs. In one district that struggled to keep more advanced students in the district, they created a Gifted and Talented program. As the program was designed and curriculum developed, a decision was made to begin the program in third grade and to limit such classes to 15 students. It was understood that this would slightly increase costs, since the typical class had 22 students. The district had a contractual cap on class size at 24 students. Across the district, it was anticipated that 0.3 extra FTE would be required, given that class size would decrease by $1 / 3$.

Unfortunately, these decisions created much greater costs than anticipated, requiring an extra FTE for each Gifted and Talented class (Exhibit 6). For example, a school with 66 students in second grade would have 3 classes, each with 22 students. Based on the district's Gifted and Talented program policy, only 15 students are selected to be in the program when the second grade students become third graders. Rather than serving these 66 third-grade students with three third-grade teachers, the school required four teachers.

Had the Gifted and Talented class been designed to accept 22 talented students instead of 15 , then only three teachers would have been required, not four. Alternatively, removing the class-size cap of 24 would also have allowed all students to be served by three teachers.

## Closing thoughts

Increasing class size is one of the most politically challenging issues a district can take on. Fortunately, these five strategies can increase class size for a district without changing class-size targets. By aligning the systems, policies, and processes to achieve existing class-size targets, the financial gain can be had without a great deal of pain.

[^2]
## GETTING STARTED

## MANAGING TO EXISTING CLASS-SIZE TARGETS: Systems and Tools to Staff More Closely to Current Policy

Class size is a hotly debated issue in many districts, but even small increases in class size can result in significant cost savings. Many districts have an opportunity to realize savings without the usual political pushback by matching actual class sizes to the targets that they have already set, agreed upon, and approved. Redesigning systems and creating tools can help districts manage enrollment more precisely to achieve their class-size targets.

HERE'S HOW TO GET STARTED:

## 1 INVEST TIME, TALENT, AND RESOURCES INTO ACCURATE ENROLLMENT FORECASTING

Accurate enrollment projections can help districts create cost-effective staffing plans based on existing class-size targets. Small investments in professional demographers, improved data systems, and real-time attendance data can pay off.

## 2 STAFF TO ENROLLMENT

Target class size and student enrollment should be the input, and number of teachers should be an output. Using part-time staff at the secondary level and moving staff between schools as enrollment shifts, even after school starts, can keep actual class size much closer to targets.

## 3 ESTABLISH AVERAGE CLASS-SIZE TARGETS INSTEAD OF CLASS-SIZE MAXIMUMS <br> In most districts, class-size targets, are, de facto, maximums or caps. If possible, establishing average class-size targets across a grade or school as opposed to hard caps can provide districts considerable flexibility in managing class size.

4 IF THERE ARE CLASS-SIZE MAXIMUMS, CONSIDER ESTABLISHING CLASS-SIZE MINIMUMS
In most cases, if enrollment exceeds the class-size maximum, another teacher is added, often resulting in much smaller classes. Establishing a class size minimum would mean that, under certain circumstances, students would be assigned to another school in the district if adding another teacher would result in lower-than-minimum class size. Of course, student assignment policies might have to change to accommodate this flexible, cost-effective approach.

## 5 SEEK OUT SCHEDULING EXPERTISE

Scheduling is critical to managing class size at the secondary level, but creating effective schedules is a rare skill. Charging a "master scheduler" (e.g., a principal with a knack for it, an out-of-district expert, or a central office staffer) with creating schedules for multiple schools can help ensure that existing class-size targets become reality.

## A word to the wise: DON'T OVERLOOK THE IMPACT OF SCHOOL CONFIGURATION AND SIZE

 Decisions about school configuration and school size seem unrelated to class size, but can actually have a substantial impact on the ability to effectively meet class-size targets. Smaller schools or schools with more grade levels can make it harder to achieve class-size targets. Considering classsize implications of building new schools or rethinking school configurations is essential.
## DISTRICT MANAGEMENT COUNCIL®

## LESSONS FROM THE FIELD

# MANAGING TO EXISTING CLASS-SIZE TARGETS: <br> Systems and Tools to Staff More Closely to Current Policy 

## DISTRICT MANAGEMENTCOUNCIL ${ }^{\circledR}$

The research is clear: smaller classes do not raise student achievement, except in the primary grades, and only if classes are sufficiently small, a reality difficult to achieve given today's tight budgets. Notwithstanding the research, smaller classes remain very popular with teachers, parents, and principals.


While class size may not have a big impact on learning, it does have an enormous impact on finances. Increasing the average class size by two students, for example, can free up \$11-20 million a year or more in a typical district of 50,000 students. In this typical district, approximately \$1 million could be saved annually by increasing the average class size from 23 to 25 students in the fourth grade alone (Exhibit l).

Fortunately, it is possible for many districts to raise class size, re-allocate funds for strategic priorities, and minimize the tough battles. Most districts already have established target class sizes, but in reality, actual class size is often smaller than the targets in place. Raising class size to existing, pre-approved levels can garner savings and minimize pushback.

Some districts, especially those with lower per-pupil spending, have learned five key lessons for achieving class size close to the established target.


## Accurate, timely enrollment forecasting is critical

Most districts already plan next year's staffing based on projected school and course enrollment. If a school is expecting more first graders or fewer students taking biology, staffing is adjusted accordingly. Some districts have built the systems and skills to predict enrollment within $1 \%$ of actual. Other districts, however, have much less accuracy in their predictions.

Over- or under- forecasting enrollment by school and course can reduce average actual class size and thereby raise costs. For example, if 2,000 students were expected to take math in a high school, 20 math teachers might be hired; but, if only 1,900 actually end up taking math, then only 19 teachers would be needed. In the other direction, if 125 first graders were expected at a given school, five teachers would be hired, assuming a target class size of 25 . If 135 students show up, an extra classroom might need to be opened. If, however, the district knew that 135 first-grade students wanted to attend this school, they may have, through their student assignment policy, accepted only 125 students, and placed the ten additional children in nearby schools where classes are below the target size.

The ability to accurately forecast enrollment varies greatly from district to district. One mid-sized district, for example, has long struggled to staff efficiently due to imprecise enrollment forecasting. The office providing the enrollment data that drives staffing decisions can easily fall victim to numerous organizational shortcomings. Schools often provide outdated and inaccurate current enrollments. High school guidance offices sometimes do not provide accurate course enrollment until after most staffing decisions are already made. Different data systems do not sync, so when a student transfers from one school to another, they can appear on the rosters for both schools. Finally, lack of good cross-departmental communication creates significant inefficiencies. For example, special education and ELL "hold" seats in many classrooms "in case" they are needed. Often these reserved seats go unfilled, sometimes for years. It is not uncommon for a seat reserved for a special education inclusion student to be unfilled, but appear to the enrollment office as filled. As a result, the district might often have classrooms with 15-18 students despite a stated target of 22 at the elementary level.

Some districts have created very sophisticated methods to monitor and forecast enrollment, and thus, can more accurately match staffing to class-size targets. Making enrollment projections an interactive process is one way in which these districts improve their accuracy. In one district, for example, central office prepares the first forecast, then asks principals to revise it based on their knowledge of new construction, shifting housing patterns, and other local factors. Another

## Exhibit 1

| ESTIMATED SAVINGS FROM BRINGING AVERAGE CLASS SIZE OF ONE GRADE TO TARGET OF 25 STUDENTS |  |  |  |
| :---: | :---: | :---: | :---: |
| EXAMPLE: 3,800-STUDENTS IN FOURTH GRADE |  |  |  |
| Average Class Size | Staff Needed | Staffing Costs | Savings from Reaching Target |
| 25 | 152 | \$11.4 million |  |
| 24 | 158 | \$11.9 million | \$0.5 million |
| 23 | 165 | \$12.4 million | \$1.0 million |

Note: Based on average teacher salary plus benefits of \$75,000.
Source: The District Management Council
district employs a full-time planner with training and background in city planning; the district's planner works closely with the city's planning office to monitor new home and apartment construction, track changes of address, and geocode each household in the district. Each year, the district compares actual to projected enrollment, and conducts a root cause analysis to understand any variance so it can revise the forecasting model and/or improve the flow of information for the next forecasting cycle.

The decision by this district to hire a professional demographer was bold, but the logic was surprisingly simple. Traditional central office staff, especially in the human resources and budget development offices, are charged with managing staff allocations, but do not have training in forecasting demographics, a skill which is commonplace in many government offices and private sector firms. This was not a slight to current central office staff, but rather an acknowledgment of the value of certain skills and training.

Another important lesson is that a district's quest for accurate enrollment cannot end on the first day of school. Enrollment needs to be tracked and refined during the first few weeks. In one district, district leaders receive an update from every school and every classroom on the third day of school. By the seventh day, calls have been made to each family of "no show" students; if they find that students have moved over the summer, staffing is adjusted right away to match actual enrollment. As a result, very few classes are below target enrollment.

Other kinds of highly visible monitoring efforts are helpful, too. In some districts, the CFO leads the effort and the superintendent monitors accuracy of forecasts and reviews enrollment variances on each of the first ten days of school. Since high school class size is dependent on course enrollment and staffing levels, one large district that gives some autonomy to schools still conducts a central office review of each teacher's schedule in each high school. Even though this district
is one of the larger districts in the country, they make the tracking of enrollment and review of staffing schedules a priority.

Districts with effective enrollment forecasting invest time,
talent, and resources to ensure that they have timely, accurate information to make these important staffing and class-size decisions. Enrollment and staffing are addressed, assessed, and planned for throughout the year (Exhibit 2).

## Exhibit 2

## SAMPLE ANNUAL ENROLLMENT FORECASTING AND STAFFING CYCLE



Source: The District Management Council

## LESSON <br> 2 <br> Move staff as enrollment shifts, even after school starts

Accurate and timely enrollment forecasting is only helpful if the data is used to drive change. One district establishes its staffing plan around April for the following September. If enrollment changes between May and September (and it does) and pushes some classes above levels allowed by collective bargaining, they add staff; but if actual enrollment is below
estimates, staff stay as originally assigned.
This contrasts with other districts that make preliminary assignments for staffing in the spring, but adjust staff assignments and hiring a few times before school starts based on updated projections. Some districts take this type of flexibility further by shifting teachers after school starts based on actual enrollment and after confirming which students have moved or dropped out. The number of teachers moved or classrooms combined is not huge - often involving just $1 \%$ to $2 \%$ of staff - but, based on these districts' experiences, this approach can
allow actual class size to match target class size with great precision.

There are obvious benefits to providing stability to staff and not moving them around each year or after school starts, but in districts with shifting enrollment, the financial cost of such stability can be high. A few strategies can be used to add flexibility to managing class size, while minimizing the impact on staff. Moving a teacher from one school to another is asking a lot. One district hedges its bets by staffing conservatively, and keeping some teachers unassigned until the first week of school. As actual enrollment becomes known, these unassigned teachers are assigned where class sizes exceed targets. Another district adds a twist to this plan by not actually hiring the reserve teachers, but only budgeting for them. If extra teachers are needed, they can be brought on board; if not, the dollars saved can be repurposed. To ease the burden of hiring quality teachers at the last minute, the district often draws from its pool of newly certified teachers, who are already working in the district as paraprofessionals in hopes of getting a teaching position within a year or two.

Frequent updating of enrollment projections, careful review of actual enrollment by class and course, and building in an ability to shift staff have an additional benefit. They help create a cultural norm that enrollment, not history or staff preference, determines staffing levels. In some districts, there is
significant pressure to keep teachers at "their schools." Even more common is the sense that a given number of FTE positions "belong" to a principal, and any reduction can feel like a slight. When staffing is tightly tied to enrollment and well-established class-size targets, the decision to shift staff from one school to another is more transparent and will not be seen as a reflection of any one individual's relative "clout" with central office. Principals will be more likely to understand that the decisions are fair, and will resist the temptation or pressure to engage their families in lobbying district leaders for more staff.

## HESSON

Look for class-size management implications in every decision

Districts infrequently change class-size targets, and they never do it without careful consideration. Districts can, however, make decisions seemingly unrelated to class size that have a substantial impact on the ability to effectively meet class-size targets. A few common ones include:

- Special education practices for assigning students to inclusion classes
- When and how students are identified for ELL services
- Switching to K-8 from K-5 schools, especially if the


## Does weighted student funding improve class-size

## management?

Akey challenge for central office is knowing how much staff is needed in each school in real time. Great central office data systems can help, but weighted student funding (WSF) can be an effective alternative.

WSF is a funding plan where each school is allocated a sum of money based on the number of students and their needs. The dollars follow the student, and since some students have greater needs, such as being identified for special education, living in poverty, or being a non-native English speaker, more dollars follow some students than others. Rather than central office's assigning a fixed number of teachers to a school and hoping the need was estimated correctly, the school principals each receive a budget in dollars, not specific staff positions, and adjust staffing in real time based on available funds.

Unfortunately, WSF is not a cure-all. In many districts, principals empowered to manage class size through WSF actually drive class size down even further than the central office would have. This happens for two reasons: (1) many principals favor small classes, and (2) they feel more intensely the pressure to keep staff in their current schools and grades.
total enrollment in the school is small

- School choice policies, especially for students who move during the school year
- Policies on part-time staff or staff shared between schools, especially for secondary elective teachers

Some districts very proactively make decisions to make it easier to achieve class-size targets. One district, for example, has a team that includes the CFO and planning office to review nearly all proposed new policy and programs to determine their impact on class size, staffing requirements, and the ability to manage class size in the future. Putting in place appropriate systems and practices can make it easier to create staffing plans that achieve targeted class size. Among the steps districts have taken are the following:

- Building new elementary schools for $800-1,200$ students (with wings for school-within-a-school small school environments) rather than the more traditional 300-500 student schools
- Student assignment policies that explicitly consider classroom-by-classroom enrollment at the time selection is made, especially for students moving during the school year
- Ensuring that nearby secondary schools have the same bell schedules, so staff can be shared between schools
- Providing a common curriculum and very similar program offerings across schools to ease the impact of shifting students or staff
Once district leaders deeply understand which factors affect their ability to manage class size to achieve existing targets, they will add a critical new dimension to every policy analysis.


## LESSON <br> 4

## Recognize that scheduling is critical to managing class size at the secondary level and that scheduling is a skill

At the secondary level, small classes often occur as a result of the schedule, not student enrollment. For example, 100 students taking statistics should be able to be placed in four classes of 25 , but due to scheduling conflicts with other courses taken by these students, this is unlikely to occur. More likely, five classes averaging 20 students, or even six classes averaging 17 students, will have to be offered to accommodate students' schedules. Inefficient schedules can also impede other efficiencies like being able to share a teacher between two schools.

These seemingly unsolvable, frustrating inefficiencies caused by the schedule are actually often caused by the scheduler's inability to schedule, not the schedule itself. Just as some people struggle endlessly to solve a Rubik's cube while others can line up the colors in under a minute, schedules are often more adaptable than they seem when in the hands of a master scheduler.

Districts in which actual class size approaches target class size treat scheduling as a strategically important element of budgeting and managing resources. This takes many forms, including reviewing all schedules at the central office, actively searching for inefficiencies, incorporating staffing efficiency into principal evaluations, and/or actually creating detailed schedules during the budgeting process to support staffing decisions.

Districts leaders who recognize the importance of scheduling also recognize that scheduling is a skill, and a fairly rare skill at that. Too often, the task of scheduling is assigned to the most junior assistant principal or to whomever is willing to work over the summer for a small stipend. And all too often, the staff assigned to build schedules will confess they do not like to build schedules because they are not very skilled at it. In some schools, the person charged with scheduling may know the existing schedule well, but may lack the skill or desire to explore different schedules. Some districts have found ways to successfully access those with strong scheduling skills. Some districts screen principal candidates for their ability to schedule, hire experts on a temporary basis to build schedules over the summer, loan out master schedulers from the central office to schools, or compensate a master scheduler from one school to schedule for three or four other schools.

## LESSON 5

## Move from class-size maximums to average class-size targets

Implicit in most discussions about managing class size is the understanding that in most districts, class size targets are, de facto, maximums or caps. Districts with a first-grade target class size of 25 will strive for 25 students in every class, but will not allow 26 or 27 students. When 51 students enroll, three classes of 17 is the solution; the addition of the last student adds $\$ 75,000$ to the budget. Hard caps create many of the inefficiencies in managing class size.

Some districts have provided themselves significant flexibility in staffing by creating average class-size targets as opposed to caps (Exhibit 3). Some districts create targets for entire schools or grades within a school.

One district set its target at 25 students per class on average in each school. In a given school, some classes might have 22 and others 28. They hardly ever add an extra teacher just because a few additional students enroll. Because the average class size for the school is always honored, parents, teachers, and students have grown accustomed to variations in class size. A student might have a small class one year, but then have a larger class the following year. Principals typically have autonomy to decide which grades or classes are bigger than others, ensuring that they can balance sizes out over time.

A slightly more nuanced, but very cost-effective strategy is

Exhibit 3
ACTUAL CLASS SIZES IN DISTRICT WITH CLASS-SIZE CAP VERSUS DISTRICT WITH CLASS-SIZE TARGET EXAMPLE: 18-CLASSROOM SCHOOL


Source: The District Management Council
to vary average class-size targets strategically. The class-size target might be smaller for grades K-2, or for high-poverty schools, or for gateway courses like Algebra I and English 9. Other grades and classes might have larger class-size targets, but even within these categories, staffing is based on averages, allowing some classes to "go over." When class targets are maximums, it is not uncommon to find that actual class-size is two or three students below the cap. Managing to average classsize targets rather than to maximums could, in some districts, reduce classroom teacher staffing by $5-10 \%$ by raising the average class size by just one or two students.

## The perfect system

W. Edwards Deming said, "Every system is perfectly designed for the results it gets." For districts that struggle to achieve actual class sizes that match their targets, it is not a reflection of a lack of trying or caring. Typically, it is an indication that their systems are not designed to make managing actual class size easy. Fortunately, districts that have learned how to align their policies, procedures, and practices to carefully manage class size to existing targets have managed to free up substantial funds for more strategic uses.

## OPPORTUNITYBRIEF

# ADDING PRECISION TO REMEDIATION AND INTERVENTION STAFFING LEVELS: Data-driven Guidelines Improve Schedules, Building Assignments, and Workload 

DISTRICT MANAGEMENT COUNCIL ${ }^{\circledR}$

For many districts, improving the management of remediation and intervention staffing is a significant opportunity to free up funds. In fact, it may be one of the largest opportunities to both reduce costs and raise achievement, with only modest political pushback. While the implementation does take some detailed data collection and cross-departmental leadership, some districts could free up millions of dollars without reducing a minute of service and support to students. This may be surprising to some, since principals often report a shortage of academic support staff; however, creating data-driven guidelines for staffing, taking a more active role in scheduling of these services, and proactively reducing time spent in meetings have allowed some districts to reduce the number of staff needed to deliver the same amount of services to students. Since the actual amount of services to students remains constant, pushback from parents is limited. The significant savings can then be used for other strategic initiatives within the district.

FINANCIAL BENEFIT
Negative/ No Benefit


IMPACT ON STUDENT ACHIEVEMENT

Negative
 Positive

POLITICAL FEASIBILITY
Very Politically Difficult
 Feasible

CERTAINTY OF GAIN, RELATIVE TO IMPLEMENTATION COMPLEXITY


## A large cost center

In a typical urban district of 50,000 students, there may be as many as 900 special education, ELL, and Title I teachers, plus 400 special education paraprofessionals. Remediation and intervention staff thus accounts for between a quarter to a third or more of total spending on instructional salaries.

Nationwide, the number of interventionists has grown dramatically. Their ranks have grown to represent nearly half of all K-12 staff, while classroom teachers have declined from $70 \%$ of staff employed to roughly $50 \%$ in the past six decades (Exhibit l). Of the real increase in perpupil spending from 1996 to $2005,67 \%$ of it
was allocated to intervention and remediation expenses (Exhibit 2).

## Exhibit 1

PERCENT OF K-12 STAFF EMPLOYED BY CATEGORY (2008)


## Much variation in staffing and spending from district to district

Based on DMC research and experience, district-to-district staffing levels vary greatly, even when normalized for enrollment, demographics, and per pupil spending. For example, some districts have nearly three times as many special education teachers as similar districts, or more than four times as many paraprofessionals; this is the case after adjusting for enrollment and other factors. In nearly all districts with aboveaverage staffing, many principals and central office staff believe that they still have too little academic support staffing.

If districts with above-average special education staffing were able to staff at the national median, collectively they would save over $\$ 10$ billion per year. To put this impact into perspective, a 50,000 -pupil school district spending at the $90^{\text {th }}$ percentile on special education could save or repurpose upward of $\$ 35$ million a year if it had more typical spending.

## Few staffing guidelines exist

Despite the large number of staff devoted to remediation and intervention, most districts have limited or imperfect methods for determining how many staff should be assigned to a given school. This stands in stark contrast to the norm for determining general education staffing, which is set by

Source: National Center for Education Statistics, Digest of Education Statistics, 2010.

## Exhibit 2

## ALLOCATION OF NET INCREASE IN SPENDING (1996-2005)



Source: The District Management Council analysis of Juan Diego Alonso and Richard Rothstein, "Where has the money been going? A preliminary update," Economic Policy Institute, October 2010, http://s2.epi.org/files/page/-/pdf/bp281.pdf, (accessed November 20, 2013).
carefully managed class-size guidelines or teaching-load guidelines. In general education staffing, it is common to have guidelines such as one classroom teacher for every 24 first graders, or one high school math teacher for every 125 students taking math, for example.

Remediation and intervention staffing decisions seldom have such straightforward rules. Unfortunately, simple rules do not really help. A rule of one special education or ELL teacher for every 25 students who require their service does not take into account the fact that one student may need one hour of support a week while another needs five hours a week, or that some students need one-on-one support while others are supported in groups of five.

Given the complexity of determining staffing needs for remediation and intervention support, staffing is often set by tradition, availability of grant funds, and negotiations between principals and central office administrators. If and when a principal insists that additional staff is needed, negotiation and anecdote, rather than hard data, often drive the discussion.

## The Overstaffing Cycle

The lack of precise staffing guidelines often leads to overstaffing. To demonstrate how this occurs, imagine two schools, Washington and Kennedy. Each is assigned ten intervention staff. Based on actual student IEPs, English proficiency levels, reading scores, etc., eight staff members may actually be needed at Washington and twelve may be needed at Kennedy. While the 20 staff in total is adequate, the principal at Kennedy will rightfully insist that more help is needed, while the Washington staff will have lighter workloads, but still will feel busy. Over time, two more staff will likely be added to Kennedy, yet all ten will likely remain at Washington, leading to a net increase of two, from 20 to 22.

Fear of understaffing tends to add urgency to addressing the demands for more help, especially in special education and ESL, since both have state and federal protections and serious consequences for failing to provide mandated services. When a director insists more staff is needed in a given school, the request is accompanied by a reminder - stated or unstated that failure to meet the IEP or ELL service requirements will result in non-compliance, state sanction, advocate-driven legal proceedings, and/or other negative consequences.

> Given the complexity of determining staffing needs for remediation and intervention support, staffing is often set by tradition, availability of grant funds, and negotiations between principals and central office administrators.

Understaffing and overstaffing lead to some staff's having time to attend lots of meetings, while others are forced to do nearly all of their paperwork outside of school hours. Time studies have shown that in nearly all districts, some remediation and intervention staff work many more hours with students (up to three times more) than colleagues in other schools in the same district.

## Improving Equity and Efficiency through Staffing Guidelines

School districts can create data-driven staffing plans for interventionists, meet $100 \%$ of student needs, and free up significant funds for redeployment. When done thoughtfully, student achievement should increase as well. The same data that allows the district to more tightly manage the schedule and staff devoted to special education, ELL, and reading also allow districts to better manage the type and effectiveness of the interventions provided to students.

Better managing remediation and intervention staffing levels starts by believing it can and should be managed in a more datadriven way. The importance of this step cannot be overemphasized. In The District Management Council's experience, many directors of special education, ELL, and Title I have managed by professional judgment for years. At the same time, many human resources departments and business offices (departments with experience staffing to guidelines) are uncomfortable managing remediation and intervention staffing, given the legal complexities and the consequences of non-compliance. Often, only the superintendent can create the desire and the urgency to address this opportunity.

Given a commitment to create data-driven staffing guidelines, districts must then wrestle with the question, "Who should determine the guidelines and manage the process?" Here, the organizational chart and human nature can collide, especially during the transition to more data-driven staffing. The adage, "Never ask a barber if you need a trim," explains why having the special education director, ELL coordinator, or Title I administrator lead this effort often proves insufficient. The individuals in these positions often feel any cuts or changes will lead to non-compliance or hurt students. Neither is the case.

A team approach, which includes these department heads, but also includes the business office and human resources, can work well. Overall leadership at the deputy superintendent level, and strong encouragement from the superintendent is often necessary.

With the right team assembled, the next step is to determine what data is needed to create thoughtful staffing guidelines. Some required data varies by type of position, but two data points are universally helpful: 1) direct service time and 2 ) target group size.

Direct service time is the amount of time an academic support teacher, paraprofessional, or tutor is expected to spend providing direct instruction and/or support to students, often measured in hours per week. This highlights a major difference between academic support staff and other staff. Elementary classroom teachers have clearly defined expectations for student contact, such as direct instruction all day, except for a 30 -minute lunch and a 45 -minute planning period. Secondary teachers also have unambiguous expectations, such as five periods a day, or 25 classes a week. Depending on the role, academic support teachers, in particular, have a wide array of responsibilities beyond providing direct instruction to students including IEP assessments, report writing, attending meetings, and communicating with parents.

Target group size is the academic support staff's equivalent of class size. When an academic support teacher is working with children, how many students are they working with at one time?

Beyond these two universal criteria, other role-specific data can be incorporated into thoughtfully creating staffing guidelines. For example, districts may consider the number of initial and three-year IEP evaluations conducted on an annual basis when determining guidelines for school psychologists. They may also measure the percentage of time spent supporting students versus time spent supporting teachers when determining guidelines for reading coaches.

Few districts can push a button and ascertain how much time special education, ELL, Title I, or reading teachers spend with children each week, or how many students they help during each session. The lack of data explains why the opportunity to reduce staff, but not services to students, exists in many districts. Online tools or Excel spreadsheets can help gather and analyze the needed information.

With data on current practices in hand, setting guidelines for expected direct service and average group size is the next step. For districts new to this process, benchmarking can help determine what is reasonable. Internal benchmarks are based on current practices in the district. Since the baseline data typically reveal wide ranges for direct service and group size, many choices for new guidelines exist, but all are possible given the district's culture and schedule, because they are already being done by some staff in the district (Exhibit 3).

## Exhibit 3

PERCENTAGE OF CONTRACTED WORK WEEK SPECIAL EDUCATION INCLUSION TEACHERS SPEND IN DIRECT SERVICE


Source: The District Management Council

In most districts, the biggest variable impacting direct service with students is how much time is devoted to meetings. In our studies, time devoted to meetings ranges from $10 \%$ to $70 \%$ of the week for staff with similar roles serving similar students. District leaders can greatly influence this variable, which in turn greatly impacts required staffing. Roughly speaking, decreasing the time staff spend attending meetings by three hours a week can reduce required staffing levels by $10 \%$. In a typical urban district of 50,000 students, this equates to $\$ 5$ million - $\$ 10$ million in annual expenses without reducing a minute of service to students or increasing group sizes. It leaves upwards of ten hours a week for meetings.

Setting target group size is a bit more complex, since there are a number of factors at play. While IEPs or state ELL guidelines set some limits, in most districts interventionist preference, building schedules, and tradition carry the day. It is rare that district leaders debate special education, ESL, or reading group size with the same intensity and analysis as they do class size, but both are major drivers of staffing levels. The impact of group size is often underestimated. Moving from an average group size of three to four reduces staffing needs by $25 \%$; moving from a group size of five to six saves more than $15 \%$.

Group size is also indirectly impacted by the "service delivery model." Service delivery refers to how and where intervention services are provided, such as "push in," "pull out," sheltered immersion, resource room, or co-teaching. In many districts, there is not a clear understanding of the impact that service delivery choices have on group size, and thus staffing. For example, a district decided to switch from pulling elementary ELL students out of class ("pull out" model) to having ELL teachers go into general education classes ("push in" model). This was a pedagogical decision made on pedagogical grounds. It also had significant, but unintended staffing
consequences. Before, six students of similar needs could be pulled from up to six different classrooms, thus allowing for an average group of six students. With the switch to a "push in" model, often only two or three students in a given room had similar needs, so group size dropped by half, and the staffing requirements doubled.

Staffing, of course, should not be the only criteria in setting target group size, but it should not be ignored. Guidelines for target group size should be based on thoughtful, academic return on investment calculations, calculating the cost per student served and student growth rates.

Once a district has selected direct service expectations, target group size (influenced by the service delivery model), and other criteria, determining how much staffing is needed in each school becomes data-driven, transparent, and equitable.

Reading support provides a good example of the value of creating staffing and workload guidelines. As districts across the country have focused on increasing reading proficiency, a common question is, "How many reading teachers are needed in each school?" Without clear guidelines, it is a very difficult question to answer definitively. By creating both direct service time and group size guidelines, it becomes a much easier question to answer. For example, if a district decides that reading teachers are expected to instruct students 20 hours a week (roughly $60 \%$ of the work week) and each reading group serves five students on average, then 6.3 FTE are required in a school with 250 struggling readers. No more, no less.

As the table below reveals, small changes in direct service or average group size have a big impact on staffing needs. Dropping the group size by a student or reducing the number of sessions taught by one day shifts staffing by $20 \%$ or $12 \%$ respectively (Exhibit 4).

## Exhibit 4

NUMBER OF READING TEACHERS (FTEs) REQUIRED TO SUPPORT 250 STRUGGLING READERS*

| Direct Service Time Expectation |  | Target Group Size Options |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hours Per Week | Sessions Per Day | 3 | 4 | 5 | 6 | 7 | 8 |
| 12.5 | 5 | 16.7 | 12.5 | 10.0 | 8.3 | 7.1 | 6.3 |
| 15.0 | 6 | 13.9 | 10.4 | 8.3 | 6.9 | 6.0 | 5.2 |
| 17.5 | 7 | 11.9 | 8.9 | 7.1 | 6.0 | 5.1 | 4.5 |
| 20.0 | 8 | 10.4 | 7.8 | 6.3 | 5.2 | 4.5 | 3.9 |
| 22.5 | 9 | 9.3 | 6.9 | 5.6 | 4.6 | 4.0 | 3.5 |
| 25.0 | 10 | 8.3 | 6.3 | 5.0 | 4.2 | 3.6 | 3.1 |

[^3]
## The Nagging Question

## "If managing remediation and intervention staff frees up funds by reducing overall staffing needs, will this hurt student outcomes?"

The answer to this question is a resounding "No!" If this is managed thoughtfully, it can, in fact, be an avenue to raising achievement.

Some of the savings come from increasing the amount of time each staff spends with students lespecially in schools where direct service time has been low). This should help rather than harm student achievement.

Managing group size need not impact student achievement. By grouping students with similar needs, slightly larger groups can be equally effective. For example, some districts have moved from a "push in" model that created reading groups of three students whose only
commonality is their homeroom, to a "pull out" model that created groups of five students pulled from multiple rooms, but all having similar needs, e.g., decoding. As a result, instruction could be more targeted, which more than compensated for the slightly larger group size.
Finally, elevating the discussion and management of remediation and intervention efforts to district leaders often leads to a more robust review of service delivery models, academic return on investment, and teacher effectiveness. All this is not only good for the budget, but is also good for students.

## Overcoming Pushback

The benefits of thoughtfully managing intervention staffing through guidelines are significant, often allowing for dou-ble-digit reductions in staff without reducing at all the amount of time each student is supported. But, managing staffing in this way is uncommon, and can feel unreasonable at first. Pushback often comes from staff on three fronts: 1) the concept is unrealistic, 2) the guidelines are unreasonable, and 3) the implementation is unfair.
"Every student is different" and "My work can't be simply put into a chart" are common feelings. It helps when district and school leaders communicate that virtually all other teachers in the district do have very clearly defined expectations and that this effort only brings academic support staff onto the same system as general education staff.

Communicating that direct-service time and group-size targets create much greater equity for students and academic support staff offers a positive rationale for the change. Without clear guidelines, some staff are unintentionally being asked to work more hours and serve more students. In schools that are understaffed, some children are likely to get less support than similar students in other schools. Framing the targets as a new approach to the new normal can also resonate: given declining resources, the district must manage differently, and this change is prudent for tough times.

The loudest pushback can come when the guidelines are first established, especially the direct-service time guideline.

Teachers who spend as few as one of every three school hours with students can see themselves as working at capacity, even if many of their colleagues spend twice this amount of time with students. It turns out that these staff members generally attend various internal meetings and do not want to cut back on them, which is necessary to increase the time they spend serving students directly. By acknowledging the value of meetings, but clearly placing a high value on serving students, the principal and district leaders can communicate that meetings are important, but that decisions about who must attend, when they are held, and what their focus and structure are must be made with an eye to the need to have academic staff providing direct service to students for a substantial portion of their time in school. Their willingness to do so can be encouraged by reminding them that general education staff also want more time to meet, but that they, too, are provided only a fixed amount of time away from students.

The last hurdle to overcome is staff pushback regarding the reassignment process. New guidelines will lead to new staffing patterns. Schools with too many staff will have some of their staff moved to schools with too few. But, many staff feel very attached to their school, and view a transfer as unfair. Similarly, principals are not always pleased to lose staff who are part of the faculty "family" they have come to count on. Allowing principals and staff to have input into how but not whether transfer decisions will be made can help smooth the way.

## ADDING PRECISION TO REMEDIATION AND INTERVENTION STAFFING LEVELS: <br> Data-Driven Guidelines Improve Schedules, Building Assignments, and Workload

Remediation and intervention staff, including special education, ELL, Title I teachers, and paraprofessionals, can account for a quarter to a third of total district spending on instructional salaries. Better managing remediation and intervention staffing by creating formal staffing and workload guidelines can free up millions of dollars without reducing a minute of service and support to students.

HERE'S HOW TO GET STARTED:

## 1 INVEST IN GATHERING THE RIGHT DATA

When managing virtually all remediation and intervention roles, it is helpful to know two key data points: 1) The amount of time a staff member spends directly serving students, and 2) group size lessentially, class size). Most districts do not have these data readily available, but processes, systems, and tools to collect and analyze the data are well worth the effort.

2 BUILD A CROSS-FUNCTIONAL TEAM TO SET THE GUIDELINES
Special education, ELL, and Title I leadership have little experience writing workload guidelines, and are naturally reluctant for changes that could mean more work or less staff. A team approach that is led at the deputy superintendent level and includes remediation and intervention department heads, the business office, and human resources, is often needed.

3 INCREASE STAFF TIME SPENT SERVING STUDENTS BY REDUCING TIME SPENT IN MEETINGS
In many districts, meetings and paperwork consume $50 \%$ or more of each day. Creating guidelines that reduce the number of meetings attended can free up time to serve students and can reduce staffing needs.

## 4 USE MULTIPLE CRITERIA TO DETERMINE TARGET GROUP SIZES

Setting guidelines for target group sizes for special education and other interventions is not as straightforward as general education targets. Districts can use multiple criteria such as the age of the student, type of need, type of disability, and other criteria to create nuanced guidelines that are child-centered and cost-effective.

## 5 IF THE BUDGET ALLOWS, PHASE IN CHANGES THROUGH ATTRITION

This phased approach can ease pushback and make staff more comfortable participating in the process of developing guidelines.

A word to the wise: KEEP THE CONVERSATION FOCUSED ON STUDENT ACHIEVEMENT AND EQUITY FOR STAFF AND STUDENTS
Any reductions to special education, ELL, or other remediation and support services can provoke stiff opposition. Communicate that thoughtful staffing guidelines can actually make staffing assignments more equitable without reducing any services to students. The district's message and actions must stay focused on helping students, staff, and the budget all at the same time.

## DISTRICT MANAGEMENT COUNCIL ${ }^{\circledR}$

## LESSONS FROM THE FIELD

# ADDING PRECISION TO REMEDIATION AND INTERVENTION STAFFING LEVELS: Data-driven Guidelines Improve Schedules, Building Assignments, and Workload 

DISTRICT MANAGEMENTCOUNCIL ${ }^{\circledR}$

Using data-driven guidelines to manage staffing of special education, ELL, Title I and reading teachers often presents an opportunity to improve student outcomes, increase equity between staff, bring transparency to often-debated central office decisions, and free up considerable resources for other strategic priorities. It is also not very common.


LESSON 3


LESSON 5

Minimize staff discomfort by offering control over most decisions

Implementation challenges such as pushback from teachers, lack of actionable data, and reluctance from department leaders often discourage school districts from tackling this opportunity, which is, in fact, good for kids and good for the budget.

Changing special education, English Language Learners (ELL), and reading support is never easy given that these services impact some of the neediest children in the district. But big gains can be had, and, in most cases, a slight shift-not an overhaul, is all that is needed. It may mean new schedules and it may mean staff visit different schools, but by committing to help students, by ensuring that not one minute of support is reduced for even one student, and by engaging with staff throughout the process, positive change can be made.

## LESSON <br> 1 <br> Superintendent leadership is critical

It might seem obvious that the assistant superintendent for special education or the ELL director should lead any effort to revamp remediation and intervention staffing and scheduling. This has not been the path to success in most districts, however. Only superintendents can provide the urgency, political cover, and clout needed to implement changes in such a sensitive and complex area.

There are too many divergent stakeholders for the leader of just one department to chair the effort. For example, when one district revised its staffing guidelines for special education teachers and speech and language therapists, the special education director, the speech and language director, special education teachers, therapists, principals, and parents were all active participants. Each had different concerns.

Since the district was experiencing dramatic budget cuts in general education, special education staff were naturally wary of creating guidelines that might lead to staff cuts. Staff anxiety quickly made its way to the speech and language director and the special education director. Principals were also protective of their staff, and feared any new guidelines would just be code for staff reductions, leaving schools unable to meet IEP requirements. Parents naturally were concerned that services would be cut. At the start, all but the superintendent wished the effort would fade away.

Despite the resistance, the superintendent championed the effort and held firm. Her resolve strengthened the special education director's commitment, which in turn buoyed the speech and language director and the parents. The superintendent assured the principals that the process would not leave schools understaffed, but actually would ensure appropriate support in each school.

In another district, a hands-on superintendent realized that it was her attitude of "We're going to do this" that was key to propelling this effort; the number of hours she spent on this effort was far less important. She inserted herself at just a few critical times, but did so with energy and determination. In all, she attended just four key meetings in the course of the school year. The initial meeting included special education administrators and about five teachers. Those at the first meeting became the scheduling guideline committee, a small group charged with analyzing data and creating guidelines that would best serve the students in the district. The

> The superintendent's message was clear: "We want to be inclusive in the change, but change is coming."
superintendent's presence at this kickoff meeting conveyed the importance of the effort and greatly empowered and energized the committee members.

The second meeting was an informational session with the principals. The superintendent's message was clear: "We want to be inclusive in the change, but change is coming." She attended two other key meetings with staff, reiterating her commitment to the change. These were not detailed working sessions, but created urgency and conveyed the certainty of change. Even though the director of special education had become the true champion of the work, only the superintendent could have maintained the momentum when the inevitable pushback arose.

Part of good leadership is knowing when to step away. For example, when all the speech therapists met to review draft guidelines, the superintendent was purposefully absent. This allowed for concerns, feedback, and pushback to be voiced freely. Knowing there was strong support from the superintendent, the special education director was able to navigate some tough conversations.


Focus equally on improving student achievement and increasing equity for staff and students

No one wants to balance the budget on the backs of needy students. Any attempt to shift resources from special education, ELL, or other remediation and support services can seem harsh and can engender stiff opposition. The message and actions must stay focused on helping students, staff, and the budget all at the same time.
For example, one district made clear that the district's development of special education staffing guidelines would not take a single minute of service away from students. To expedite the process and dramatically reduce the pushback, he also declared that the district would not change the service delivery model either. The district would just apply data-driven staffing rules to current practices to better manage current approaches. "We will serve students more efficiently, but not differently," he stipulated.

This was an important decision; a number of more radical redesigns had been considered, such as shifting from co-teaching to other less costly forms of academic support. He reasoned that a move away from co-teaching might free up more funds, but it was too much of an emotional shift. Holding service delivery constant at the start made it easier to bring an
analytical approach to remediation and intervention staffing.
In another district, messaging included a tight linkage to the reality that state funding was being reduced dramatically and that services in general education were being cut. If special education services could be managed more efficiently without reducing services to special education students, then other services to students could be restored. This was about adding back in other places, not about taking away.

Stressing that the effort is more than just about efficiency helps win supporters. When a district discovered from detailed data analysis that workloads varied widely among staff, improving equity became important. While some staff spent close to $70 \%$ of their week serving students, others were spending just $30 \%$. All realized that having guidelines would create equity and address the underlying resentment among those who had to work more than others. There is almost always a high desire to make things more fair; data-driven staffing guidelines are part of the solution.

Debunking the myth that changes in group size harm students is also important. Sharing hard data that shows many teachers in the district already have larger groups than others lessens the concerns among staff that any change will be unreasonable.

LESSON


## Sharing good data eases the way

"This just isn't possible. I'm already working at home and on weekends." "My staff is already stretched too thin." These are often the first comments uttered when discussing the concept of shifting resources by managing remediation and intervention staffing through guidelines.

For example, in a meeting with upward of 25 speech and language pathologists, staff shared that they were spending about $90 \%$ of their time with students and nothing more could

## The need for faith and persistence

Ahallmark of focusing on improving effectiveness and cost-effectiveness in remediation and intervention is that so many smart, committed people will say it cannot be done. The story of one mid-sized urban district highlights the need for both faith and persistence.

Facing a budget gap that exceeded $\$ 50$ million, the district decided no stone should remain unturned. A study a few years earlier indicated that compared to like-districts, it had $50 \%$ more related service providers (speech, occupational therapy, and physical therapy). Dusting off the old report, the question was asked, "Is there an opportunity to provide all the same services at less expense?" "No," said the assistant superintendent for special education. "It would be illegal!" he added. "No," said the director of therapeutic services. "We are so understaffed that we have taken to using outside contractors to supplement district staff." "No," said the human resources director. "Our collective bargaining agreement places very tight limits
on staff caseload." The deputy superintendent finally said, "They can't all be wrong. They are much closer to the frontline reality than I am."

It took faith in the benchmarking data to push back and ask again, "How is it that other districts are much more efficient?" "We are different from those other districts," all replied with confidence.

Persistence trumped certainty. Despite the belief by many that it was a fool's errand, the district collected paper schedules from every therapist in every school. The results surprised many. With just a few hours of analysis, it became clear that some therapists taught well below the collective bargaining minimums, which were quite conservative to begin with. Simply by assigning these underutilized staff to cover schools that needed extra help, the number of outside contractors could be reduced. A couple days of data collection and analysis revealed $\$ 2$ million in savings, which were realized the following year.
be squeezed from them. "Just look at my week and you will see!" This was not resistance to change; it was an honest, deep-seated belief. However, it was not true.

Notwithstanding the fact that the district had 1.4 times as many therapists as like districts, neither staff, principals nor many special education administrators believed gains could be had. It seemed very unlikely that a consultant's report and a central office analysis could dislodge this misconception. The district decided to do exactly as the staff suggested and "look at their week." Each staff member was asked to track his or her activities for a week, session by session, hour by hour, and submit the information. Only by going straight to the source, staff members themselves, would the data be believable.

An analysis of the data indicated that, on average, therapists were spending $32 \%$, not $90 \%$, of their time with students. When discussing guidelines for how much time a therapist should spend with students, some staff and administrators quickly concluded that if current practice was indeed that just a third of the week was spent with students, then that must be reasonable. District leaders reached out to another district to benchmark and calibrate their practices. The other district, which was very similar, had also collected schedules from their staff. In that district, therapists were spending $55 \%$ of their time with students; that district was seeking to increase this to $65 \%$, and eventually up to $75 \%$. The misconception that $32 \%$ was the maximum possible began to erode.

During the rollout of new staffing guidelines, continuing to share data can be valuable. During the first week of a new school year with new schedules and fewer staff (but no change in services to students), screams of angst were erupting. The new workload is "impossible, overwhelming, and unsustainable." While wanting not to backtrack, but also wanting to be responsive, one district chose not to engage in a theoretical discussion of "too much" versus "just enough." The district again turned to sharing hard data. Staff once again submitted their actual new schedules to district leaders. On average, staff had only increased their time with students by less than 2 hours a week, well below the district targets. It just felt like much more.

## LESSON

## Create formal written guidelines

Specificity helps create clarity and transparency. In general education, workload and other guidelines are typically clear and unambiguous. A district's target first grade class size might be 25 students, not "around 20 to low 30s." Remediation and intervention staff often have much less precise expectations on their time.

Administrators at first often doubt that precision is possible. The students served are different, with different IEPs, and
different needs and intensity of support. The most common pushback is "one child doesn't equal another child," so precision isn't possible. The students are different, but expectations for adults need not be.

The guideline writing committees quickly learn that they cannot reasonably target how many students each staff member should support, but they can set guidelines about many other aspects.

One committee was able to quickly develop direct service and grouping guidelines. The staff themselves helped establish how much time a therapist should spend in direct service with students on a weekly basis, and how many students could be grouped together. They also set a much more nuanced grouping policy, varying it based on the type of need and the age of the students; they also limited groups to similar aged students, with larger age ranges at the higher grades. Having front-line staff help craft the guidelines brought needed expertise to the table and minimized criticism. Finalizing the direct service expectations, however, did require direct involvement of the superintendent, as it is difficult for staff to set their own workload.

The guideline committee also used both internal and external benchmarks in setting guidelines. An internal benchmark looks at what each district staff member is already doing. For a teacher currently working with children just a third of the week, spending $65 \%$ of the week with students might seem "impossible" until they realize that many others in the district are already doing exactly this. External benchmarks can also be a game changer in redefining what is reasonable.

There is no wrong or right set of guidelines, since each district has a unique context, culture, and community expectations, but being specific increases efficiency, equity, and transparency.

## LESSON 5

## Minimize staff discomfort by offering control over most decisions

Districts often wrestle with how fast to implement changes in staffing based on their newly developed guidelines. A "rip the Band-Aid off fast" strategy of implementing the guidelines in one fell swoop can likely create enough pushback from staff that the whole effort could be scuttled.

Since setting guidelines often leads to fewer staff and staff being assigned to different schools, implementing data-driven staffing guidelines can be very unsettling to teachers, even if there is no impact on students. Based on conversations with staff, it has become clear that there are a number of issues important to them, but not critical to the district:

- Allowing staff to remain teaching at their current level - elementary, middle, or high school - was very
important, even if they are technically able to work at any level.
- Allowing staff to prioritize which schools they work in was very important.
- Limiting the number of schools supported by one person was also appreciated.
- Since increasing direct service with students means reducing hours in meetings, allowing staff to have input as to which meetings they attend made it easier to accept going to fewer meetings. For example, in one district, staff greatly valued attending meetings $31 / 2$ days out of five. It was a mistake to have assumed that the district was "freeing" them from attending all these meetings.
These and other decisions impacted where staff worked, but not how many staff worked. They are budget neutral. Allowing staff to have significant impact on these decisions eased the pushback. For example, some districts provided draft schedules to staff to get their feedback and allowed many modifications, as long as it did not increase staffing or decrease service to students. The results can be surprising. In one district, for example, many staff opted for less equity (having more or less time with students than their colleagues) in exchange for not having to share a school with other therapists.

Getting staff feedback is helpful, but not always fun. Often the meetings turn into gripe sessions, with questions as to why

# The students are different, but expectations for adults need not be. 

any changes are needed. However, giving staff a forum to vent and to identify areas to be tweaked actually eases the process. Staff want to be heard, but strong leadership is needed to stay the course.
The most challenging question is how quickly to reduce staffing when reductions are warranted based on student needs and the new guidelines. Most districts phased in many of the changes through attrition. As teachers retired or moved away, the staffing guidelines determined whether the positions would be replaced. Often, districts decided to reach their targets over a roughly three-year period.
If the district can and will phase in the changes via attrition, it helps to state this approach upfront. Job security is obviously a top concern, and addressing this issue early helped staff participate in the planning since they knew they would not be working a colleague or themselves out of a job.

## Leadership and good listening

Better managing remediation and intervention services is possible. A strong superintendent, armed with good data and bolstered by strong resolve, needs to listen to staff concerns and to make accommodation when possible, but needs to hold firm on a few key decisions. Students will continue to be well served, staff will benefit from more equitable distribution of work, and the budget will come out ahead.

## OPPORTUNITYBRIEF

# FINDING POLITICALLY ACCEPTABLE WAYS TO INCREASE CLASS SIZE OR TEACHING LOAD: Freeing Up Funds for Strategic Priorities 

DISTRICT MANAGEMENTCOUNCIL ${ }^{\circledR}$

Class size is perhaps the single largest driver of school spending, and small changes can have a huge impact on total spending. Increasing class size by two students, from 24 to 26 students for example, can free up to $\$ 11$ to $\$ 20$ million dollars in a typical district of 50,000 students. Nearly all district leaders wrestling with tight budgets are well aware of the impact class size has on spending, but they are also highly cognizant of how unpopular raising class size can be.

Class size matters far less than the public thinks. Yet, despite all the research, very few parents, teachers, principals, or school boards want to raise class size; in fact, their primary goal at budget time is often to reduce class size. At least 34 states have legislated class-size limits or provided incentives for class-size reductions. ${ }^{1}$

Research on class size is unambiguous: the quality of classroom instruction matters far more than the number of students in the class. After being in small classes averaging 15 students for four years from kindergarten through third grade, these students
 in the well-known Tennessee STAR program outperformed their classmates who had been in regular classes averaging 22 students by about 0.22 standard deviations, the equivalent of having received about three months more of schooling over the four years. This class-size effect was concentrated in the first year that students participated in the program and the positive effects were largest for black students, economically disadvantaged students, and boys. ${ }^{2}$ The effectiveness of the teacher, however, had a dramatically greater impact: Tennessee students taught by the top $25 \%$ of teachers made 1.5 years of learning progress each year, three times the annual progress of students taught by teachers in
the bottom quartile. ${ }^{3}$ The research is clear: freeing up funds to improve teacher effectiveness or to expand the proportion of students taught by highly-effective teachers matters much more than class size.

Closely related but not identical to class size are the concepts of teaching load and student load. The former is the total number of class periods in a school day that a teacher spends teaching students; the latter is the total number of students for whom a teacher is responsible in a day or week. Much less research has been done on these elements of school organization, yet most districts have limits on both student load and teaching load that vary little, are not often examined, and seldom change. These limits, like those of class size, are held dear by most teachers, yet, like class size, they can dramatically affect resource allocation options.

Because teachers' salaries and benefits typically comprise $70 \%$ or more of a district's total budget, adding a single student to every secondary class in a typical school district of 50,000 students can produce savings of close to $\$ 4$ million. Since most secondary teachers teach five classes, if this were increased to six, the total savings could be up to $\$ 20$ million. Some of these savings can be reallocated to provide additional compensation for teachers with increased loads.

That said, savings are not the only reason to consider selectively raising class size and teaching loads: if the increases mean that more students are being taught by more effective teachers (and fewer are being taught by less effective teachers), then students benefit. Similarly, students benefit if the funds saved are reallocated to implement or improve practices found to have substantial positive impact on teacher effectiveness (such as common planning time for teacher teams or high-quality mentoring and coaching) and/or on other practices shown to improve student learning (such as adding reading teachers, preserving high-quality art programs, or implementing strong tiered systems of academic or behavioral supports and intervention). Raising class size both to improve teacher effectiveness and to allow more students access to effective teachers can be a very high-impact use of limited resources.

Given the absence of evidence to support marginal reductions in class size or oppose marginal increases, and given the potential benefit that selectively raising class size and teaching load have for improving student learning, it is critical to explore ways to increase the appeal to teachers, parents, principals and other stakeholders of selectively raising class size and teacher

> Larger class sizes or student loads can be made more appealing when they are a consequence of an instructional delivery model.
load. A number of strategies for increasing appeal and reducing resistance are emerging.

## Create incentives for teachers to volunteer to teach larger classes

Teachers are often the first to resist having larger classes, and teacher resistance often influences and intensifies resistance from parents and principals. On the other hand, if a teacher wants to teach a larger class (or classes), parent and principal resistance fades. And if the teacher is known to be an effective teacher, resistance might turn to outright support.


Offering to pay teachers more for volunteering to teach larger classes is a promising approach - one that can yield substantial savings and opportunities to reallocate resources to high-impact services and strategies.

For example, if a teacher is willing to increase his/her average class size from 24 to 28 students, the typical district could pay this teacher $\$ 5,000$ extra each year and still save or reallocate another $\$ 7,500$. This is a $10 \%$ net reduction in per pupil teaching cost, assuming that the average teacher earns $\$ 75,000$ with benefits.

Currently, few districts offer extra pay as an incentive for larger classes, but paradoxically, many offer extra pay as a penalty for larger classes. In states like Florida with tight class-size limits, or in districts that have collective barging agreements that limit class size, there is often a financial penalty for exceeding the caps. The district must compensate the teachers who have oversized classes. In many situations, it is more cost-effective to increase class size and pay the penalty. Turning this rule on its head by asking teachers to volunteer for this extra pay turns a penalty into an incentive.

Another variant is to encourage secondary teachers to teach more periods a day. If just five teachers in a district each teach a sixth class, a sixth teacher need not be hired (Exhibit l). The approximately $\$ 75,000$ saved would be available for extra pay for the teachers teaching an additional class, and would leave some funds to be reallocated. This idea might be appealing to teachers for a number of reasons. First, the extra compensation may seem very fair, since it represents an increase in salary roughly proportional to the increase in classes taught. Schools that have extended the school day have often found that this proportionality approach resonates with teachers.

## Definitions: Student load and teaching load

Student load is the total number of students for whom a teacher is responsible; it is closely associated with class size, but is not always the same. While a first grade teacher who teaches 25 first grade students has a student load of 25 , a high school English teacher who teaches 5 classes, each with 25 students, has a student load of 125 .

Typically, elementary art, music, and physical education specialists have dramatically higher student loads because they teach each student only once or twice each week; special educators and other support personnel typically have dramatically lower student loads because their class size is typically much lower, and some special educators teach the same students for more than one period a day.

Teaching load is the total number of class periods in a school day that a teacher spends teaching students; teaching load operates independently of class size, but can affect student load. In some schools, teaching load for some teaching positions can be as low as $40 \%$ of the school day.

In many districts, elementary teachers teach a higher proportion of the school day than secondary teachers. Often, the only time elementary teachers are not teaching their students is when their students are at lunch or at a specialist class (music, art, physical education). Secondary teachers, on the other hand, typically have one full period free for preparation each day and spend another period each day supervising students in the cafeteria or in study hall.

TEACHING LOAD VS. STUDENT LOAD


Additionally, since many younger teachers actually work second jobs, this can be more appealing to teachers than rushing off to a second employer.

As a sixth class, a teacher might be invited to teach an intervention class to which struggling students in his five other classes are assigned (this practice is often called "double time"). The teacher's student load would not increase, and the teacher would have the opportunity for more time to support his struggling students.

## ? <br> Improve the odds and outcomes

The impact on student achievement will be dramatically increased if the opportunity to teach larger classes or more classes is offered only to teachers who have been identified as highly effective through the district's evaluation system and student growth scores. The increased student load and teaching load is an acknowledgement of these teachers' abilities,

Exhibit 1

| TYPICAL TEACHER SCHEDULES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Teacher 1 | Teacher 2 | Teacher 3 | Teacher 4 | Teacher 5 | Teacher 6 |
| Class 1 | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 |
| Class 2 | Class 2 | Class 2 | Class 2 | Class 2 | Class 2 |
| Class 3 | Class 3 | Class 3 | Class 3 | Class 3 | Class 3 |
| Class 4 | Class 4 | Class 4 | Class 4 | Class 4 | Class 4 |
| Class 5 | Class 5 | Class 5 | Class 5 | Class 5 | Class 5 |
| TEACHER SCHEDULES WITH INCREASED TEACHING LOAD |  |  |  |  |  |
| Teacher 1 | Teacher 2 | Teacher 3 | Teacher 4 | Teacher 5 | Teacher 6 |
| Class 1 | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 |
| Class 2 | Class 2 | Class 2 | Class 2 |  | Class 2 |
| Class 3 | Class 3 | Class 3 | lass 3 |  | Class 3 |
| Class 4 | Class 4 | ass | Class 4 |  | Class 4 |
| Class 5 | ass 5 | lass 5 | lass 5 | ass 5 | Class 5 |
| Class 1 | Class 2 | Class 3 | Class 4 | Class 5 |  |

[^4]and is an opportunity to teach more and earn more. If parents know that the option of larger class size is only available to teachers identified as highly effective, then parent resistance is likely to also diminish. Many suburban schools have long, perhaps quietly, used such a strategy to get parents to accept otherwise less desirable options. It is common to see the "best" (a.k.a very popular) teacher in a school become the first to pilot new ideas such as inclusion for students with significant special needs, multi-age classrooms, or to be the one to teach the class that must be bigger than the rest. Often, parents happily accept their child's assignment when they know the teacher is strong. A way to make larger class size even more attractive to
parents is to offer parents the choice: just as highly-effective teachers can volunteer to "teach larger classes," so, too, could parents be allowed to opt in.

Perhaps the "double time" model represents the ultimate win-win: students, teachers, and the budget all benefit. First a brief description of the double time model, which is sometimes called double-dipping, double-dosing, or core-plus-more. Regardless of the name, the idea is the same. Most secondary students receive, for example, one period of math and one period of English each day. Students who have disabilities or students who struggle and are at risk of dropping out often receive some form of extra help. This might take the form of a

## Exhibit 2

## SHIFTING TO DOUBLE TIME



[^5]resource-room period each day with a special education teacher or a study-skills class or a homework-help class with an interventionist, most often a Title I tutor or special educator.

Double time replaces this extra help with a second period each day of either math or English taught by a regular math or English teacher (Exhibit 2). Some districts have seen big gains in student leaning by shifting the extra help to general education teachers. Double time, unlike its alternatives, tightly connects the extra help to core instruction and provides a teacher with deep content expertise. Teachers will likely be pleased to have extra time each day with "their" struggling students. Finally, if each teacher who opts in to teach a sixth class teaches one double time class for students from their other five regular classes, they have not increased their student load while increasing their teaching load and increasing their compensation.

## Adopt instructional delivery models that encourage larger class sizes or student loads

Larger class sizes or student loads can be made more appealing to both teachers and stakeholders when they are a consequence of an instructional delivery model that is likely to yield better student learning. Two such instructional delivery models hold promise:

## - Blended learning

Blended learning combines independent and smallgroup, technology-supported learning with more traditional face-to-face teaching. While still in its infancy in public schools, blended learning can do one of two things. It can enable a "time-technology swap" in which students engage in digital learning for part of the day, often in substantially larger-than-typical classes supervised by paraprofessionals rather than classroom teachers. The time students spend in digital learning frees up time for highly-effective teachers to teach more students and expand their impact beyond what traditional approaches and schedules allow. It can also allow fewer teachers to reach the same number of students (Exhibit 3).

Besides the increasingly well-understood potential for individualization that digital learning can bring, digital learning can also bring greater equity and access. For example, advances in live, remote instruction can bring highly-effective teaching to urban schools and hard-to-reach rural schools that most need highly-effective teachers.

Effective blended learning is not easy. It requires careful planning, complex scheduling, carefully chosen and carefully used digital tools and assessments, and well-crafted, differentiated staffing roles. Yet, its promise of greater individualization, improved access
and equity, and improved outcomes and productivity is substantial.

- College-format, lecture-style classes at high school

Another instructional delivery model that can be used at the high-school level to reduce costs, improve student readiness for college, take advantage of teacher expertise, and give more students access to highly-effective teaching is greater use of college-format, lecture-style classes. In these classes, some periods may have 100 or more students in a single class for a lecture, followed later in the week by smaller classes for discussion, review, and targeted help. At first blush, this might seem undesirable, but nearly all college freshmen will experience such classes. Students would develop skills and habits that will hold them in good stead when they face their first lecture courses in college. As some districts encourage students to take college classes during high school (so called dual-enrollment classes), they actually send students to large lecture/ small group courses away from school, but do not consider such formats under their own roof.

Exhibit 3

TRADITIONAL ELEMENTARY SCHOOL SCHEDULE


BLENDED LEARNING MODEL EXAMPLE

| Class 1 | Class 2 | Class 3 | Class 4 |
| :---: | :---: | :---: | :---: |
| Teacher A | Teacher B | Teacher C | Learning <br> Lab |
| Teacher A | Learning <br> Lab | Teacher B | Teacher C |
| O | Tener | Teacher A | Learning <br> Lab |
| Teacher C |  |  |  |
| Learning <br> Lab | Teacher A | Teacher B | Teacher C |
| Teacher |  |  |  |

[^6] Computer Labs Can Enable New Staffing Structures, and New Savings" by Suzanne Simburg and Marguerite Roza, 2012.

Courses such as biology, U.S. History, and American literature could be good candidates for this format. A high school can challenge its most gifted presenter to design the lecture series. The teacher might use the auditorium and have access to first-rate presentation technology and software, including such tools as electronic "clickers" that make it possible for the teacher to pose questions, display student responses, and monitor individual student engagement. The lecture can be recorded for use by absent students and reviewed later by students and discussion leaders.

The financial impact (as well as the learning benefits) can be meaningful. Let us look at just one popular course offering: junior-year U.S. History. A 4,000-student high school with 1,000 juniors and an average class size for social studies of 25 requires 40 sections of U.S. History taught by eight full-time teachers. Often, scheduling limitations require more than eight social studies teachers to cover the 40 sections. Some teachers might teach five sections of the course, while others might just teach one or two, and fill the rest of their teaching schedule by teaching with other social studies classes. Those teaching only one or two sections often have neither the time nor expertise to make the ongoing improvements to the curriculum and to their instruction to ensure a highly engaging and effective learning experience for students. Reducing the number of staff needed to teach a given course can thus also increase the quality of the instruction, as well as reduce the cost. This is doubly true when only highly-effective teachers are asked to lead the large sections.

Here is what a college-style delivery format might look like:

## For students:

- Students attend three lectures each week with 250 other students.
- For the two other periods each week, students participate in a discussion, follow-up, and homework review session with approximately 25 students. These sessions are led by the lecturer or another U.S. History teacher.

For teachers:

- A master teacher delivers the lecture with two other U.S. history teachers attending to ensure continuity of content and to provide professional development.
- The lecturer and other U.S. History teachers also lead discussion sessions.
- The lecturer and other U.S. History teachers meet together twice each week during extra-planning periods to examine student performance data, adjust instruction, and plan discussion sessions.


## Great Digital Instruction

Public Impact, an education think tank, highlights that blended learning is not a strategy designed to reduce the importance of teachers; instead, it can be a strategy designed to enhance the role of highlyeffective teachers. To that end, it has spotlighted seven characteristics of effective digital instruction, all of which "allow digital instruction to save teachers time that they can reinvest in deeper learning, differentiated in-person instruction, and team collaboration:

Alignment: Aligns units of instruction with the school's curriculum, below and above grade-level standards
Advancement: Allows advancement at a personalized pace, with students able to autonomously advance or repeat lessons until a topic is mastered

Assessment: Includes frequent assessment of mastery and reports of individual and group learning trends that teachers can use to monitor student learning and inform instruction

Advice: Recommends next instructional steps for each student and groups of students, including in-person and digital follow-up

Accessibility: Accessible to all students who have access to software, hardware, and Internet connections

Application: Includes analytical, creative, and conceptual thinking units to apply knowledge and skills

Accountability: Monitors digital instruction effectiveness with different students and makes changes or prompts teachers when changes are needed." ${ }^{1}$

[^7]From a productivity perspective, this plan requires 4.8 FTE compared to the traditional delivery method, which required 8.0 FTE; this represents a $40 \%$ reduction. More importantly, students are gaining access to exceptional teaching that is regularly strengthened by collaboration among a core group of teachers. For teachers, this provides a strong teamwork environment and embedded professional development through observing a highly-effective teacher and planning as a team.

## Change the structure of teaching and class assignments

The traditional model in most schools, kindergarten through fifth or sixth grade, is to have one teacher, sometimes supported by a part- or full-time paraprofessional, for each group of approximately 25 students. A typical 600 -student K-5 school might have four classrooms at each grade level, each with 25 students and one teacher, and perhaps a paraprofessional shared among some or all four classrooms. This familiar set-up has hardly changed in generations, except perhaps by the addition of a paraprofessional.

That is an expensive model, and one that assumes every teacher is equally effective and will be effective working mostly in isolation. It also assumes that districts will have ever-increasing revenue, thus eliminating the need to manage productivity or class size.

Some districts are beginning to try new models of teaching and class assignments that are designed to take full advantage of the strengths of the district's most effective teachers and to better develop novice teachers. In this emerging model, both class size and average student load also rise, but teachers, parents, and students can all benefit, thus reducing pushback.

At the heart of this new elementary teaching model is a shift away from assigning a room full of students to an individual teacher to having a team of teachers work collectively and flexibly with many students. For example, in a school with 100 first graders, the traditional staffing model would be four teachers each with 25 students, and likely a paraprofessional in at least one class to support a few students with disabilities and/or English language learners.

In the new model, all 100 students would be assigned to a team of three teachers and one or more assistants. Most importantly, the team has a clear leader, the master teacher, who is proven to be a highly-effective teacher and is charged with the ultimate responsibility for all 100 students' learning. The master teacher directs the grouping and instruction across all 100 students so that all 100 students benefit from the expertise of the master teacher.

In addition, the master teacher is responsible for developing the skills of her/his teammate teachers. Instead of hiring paraprofessionals as assistants, hiring full-time paid student teachers may provide a way to groom future talent.

Schools in Charlotte-Mecklenburg (NC) and Metropolitan

Nashville Public Schools (TN) are working with the non-profit Public Impact to develop this model. Four schools in West Charlotte (NC), for example, launched in fall 2013 new models built on these principles. The district had 708 applicants for the new positions in the spring of 2013, roughly half from within the district and half from outside the district and/or state. ${ }^{4}$

Metropolitan Nashville Public Schools is an example of a district that has developed a job description for a paid, fulltime student teacher who can learn and work in the team environment. Its compensation totaling approximately $\$ 15,000$ is enabling them to attract highly promising candidates: there were 100 applicants in the first three weeks of posting the positions.

While this strategy is potentially a big step forward in putting more students in front of highly-effective teachers and in building a stronger system of developing teachers, it is also a way of increasing class size without the usual resistance. Because students are grouped and regrouped throughout the day, the model changes the very idea of class size. Perhaps 100 students will be together for morning announcements, 50 for listening to a story, 34 for some instruction, and five or six in small groups with staff circulating.

As the example below shows, costs can drop by $10 \%$, while paying highly-effective staff more and providing far more support to new and developing teachers. Since this model

## Exhibit 4

COST COMPARISON OF TRADITIONAL AND TEAM STAFFING

|  | Traditional <br> Staffing | Team <br> Staffing |
| :--- | :---: | :---: |
| Students | 100 | 100 |
| Staffing |  |  |
| Master teacher | $\$ 50,000$ | $\$ 50,000$ |
| Teacher A | $\$ 50,000$ | $\$ 50,000$ |
| Teacher B | $\$ 50,000$ |  |
| Teacher C | $\$ 50,000$ |  |
| Teacher D | $\$ 15,000$ | $\$ 15,000$ |
| Para | $\$ 80,000$ | $\$ 60,000$ |
| Student Teacher | $\$ 295,000$ | $\$ \mathbf{2 6 5 , 0 0 0}$ |
| Benefits |  |  |
| Total |  |  |

Source: The District Management Council, based on a real district example
provides round-the-clock professional development and coaching, other professional development costs might be reduced as well, so that the savings could approach $15-20 \%$ or more (Exhibit 4).

Several of the models being developed in Charlotte (NC) and elsewhere make use of blended learning, which they see as a perfect complement for the team structure - and possibly essential to its success. Public Impact describes it as a "better blend."

## Judo, not karate

A key element of judo is to use the opponent's weight and momentum to your advantage; karate, by contrast, tends to rely more on blocking and forcefully attacking. It seems that many past efforts to raise class size have been frontal assaults (backed by good data) on stakeholders who just do not want more students in a class. As budgets tighten and as highlyeffective teachers are more easily identified through datadriven evaluation systems, districts can take a page from judo's playbook. Crafting plans to raise class size, student load, and teaching load that generate support rather than pushback will serve students and the budget well.

[^8]
## FINDING POLITICALLY ACCEPTABLE WAYS TO INCREASE CLASS SIZE OR TEACHING LOAD: <br> Freeing Up Funds for Strategic Priorities

Despite research that shows the relatively small impact of class size on student learning, the suggestion of increasing class size can ignite significant teacher, principal, and parent pushback. Given the substantial potential to free up funds for strategic priorities, strategies for increasing the appeal and reducing the resistance are often worth the effort.

HERE'S HOW TO GET STARTED:

## 1 AVOID RIGID CAPS ON CLASS SIZE

Many districts have class size targets that have become de facto caps. Developing broader guidelines and a range of acceptable class sizes increases stakeholder comfort with class-size variation and make it easier to change class sizes in the future.

## 2 STOP TALKING ABOUT "CLASS SIZE"

In many districts, "class size" is a third rail, not to be talked about in polite company. It is easier to overcome political pushback and resistance if the conversation is centered on expanding the reach of effective teachers or highlighting the other reforms that modest class-size increases afford. Even a focus on adult-to-student ratios, instead of class size, can help ease the conversation.

## 3 GET TEACHERS ON BOARD BY PROVIDING INCENTIVES

If a teacher wants to teach larger classes, parent and principal resistance often fades. Strategies such as providing additional compensation for teaching larger classes or have bigger teaching loads, making teaching bigger classes voluntary instead of required, or making teaching bigger classes part of a teacher career path can help win teacher support.

## 4 CHANGE THE INSTRUCTIONAL DELIVERY MODEL AS WELL AS CLASS SIZE

Larger class sizes or student loads can be made more appealing when they are a consequence of an instructional delivery model that is likely to yield better student learning. Blended learning and college-style lecture classes at the high school level, or linking larger classes to teachers of proven effectiveness are new instructional delivery models that are good for the budget and, likely, good for students.

## 5 INCREASE STUDENT LOAD FOR HIGHLY-EFFECTIVE TEACHERS

A new approach groups many students, say 100 students, to a group of teachers, perhaps three teachers and an aide. In this model, one of the teachers is a master teacher, who is paid more and takes responsibility for developing and coaching the other teachers and assistants.

[^9]$$
\text { DISTRICT MANAGEMENT COUNCIL® }{ }^{\circledR}
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## LESSONS FROM THE FIELD

# FINDING POLITICALLY ACCEPTABLE WAYS TO INCREASE CLASS SIZE OR TEACHING LOAD: Freeing up Funds for Strategic Priorities 

## DISTRICT MANAGEMENTCOUNCIL ${ }^{\circledR}$

As districts seek to balance tight budgets and invest in strategic priorities such as instructional coaching, professional development, early literacy or other high-impact levers for raising achievement, they must look to shift existing funds to these new uses. District leaders know well that small increases in class size can free up significant dollars. All too often, however, this option is quickly dismissed due to the substantial pushback that comes with most discussions of raising class size. Fortunately, some districts have found ways to minimize the resistance or even make larger class sizes popular.

## Some districts are turning larger class size into a high-impact reform strategy in and of itself.

## Lessons from the field

## Lesson

1

## Lesson

2

Lesson
3

## Lesson

4
Create a culture that is comfortable with variation in class size

This is no small matter, since increasing the average class size by just two students in a typical district of 50,000 students can free up approximately $\$ 11$ to $\$ 20$ million a year or more. Some districts have moved beyond increasing class size solely for the financial savings, and are turning larger class size into a high-impact reform strategy in and of itself.

These districts are placing more students in classrooms of highly-effective teachers and using these larger classes as the foundation for a comprehensive redesign of the role of the teacher. This is a newly emerging area, and the first pioneers have learned some valuable lessons.

## LESSON <br> 1 <br> Stop trying to convince skeptics with research data

In an effort to fund more effective reforms, advocates of larger classes often point to research as compelling proof that in most cases, adding a few students to a typical class will not hurt learning. While the research is very solid, it has failed to convince many parents, teachers, and principals. Reiterating the findings seldom garners many converts.

Some districts have more effectively changed opinion by collecting and sharing district-specific data to make the point. One large, urban district, for example, widely shared data from its own schools demonstrating that the effectiveness of the teacher in the room, not how many children were in the room, correlated highly to student achievement. Another district used an independent outside evaluator to show that despite its higher-than-average class sizes, the district was outperforming similar districts.

## LESSON

## Win the support of teachers and others will follow

Districts that have raised class size without significant resistance have made concerted, comprehensive efforts to turn teachers into advocates, not reluctant participants. They recognized that if the teachers are onboard, their enthusiasm will win over parents and principals. National research suggests that on the whole, teachers have complex feelings about class size. Within limits, teachers seem to view whatever class size they are used to as acceptable, but they regard even a small increase as problematic. This is equally true whether the district typically has 21 students per class or 29. This comfort with the familiar suggests that as districts take advantage of opportunities to raise class size, the larger classes will, in time, feel like the new normal and will be accepted as reasonable.

Districts have taken a number of routes to win teacher support for larger classes:

- Provide additional compensation for larger classes or bigger teaching loads, but on a volunteer-only basis

Staff who find the idea of larger classes or bigger teaching loads unattractive or even unacceptable are not forced into opposition as it is on a volunteer basis. And, many teachers, especially younger teachers who work second jobs, prefer the opportunity to earn more by adding responsibilities to their first job. In some cases, districts can use existing funds for compensation since many collective bargaining contracts include that a penalty be paid to teachers who are forced to have classes above a certain size. By seeking
volunteers, a fine can be converted to a reward.

- Link larger classes to effective teachers

Some districts limit the pool of potential volunteers for larger classes to only highly-effective teachers. Many teachers and most unions seem uncomfortable with performance-based pay per se, but extra pay for extra work (even if limited to high-performing teachers) seems to be politically more acceptable in some districts than straight "pay for performance."

Linking class-size increases to only highly-effective teachers also wins over many parents. When parents can be certain that having a child in a larger-than-average class assures them of a highly-effective teacher, they often lobby for the bigger class. To eliminate pushback, some districts allow families to opt in or out of the larger classes, and have found that few parents refuse the opportunity to place their child with a teacher who is proven to be effective. It may be that many parents do believe the research that the teacher matters more than class size. Perhaps guaranteeing that their child will have a highly-effective teacher allows them to shed their fear of larger class size.

- Make bigger classes part of a teacher career path

One of the most comprehensive approaches to winning teacher support for larger classes is project LIFT, currently underway in Charlotte-Mecklenburg Public Schools (CMS). CMS leaders adopted the concept of seeking volunteers from a pool of their most effective teachers to teach larger classes for extra pay; to this, they added a significant career ladder component as well.

There are few options for promotion in most schools. For a teacher, the typical move up is to become an assistant principal or perhaps an instructional coach. Neither may be appealing to someone who wants to continue working with students. To tackle this problem, CMS drew on the guidance of Public Impact to establish a new job design linking top teachers to larger class sizes. ${ }^{1}$ A teacher with proven results is promoted to master teacher; the master teacher both teaches classes and oversees two or three other teachers, and gets paid substantially more. The higher pay is sustainable because the average class size of the group of teachers is larger. Linking the extra pay to more responsibility and an active role in developing and leading other teachers has been very well-received, even though class sizes increased by a healthy dose. In fact, CMS had about 30 applicants for each position in previously hard-to-staff schools. Interestingly, some of
the applicants were members of the staff who had been promoted out of the classroom, but who saw this as an opportunity to return to teaching without giving up a sense of advancement.

## LESSON <br> 3

Reframe the discussion away from larger class size

Districts that have raised class size have typically done so by reframing the discussion completely. In effective messaging, larger classes are never the goal; they are the means to an end, freeing up funds for something that is good for students.

- Frame the goal as expanding the reach of highly-effective teachers
Some districts have placed their emphasis on putting more children in front of highly-effective teachers. This positioning draws on the research that "teachers matter most," which is more widely accepted than "class size doesn't matter much."
- Frame larger class sizes as part of a larger reform agenda

Directly linking larger classes to other strategies or benefits has been a winning message in a number of districts. One district first sought support for an extended school day and extensive instructional coaching. With many wanting such reforms, it was easier to then move to slightly larger classes to fund these sought-after changes. Larger classes were the means to a highly desirable end.

This approach contrasts greatly with those districts that first identify the need for larger class size to balance the budget, and justify (accurately) that this is a reasonable student-centered response to declining resources because it will enable the district to preserve services essential to their success. While reasonable, this approach positions larger classes as less bad than the alternative. It is a necessary evil, but not a good thing, which seldom garners much enthusiasm.

Presenting larger classes as part of a comprehensive reform is also effective in garnering support. Some districts have made larger class size just a footnote in a very comprehensive redesign plan. Having larger classes with highly-effective teachers is just a piece of the reform which includes initiatives regarding blended learning, common planning time, career ladder, teacher development, recognition, extra pay, and promotion.

- Focus on adult-to-student ratios, not class size
Still another strategy involves shifting the conversation away from class size, which measures the number
of students per classroom teacher, to the number of students per adult. This latter ratio considers the number of all staff supporting students. Given that roughly half the adults in a typical school are not classroom teachers, this alternative measure can be a very reasonable gauge of support. A co-taught classroom of 28 students with one general education teacher and one special education teacher may seem large, but when presented as 14 students per teacher, it does not seem so overwhelming.
Beyond acknowledging the extra staff in many classrooms, focusing on student-to-adult ratios also encourages much of the instructional flexibility and personalization that smaller class size is often intended to create. When a school adds reading teachers, coaches, or behaviorists with the funds it has saved by increasing class size, it has actually held constant the schoolwide adult-to-student ratio. This change does not have to feel like a negative change any more. Getting a community to shift its focus from class size to adult-to-student ratio takes time and consistent messaging, but districts that have persisted have been able to get their communities to embrace the concept, and in turn, support larger class sizes.


## LESSON <br> Create a culture that is comfortable with variation in class size

Districts that have raised class size successfully typically get teachers and parents comfortable with variation in class size. Establishing a context for variation in class size can help a district raise overall average class size with no formal change to policy.

- Avoid creating a visible, high-stakes, class-size cap

Typically, districts establish class-size guidelines in response to the priority many parents, teachers and principals place on small classes. In some cases, school boards adopt policies that cap class size, especially in elementary schools. If they want to ensure their administrators have some flexibility, they set "targets" or "guidelines" rather than hard and fast maximums. Yet often those "targets" and "guidelines" become de facto caps in the minds of stakeholders, and any attempt to change the number can create a high-stakes, often bruising public debate. Developing broad "targets" and "guidelines" and building stakeholder comfort with variation makes it easier to change class sizes.

## - Embrace variation itself

Some districts avoid a fixed class-size target altogether by embracing variation and rejecting a
"one size fits all" approach to class size. This concept fits well with both principal autonomy and weighted student funding (WSF) theories of action. Under these models, individual schools are expected to customize staffing based on student need and school-based plans. One school might opt for larger classes in exchange for more reading teachers or social workers, for example. In a district that has different strategies and class sizes from school to school, it is much less newsworthy when some class sizes increase.

A related approach is to have many different targets. Some districts have different targets by grade or by subject. Some explicitly vary class size based on whether a teacher is new (warranting smaller class size) or whether a teacher is proven highly-effective (warranting a larger class size).

At the elementary level especially, another way to take the focus off a single hard-to-change class-size target is to change class size during the day through flexible grouping. In this model, 100 students might be assigned to four first grade homerooms, but then 30 students across all four classes may go with teacher A for an hour, 30 students with teacher B, and 40 to a computer lab with teacher C . The fourth teacher is then free to take on another role such as serving as an instructional coach.

- Frame variation as an issue of equity

Based in large part on the success of Montgomery County Public Schools's (MD) strategy of differentiating resources between high- and low-poverty schools, some districts embrace variability in class size as an equity issue. They acknowledge different needs and thus staff differently. Some districts reduce class size in high-poverty schools. Others actually keep class sizes small in more affluent communities where parent preference for small classes is strong; in high-poverty schools, class size is slightly increased in order to bolster staffing for more intervention and social/emotional support.

## - Respond to variation with flexibility

Still another strategy for getting a community and staff to accept larger class sizes is to accept that not everyone will, and to build in quick-response options. Some districts keep a few teaching positions in reserve to address a few school-specific concerns, rather than make global changes to their strategy. One district linked raising average elementary class sizes with the addition of a cadre of part-time, retired master teachers supporting classrooms during core instructional blocks. The community reacted favorably knowing that additional expert staff was available during part of the day; for the district, it was financially viable because the cost of stipends was far less than the cost of full-time teaching positions with benefits. The cadre of retired master teachers also made possible job-embedded coaching from experienced, effective teachers.

## Worth the effort

Raising class size is never easy, but given its significant impact on budget and its limited adverse impact on student achievement, it is an important lever for managing resources astutely. Establishing a context for variation in class size can help a district raise overall average class size with little or no formal change to policy. A slow, thoughtful approach to win the support of teachers and to acknowledge parent concerns has helped some urban districts narrow their budget gaps as well as their achievement gaps.

## OPPORTUNITYBRIEF

# STRATEGICALLY SPENDING FEDERAL ENTITLEMENT GRANTS: Making the Connection to District Priorities 

DISTRICTMANAGEMENTCOUNCIL ${ }^{\circledR}$

Ensuring that federal entitlement grants are thoughtfully allocated to support strategic priorities is an often-overlooked opportunity. The typical large district of 50,000 students receives approximately $14 \%$ of its revenue from federal funds, representing close to $\$ 1,500$ per student. By developing a coordinated budget, shifting decision-making from compliance to negotiation, and fixing misaligned incentives, district leaders can turn federal grant budgets into a much more powerful tool for student achievement and use them to help fund many of the district's strategic priorities.

## Federal rules provide much more flexibility in grant use than is typically recognized.



This opportunity represents a way to shift significant funds with only modest political pushback from the public, since federal funds tend not to be in the public eye. The greatest challenge can be overcoming central office resistance born out of fear of non-compliance; access to a few experts in the field can significantly reduce that fear.

## Complex and Confusing

Federal grants include ESEA Title I (for low-income students), IDEA (for students with special needs), School Lunch and Breakfast, Title II (Principal and Teacher Training and Recruitment) and Title III (English Language Learners).

## Grant Administration

Federal funds come with "strings attached." Use of funds is restricted, and there are extensive reporting requirements and audits to ensure compliance with allowable use. Each major grant program is administered through a separate office at the U.S. Department of Education that is charged with managing the grant based on grant-specific requirements in law, regulation, and guidance. The requirements are detailed, and vary from program by program. Administering the grant program at the federal, state, and local levels requires expert knowledge and detailed record-keeping and reporting. Expert knowledge required for one program is not easily transferable to another grant program.

This complexity has led most mid-sized and large districts to hire a grant administrator for each federal grant, replicating the federal structure of having separate offices for each major grant program. Districts typically identify for each program a manager who is not the chief financial officer and who often does not report to the chief financial officer. In many districts, the grants budgets are maintained separately from the operating budget and are often not included in school board or public budget deliberations.

Further complicating federal grant management is the reality that states can add requirements for grant programs based on their own laws, regulations, procedures, and priorities. The only caveat is that state requirements cannot conflict with federal requirements. As a result, district managers cannot rely solely on federal guidance to determine how to comply with grant requirements; they must follow their own state's requirements as well. For the same reason, district leaders cannot rely exclusively on the recommendations offered here; they will need to take into consideration their specific state context.

The complexity, silo-like management, and relative lack of visibility can lead to federal dollars being used well from a legal standpoint, but not from a strategic standpoint. Many districts have a wide range of grant-specific programs in place that are not as connected to one another, or to district priorities, as they would be if the funding streams were managed centrally by leaders charged with comprehensive district improvement.

## Why Opportunities Are Lost

Three key factors impede the effective use of federal grant dollars:

## 1- Lack of visibility and scrutiny

District leaders directly accountable for improvement in teaching and learning apply limited scrutiny to existing grant programs and options for alternative use. Limited scrutiny reduces the likelihood of ending ineffective or unaligned programs and redeploying grant resources to support higher priority and more effective practices.

Exhibit 1

## ESTIMATED FEDERAL FUNDING BY SOURCE FOR TYPICAL DISTRICT OF 50,000 STUDENTS (\$ MILLIONS)



Source: The District Management Council

## 2- Inaccurate and misunderstood information becomes institutionalized

Grant managers make decisions and interpret grant requirements all the time. Yet, experts in the field report that many districts base their decisions on inaccurate information or flawed interpretations received from federal officers, state compliance officials, lawyers, and others. Grant managers may also have misinterpreted this guidance in ways that unnecessarily limit options for grant use. However, once made, these decisions and interpretations tend to become institutionalized. Others in the district are highly unlikely to challenge grant managers because of their respect for the complexity of grants management. Melissa Junge and Sheara Krvaric, lawyers and experts in federal grants, see this play out in their partner districts: "Given the uncertainty about what you can and cannot spend money on, nearly every district we work with tends to be over-cautious. Over time, this restrained approach shifts from being the 'way things are done' to 'the way things have to be done." Despite strongly-held beliefs of many grant managers to the contrary, federal rules provide much more flexibility in grant use than is typically recognized.

## 3-Compliance incentives trump all

Each major grant program is typically run by a separate manager, and as a result, it is difficult for many managers to
resist "silo thinking." They lose the capacity to see or value a tight connection between "my grant program" and "the district priorities." The "silo thinking" is exacerbated by their sense of responsibility to ensure that "their grant program" complies with all federal and state requirements, including "allowable use" of funds, "maintenance of effort," "supplement, not supplant," and reporting.

The fear of non-compliance is real: no grant manager wants the district superintendent to receive a letter from the state department of education threatening loss of funds due to some issue of non-compliance! But fear of non-compliance has a cost: since it is easiest to meet compliance requirements with separate and/or unrelated projects, those are the kinds of projects most grant managers are most comfortable proposing and continuing. However, students are best served when all district dollars, including federal dollars, are tightly linked to the district's key strategies and priorities and are routinely evaluated for effectiveness, not just compliance.

## No-Cost \& Low-Cost Solutions

Fortunately, district leaders can take a number of specific no-cost or low-cost actions to shift more of their federal dollars towards strategic priorities. In the process, they will be leveraging existing resources more effectively and identifying new dollars to support critical efforts.

## Create visibility: develop a coordinated budget

Form follows function. Often, how a budget document is designed dramatically shapes how budget decisions are made and communicated. In most districts, district leaders and the public pay little or no attention to the many grant budgets, and focus on the district's operating budget. A coordinated budget that combines the operating budget and major grant budgets into one unified and comprehensive budget will shine a light on the district's activities as a whole. Without grant spending displayed alongside operating budget expenditures, grant
spending receives less scrutiny, is not always connected to strategic priorities, and masks the total costs of efforts that are underway. Below is a simplified example of a coordinated budget (Exhibit 2).

In the example, district leaders - looking only at the operating budget - might believe that the district is spending only $\$ 1$ million on reading teachers as opposed to $\$ 6$ million. In reality, less than $20 \%$ of the district's reading teachers and only $25 \%$ of the reading materials are funded through the operating budget.

Not consolidating and coordinating the budget often leads to uncoordinated efforts as well. The chief academic officer may evaluate the effectiveness of the reading program and staff paid for through the operating budget, but not those funded through grants and other sources. In many districts, a reading program purchased with Title I funds will use different materials even though they are to be used with the same children as the district-wide program. The reading programs are so siloed that in many districts, teachers who teach reading, but are funded through Title I, actually introduce themselves as Title 1 teachers, not reading teachers, and might even attend separate professional development sessions, thus missing key support provided by the district to help improve the instruction of reading. When a student receives different and perhaps conflicting instruction, it can undermine that student's learning.

District leaders who want to gain an initial sense of how grants are being used and how grant managers view their responsibilities may find it useful to ask each grant manager to complete the questionnaire in Appendix A. The questionnaire poses basic questions about what the grant is paying for, how those expenditures are linked to the district's strategic objectives, and how its impact is measured.

## Eliminate inaccurate and misunderstood information

District leaders should not assume that grant managers know the actual requirements of a grant, fully understand the

## Exhibit 2

A COORDINATED BUDGET

| Budget Item | Operating <br> Budget | Title I | Title II | IDEA | Private <br> Grant | State <br> Reading <br> Grant | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reading teacher salaries | $\$ 1$ <br> million | $\$ 2.9$ <br> million | $\$ 0.1$ <br> million | $\$ 1.0$ <br> million | $\$ 0.5$ <br> million | $\$ 0.5$ <br> million | $\$ 6.0$ <br> million |
| Reading materials | $\$ 1$ <br> million | $\$ 2.0$ <br> million | $\$ 0.0$ <br> million | $\$ 0.5$ <br> million | $\$ 0.25$ <br> million | $\$ 0.25$ <br> million | $\$ 4.0$ <br> million |

Source: The District Management Council
flexibility that exists in every grant, or know how to deploy grant funds to address strategic priorities. Asking the grant manager to contact the state-level grant manager to uncover actual requirements and opportunities for flexibility is also not likely to yield the results district leaders need for two reasons: 1) the grant manager will not be eager to report back to district leaders that $s / h e$ has been operating on inaccurate or incomplete information; and 2 ) the state grant manager may not be sufficiently expert or enthusiastic to acknowledge the flexibility of grant funds.

## Find your own expert

Unfortunately, it makes the most sense for the district to find its own "expert." One option is finding a lawyer who specializes in identifying the flexibility available in state and federal grant funding. Another option is to groom a non-traditional candidate to manage Title I or IDEA; for example, a principal known for successfully interpreting district rules to get important work done can be encouraged and supported to bring the same approach to managing these grants. Still another option is to push existing grant managers to adopt "outside-the-box" thinking by giving them the full support of district leadership and explicitly communicating what is desired of them.

One more option is to start the conversation with a state or federal education official whom district leaders have reason to believe may be more inclined to interpret rules in ways that support rather than impede implementation of a well-conceived idea. Experts Junge and Krvaric say that although many state agencies have compliance-oriented cultures, there are some sympathetic and innovative officers who will help districts access flexibility as best they can.

One way to encourage education department officials to say "yes" is not to ask "if" the district can do something with a particular grant, but rather "how" the district can use this grant to meet the desired objective. Even more proactively, the district can assert the district's interpretation and explain why it makes sense; this approach puts the education official in the position of needing to put together a comprehensive rebuttal based on regulation, rather than a simple and safe "no". Requesting that the official respond with options for allowable uses is another way to identify flexibility that may not have been apparent before. And, of course, in the event that the official does say "no", district leaders need not hesitate to negotiate the interpretation of the law with the official or to take the issue to a higher level in the bureaucracy. Because there is considerable variation among reviewers about what constitutes an allowable Title I cost, for example, the opportunity for negotiation seems especially rich in this area. ${ }^{1}$

District leaders seeking pre-approval from state (or federal) officials should begin these conversations months in advance of the grant due date to allow time for negotiations and to
minimize the risk of being found out of compliance. Districts that have worked with outside experts or found "can do" talent internally, and have doggedly pursued grant flexibility, have often been rewarded.

## Shift decision-making authority and accountability to district leadership

The key step to maximizing the effectiveness of federal grant dollars is to align incentives by moving decision-making authority about how grants are used to the senior district leadership level, where leaders are held responsible for achieving district priorities and are in a position to ensure that all efforts are aligned to district priorities. Moving the ultimate decision for grant use out of the hands of the grant manager and up to the leadership level also gives districts the ability to prudently manage risk, rather than avoid it at all costs.

Holding the grant manager and other central office staff partially responsible through the evaluation process for both improving academic results and aligning federal dollars to district priorities is another way to help build a mindset that spending should drive results and continued spending is contingent on past results. In reality, grant managers in most districts are evaluated nearly entirely on compliance: if grant applications are submitted on time, reports are approved by the state, and no unallowable use of funds letters arrive, then the grants manager is deemed successful. District leaders can ask more of them.

## Opportunities to Use Federal Funds Differently

All too often, when a superintendent attempts to seek greater flexibility of grant dollars, they hear, "We are already doing everything we can." Keeping in mind that some rules vary by state, we offer a few examples of flexibility that are often overlooked. Because Title I and IDEA are, by far, the largest sources of grant funds that can support district priorities for improving academic achievement, our focus is on these two programs, with some attention to two other ESEA grant programs, Title II and Title III.

## Title I

## Gain more flexibility by implementing schoolwide programs

Any school with $40 \%$ or more students eligible for free or reduced lunch may become a schoolwide Title I program, which means Title I funds can be spent to support initiatives for the entire school. Schools that have been identified as "priority" or "focus" schools in states that have obtained ESEA flexibility waivers can also operate schoolwide programs regardless of poverty level. The alternative is a targeted assistance program where the money can be spent only for direct services for specific students who are struggling academically.

Aligning Title I grant funds to district priorities is made
much simpler in schools that have opted to have schoolwide programs rather than targeted assistance programs. Funds for schoolwide programs can be used for any effort linked to the broad Title I purpose of ensuring at-risk students achieve proficiency on state academic assessments aligned to state academic standards. ${ }^{2}$ The funds can be used for a host of common strategic priorities including schoolwide reading programs and staff, positive behavior and intervention supports (PBIS), Response to Intervention (RTI), support for struggling students, training of staff and leaders in any of these areas, or improved curriculum. Funds for targeted assistance programs, on the other hand, can only be used to pay for direct services for those students specifically identified as eligible.

Through the 2000s, at the urging of federal education officials, many eligible schools moved to schoolwide program status. Yet, despite the fact that most schools in urban districts are now schoolwide Title I programs, most continue to use their Title I funds as if they are a targeted assistance school. For example, a large proportion of Title I funds are used for tutors and teachers who work in separate programs for a targeted group of students. These programs and staff are often different from the staff providing core or tier two instruction in the school. They often use different curriculum and are supervised and managed by different leaders. The services are typically so separate that they are often called "Title I services," not reading services, for example. Therefore, while it is essential to move to schoolwide program status whenever possible, it is not sufficient: district and school leaders have to take advantage of the flexibility afforded by schoolwide status to end instructional fragmentation by spending Title I dollars on
services and staff that are integrated, aligned, and support schoolwide strategies to improve academic achievement.

## Track and use grant funds to pay for portions of staff time

Those schools that cannot qualify for schoolwide program status can still take steps to align their grants with district priorities. For example, the grant can be used to pay for a portion of a teacher's time working on a whole school effort - the time when s/he is working with eligible students. The remainder of the teacher's salary can be paid with local funds or other grant funds, thereby permitting that teacher to work with all students. Splitting the salary of a single teacher or among paraprofessional different funding sources is one way to reduce the problem of instructional fragmentation. A practical

> The greatest challenge can be overcoming central office resistance born out of fear of non-compliance.

consideration when integrating grants is to ensure that staff members maintain time sheets that allow their time to be apportioned to the different funding sources.

## Misconceptions about Restrictions on Title I Funds

Many districts miss opportunities to use Title I funds for district or school strategic priorities because they believe that grant rules and requirements prevent them from doing so.

The federal "necessary and reasonable use" standard allows more flexible use than most grant managers believe

Many federal grants list allowable uses of funds in a "use of funds" section. That is not the case for Title I because Congress designed it to be a more flexible program. Because the law does not specifically describe a list of permissible funds, districts are sometimes timid about spending Title I funds in innovative ways. The general goal of Title I is to raise the achievement of low-performing students. Therefore, district leaders looking to increase the effectiveness of Title I dollars can use the "necessary and reasonable" standard to help drive spending decisions instead of past practice. Yet, few Title I grant managers at the local or state level appear to be comfortable with an expansive definition of "necessary and reasonable use". Their discomfort stems in part from the fact that interpretations of what is permissible vary considerably among states and from grant manager to grant manager. Faced with conflicting interpretations, it is "safer" to accept a more restrictive definition of acceptable use.

Schoolwide Title I funds do not have to be coordinated with other federal, state and local funds as a requirement for flexible use
Another common misconception is that a schoolwide program must consolidate its Title I funds with other federal state and local funds in order to be able to spend those dollars flexibly. In fact, schools may - but are not required to - use additional funding sources. A schoolwide program can be supported exclusively with Title I funds or by a mix of funding sources. "Consolidating" various funding sources has been encouraged by many state Title I offices in response to federal guidance, and that focus has led many grant managers at the local level to erroneously conclude that it is required.

Whether Title I funds are coordinated with other funds or not, they may be spent on comprehensive activities. For example, as long as the activities are consistent with a school's needs assessment and schoolwide plan, a school can use Title I funds
on a wide range of school climate activities: peer tutoring; professional development to help staff address bullying, harassment, and social isolation; preparing low-achieving students to participate in advanced coursework; implementing formative or interim assessments; collecting and analyzing data; inducting new teachers; and, operating a ninth grade learning academy. ${ }^{3}$

Schoolwide programs are not subject to the same cost-by-cost requirement to meet the "supplement, not suplant" standard

Title I expenditures are governed by the rule known as "supplement, not supplant." The basic premise of "supplement not supplant" is to ensure that Title I funds are used to add to (supplement) and not replace (supplant) state and local funds. Proving that funds are being used to supplement not supplant has typically required grant managers to demonstrate that each individual cost charged to Title I supports an activity or service that the district or school would not otherwise have carried out with local or state funds. This individual cost-by-cost requirement tends to lead schools and districts to create separate, siloed efforts with Title I dollars to most safely ensure that they are supplementing and not supplanting: if it is new and separate, it must be supplemental. Districts have relied heavily on separate "pull-out" services that remove students from the regular classroom because these separate programs make it easier to demonstrate that Title I funds are being used to provide extra (supplemental) services. The challenge is that these separate Title I-funded activities or positions may also be disconnected from district priorities because they are so separate.

Few grant managers are aware that federal statute establishes a different test for schoolwide Title I programs. For these, grant managers need only establish that each school, in the aggregate, has received all of the state and local funds it would have received in the absence of Title I funds. To meet this "supplemental funds test," a school district needs to show that its Title I schoolwide schools were not denied access to state and local funds because they received Title I funds. Once the district can establish that its methods for allocating state and local funds is "Title I-neutral," schools with schoolwide Title I status need not demonstrate that an individual cost is supplemental. Because this substantially different test for supplanting is not widely known, few grant managers have been able to take advantage of the opportunity it affords to use Title I funds in more integrated, aligned ways at the school and district level.

Suppose a district wants to use Title I dollars for a reading program for a schoolwide program. Of course, the district has paid for reading in the past. Does this then constitute "supplanting?" It does not, as long as school spending from all sources is the same, and the Title I dollars are in addition to the
funds that would normally be allocated.
Schools with targeted programs can address the stricter "supplement, not supplant" requirement and still achieve more flexible use of funds by repurposing the grant-funded effort. This strategy typically requires developing a different structure and/or different provider. For example, a school may have used local funds to pay for its library media specialist and then eliminated the position. In the following year, it can use Title I funds to pay for a literacy teacher to bring students to the library media center twice each week to read stories, show films, and supervise writing activities.

Even without a redesign of the grant-funded effort, there is some flexibility to pick up the cost with Title I of previous-ly-eliminated positions. This is called "overcoming the presumption of supplanting." If the district can prove it would not have supported the cost with state/local funds this year, then it can pick up the cost with Title I (assuming the underlying cost is allowable).

## IDEA

IDEA, the federal grant related to special education, offers districts several key opportunities to integrate, coordinate, and align grant activities with district priorities:

- $15 \%$ of the IDEA grant can be used for early intervening services for students who do not have Individual Education Plans (IEPs). That means that a variety of behavioral and academic-tiered intervention programs can be funded with IDEA for all struggling students in the district, not just those identified as having disabilities. This flexibility is very useful when combined with the strategy of setting guidelines for special education staff, which can free up considerable funds from the special education budget.
- The remaining $85 \%$ of the IDEA grant must support students with disabilities, but in many states (not all), there is latitude in the use of these funds.
This means IDEA funds can be used to partially fund comprehensive endeavors as writing new curricula, preparing teachers for the Common Core State Standards, and providing professional development in content areas. IDEA can pay for the portion related to serving students with disabilities, such as differentiated instruction, using data to drive instruction, or universal design for learning techniques. General education staff can participate in these efforts. IDEA cannot, however, pay for the portion of such work that wasn't applicable to supporting students with disabilities.
Additionally, professional development or training provided for special educators can be recorded and put on the district website for use by other special educators - and become accessible to regular education teachers, as well.

Finally, in some states, IDEA funds can be used to pay
general education teachers to provide instruction to students with disabilities if those services represent additional time on task for these students. For example, some districts use general education reading, math, or English teachers to provide a double dose of instruction to students with IEPs. Many districts falsely believe that only special education certified staff can be paid with IDEA funds.

## Title II

Title II is, in practice, the most flexible of the ESEA Title grants. Designed for principal and teacher development and recruitment, it is often referred to as the "PD grant." It is common to see districts allocate a fixed portion of the grant to each school to use for school-based professional development (PD). Since the grant dollars are sometimes distributed directly to the schools, the grant's contribution to advancing district priorities can be limited. Some districts have taken a more aggressive approach to aligning Title II to district priorities by determining how the dollars will be spent from the district office, thus ensuring the professional development is tightly aligned to district strategies. District-level decision-making can also eliminate the tendency to split the dollars (and PD) across dozens of short, ineffective, training sessions.

Other districts have taken full advantage of the grant's definition of purpose: principal and teacher development and recruitment. They have moved away from mostly funding "sit and git" professional development sessions or paying for educators' attendance at workshops, both of which seldom actually develop educator expertise. They have used Title II for a wide range of initiatives aimed at improving teaching, including coaching, mentoring, induction programs, implementing new evaluation systems, performance-based pay, or even lawyers to support principals when removing ineffective teachers. (In this last case, the lawyers mentor and support the
principals through the evaluation and documentation process, rather than conduct the actual legal proceedings.)

## Title III

Title III is designed to support English language (EL) learners. It is the least flexible of the ESEA Title programs because its use is restricted to direct services for EL students and their teachers. That said, districts have found ways to integrate and coordinate Title III-funded services with other district services. For example, a district uses Title III funds to pay for that portion of its six-week, summer academy for ninth graders that serves newcomers and EL students at risk of failure. The district does not have sufficient Title III funds to run a separate program due to high transportation costs, but by integrating and coordinating programs and funding with its Title I and Refugee grants, the district is able to provide transportation for everyone to various summer programs - EL students, newcomers, and native speakers.

## A Tool to Get Started

As demonstrated by the examples of the Title III summer school and Title I shared staffing programs, multiple grants can be used, along with local funds, to pay for a single program to help reduce silos and integrate efforts. Opportunities are plentiful.
To accelerate the process of identifying opportunities for integration, districts can consider using the worksheet in Appendix B to identify their grant sources and potential uses. The completed worksheet - in combination with the coordinated budget recommended earlier - can be used together to strengthen district capacity to more aggressively and effectively coordinate, integrate, and align federal grants with district priorities.

[^10][^11]
## SAMPLE GRANT QUESTIONNAIRE

Name of Grant:
Total Grant: \$ Starting Date: Ending Date:

1. Positions Funded:

| Name | Title | Dept/School | Supervisor | FTE | Salary | Fringe | Total |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

2. Professional Development Funded:

| Focus | Frequency | \# Participants <br> (Anticipated) | Cost | Cost Per <br> Participant |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

3. Curriculum Materials (including technology and software):

| Item | Intended Users | Cost |
| :--- | :--- | :--- |
|  |  |  |

## GRANT QUESTIONNAIRE

4. Other:

| Item | Purpose | Intended Users | Cost |
| :---: | :---: | :---: | :---: |

5. In what ways do the major activities supported through this grant advance the district's strategic priorities? (please be specific)
6. How are you measuring the impact of the major grant activities?
7. What have you learned in the past about the impacts of major grant activities?
8. What have you done to adjust grant activities on the basis of information about their impact?

## Appendix B

SAMPLE GRANTS INTEGRATION AND COORDINATION WORKSHEET

Title I Basic
1003A
1003G
Migrant
Title II A: Principal \& Teacher
Training/Recruitment
D: Technology
Title III Limited English Proficient
Title IV B: Safe \& Drug Free
C: $21^{\text {st }}$ Century Learning
Title V B: Innovative Programs
Title VI

Title X McKinney-Vento
Perkins
IDEA Part B

Early Intervention
Preschool

Professional Development

## STRATEGICALLY SPENDING FEDERAL ENTITLEMENT GRANTS: Making the Connection to District Priorities

Large districts typically receive around $14 \%$ of their revenue from federal funds, but grant budgets are often managed separately from the operating budget and are often less aligned to key district strategies for raising achievement. Spending these funds differently can shift significant resources to district priorities.

HERE'S HOW TO GET STARTED:

## 1 DETAIL CURRENT USES OF GRANT FUNDING

The operating budget is closely scrutinized by district leaders and the public, but grant budgets generally receive little attention. Find out the details of what the various grants are paying for, how those expenditures are linked to the district's strategic objectives, and how impact is being measured. This review will highlight opportunities to align grant activities and grant spending more closely to district priorities.

## 2 FIND OR GROOM EXPERTS

Fearing non-compliance, grant managers often are unlikely to uncover opportunities for spending grant funds more flexibly. It is essential to engage outside experts or groom forward-thinking grant managers to lead the way.

## 3 ASK "HOW" NOT "IF" FUNDS CAN BE USED MORE FLEXIBLY

A "can do" attitude and dogged persistence can help districts overcome naysayers and find creative solutions. There is often more room for discussion and negotiation than is assumed.

## 4 TAKE FULL ADVANTAGE OF TITLE I SCHOOLWIDE PROGRAM FLEXIBILITY

Many schools operating under schoolwide program models continue to use funds as if they were targeted assistance schools. Guidance and support from district leadership can help schools take advantage of the flexibility that is already available to them and align grant funding to support comprehensive school improvement strategies.

## 5 STAY INVOLVED; DON'T JUST DELEGATE AND HOPE

District leaders need to stay involved in examining and deciding how grant dollars are spent. Leaders have a broader view of the organization and are better positioned to ensure that all spending is aligned with district priorities. Setting the tone for grant managers is also important. Evaluating grant managers on more than just compliance can send a clear message that spending should drive results and that continued spending is contingent on past results.

## A word to the wise: BEWARE OF MISCONCEPTIONS

Due to the complexity of grant requirements and the consequences of non-compliance, the "way things are done" can seem like the "way things have to be done." It is essential that district leaders make the effort to debunk inaccurate and misunderstood information in order to achieve the benefits of this opportunity.

## DISTRICT MANAGEMENT COUNCIL ${ }^{\circledR}$

## OPPORTUNITYBRIEF

# ENSURING MORE STUDENTS READ ON GRADE LEVEL: Cost-Effective Strategies 



DISTRICT MANAGEMENTCOUNCIL ${ }^{\oplus}$

Research confirms the importance of reading. Low-income students who cannot read on grade level by third grade are thirteen times less likely to graduate on time than middle-class peers who can read on grade level by third grade. By contrast, ensuring a child can read on grade level by third grade virtually eliminates the high school graduation gap between rich and poor students. ${ }^{1}$ With Common Core State Standards moving into 46 states, reading skills are likely to become even more important. These new standards focus on original historic documents, deep reading, and citing evidence from the text, which render reading skills even more critical to success.

## Close examination of many district budgets confirms that substantial resources are already being directed to reading; the challenge is to spend differently.

FINANCIAL BENEFIT
Negative/ No Benefit


IMPACT ON STUDENT ACHIEVEMENT

Negative $\qquad$ Positive

POLITICAL FEASIBILITY


CERTAINTY OF GAIN, RELATIVE TO IMPLEMENTATION COMPLEXITY

Uncertain
 Certain

Indeed, many districts' strategic plans set thirdgrade reading proficiency as a key metric of success. It is well understood that any successful effort to boost reading achievement will yield big academic gains. What is perhaps most surprising is that the incremental cost of launching a largescale intensive reading program is zero in most districts. Although many district leaders lament that their districts lack adequate resources, close examination of many district budgets confirms that substantial resources are already being directed to reading; the challenge is to spend differently.

Reading instruction is, in fact, a prime candidate for raising achievement while reducing costs. The political pushback to improving reading is moderate. There is generally strong support externally, but significant pushback from internal stakeholders such as paraprofessionals and special education teachers who may be impacted by a large shift in staffing, roles, and responsibilities. Implementation risk is the greatest obstacle, since this effort requires many staff in many schools to implement well.

## Know what is really being spent

Most districts already allocate substantial resources to ensuring all students can read. However, many of the activities and line items are not identified as such, making it difficult to fully assess what is really being spent on this effort. To allocate reading resources more effectively, the first step is to fully understand all current spending on reading.

In a typical district of 50,000 students, a review of the budget for reading expenses might turn up the items identified in Exhibit 1.

Certainly, any district of 50,000 students spends more than one million dollars on teaching reading, but this hypothetical example is typical of how reading expenses are reported. A review of budgets from a number of large urban districts showed less than one million dollars labeled as reading (or
related to reading) out of a nearly $\$ 900$ million budget $(0.1 \%$ of spending); even one of the largest districts in the country reports spending less than $2 \%$ of its budget on teaching reading.

Line-item budgets generally capture less than $0.6 \%$ of the district's true financial commitment to teaching reading. The underrepresentation stems from two root causes. First,

## Exhibit 1

ILLUSTRATIVE BUDGET FOR READING EXPENSES

|  | Cost | FTE |
| :--- | :---: | :---: |
| Reading tutors | $\$ 600,000$ | 24 |
| Reading curriculum <br> materials | $\$ 250,000$ | -- |
| Software (Read 180, etc.) | $\$ 100,000$ | -- |
| Afterschool reading <br> support | $\$ 50,000$ | -- |
| Total | $\mathbf{\$ 1 , 0 0 0 , 0 0 0}$ | $\mathbf{2 4}$ |

Source: The District Management Council

## Exhibit 2

| CONSOLIDATED READING BUDGET EXAMPLE |  |  |
| :---: | :---: | :---: |
| Source | Use | \$ (millions) |
| Title I | Reading teachers | \$10.8 |
|  | Reading tutors | \$21.0 |
|  | Reading curriculum | \$15.0 |
|  | Reading software | \$10.0 |
|  | Reading coaches | \$6.2 |
|  | Reading professional development | \$0.5 |
| Title Ila | Reading professional development | \$0.4 |
|  | Reading coaches | \$4.1 |
| Title III | Reading PD for ELL teachers | \$0.2 |
|  | Reading curriculum for ELL students | \$3.0 |
| Foundation Grant 1 | Dropout prevention/recovery (for students who can't read well) | \$37.5 |
| Foundation Grant 2 | Summer elementary reading intervention | \$8.4 |
| Foundation Grant 3 | Afterschool reading support (as part of a comprehensive afterschool program) | \$7.2 |
| Total |  | \$124.3 |

the dollars devoted to teaching reading are not in the operating budget, but are instead in grant budgets and other budgets, and thus are much less visible. Second, most reading instruction is delivered by people not identified on the budgets as reading staff.

## Grant and other budget expenditures

All school districts have many budgets, not just one. The most visible, hotly debated, and tightly managed is the operating budget. Federal funds like Title grants and private foundation dollars often require separate budgets. While much less likely to be closely reviewed and managed by the superintendent and CFO, these other budgets often contain a great deal of spending in support of reading. In our hypothetical district of 50,000 students, these other budgets might include supports as shown on Exhibit 2.

In many districts, the full "other budget" list of reading-related expenses is even longer than that shown on Exhibit 2, reflecting the importance districts place on mastering reading. Creating a consolidated program budget that rolls up all related spending from every funding source is necessary to define and fully understand current efforts.

## Other expenditures not labeled "Reading"

While consolidating operating and non-operating budgets is helpful, it will still fail to capture the vast majority of a dis-
trict's spending on reading instruction. Most of the funds dedicated to reading are hiding in plain sight, just labeled as something else. Based on the experience of some districts, resources dedicated to teaching reading are estimated to include significant staff time as shown in Exhibit 3.

Including the operating budget line items, grant-funded expenditures, and associated staffing costs, a hypothetical typical district of 50,000 students can spend up to $\$ 162$ million on reading.

## Three shifts in resources to raise reading achievement

Given the importance of reading, significant investment in this area seems reasonable and necessary. However, many districts have not seen significant returns in terms of improved student outcomes. In response, many districts scrounge for new funds to layer a "fix" on top of current efforts. Some of the more common uses for these sought-after reading dollars are to add dedicated reading teachers and reading tutors, to expand before-school, after-school, and summer reading instruction, to purchase new curriculum, and to offer more professional development.

Instead of adding new funds, reallocating existing resources and strategically managing a district's reading efforts can improve results for students and improve the efficacy of current spending. While by no means a comprehensive list, three

## Exhibit 3

STAFF TIME (AND THUS EXPENSE) DEVOTED TO TEACHING READING

| Role | Estimated \% of time spent teaching reading | Notes |
| :---: | :---: | :---: |
| Elementary classroom teachers | 25\% | In many districts, teachers spend 90 minutes or more on reading instruction per day. |
| Special education paraprofessionals | 30\% | In some districts, up to $30 \%$ of special education paraprofessionals' time is devoted to delivering reading instruction, based on time studies conducted by The District Management Council (DMC). |
| Special education teachers | 40\% | Struggling to read accounts nationally for $40 \%$ of all referrals to special education. The figure might be even higher in districts with aboveaverage special education identification rates, since $80 \%$ of students with mild "disabilities" like specific learning disability (SLD) have reading as their primary need. ${ }^{2}$ |
| Speech and language therapists | 85\% | Up to $85 \%$ of speech and language therapists' time is dedicated to language concerns like comprehension and vocabulary, which are closely connected to reading. Nationally, it is only approximately $15 \%$ of speech and language services that focus on more traditional speech challenges like articulation or helping non-verbal students. |

shifts in resources can raise reading achievement and reduce overall costs.

## Focus on teaching quality, not teacher quantity or small group size

Many districts have adopted a strategy of more, rather than better. A review of actual practice suggests that many districts have sought to improve reading outcomes by focusing on having more instructors and very small instructional groups rather than focusing on improving the quality of instruction. To be fair, few districts, if any, would identify this as their strategy, but their actions seem to indicate that this is the operating assumption.

The wide use of paraprofessionals to teach or support reading instruction is one proof point. Some districts rely on a great many non-certified staff to help students who struggle to read. This is a common use for Title I funds and special education dollars. These staff members are not teachers, have no formal training in teaching reading, and may or may not have college degrees, yet they provide a great deal of reading instruction and support. In a study of one large district, fully $75 \%$ of paraprofessional time was devoted to providing academic support, much of it on reading at the elementary level. The popularity of this practice stems from the fact that many more paraprofessionals can be hired because they earn much less than teachers.

Nationwide, the number of paraprofessionals, adjusted for enrollment, has grown steadily in recent years and now exceeds the number of special education teachers (Exhibit 4). Certainly, not all the growth is attributed to providing reading instruction, but in some districts these extra paraprofessionals have an active role in providing reading support. This is seldom a cost-effective or even effective use of funds.

## Exhibit 4

SPECIAL EDUCATION TEACHERS AND PARAPROFESSIONALS PER 1,000 STUDENTS


Source: Thomas B. Fordham Institute, "Shifting Trends in Special Education," 2011, 10, http://www.edexcellencemedia.net/publications/ 2011/20110525_ShiftingTrendsinSpecialEducation/ShiftingTrendsin SpecialEducation.pdf (accessed July 2013).

## Trouble Teaching the Teachers

Arecent National Council on Teacher Quality study reports that teacher preparation programs are "an industry of mediocrity,"1 inadequately equipping teachers with the skills and knowledge needed in the classroom. This includes teachers of reading:

- Three out of four teacher preparation programs are not teaching proven methods of reading instruction. Instead, the teacher candidate is all too often told to develop his or her own 'unique approach' to teaching reading.
- Key content such as phonemic awareness and fluency are addressed adequately in only 33\% of the teacher preparation programs.
- Only $4 \%$ of special education teacher preparatory programs require adequate training in Common Core-level content for which the candidate will be certified to teach.

[^12]The wide use of special education teachers to teach struggling readers also merits review and consideration. This may be surprising, but most special education teachers have little or no formal training in teaching reading; however, in many school districts, students who struggle to read and have IEPS rely heavily on special education teachers as reading teachers.

While supplemental reading instruction is not always delivered from staff highly-trained to teach reading, it is often delivered in very small group settings. The focus is on attention and intensity, but it is efficacy that should be at the forefront. A review conducted by The District Management Council of the schedules of special education teachers and paraprofessionals from a variety of districts across the country shows that it is common for extra reading help to take place with just two to four students in the room at any one time.

It is rare to find a district, especially an urban district, in which most struggling readers receive extra help from skilled reading teachers who have extensive training in teaching reading. Having highly-skilled reading teachers is not only more effective, but can be more cost-effective. Highly-skilled reading teachers are paid the same as special education teachers, but often serve 30-50 struggling students a week, whereas a typical special education teacher supports only $15-25$ students a week. This reduces the cost to serve a struggling reader by half or more in some cases.

Even compared to lower-cost paraprofessionals, certified reading teachers can be cost neutral. Fully loaded, a reading teacher is two to three times more expensive than many
reading paraprofessionals, but increasing group size to five or six students can offset much of the cost of switching from many paraprofessionals and special education teachers to fewer highly-skilled reading teachers. And, of course, nothing is more expensive than providing services that do not actually improve reading skills.

## ? <br> Shift resources to improve core instruction

In urban districts, where often the majority of students are struggling readers, the demand for extra help in reading is strong. Many districts have invested heavily in reading teachers, Title I teachers, and paraprofessionals or tutors as part of their Tier 2 or Tier 3 reading interventions under the Response to Intervention (RTI) model. This is an example of districts' shifting resources to support strategic priorities, but it can prove not to be cost-effective.

RTI originated in suburban schools, and the model assumed that only $15-20 \%$ of students would be identified for supports beyond core classroom instruction (Exhibit 5). For a school of 500 , for example, 100 students would get extra help, requiring approximately three intervention teachers. For the same size school in an urban district, as many as 400 students could need extra help, requiring approximately 12 additional teachers, nine more than the suburban school. For a district of 50,000 students, this represents a difference of about 450 more elementary intervention teachers. Because the need for staff is so great, many urban districts hire lower-cost paraprofessionals to

## Benefits to students with IEPs

mproved core instruction can also have tremendous benefits for students with disabilities. In many cases, struggling readers are identified for Individualized Education Programs (IEPs). In fact, nationally, $80 \%$ of students with mild "disabilities" like specific learning disability have reading as their primary need. ${ }^{1}$ For example, one large county district's literacy reforms focused on implementation of a common curriculum in all classrooms and regular assessments for all students, including students with disabilities. From 2005-2009, the percentage of students with disabilities scoring proficient or above on state assessments increased from $60 \%$ to $77 \%$. During this time period, more of these students were being educated in the general education classroom than ever before.

Eventually, improving core reading instruction can significantly decrease special education costs as fewer struggling readers are identified for special education.

1 "Seeking Effective Policies and Practices for Students with Special Needs," Rennie Center for Education Research \& Policy, Spring 2009, 2, http://www.renniecenter.org/research/SeekingEffectPolicies_SPED.pdf laccessed November 5, 2013).
provide the extra instruction, even though they have no formal training in teaching reading. This creates two problems: (l) classroom teachers start to rely on the "extra help" intervention to remediate struggling readers, and (2) the quality of the extra help is not sufficient for the task.

In one urban district with an overwhelming commitment to reading, it was not uncommon to see 18 of 24 elementary students leave the room to get Tier 2 support from paraprofessionals. The irony was they left a classroom with a certified teacher who had received extensive district-provided training in teaching reading; instead, they went to work with paraprofessionals or others who had no formal training in teaching reading.

For many urban districts, concentrating efforts on core classroom instruction has yielded a higher return on investment. This district shifted their literacy interventions to focus on improving the effectiveness of the core classroom teacher. Reading blocks were extended to 90 minutes per day (some districts have provided as much as 2.5 hours per day), allowing classroom teachers to provide the additional, intensive reading instruction needed. Targeted small group instruction was still provided, but without students going to another teacher.

In order to make this extended time effective, the instruction must be effective - more time with an ineffective teacher is unlikely to help. Many elementary teachers still have limited formal training in how to teach reading and the key content of reading instruction, and even less in how to help struggling readers. In raising the expectations for core instruction, some
districts have made the commitment to help teachers improve their practice. Some districts have adopted school-based coaching models in which strong reading coaches observe teachers, model lessons, and attend common planning time, data meetings, and faculty meetings.

The economics, both in terms of time and money, of intensive, effective coaching to improve core instruction can be very cost-effective. In the example of an elementary school with 500 students, 12 reading teachers could provide 30 minutes of extra help each day to each struggling student. This leaves the 90 minutes each day of core instruction unimproved. Conversely, just two reading coaches could provide intense support to 25 classroom teachers, who could use a twohour literacy block to help all students. Each coach could work with each teacher for two hours a week on average, which is a significant level of support.

## Integrate other existing systems, departments, and spending

If reading is a top strategic priority, then it should be a top priority in the design of most systems, procedures, and departments. The question is, "Do other departments and procedures reflect that reading is critical?"

Two other areas warrant special attention: evaluations and schedules. One already gets much senior leadership attention, and the other might not.

## Exhibit 5

NEED FOR "EXTRA HELP" IN SUBURBAN VS. URBAN SCHOOLS

TYPICAL RTI MODEL IN MANY SUBURBAN SCHOOLS


INTERVENTION MODEL IN MANY URBAN SCHOOLS


[^13]
# Reading in middle and high school: Big opportunity or big expense? 

1n nearly all urban districts, there are many middle and high school students who struggle to read and experience particular difficulty with comprehension. Few districts, however, offer direct instruction in reading to the majority of these struggling readers. Often, only a handful of students receive reading instruction, mostly through special education. For example, in one particular urban district, $52 \%$ of secondary students could not read well enough to handle grade-level English, math, science and social studies, but less than $10 \%$ of these students got any help to improve their reading. The system acted as if they could read, even though they knew who (by name) could not. The very scale of the problem often drives districts from addressing it. The idea of extra instruction for half of all middle and high school students seems daunting in times of scarce resources.

Drawing from the strategies for improving elementary reading, there are ways that districts can cost-effectively improve reading outcomes and expand support. In fact, a number of cost-neutral options exist:

- Districts can shift from generalists like special education teachers to reading teachers. In many districts, each reading
teacher serves many more students than a special education teacher, so this actually can end up being a lower-cost option.
- Reading comprehension can be offered as a for-credit course. This will increase the number of reading teachers required, but could reduce by an equal amount other staff for other credit-bearing courses. If students take the same number of credit-bearing courses with the same average class size, no additional staff is required; it is different staff that is required.
- If a district does not want to create a new course, reading instruction could be combined with other courses such as social studies by hiring teachers who are dual certified in reading and social studies. Such a class would place equal emphasis on building reading skills as mastering the content.

Like at the elementary level, a small investment in a cabinet-level position for secondary reading can help develop, coordinate, and manage cost-effective reading instruction at the secondary level.

Addressing this large need may seem too costly, but failing to address it comes at an even higher price.

Evaluations are a front-burner topic in many districts, and some districts are closely connecting their teacher and principal evaluation systems to their efforts to improve reading. This includes ensuring that a large percentage of elementary walkthroughs and observations take place when reading is taught, aligning the evaluation rubric to include specifics related to district-endorsed reading practices, and evaluating elementary principals based on reading growth in their schools.

Schedules, the use of time during the day, however, are not often a topic of review, debate, and revision; many school schedules do not support improving reading. In some schools, students are pulled out of reading instruction for speech or occupational therapy; in many schools, the amount of time devoted to reading is based on what is "left over," rather than what they think is required. Some schools provide $2 \frac{1}{2}$ hours of literacy a day K-5, while others with the same $61 / 2$-hour school day say such a long block is impossible. Some middle schools find time to teach reading and English, but many cannot fit both into the schedule, so choose to teach English and not reading.

While this is a partial list, it makes the point that many parts of a district must work together to ensure all students can read. All of these functions already exist, and no new dollars are needed. Reading needs to be made a priority, and existing resources need to be deployed in support of reading. It takes a shift of mindset, not more money.

## Win-win

Strong reading and comprehension skills are critical to student success. As discussed, there are often quite a lot of resources within a district directed toward reading when the various programs and funds are consolidated. Consolidating and reallocating resources strategically and ensuring that students are getting the most effective instruction can result in improved student outcomes without requiring an increase in spending. In fact, over time, as more students become proficient readers, further savings may be realized as a result of reduced referrals to special education and less remediation in the older grades. It is truly a win for students and the budget.

[^14]
## Do your district's actions <br> demonstrate that <br> reading is a priority?

- Are your district's hiring and tenure practices aligned with the stated belief that reading is critical?

Do the special education and human resources departments screen new teacher candidates for their training and skill in teaching reading? Is this even part of the interview process? Are they asked to teach a sample lesson to struggling readers?

Do elementary principals know that the teachers they are hiring have training and skill in teaching reading and have strong content knowledge in all five domains of reading instruction?

- Can an elementary teacher be awarded tenure if his or her students do not make much growth in reading? Does a principal have this data before making the decision?
- Are a significant number of elementary faculty meetings dedicated to improving reading instruction?
- Does the professional development calendar reflect the disproportionate importance of reading?
- Has the Curriculum and Instruction Office established a best-practice-based approach to teaching reading in the district?
- Does the use of data in the district support the reading effort?
- Does data and assessment closely monitor student growth in reading and identify effective and ineffective teachers of reading?
- Do data teams and PLCs regularly look at reading scores?


## GETTING STARTED

## ENSURING MORE STUDENTS READ ON GRADE LEVEL: Cost-Effective Strategies

Research has shown that the ability to read on grade level by third grade is a predictor of future achievement and success. Given the importance of reading, most districts invest significantly to increase the number of students reading on grade level, but are often disappointed by lackluster or stagnant results. By reallocating existing resources, many districts can fund a robust and effective reading program without increasing total costs.

HERE'S HOW TO GET STARTED:

## 1 PUT SOMEONE IN CHARGE OF READING DISTRICT-WIDE

Despite its importance and strategic value, reading instruction and intervention does not have a clear leader in name or in practice in many districts. Appointing a reading director and holding this individual accountable for results can help ensure that reading efforts are integrated and cohesive.

## 2 LOOK NO FURTHER THAN YOUR CURRENT BUDGET

Most districts already spend enough money on reading efforts to fund a robust best-practice program. However, existing resources are often spread across many different budgets and funding sources and each are managed independently. Consolidating existing resources under the reading director can increase the cost-effectiveness of reading efforts.

3 SHIFT RESOURCES TO IMPROVE THE QUALITY, NOT THE QUANTITY, OF INSTRUCTION
Small group sizes and extra time for intervention and remediation are often not enough to raise reading achievement, unless they are taught by an effective teacher. Shifting resources from paraprofessionals to larger groups working with highly-skilled reading teachers can be a more effective - but not more expensive - intervention strategy. Additionally, investing in improving core classroom instruction can be more cost-effective than expanding extra-help programs.

## 4 DEFINE A COMMON APPROACH TO TEACHING READING

Implementing a common approach to teaching reading lincluding materials, curriculum, and assessments) can ease implementation and leverage limited financial resources.

## 5 MONITOR FOR IMPLEMENTATION

Establishing a common approach to reading instruction is relatively straightforward; implementing it in the classroom is far more complex. Tools for teachers such as pacing guides and common formative assessments can help. But, leaders must also monitor for implementation during classroom walk-throughs.

## A word to the wise: ACT LIKE READING IS KING

Most districts say that reading is one of their top priorities. If that is the case, then reading should be a top consideration in the design of most systems, procedures, and schedules. When implementing more cost-effective reading strategies, ask, "Do other policies and procedures reflect that reading is critical?" Often, district practices can unintentionally undermine the effort.

## DISTRICT MANAGEMENT COUNCIL ${ }^{\circledR}$

## LESSONS FROM THE FIELD

# ENSURING MORE STUDENTS READ ON GRADE LEVEL: Cost-Effective Strategies 

DISTRICT MANAGEMENTCOUNCIL ${ }^{\circledR}$

Agoal in many strategic plans is to ensure that all students can read on grade level, typically by second or third grade. Given the importance of reading to future success, it is not surprising to find that so many districts make it a top priority and invest heavily in this area. For a hypothetical typical district of 50,000 students, the investment in reading can reach $\$ 162$ million, or over $\$ 3,000$ per pupil. ${ }^{1}$ Despite these efforts, $80 \%$ or more of fourth graders in urban districts are not proficient in reading, according to the NAEP reading test. ${ }^{2}$ Many districts therefore search for additional funding to strengthen their literacy efforts.

## Lessons from the field

## Lesson Treat reading as the priority 1 you say it is

## lesson Put one person in charge and pool resources

## Lesson Establish a common 3

## Lesson It is not the materials, but

 how they are implementedThe truth is that many districts already have the necessary funds to implement a best-practice elementary reading program. By focusing on teacher quality, shifting resources to improve core instruction, and incorporating "no cost" elements, districts can increase reading achievement and potentially realize cost-savings.

Three lessons learned in districts like Montgomery County Public School (MD), School District of Lancaster (PA), and others demonstrate how to raise reading achievement without raising costs.

## LESSON

## Treat reading as the priority you say it is

More than a few urban districts have written strategic plans prioritizing early literacy, and soon thereafter cut half of their reading teachers to balance the budget. Many districts that have successfully increased the number of children reading on grade level have made reading a top strategic priority and demonstrated this commitment in the budget process and in the realigning of nearly all aspects of their organizations to elevate reading above all else. Not only does this prioritization strategy increase the likelihood that all students master reading, but it is a more effective use of resources; it leverages existing systems, processes, and procedures as opposed to piling on new ones.

In the School District of Lancaster, a mid-sized urban district, evidence that reading matters was visible at all levels. ${ }^{3}$ During the development and implementation of a multi-year reading initiative, the leadership team devoted a significant amount of their time to ensuring the success of the new reading efforts. They dedicated more than half of their regular, full-day monthly meetings of principals and the cabinet to reading issues; they also expected many of the principals to work many hours a month on this initiative with their peers outside the building. Taking a principal out of school is never an easy decision, but if reading mattered most, it needed this level of attention from the leadership. While some principals grumbled a bit about the time being spent out of the building, they knew reading could be a real game changer for their students, and noted that they attended many meetings that mattered much less. To ease the pushback, the district co-opted existing meeting times first, rather than adding new ones. If reading was the priority, then their meeting agendas should also reflect this. For added emphasis, the superintendent attended several planning and monitoring meetings throughout the year to demonstrate support and to push through any roadblocks.

All elementary school schedules were modified to include at least 90 minutes of literacy instruction every day. Other subjects, especially social studies and science, were expected to incorporate content-related reading and writing skills. To support the emphasis on literacy, all staff who taught reading including classroom teachers, special education teachers, Title I teachers, and others - received 50 hours of sustained professional development per year on literacy alone, led by in-house experts, including teachers.

This intensive focus on reading did not cost an additional

> If reading was the priority, then their meeting agendas should also reflect this.
dollar. The School District of Lancaster reallocated how it used time and was able to make improvements despite a $10 \%$ reduction in their operating budget over the two years of planning and initial implementation.

Realizing that roughly half their middle and high school students also struggled to read, they made the decision to reallocate resources to support reading at the secondary level despite a shrinking budget and staff cuts. Starting with sixth and ninth grade, they set out to offer a credit-bearing course in reading. When a much-hoped-for grant to support secondary reading did not materialize, they reasoned that if reading mattered most, most everything else mattered less. Having created a culture that prized reading, the special education director stepped up and significantly reduced her department to free up funds to hire reading teachers. The district's steadfastness was worth it: nearly $40 \%$ of struggling secondary students achieved a full year's gain in reading in just five months.

Montgomery County Public Schools also saw significant reading gains by making it one of the district's top priorities, even in the face of political opposition. When Superintendent Jerry Weast arrived in the district in 1999, he and his team first concentrated on early literacy in the neediest schools as an important lever to achieving equity. They implemented full-day kindergarten for schools in the "Red Zones," a district-within-a-district of mainly high-poverty, high-minority, and low-performing schools. The program included literacy-based curriculum and 100 hours of mandatory training for all kindergarten teachers. This was accomplished despite significant pushback from parents in the low-poverty, suburban "Green Zones," who worried that shifting resources to the "Red Zones" would lead to declines at their neighborhood schools. By 2008, $93 \%$ of all kindergarteners were reading at or above standards. ${ }^{4}$ Between 2003 and 2010, the proficiency gap between white and minority students for third-grade reading proficiency decreased by 21 percentage points, even as proficiency levels for white students increased by more than ten percentage points.

Another cost-free way to improve reading proficiency is to message the importance of reading through the district's hiring and promotion practices. In some districts, district and school leaders are promoted or given additional responsibilities based on their reading expertise and demonstrated results. Principals' evaluations are tied to their school's reading progress, and highly-effective reading teachers are identified for coaching or other leadership positions. As budgets continue to tighten, taking full advantage of no-cost improvements and shifting existing resources can turn hope into reality.

## LESSON <br> 2 <br> Put one person in charge and pool resources

Perhaps because reading is so important, a multitude of people and departments in a typical district are involved in managing reading efforts, but often no one person or department is actually in charge or fully accountable for results or resources. When a group of superintendents was asked, "Who is in charge of reading in your district?" few could answer. More than a few marveled at the simplicity and complexity of the question. One superintendent immediately texted his deputy superintendent for curriculum and instruction. The deputy superintendent replied, "That is a very complex question with no simple answer. Perhaps a flow chart or a table might be useful?" On returning to his district, the flow chart revealed dozens of managers, but no leader. Principals, curriculum coordinators, special education administrators, ELL central office staff, the Title I grant manager, and the professional development department all claimed a role. While many departments were involved, there was no reading department and no individual in charge of all the efforts.

Mirroring or perhaps causing this diffuse leadership is the fact that funding for reading comes from a variety of sources (operating budget, Title I, Title IIa, IDEA, etc.) that are all managed by different people who often support different approaches. This is not only pedagogically ineffective, as some students may receive a smattering of assorted and perhaps contradictory interventions each week, but it is not cost-effective. To support a robust reading program, it is often necessary to integrate and coordinate efforts and funding sources. While the superintendent could charge everyone on the flow chart and all the grant managers to work together, the easiest way to do this is to consolidate leadership (Exhibit l). Investment in a leadership position is small compared to the potential impact. Creating a cabinet-level director of reading would cost just $0.02 \%$ of our typical district's spending on reading instruction, or the cost of about five paraprofessionals or two teachers.

But, who should be in charge? This can reopen the debate of instructional leadership versus organizational leadership. Many districts that have closed the achievement gap through a literacy-centric approach have concluded it is not one or the other, but needs to be both. They have sought candidates with deep content knowledge and strong leadership qualities,

## Exhibit 1

## POTENTIAL ORGANIZATIONAL CHART WITH CONSOLIDATED READING LEADERSHIP



[^15]backed by a proven record of student achievement results. Too often, the scale is tipped far in favor of domain knowledge, yet a key challenge is to coordinate many previously independent departments, fuse professional development efforts, integrate a great many budgets, support principals who most likely are not direct reports, and align and improve the practice of nearly half the teachers in the district.

One district, for example, had a "star" reading director. She had great credentials, had been a reading teacher, was an officer of a major reading association, and had deep knowledge of pedagogy. However, she was also disorganized and uncomfortable debating with building principals. Implementation of the district's efforts had stalled and results had not budged much. In a politically delicate move, she was replaced as district-wide head, but remained an important advisor. An able manager with both content knowledge and a record of raising achievement took the existing plan and turned it into a reality. The number of struggling readers declined by $65 \%$ over three years. The plan had not changed, but the leadership had.

With a talented leader in place, it is important to let him or her build a team. This step is often overlooked. It can seem unnecessary, given that the district already has a multitude of people devoted to improving reading, but all these people already have their own teams: curriculum and instruction, special education, school-based teams, etc. Patrick Lencioni wrote in The Five Dysfunctions of a Team about the idea of first and second teams. ${ }^{5}$ The first team is where your loyalties lie, and the second team may be defined by which meeting you attend. Successful districts have made sure to build a true "first" reading team to lead the effort. The reading team can be augmented by an advisory group of principals, top-performing teachers, and coaches to help steer the initiative, provide feedback, and serve as liaisons to schools.

One large, diverse urban district centralized leadership in a three-person literacy team embedded within the Curriculum and Instruction Department. The team has a direct line of communication with school-based coaches, principals, and teachers. Everyone in the district knows, "If you have a question about reading, the literacy team is whom you call." In another district, coaches who support teachers in implementing new reading curriculum and instructional strategies report directly to the reading director in addition to their principal. Everyone who teaches reading is "part of the team" and receives the same literacy training, materials, and support
from the reading director and his office.
The last step to creating a unified and effective leadership structure is to explicitly map out roles and responsibilities. Asking the following questions can help get started:

- Who do staff who teach reading report to?
- Who hires and evaluates staff who teach reading?
- Who sets their instructional practices?
- How is reading professional development determined?

Based on the successes of districts that have significantly raised reading scores, there are no right answers, but the answers do need to be clear. Failing to spell out roles and responsibilities, typically in writing, undermines leadership, creates friction, and squanders resources. Some districts try to make many of these decisions through joint ownership. This can be difficult, unless a dispute resolution mechanism exists. A more effective framework for collaboration can be to give decision rights to one person, but require consultation with other identified players.
Lastly, the leadership must have control over the resources they need to be successful. In both the districts mentioned above, all funding that supports reading is pooled and managed by the reading leadership. This includes Title I, Title IIa, IDEA, other grants, and operating budget dollars. Reading materials, accompanying technology, coaches' salaries, and training for teachers are all funded through the reading leadership. This creates a clear separation between those who determine how money is used versus those who administer the grant paperwork and compliance reporting.
Very often, the grant administrator de facto becomes head of a reading fiefdom. In one mid-sized urban district, reading teachers and coaches paid for by Title I funds were hired and supervised by the Title I director, while staff doing the same work but paid from the operating budget where under the domain of the principal; in addition, coaches paid for by Title IIa funds reported to the director of curriculum, and not surprisingly special education teachers who taught reading reported to the special education director. They all had different professional development programs and used different materials. This splintered approach ensured that each of these efforts was only marginally funded or effective. More successful districts have found that consolidating leadership and funding has streamlined implementation, maximized the strategic use of existing resources, and held leadership accountable for results.

## LESSON



## Establish a common approach

Urban districts today are testing and refining how best to divide responsibility and authority between central office and school leaders. Districts have seen success via principal empowerment, centralized managed instruction, and a wide range of combinations along a continuum. Without taking sides on the issue, districts have found that implementing and monitoring a common, best-practice-based approach to reading allows them to more effectively leverage limited financial resources and ease implementation.

If central office expertise is to be available to support teachers and principals, then a common program and approach helps a lot. A typical district of 50,000 students has 1,000 elementary classroom teachers. Central office cannot reasonably support 1,000 different approaches to teaching reading, or even the approaches of 50 elementary school principals if they each have a different plan. In a principal empowerment model, principals can still have a large say in who teaches and other operational aspects, but perhaps not on curriculum, materials, and assessments.

Some leaders may be surprised at how varied the reading materials, curriculum, and approaches can be. One urban district, years into a district-mandated reading program, sampled classrooms across the district. To the surprise of central office, more than 27 different materials were in use across the district; some teachers opted to teach very little phonics, a cornerstone of the program, and some classes spent $20 \%$ more time on teaching reading than others.

Formally assessing all of the approaches to reading across the district is a good first step. One district conducted two surveys - one for principals and one for teachers - that identified the time, materials, topics, and strategies they employed to teach reading. Principals were amazed at the varied activities occurring within their schools, let alone the differences across schools. This begged the question, "Is this intentional or historical?" It is, in part, a result of teacher training. The National Council on Teacher Quality reports: "Three out of four elementary teacher preparation programs still are not teaching the methods of reading instruction that could substantially
lower the number of children who never become proficient readers from 30 percent to under 10 percent. Instead, the teacher candidate is all too often told to develop his or her 'own unique approach' to teaching reading." ${ }^{6}$

After assessing all of the reading approaches, the next step is to decide on common materials, curriculum, and assessments. Some districts have relied on high-performing reading teachers within the district. The School District of Lancaster, for example, tasked highly-effective teachers from across the district with developing curriculum maps and pacing guides based on common materials. Once the unified approach was identified, it was messaged consistently through coaching, videos, faculty meetings, peer observations, and webinars. This created economies of scale. One series of meetings with 20 principals could help 20 schools. Coaches could be shared across schools and not have to master a wide array of programs. Perhaps the greatest benefit was that it created a learning network that allowed staff and principals to share what was working and roll it out to all their schools. This had not been possible when each school (or classroom) had different materials and approaches. Without having to spend more, the effectiveness of the effort was greatly increased.

Another way to build commitment is to give schools the option of adopting the common approach or not. One district did not mandate that schools adopt common reading materials, assessments, and training, but would not support any other reading efforts in schools unless they adopted the program. By doing so, central office ensured its resources were maximized for program success, but gave principals limited autonomy. In the end, nearly all schools adopted the common approach by choice, not central office "mandate," which increased enthusiasm for the program.
A common and well-communicated approach to literacy curriculum and instruction can ease the implementation of a large, district-wide reading effort; it also can reduce costs of supporting the effort and can reduce future remediation costs as well. For children whose families are highly mobile, the absence of a consistent approach can mean new textbooks, new expectations, and varying forms of instruction at each new school, compounding the learning loss from each move. A consistent approach can reduce this barrier to success.

| Sample process for implementing a common approach to reading | Assess all the approaches to reading | Decide on common materials, curriculum, and assessments | Implement the common approach, sharing lessons learned among schools | Monitor and evaluate implementation |
| :---: | :---: | :---: | :---: | :---: |

## LESSON 4 <br> It is not the materials, but how they are implemented

Good curriculum can be a powerful tool in the hands of an effective teacher, but it is not enough to change teacher practice. Too often, new reading efforts begin and end with the purchase of new materials, software, and curriculum. In successful literacy efforts, more attention was focused on how materials were used than which materials were used. The What Works Clearinghouse, an independent research arm of the Institute of Education Sciences, has not found that one particular program works miracles; districts that have made great strides have used various materials. Many districts have gone and purchased the same material and curriculum as high performers like Montgomery County Public Schools (MD), but were not able to duplicate their results. When allocating scarce resources, managing and monitoring implementation
often yields a better return than big purchases of new materials.

One district exemplifies a common scenario. After careful and extensive research and assessment of needs, the district purchased a program with which it would launch a dis-trict-wide elementary literacy initiative. Reference checking confirmed it had been "effective" in many other districts. This was a substantial line-item in the budget for the year, backed by much costly outside training. It was rolled out to every classroom teacher in the district. However, after several years of very modest improvements in students' reading and comprehension, the district investigated how the program was being used. The results were surprising: not every teacher was even teaching the materials, and those who were were often using them very differently.

The district faced a choice: should they look for a new reading program or should they work harder to ensure the existing program be used effectively and consistently in every

## Shifting culture

The use of common curriculum, materials, and assessments can be a dramatic cultural change for many schools and districts. Some districts that have implemented a common approach to reading have found that leaders must first demonstrate the change in beliefs they want to see district-wide. They have also found that changing teacher behavior first helps shift culture in the end. Once teachers see, by sharing growth data from common formative assessments, that the new approach is working in their classrooms and/or other classrooms in their school and district, their beliefs start to change. After seeing the evidence, more and more teachers will "buy in" to the common approach.

## The Process of Shifting Culture

## 1. Leadership believes

Leaders must first believe that all children can learn at high levels

New behavior required of staff
Leaders expect staff to implement new efforts

New beliefs by staff
Beliefs change as staff see results
classroom? Leaders chose to double down on implementation. First, they visited classrooms and sought feedback from teachers in an effort to better understand why implementation had failed. They learned that the reading materials were not comprehensively covering all five domains of literacy, and teachers were assembling various pieces to create an effective lesson.

To remedy this, the district brought together a group of highly-effective reading teachers from several schools to develop reading maps and pacing guides for the common 90 -minute reading blocks. These guides covered all strands of literacy and helped teachers integrate the various materials into their lessons. During walk-throughs, principals and instructional coaches looked for evidence that the tools were being employed in the classroom and used them as the basis for immediate feedback.

In the end, the district's choice to focus on implementation instead of switching materials was a shrewd one. Thanks to the new teacher-developed tools and monitoring of implementation, reading gains improved significantly, teachers' morale was boosted by the increased support, and the district did not spend limited funds on a new program.

In another district that achieved significant gains in reading, an accountability office designs, runs, and publishes formal implementation evaluations of their reading programs. Interviews with teachers and administrators, classroom observations, and training records are used to answer the question, "To what extent is the program being implemented in schools as designed?" Data is then analyzed by Ph.D.-level staff, and findings are published district-wide; individual interview and observation data is anonymous to most. If the program is being implemented as designed across all schools, then a further evaluation of program-effectiveness will be conducted; if it is not, the program will be modified or abandoned.

[^16]
## Spend differently, not more

Virtually all districts consider it an imperative to teach students to read to prepare these students to be successful in college and careers. Many districts, however, lament that they lack the necessary funds to fully address this challenge. Districts can, however, have a top quality, intensive reading program that costs no more, or perhaps less, than current efforts. By pooling all reading resources, focusing on effective core instruction through a common approach, and ensuring faithful implementation, many districts will be surprised that they have more than enough funds already.

> They reasoned that if reading mattered most, most everything else mattered less.

[^17]
## OPPORTUNITYBRIEF

# IMPROVING THE COST-EFFECTIVENESS OF PROFESSIONAL DEVELOPMENT: Reducing Expenses while Increasing Impact 

DISTRICT MANAGEMENTCOUNCIL ${ }^{\circledR}$

Research confirms what many students, families, and school leaders have long believed: teachers are the most important school-based factor in raising student achievement. Spending money wisely to improve teacher effectiveness is therefore a high-leverage opportunity for improving student outcomes. Since most districts already spend a great amount on this effort, there is an opportunity to shift significant resources, rather than look for new funds. Political pushback is limited: external stakeholders are not impacted, and few internal staff are negatively affected. The real challenge is the implementation risk; providing effective professional development that actually raises student achievement is difficult to achieve.

No other school-based factors can come close to having as significant an impact as an effective teacher. Based on one study, even a ten-student reduction in class size produces smaller benefits than one standard deviation improvement in teacher quality. ${ }^{1}$


An effective teacher can mitigate non-school factors such as family characteristics, income, etc. that influence achievement. A student fortunate to be assigned to an effective teacher can make up to a full year's more growth than a student assigned to an ineffective teacher. Being assigned consecutively year after year to several effective teachers can close achievement gaps. Improving teacher quality is one of the biggest levers for improving student outcomes.

Recognizing the potential impact, districts have invested significantly in professional development (PD) for their teachers. School districts often spend \$8,000-\$12,000 per teacher per year on professional development. ${ }^{2}$ A recent study of two urban districts by Education Resource

Strategies found that spending reached as high as $\$ 18,000$ per teacher. ${ }^{3}$ For a typical school district of 50,000 students, a conservative estimate for professional development is $\$ 25$ - \$40 million per year, with over $\$ 3.5$ million per year spent on contracted professional development services alone.

While the importance of professional development is well understood, the total cost of PD is often not well understood; many districts are quite surprised to discover how high the total costs are, as the costs are often much larger than they appear in the budget. In a study of a sample of large, urban districts, one district's actual PD costs were 20 times the budget item amount. ${ }^{4}$ Professional development spending is often buried across multiple department budgets and funding sources. Spending frequently falls under the purview of many departments such as curriculum and instruction, technology, Title I, and special education, among others. The staff overseeing this spending is usually not officially charged with managing "professional development." The aforementioned report found that in the four districts studied, each had more than ten departments managing professional development spending. As a result, professional development spending is often fragmented and uncoordinated, making it difficult to accurately aggregate.

Another reason some districts do not realize how much they are spending on professional development is that many of the costs are not labeled as professional development. For example, many districts believe that since teachers must pay tuition out-of-pocket for graduate courses, this is "free" to the district. However, the "lanes" in most collective bargaining agreements pay teachers extra for completing these courses. This cost is rarely considered professional development, and yet these pay increases can total close to $\$ 9$ million annually for a typical school district of 50,000 students. ${ }^{5}$

More disconcerting than not knowing the full cost of a district's professional development efforts is not knowing whether these efforts are effective. PD is a significant expense, but few districts have comprehensive systems to measure its effectiveness. Of more than 1,300 studies that do address the effects of teacher professional development on student achievement, only nine meet What Works Clearinghouse evidence standards.

Research is clear that substantial and sustained professional development - 50 hours on a single topic - is needed to change teacher behavior and correlate to student achievement gains. ${ }^{6}$ However, it is rare that professional development is both substantial and sustained. Often, limited professional development time is used to address multiple topics and content areas over the course of the school year. A recent Education Resource Strategies study of three urban school systems with robust programs reported that they all spent more than half of their PD time on non-content specific topics. ${ }^{7}$ Most professional development is delivered in the form of short
conferences and workshops that do not provide the time on topic that research shows is needed to improve student outcomes. Given this, it is no surprise that most teachers report that the professional development they receive does not effectively inform their practice. One survey showed that $41 \%$ of teachers reported that content-related training they had received was unhelpful and over $50 \%$ reported that training in other areas was unhelpful. ${ }^{8}$

Given the importance and expense of professional development, there is an opportunity in many districts to both more effectively manage the cost of PD, and increase the effectiveness of PD.

## What Gets Measured Gets Managed

As the management adage goes, "what gets measured gets managed." Simply knowing the full cost drives action. When district leaders realize how much they are actually spending, they are often surprised and highly motivated to make better use of scarce resources. Additionally, a full understanding of the scope of the programs offered can help better examine effectiveness and increase the ability to manage cost-effectiveness.

So, how do you assess the full real cost of PD? To fully assess the total costs, consider the following:

## 1 - Teacher time

Up to $55 \%$ of total professional development spending is allocated to freeing up teacher time, ${ }^{9}$ which represents up to $\$ 20$ million for a school district of 50,000 students.

- Salaries to support teacher participation in professional development
This primarily includes the cost of non-teaching days in the teacher contract, often intended to be used for professional development. A study of five urban districts found that the number of full professional development days ranged from 5 to $11 .{ }^{10}$ For a typical district of 50,000 students, this item alone could amount to approximately $\$ 5$ million - $\$ 15$ million.
- Teacher stipends for professional development time Districts and schools pay teachers to stay after school to collaborate with their colleagues, such as for team planning or professional learning community (PLC) meetings.
- Expenditures for substitute teachers to cover classes during professional development
Some districts increase the cost of each hour of professional development by paying for a substitute teacher in addition to the portion of the teacher's salary.
- Salaries and benefits for school-based professional development staff
Some staff is paid on a part-time or full-time basis to take on coaching, teacher-leadership roles, or other PD related tasks.


## 2-External professional development fees

Externally contracted services are the second largest costdriver of professional development.

- Tuition for teachers who enroll in college and university courses
- Fees and expenses for external consultants and workshops
- Transportation, meals, and lodging for out-of-district professional development


## 3 - Pay increases tied to professional development

While seldom labeled as a PD expense, districts encourage and reward teachers for taking graduate courses, presumably based on the assumption that this will increase teacher effectiveness.

- Salary increases tied to graduate degrees and courses Although graduate degrees have been shown to be ineffective in raising student achievement, many districts still invest heavily in this form of professional development, most often through increased compensation tied to graduate degrees and courses.


## 4 - Other PD costs include:

- Principal and assistant principal time devoted to educator evaluations
- Salaries and benefits for coaches, master teachers, department heads and other roles that help teachers become better
- Salaries and benefits for central office professional development staff
- Salaries and benefits for central office staff that devote a portion of their time to supporting PD
- Expenditures for supplies and equipment used for PD activities
- Expenditures for district facilities and other facilities used primarily for PD
Once districts know the full costs and scope of their professional development, they can take steps to make their programs more cost-effective and effective in raising student achievement.


## Measuring effectiveness

Managing the cost-effectiveness of professional development requires knowing both the cost and the effectiveness of each effort. A full accounting of costs is not an easy task, but assessing effectiveness can be even more challenging. When measuring the effectiveness of professional development, districts should ask the following questions:

1. Is teacher behavior changing?
2. Is student learning improving as a result of professional development?

## Is Teacher Behavior Changing?

This first measure is valuable as an easy-to-monitor leading indicator. Before professional development can impact student achievement, it must first change teacher practice. If teacher actions do not change, then PD has no chance of impacting students.

Observations: Pre- and post-observations of teacher practice can be very illuminating. For example, suppose a district is preparing to roll out professional development on the topic of asking probing questions. Principals, coaches, and other observers could visit a sample of classrooms and collect data on the number and type of probing questions asked; the assessment should be based on a rubric aligned to the goals of the professional development program to be administered. This creates a baseline for teachers' use of probing questions. After the professional development has begun, the observers should return to those same classrooms and use the same rubric to measure progress against the baseline. Ideally, these classroom visits should be done on a regular basis and integrated into the school's regular walk-through schedule.

Survey Data: Another measure is student and teacher survey data. Similar to observations, pre- and post-surveys offer districts an opportunity to establish a baseline and measure progress. They also offer teachers the opportunity to provide feedback, a step that could increase buy-in. The caution is that teachers may overstate any change in behavior, but feedback that says, "I have not changed my practice much" should ring an alarm bell.

Neither classroom observation nor survey data can show whether a professional development offering is effective, but they can show whether it is ineffective. In the case of professional development, it is easier to measure failure. This can be helpful information given that national research has indicated many current efforts are ineffective and costly.

These assessment strategies can provide feedback within weeks or months. Once the district realizes that a certain professional development program is not producing changes in teacher behavior, the particular program can be discontinued or modified quickly.

## Is Student-Learning Improving?

The ultimate measure of the effectiveness of most PD is the impact on student learning. The measures of student outcomes should be aligned to the specific goals of the professional development. For example, if the goal is to impact student understanding of a particular concept in math, the districts should measure student growth of that particular skill.

End-of-the-year state assessments provide the easiest and crudest measure of student outcomes, and if specific questions can be linked to the focus areas of the PD, this can be helpful data. Common formative assessments and/or pre- and posttests may be even better measures. A short quiz can be
administered at the start of the professional development and then again at the end to measure growth on particular skills.

The most precise way to evaluate the effectiveness of professional development is to provide it only to some teachers, thus creating a control group. By piloting professional development efforts in some classrooms or schools, districts can compare the growth of students whose teachers received the professional development to the growth of students whose teachers did not. If effective, the program can then be launched in more classrooms and schools, and can be continually refined and measured for effectiveness.

Many might object to offering professional development to only some teachers as "unfair." However, perhaps it is more unfair to not know if professional development is actually helping. Is it fair to teachers, principals, taxpayers, and most importantly, to students to spend so much on a critically important effort without knowing if it helps, should be continued, or needs to be changed?

## Recommendations for Managing PD More Strategically

Based on a review of existing literature as well as feedback from district leaders, some promising PD strategies have been identified as being cost-effective. As districts seek to build more cost-effective programs, the following four recommendations are good places to start:

## Don't pay for time that can be had for free

A full cost analysis of a district's professional development efforts is likely to show that paying for extra teacher time is the biggest cost component. Principals, central office leaders, and teachers themselves have asked for more PD as the demands placed on them have increased. The Common Core State Standards, data-driven instruction, anti-bullying efforts, and many more topics seem to overwhelm the PD schedule. In response to having too much to cover in too little time, districts have opted to pay extra for teacher time to accomplish all of this. This takes many forms: non-teaching days; beforeand after-school meetings such as faculty meetings, team, or professional learning community (PLC) time; or stipends for selected staff to work after school or over the summer to develop curriculum or analyze data.

Paying for this extra time is often expensive and ineffective. Some districts have found ways through expert scheduling to create extensive PD time during the regular school day, without reducing teachers' time with students.

Non-teaching days: Non-teaching days in the teacher contract are initially intended for professional development and often come in exchange for larger-than-typical pay increases - districts buy this extra time. Unfortunately, these days often end up being used for other things. If these days are
scheduled at the beginning or end of the school year, the days can end up being used to set up classrooms or grade final exams. Even time scheduled during the regular school year sometimes ends up being used for individual planning or prep, not professional development, especially for teachers who are not teaching core subjects.

Even when these days are used for professional development, the timing limits their potential impact. Because it is delivered when students are not present, content is less likely to inform actual classroom practices. PD during the summer or the start or end of the school year does not allow ideas to be reinforced throughout the school year with follow-up activities.

When the cost of these extra days is calculated, district leaders are often surprised by the magnitude of the expense, especially when alternative uses for the funds are considered. Since these days are just "part of the contract" and not line-itemed, they are often considered as free, when, in fact, six extra days for a typical urban district of 50,000 students amounts to $\$ 11,000,000$ a year! This sum of money would pay for nearly 150 instructional coaches, approximately one per every 13 core teachers. Assuming a one-to-one coaching model, each instructional coach could spend about two hours per week with every core teacher in the district.

Teacher-time outside the regular school day: Districts also pay for teacher-time outside of the regular school day in the form of stipends for after-school or before-school professional development. This time is often used for teacher collaboration such as PLCs and common planning. Through expert scheduling, some districts have created time for these activities during the school day, thus eliminating the need to pay extra for it.

## Recommendations for

 Managing PD More Strategically
## Don't pay for time that can be had for free

Free up funds to invest in coaching

Target professional development
strategically
Consider the evaluation system as professional development

A scheduling expert can almost always find time within the regular school day for teacher collaboration. For example, in a district that wanted to introduce common planning time for teachers at four middle schools, principals said, "We want and need common planning time, but there just isn't any wiggle room in the schedule." After a month of trying, they approached the superintendent with two choices: look for funds to pay for after-school time or live without.

Unwilling to give up, a scheduling wunderkind offered to review all four schools' schedules and staffing data. After many hours of work, he was able to add 45 minutes of common planning time each day by department, an individual planning period, plus regular grade-level team meetings; this was all done without adding any staff, shortening classes, or lengthening the day. In addition, the common planning time was scheduled back-to-back with lunch and the personal prep period. All of this was scheduled at the same time across all four schools, which gave teachers the option to spend two hours collaborating with colleagues at other schools.

This may seem impossible in many districts. Most people assigned to create schedules find it very difficult to make his happen. Creating schedules like this is a rare talent. At many schools, either the principal or an assistant principal is tasked with building the schedule, and they were generally not hired for their scheduling abilities.

Some districts have searched for this expertise internally by asking one talented principal to schedule many schools, or paying a stipend to a teacher with a knack for this. Other districts hire an outside scheduling expert, which is a small investment to free up much teacher time and reduce professional development costs.

One such expert, Marilyn Crawford, affirms, "Common planning time should never be after school. There is always time during the regular school day for teachers to work together without the need for reducing individual planning time or core instruction for students." In some cases, she has scheduled a full day of teacher collaboration per week for core subjects without adding staff or using substitute teachers. Another expert with over 40 years of experience, Elliot Merenbloom, reports, "I can usually build in one period of teacher collaboration per day in school schedules."

Embedded time for collaboration during the school day is not only more cost-effective, but potentially more effective overall. Rooting it in the school day sends a powerful signal to teachers that time for collaboration is an essential part of their jobs. Additionally, districts can often actually provide more

## Shifting funds from workshops and other forms of PD to coaching can yield a better return.

time when scheduled during the school day than they can pay for when added-on.

## Free up funds to invest in coaching

Instructional coaching is a promising strategy for professional development that has become increasingly popular in the past decade. Its popularity has grown partly in response to the weaknesses of traditional professional development in the form of workshops, lectures, and courses. McKinsey \& Company has identified coaching as one of the highest potential professional development practices when implemented well by skilled staff: "Because coaching is so customized, it can create faster and deeper insights for teachers about what can work in their classroom... Great advice from a coach is often cited as making all the difference." ${ }^{\text {"l }}$ Although there are many different models, core tenets include a one-on-one teach-er-coach relationship, classroom observations, lesson modeling, goal-setting, real-time feedback, and follow-up activities. As opposed to traditional professional development, instructional coaching is tied directly to classroom practice and occurs in the classroom with students present. Shifting funds from workshops and other forms of PD to coaching can yield a better return.

In one recent experimental study of 50 teachers by Jim Knight and Jake Cornett, researchers at the Center for Research on Learning, teachers who were coached after attending a professional development workshop were more likely to use new teaching practices and implement them with a higher degree of quality than teachers who had attended only the workshop. Another study linked reading gains with intensive coaching programs that were implemented with fidelity. Though the research base is limited, it seems that a well-implemented and intensive coaching program can lead to changes in both teacher practice and student outcomes.

Many districts seem to see the value in starting or expanding coaching programs. The biggest obstacle is that they feel they cannot afford them. The funds currently used for traditional professional development could, however, cover most, if not all, of the costs of a robust coaching program.

Allan Odden, author and professor in the Department of Educational Leadership \& Policy Analysis at the University of Wisconsin-Madison, suggests that a robust coaching model requires at least one coach per 500 students. ${ }^{12}$ Therefore, a typical school district of 50,000 students would need at least 100 instructional coaches, an investment of about
$\$ 7.5$ million. If a typical district of 50,000 students spends over $\$ 3.5$ million in professional development per year on contracted professional development services, then reallocating those funds could free up enough money to cover nearly half of the coaching program. The remaining $\$ 4$ million represents less than $1 \%$ of the total operating budget for a typical school district of 50,000 students. If half of coaching is one-on-one and half of it is in small groups of three, each core teacher could have approximately 2.5 hours of instructional coaching per week.

If districts believe that coaching is a powerful lever for change, then the good news is that most districts can shift existing professional development dollars to fund a comprehensive effort.

## Target professional development strategically

In most districts, all teachers receive roughly equal amounts of professional development, with the exception of brand new teachers who receive a bit more support. Professional development is spread thin and wide. There is an opportunity to improve the cost-effectiveness and effectiveness of professional development by targeting resources to teachers more strategically.

McKinsey \& Company, for example, suggests segmenting teachers based on experience and effectiveness and providing different professional development to each segment in terms of intensity and topic covered. Other types of segmentation could also make sense (Exhibit l).

In this model, districts potentially get more "bang-for-thebuck," while teachers receive professional development that better meets their specific needs. Topics can be tailored, for example, to provide more focus on classroom management for new teachers, or very advanced student engagement strategies for highly-effective teachers. It also allows districts to spend more on staff with greater needs, without raising total costs.

## Exhibit 1

SEGMENTED PROFESSIONAL DEVELOPMENT MODEL EXAMPLE


[^18]
## Consider the evaluation system as professional development

Recently, many districts and states throughout the country have made significant investments in redesigning teacher evaluation systems. Historically, teacher evaluations rated almost every teacher satisfactory or excellent and failed to identify areas for development. The influential report, "The Widget Effect," found that in twelve districts studied, three out of four teachers did not receive any specific feedback on how to improve their practice. ${ }^{13}$ As districts build and implement new evaluation systems, there is an opportunity to connect evaluation and professional development.

Since a major component of many evaluation systems is to improve teaching (not just to rate teacher performance), there is much overlap with the goals of professional development. It would be logical to consider shifting funds from other professional development areas toward supporting and improving teacher evaluation. This might include the following strategies:

- Evaluation ratings can help to identify top-performing teachers for coaching positions. The Bill \& Melinda Gates Foundation's recent study on teacher effectiveness has found that it is possible to identify effective teachers, and these teachers can be put into roles where they have opportunities to help their colleagues.
- Evaluation ratings and identified needs can set the topics for professional development.
- Change in evaluation ratings and classroom observation data can serve as one leading indicator of the effectiveness of professional development.
- Classroom observations can be integrated into the work of instructional coaches.
- Investing in freeing up time for principals to do classroom observations and give feedback to teachers is an indirect way of increasing high-quality professional development. Something as simple as providing additional clerical support to principals can free up time for principals to increase their impact.
A systems-thinking approach to evaluation and professional development will require adaptive change. Many districts view professional development and evaluation as separate, and even oppose a connection. This may be a missed opportunity to both improve teaching and use the limited resources of time and money most effectively.


## Looking at the familiar with fresh eyes

Districts certainly value PD and invest heavily in it, but by tracking costs, measuring effectiveness, and shifting resources, many districts will be able to do more for less. Strategic management of professional development activities can make PD more cost-effective, improve the impact on student outcomes, and free up funds for other strategic priorities. PD has always been an important tool for school districts, but taking a step back and looking at it through a different lens can improve these important efforts.

[^19]${ }^{8}$ Linda Darling-Hammond, Ruth Chung Wei, Alethea Andree, Nikole Richardson, Stelios Orphanos, National Staff Development Council, "The Learning Profession: A Status Report on Teacher Development in the United States and Abroad," National Staff Development Council, 2009, http://learningforward.org/docs/pdf/ nsdcstudy2009.pdf (accessed November 20, 2013).
${ }^{9}$ Karen Hawley Miles, "Rethinking School Resources," New American Schools, 2013,http://www.erstrategies.org/cms/files/918-rethinking-resources.pdf (accessed July 15, 2013).
10 "Continuing to Improve Teaching Quality During Tough Economic Times," Education Resource Strategies, 2009, http://www.edweek.org/media/ppt_download_2.pdf, (accessed July 15, 2013).
${ }^{11}$ Kartik Jayaram, Andy Moffit, and Doug Scott, "Breaking the Habit of Ineffective Professional Development for Teachers," McKinsey \& Company, January 2012, 7, http://mckinseyonsociety.com/downloads/reports/Education/MoSociety_ Teacher_PD-v4.pdf (accessed June 10, 2013).
${ }^{12}$ Allan Odden, Improving Student Learning When Budgets are Tight (California: Corwin, 2012), 67.
${ }^{13}$ Daniel Weisberg, Susan Sexton, Jennifer Mulhern, David Keeling, "The Widget Effect: Our National Failure to Acknowledge and Act on Differences in Teacher Effectiveness,"http://widgeteffect.org/downloads/TheWidgetEffect.pdf (accessed July 15, 2013).

# IMPROVING THE COST-EFFECTIVENESS OF PROFESSIONAL DEVELOPMENT: <br> Reducing Expenses while Increasing Impact 

Research is clear that teacher effectiveness is the most important school-based factor in raising student achievement. Providing effective professional development (PD) that actually raises teacher effectiveness - and therefore student achievement - has been difficult to achieve at scale. As most districts already spend a great deal on PD loften $\$ 10,000$ or more per teacher, when all costs are counted), districts have an opportunity to shift significant resources to more effective PD efforts, rather than look for new funds.

HERE'S HOW TO GET STARTED:

## 1 FIND OUT HOW MUCH YOU ALREADY SPEND ON PD

Many districts are surprised to discover the full cost of their PD efforts, especially when they include resources from grants and other funding sources as well as costs not traditionally labeled in the budget as "professional development," such as teacher time and pay increases tied to graduate degrees. This broad definition of PD helps highlight the often-significant resources of time, money, and people that can be redeployed.

## 2 CONSOLIDATE ALL PD EFFORTS AND LEADERSHIP

Consolidated authority, responsibility, and accountability for results can help ensure that limited funds are spent wisely and on efforts that are aligned to the district's strategic priorities and vision for effective instruction.

## 3 COMMIT TO A FOCUSED PROFESSIONAL DEVELOPMENT EFFORT

Research shows that at least 50 hours of learning, applying, and practicing a single topic is needed to change teacher behavior in ways that correlate with student achievement gains. It is essential that leadership reallocate and integrate resources to sustain such substantial and focused PD efforts.

## 4 SCHEDULE TIME FOR PD WITHIN THE REGULAR SCHOOL DAY

Time for PD - including common planning time, professional learning communities (PLCs), or data meetings - can be built into virtually every elementary school schedule land most secondary school schedules) within the confines of the regular school day and in accordance with existing collective bargaining agreements. Scheduling support and expertise from the central office can help.

## 5 CONSIDER COACHING AS AN ALTERNATIVE TO TRADITIONAL PD

Some traditional PD strategies - often in the form of short-term workshops, conferences, and courses - have not been effective in changing teacher practice or raising achievement. Job-embedded instructional coaching is a promising alternative, and can be less expensive than traditional models if designed thoughtfully.

A word to the wise: DO NOT TREAT PD AND EVALUATION SEPARATELY
As many districts are reforming their educator evaluation systems, some are using new evaluation data from observations and data on student growth by teacher to target future PD and measure the effectiveness of past PD efforts.

## DISTRICT MANAGEMENT COUNCIL ${ }^{\oplus}$

## LESSONS FROM THE FIELD

# IMPROVING THE COST-EFFECTIVENESS OF PROFESSIONAL DEVELOPMENT: Reducing Expenses while Increasing Impact 

DISTRICT MANAGEMENTCOUNCIL ${ }^{\circledR}$

Recent trends in K-12 public education have resulted in growing demands being placed on teachers. The implementation of new Common Core State Standards and related assessments in the majority of states raise expectations at a time when student populations are becoming increasingly diverse and their needs more varied and intense. Meanwhile, new evaluation systems have put teacher effectiveness and teaching practice under additional scrutiny. Given these new challenges, districts have an even greater responsibility to provide the best professional development possible.

## Lessons from the field

## LESSON

Put someone in charge of all professional development

LESSON
2

## LESSON



LESSON
4

LESSON
5

Map the time, people, and money associated with professional development

Time for professional development can almost always be found in the regular school day

Coaching can be a cost-effective alternative to traditional PD, but only if structured appropriately

Treat teacher evaluation and professional development as two sides of the same coin

The challenge most districts face is how to simultaneously improve the effectiveness of professional development and at the same time reduce cost. Districts that have improved the cost-effectiveness of their professional development programs have reimagined the way professional development is managed, designed, scheduled, implemented, and evaluated. Here are five lessons they have learned along the way.

## Most districts

 spend much more on professional development than they realize.
## LESSON 1

In many districts, there is no one person or department in charge of professional development. Typically, building principals, district content-area leaders, and directors of special education, Title I, and other grant programs all share responsibility across multiple budgets and funding sources. Even when a district does have a director of professional development, that person rarely exerts much, if any, influence over the decisions of others who have access to funding for professional development through their own budgets, especially grant-funded budgets. As a result, professional development efforts are often splintered, shallow, inconsistent, sometimes contradictory and rarely cost-effective.

Most districts that have been successful in dramatically improving the cost-effectiveness of professional development have put one person in charge of all district efforts and all associated funds. Montgomery County Public Schools (MD), for example, developed an Office of Staff Development (OSD), headed by an associate superintendent, to oversee all funding for professional development. The group was tasked with ensuring that all professional development in the district was aligned with its strategic priorities and that resources were used strategically and effectively. This dual mission yields benefits for both the budget and pedagogy.

First, having one leader with authority, responsibility, and accountability spurs development of a common understanding of what effective instruction looks like. In Montgomery County, district leadership articulated a comprehensive and specific vision for effective instruction that focused on high standards and differentiated instruction, a vision that OSD then reflected in all professional development efforts. All teachers in the district participated in common training, a research-based program focused on developing educator capacity to identify learning differences among students and adapt instruction to better meet individual needs. Managed through OSD, this unified approach fostered a common understanding across buildings, content areas, and grade levels. Teachers shared "a united view about the characteristics and importance of high-quality teaching and learning, and its link to student outcomes." ${ }^{11}$

In another large, diverse district, a leadership team charged with professional development for the entire district came to a common understanding of what good instruction looks like by watching videos of actual lessons. Together, they debated to what degree the videoed lessons demonstrated characteristics of effective instruction. The process was more difficult than anticipated, as debate highlighted different views and perspectives. In the end, the team codified what effective instruction looks like and used that as the basis for professional
development offerings.
Second, consolidated authority, responsibility, and accountability for results help ensure that limited funds are spent wisely on efforts that are aligned to strategic priorities and to the district's vision for effective instruction. For example, a large urban school district combined nearly all of its professional development efforts to improve reading instruction the year following the adoption of the Common Core State Standards. Senior leaders knew they "couldn't afford to splinter our efforts." They pooled nearly all professional development spending across departmental budgets and grant funding sources to support training and coaching for all teachers at the district and school level and focused their efforts on reading and reading only.

There is a third reason to consolidate responsibility and accountability for professional development. The intensive and sustained professional development necessary to change teacher practice and improve student outcomes is nearly impossible to achieve if spending is fractured. Research is clear that substantial and sustained professional development - not much fewer than 50 hours learning, applying, and practicing a single topic - is needed to change teacher behavior in ways that correlate with student achievement gains. ${ }^{2}$ For many districts, no one department or funding source can provide fifty hours of professional development for core-content teachers (let alone all teachers) on one high-leverage topic. Only consolidated responsibility can reallocate and integrate the resources needed to support such substantial PD.

## IFESSON Map the time, people, and money 2 associated with professional development

Most districts spend much more on professional development than they realize. Much of this spending goes to professional development activities that are unlikely to raise student achievement such as conferences, and workshops. Many districts pursuing more cost-effective PD have mapped their PD resources in order to identify patterns, gaps, and opportunities. Resource mapping typically starts with taking stock of all the time, people, and money being devoted to professional development using a comprehensive definition of the term.

A broader, more complete definition of professional development includes, for example: contracted non-teaching days; school-based professional development including faculty, department, and grade-level meeting time; instructional coaching; time school and district administrators devote to classroom observations and feedback; and, increases in compensation for master's degrees and advanced study. Along with payments to outside vendors and stipends for staff, professional development costs also include pro-rated portions of the salaries of those employees who have a hand in coordinating,
managing, or leading professional development.
Exhibit 1 is an example of the kinds of costs districts have identified across departments and budgets during the resource mapping process.

In one large southern district, broadening the definition of PD required leaders to make a cultural shift. For example, central office monitoring and support for special education teachers came to be considered professional development whereas it had previously been considered management. This broad definition highlighted previously unidentified professional development costs - as well as resources of time, money, and people that could be redeployed to more strategic purposes.

In addition to capturing expenditures and programs, resource mapping also highlights how people, time, and money are being deployed. For example, one large southern district had ten paid days in the teacher collective bargaining agreement that it considered professional development costs. Some of the days were designated for common planning and other group activities while some were designated for individual planning time. Through a resource mapping process that included interviews with staff, district leaders found that while some teachers used those days to collaborate with colleagues on their own initiative, many others did only individual planning or little schoolwork at all. The resource mapping process also brought to light that a major PD investment had little likelihood of improving teaching practice.

Few large urban districts that have comprehensively and effectively mapped their resources have done so without support from an outside partner. Resource mapping requires a specific set of statistical and analytical skills, and many districts do not have the needed capacity in-house. Additionally, resource mapping may include benchmarking data to compare resource allocation to other like districts. These efforts require data sets and analytical capacity that are often not readily available in-house. Once an initial analysis is performed, many districts are able to replicate the resource mapping process in future years without additional outside support. The goal of the outside partnerships should be to build capacity to conduct the needed data collection and analysis year after year.

Districts should regularly and systematically use resource mapping to reveal the full costs and breadth of professional development investments and highlight opportunities to

> Finding time for teacher teams to meet and learn within the regular school day, as opposed to before or after the school day or year, is important, can be done, and will have immediate impact on the budget.
increase their cost-effectiveness, reallocate resources, and align efforts to district priorities.

## IESSSON Time for professional development 3 can almost always be found in the regular school day

Up to $55 \%$ of total professional development spending goes to pay for time for teachers to participate in professional development; ${ }^{3}$ this represents up to $\$ 20$ million for a school district of 50,000 students. Some of this spending goes to additional compensation (e.g., stipends) for teachers to participate in professional development outside of the regular school day and year. However, time for common planning, professional learning communities (PLCs), or data meetings is achievable in virtually every elementary school - and most secondary schools within the confines of the regular school day and existing collective bargaining agreements.

For example, Duval County Public Schools (FL) wanted to provide opportunities for core content teachers to collaborate and plan together; this had been identified as a key professional development strategy in their reform plan. Through its resource mapping process in $2011,{ }^{4}$ the district found that it already invested approximately $\$ 100$ million (almost $\$ 12,000$ per teacher) in teacher time outside of the student day, including planning time, faculty meetings, and early release time. Although 73\% of the time was contractually obligated to be allocated toward individual planning as opposed to common planning, the remaining $27 \%$ still proved to be enough for district leaders to provide common planning time for core content teachers, and even non-core and elective staff in some grades. At the elementary level, for example, schedules were created so that resource teachers (e.g. PE, music, art) who were shared between schools could meet all together once a week with one principal for training and collaborative planning. This kind of creative scheduling required significant involvement, support, and technical assistance from central office.
Another large urban district redesigned its middle-school schedule to make time for teacher collaboration within the parameters of the teacher contract. In 2013-14, all eleven middle schools are piloting common schedules that allocate staff according to enrollment and need as opposed to historical precedent. The district has scheduled a daily common

Exhibit 1

## PROFESSIONAL DEVELOPMENT COSTS

## EXPENDITURE AREAS

| Item | General Fund | Grants | Total |
| :---: | :---: | :---: | :---: |
| Teacher Time |  |  |  |
| Cost of weekly hours spent on... |  |  |  |
| PLC meetings |  |  |  |
| Faculty meetings |  |  |  |
| Team / department meetings |  |  |  |
| Data meetings |  |  |  |
| Other meetings |  |  |  |
| Cost of annual hours spent on... |  |  |  |
| Required PD sessions |  |  |  |
| Working with coaches |  |  |  |
| Principal/teacher coaching session |  |  |  |
| Educator evaluation |  |  |  |
| External PD sessions |  |  |  |
| Department-specific required sessions |  |  |  |
| School-wide required sessions |  |  |  |
| District-wide required sessions |  |  |  |
| Dedicated PD positions |  |  |  |
| External fees and expenses |  |  |  |
| Stipends |  |  |  |
| Tuition reimbursement |  |  |  |
| Workshop Consultant |  |  |  |
| Educational Consultant |  |  |  |
| Professional Consultant |  |  |  |
| Registration Fees |  |  |  |
| Other Professional Services |  |  |  |
| Travel |  |  |  |
| Travel-Board Approved |  |  |  |
| Pay increases tied to training |  |  |  |
| Salary due to grad degrees |  |  |  |
| Salary due to PD points |  |  |  |
| Substitutes |  |  |  |
| Certified Subs |  |  |  |
| Classified Subs |  |  |  |
| Grand Total |  |  |  |

preparation period for every subject across all schools. In addition, teams of educators at each school who have demonstrated effectiveness (including proven instructional coaches) provide college- and career-themed courses to students. These courses free up core content teachers to participate in a full day of professional learning with their content area teams every ten days. Often, designing and implementing these kinds of substantial scheduling changes - within the constraints of teacher contract requirements - require expertise. Districts can engage outside scheduling experts to help them.

Finding time for teacher teams to meet and learn within the regular school day, as opposed to before or after the school day or year, is important, can be done, and will have immediate impact on the budget. However, creating the meeting time is only half the battle. Districts that have been successful in cutting costs and improving the effectiveness of their PD have not just made time for team PD during the regular school day. They have also put systems in place to ensure that the time is used effectively. Typically, they borrow heavily from the guidelines of Learning Forward, the leading national organization for staff development professionals ${ }^{5}$. Although a full description of such systems is not within the purview of this document, some of the key questions districts have considered when they build job-embedded professional development centered on effective teacher teams include:

- How does the time support the district's vision for improving teacher practice?
- How does teacher assignment strengthen or weaken teacher teams?
- What team norms, roles, and responsibilities need to be established to support team effectiveness?
- What support from principals, department heads, and others do teams need in order to be successful?
- How will instructional coaching be integrated to enhance individual and collective learning?


## LESSON 4 <br> Coaching can be a cost-effective alternative to traditional PD, but only if structured appropriately

Some traditional professional development efforts - often in the form of short-term workshops, conferences, and courses - have not proven to be effective. Of more than 1,300 studies that address the effects of teacher professional development on student achievement, only nine meet the What Works Clearinghouse evidence standards. ${ }^{6}$ Former superintendent of Boston Public Schools (MA), Tom Payzant, writes that after participating in some traditional professional development, teachers "all too often return to their classrooms without being able to see the connection between their teaching
challenges and the professional development sessions they were required to attend." ${ }^{7}$

Many districts are turning to coaching as a promising alternative. As opposed to much traditional professional development, instructional coaching is tied directly to classroom practice. Although there are many different models, core tenets include at least some one-on-one coaching, classroom observation, lesson planning and modeling, goal-setting, real-time feedback, and follow-up assessment and monitoring. Some districts are focusing more and more of their coaches' time on working with content-specific teams of teachers to help them build their individual and collective skills at analyzing data about student learning (including student work samples), identifying adaptations and modifications in instruction through lesson planning and modeling, and assessing the effectiveness of the instructional changes.

Districts that have implemented successful coaching models have understood that coaching is not a silver bullet. They found that coaching programs can only be effective if they have the following characteristics:

- Instructional coaches are selected based on their ability to teach adults in addition to their ability to teach students. One large southern district found that principals were hiring coaches based on demonstrated effectiveness in the classroom; however, many of these educators felt uncomfortable leading and coaching their peers. The district centralized the recruitment, interview, and selection process for school-based coaching positions, and specifically hired for leadership skills in addition to pedagogy. Recognizing the need for ongoing development for the coaches, the district provided monthly professional development opportunities for coaches to collaborate and continue to improve their coaching and leadership skills.
- Coaches report to a district curriculum director. Centralized coaching positions helped ensure that the coaches who were hired had the strengths and skills needed to fulfill their roles. In addition, this practice has helped ensure that coaches have authority in their buildings, can improve schools across the district (as opposed to developing "lighthouse" classrooms and schools), and have opportunities to collaborate with one another across schools.
- Roles and responsibilities are clear. Without clear roles and responsibilities, some coaches are used to fulfill non-instructional duties, such as lunch monitoring, substitute teaching, or administrative tasks. Clear articulation and monitoring of roles and responsibilities can help ensure that coaches' time is used effectively. For some districts, this begins with
the job description. For example, one district now requires that $75 \%$ of coaches' time be spent with teachers; the district made explicit that coaches are responsible for providing: 1) one-on-one instruction coaching and 2) group coaching by leading PLCs. Although the district already had an instructional coach in every school, they credit this clarification of roles and responsibilities with improving and revamping their efforts.
- Teachers and coaches plan together. Coaching models that have been proven effective have prioritized time for individual and group planning meetings between teachers and coaches. Many teachers, especially new teachers, have trouble anticipating student confusions, planning for differentiating instruction, and using data to inform lesson planning. Planning sessions can be more effective than observation and feedback sessions in addressing these concerns. One district with a robust and effective coaching program invested heavily in training for its instructional coaches to lead PLCs in using data to plan for differentiating instruction and re-teaching priority standards. They found that the leadership of the coach helped ensure that PLC time was used effectively and built team capacity to design effective lessons.
- Coaching is tied to classroom practice. Some districts have found that of the school-based coaching models implemented across the district, the most effective models are based upon direct, in-the-classroom coaching. In these schools, key components of programs were classroom observation, model lessons, and feedback sessions.

The above list is not meant to be comprehensive. Rather, it synthesizes some of the key considerations of districts that have changed teacher practice and increased student learning through coaching.

## LESSON Treat teacher evaluation and pro5 fessional development as two sides of the same coin

Recently, many districts and states have made significant investments in redesigning teacher evaluation systems, in part, to help teachers improve their practice. The Measures of Effective Teaching (MET) Project has found that a combination of multiple measures - including student surveys, observation data, and students' past performance - can identify effective teachers and predict student outcomes. ${ }^{8}$ Most new evaluation systems include at least these measures, although they are weighted differently depending on the system. As a
result, many districts have, or will have in the near future, a wealth of evaluation data from multiple measures at their disposal. Districts looking to reduce the cost of professional development and improve its effectiveness are using this new-ly-available data to target PD and to measure the effectiveness of PD efforts.

First, the new educator evaluation systems can help districts focus and target professional development by examining trends and patterns in teacher-effectiveness. Areas in which teachers need additional support can be identified by level (elementary, middle, high), by school, and by content area. Principals can even target school-based professional development down to the teacher level.

Second, some districts have used the data available for measuring and monitoring the effectiveness (or lack thereof) of professional development. In order to determine the effectiveness of professional development, districts must ask two questions: "Has teacher practice changed as a result of the professional development?" and "Has student learning also increased as a result?"

To answer the first question, districts use evaluation data from classroom observations tied to the specific professional development undertaken by each teacher. In all the classroom observation instruments used in the districts participating in the MET Project, teachers are assessed across multiple competencies or standards of effectiveness. Many evaluation systems tie specific goals and feedback to each standard, providing data on multiple aspects of teachers' classroom practices. Multiple observations throughout the year afford teachers and administrators the opportunity to track progress and growth for all the competencies. If professional development is effective, teachers and administrators can expect to see teachers making significant progress, meeting or exceeding their goals for the specific competencies that the professional development was intended to address. Furthermore, districts should consider abandoning PD that does not tie to core competencies and reallocate those resources to PD that does.

To answer the second question -"has student learning increased as a result of professional development?" - some districts use value-added measures or other measures of student growth. Some districts have eased implementation by starting small and involving teachers from the outset. For example, in one district, every teacher selects one standard of the evaluation system to focus on for the year. Job-embedded coaching and other professional development are targeted to support improvement on that particular standard. Progress is monitored throughout the year through classroom walk-throughs and, at the end of the year, is assessed through final ratings. Through this process, principals, teachers, as well as coaches and other instructional leaders evaluate the effectiveness of professional development on an individual basis. The district
has found that this process has increased teacher "buy-in" and engagement.

In many districts, recognizing classroom observations and principal walk-throughs as development (not just as evaluation) represents a significant change in and of itself. Yet, principal feedback is a form of professional development and as this increases, other types of professional development can decrease. For example, in one district, principals had rarely ever visited classrooms to give feedback. Since a new evaluation system was implemented, they conduct eight to ten observations and feedback sessions per teacher per year. This investment in professional development could offset other spending.

A systems-thinking approach to professional development and educator evaluation requires that both work in tandem to provide flexible and adaptive solutions to individual teacher needs. This is hard work and will not happen overnight, but new educator evaluation systems provide the impetus and necessary data to propel change.

## A challenge, but not an impossibility

Improving instruction to meet the increasingly high demands created by new standards, teacher evaluations, and increased student need is one of the most critical challenges districts face today. But it need not mean adding millions of dollars to the budget. Many districts that have improved the cost-effectiveness of their professional development programs have mapped resources, consolidated resources and leadership, found time for development in the regular day, provided effective instructional coaching, and integrated evaluation and professional development. In doing so, they have saved dollars and reallocated funding to their highest priority strategic imperatives.

[^20][^21]
## OPPORTUNITYBRIEF

# RETHINKING PURCHASING: <br> A Strategic Approach to Increasing the Value of Each Dollar Spent 

DISTRICTMANAGEMENTCOUNCIL®

A11 school districts spend a great deal of time, thought, and even political capital answering the question, "What should the district spend its limited resources on?" Lengthy debate often accompanies the decision of whether to buy a new math curriculum, to renovate a school, or to buy supplies, for example. In many districts, far less time and attention are devoted to how these items should be purchased. Changing how things are purchased can reduce costs and increase the value of every purchase made by school districts. Borrowing a few pages from private-sector playbooks where vendors compete on providing the best solution as opposed to just providing the lowest price to specified requirements has allowed some urban districts to free up millions of dollars and increase the value of tens of millions of dollars of purchases.

FINANCIAL BENEFIT
Negative/ No Benefit


IMPACT ON STUDENT ACHIEVEMENT


POLITICAL FEASIBILITY
Very Politically Difficult


CERTAINTY OF GAIN, RELATIVE TO IMPLEMENTATION COMPLEXITY

Uncertain $\qquad$ Certain

The political capital required to modify the approach to purchasing is modest, and while changes to purchasing methods will not directly raise student achievement, the savings can be directed to advance the district's strategic initiatives.

School districts spend meaningful dollars on curriculum and textbooks, transportation, utilities, technology, construction, maintenance, subcontracted staff, food service, and materials and supplies for students, teachers and others. For a typical district of 50,000 students, purchased expenses account for approximately $20 \%$ of the budget, ranging from $\$ 60$ to $\$ 180$ million dollars annually, not including new school capital costs. As public entities spending public funds, most
districts focus great energy on compliance, and many leaders feel there is little alternative to the processes currently in place.

However, rethinking how districts purchase by combining private sector strategic purchasing strategies with public sector requirements presents an opportunity for many districts to free up funds for strategic priorities and get more value from every dollar spent. Trimming the costs of what's purchased by $5 \%$ would save a typical district of 50,000 students $\$ 3$ to $\$ 9$ million per year. Increasing the effectiveness and value of these purchases is even more valuable.

## How school district purchasing typically works

Most states have very prescriptive laws governing purchases by municipal entities, including school districts. At the core are a public-bidding process and a requirement to select the lowest price as long as specifications are met. This system is intended to create transparency and fairness and ensure that public money is spent responsibly.

Purchasing departments make decisions with caution to ensure that all regulations and requirements are met. Anyone who has sold to school districts knows how meticulously the purchasing regulations are followed. Failure to meet every specification - missing a form in the bid package, submitting a response a day late, or not properly labeling the outer and inner envelopes - can all get a vendor disqualified. The rules matter a lot, because they are the law and many believe they ensure a good outcome for public money spent.

The whole process begins when a department head or other administrator decides to purchase something. The CFO, for example, might initiate the buying of transportation services or the math director might start purchasing new curriculum and textbooks aligned to the Common Core State Standards. Once an administrator starts the process, then purchasing gets involved (for smaller purchases, the administrator may

> Purchasing in the private-sector is more nuanced than school district purchasing and focuses on value and fit, not just meeting specifications.
function as its own purchasing department, following a very similar process).

The next step of writing detailed specifications gets a lot of attention. The heart of ensuring fairness rests on telling every potential vendor exactly what is required. For example, one recent bid package for software to support teacher evaluations indicated some high-level features, such as compatibility with iPads, ability to share data with the human resources system, and support on a particular evaluation rubric. This all makes sense, since these are critical to the district's plan to evaluate teachers. The purchasing request, however, also listed over 50 other requirements, including dozens of reports that were required to be standard, information on server-system compatibility, security features and capabilities, frequency of new software releases, data-extraction capabilities, scalability, and customer support expectations.
After the specifications are written, the rest of the process is very straightforward. Districts publicly announce what the district is looking to buy, provide the specifications to everyone interested in bidding, and then collect the bids. Each bid has a clearly listed price to meet the requirements. There is little room for favoritism since anyone can bid, and everyone is bidding on the same requirements.

With responses from multiple vendors in hand, a very objective (thus fair and transparent) process completes the buying cycle. Purchasing looks at each price submitted, selects the lowest price, and then checks that the vendor's bid does in fact meet every specification and that all forms are properly filled out. If yes, the lowest bidder wins; if no, this review process is repeated for the second lowest bidder.

On the surface, it seems like an ideal process; it is fair and transparent, and the fact that districts purchase products and services from the lowest bidder makes it seem that dollars are being spent prudently. However, this process, in fact, often raises costs. The specifications written at the beginning of the

| The Typical | Write a very | Solicit a public | Purchase from <br> the lowest bidder |  |
| :--- | :---: | :---: | :---: | :---: |
| Four-Step District | Decide to buy <br> something | detailed <br> specification | request for a <br> quote | who meets all the <br> specifications |
| Process |  |  |  |  |

process do not set districts up to get the best value.
Detailed specifications rarely provide enough flexibility for alternative solutions to be considered. It omits an important step of considering the trade-off of features for a lower price.

For example, consider a fairly straightforward purchase, such as buying ten photocopiers/printers. The specifications might look something like this:

## Printing specifications

Color laser printing method
75 pages per minute

## Copier specifications

$600 \times 600$ dots per inch resolution
Scanner specifications
Color Charge-Coupled Device (CCD)
One-touch scanning
Email scan from address book

## Fax specifications

3-second transmission speed
1,000 sheet memory capacity
With the typical purchasing approach, the lowest priced vendor who provides photocopiers with all the requested features and requirements will win. What if, however, one vendor had a copier for $15 \%$ less that had a 3.1 second fax transmission speed instead of the 3 -second speed required, or if $20 \%$ could be saved if scanning required three buttons to be pressed instead of the one-touch scanning specified? If a district sent thousands of faxes, this might be a problem, but if it mostly received faxes, it might be fine. The traditional purchasing process often prevents this kind of evaluation of trade-offs.

In our private lives, we routinely weigh these kinds of alternatives when spending our own money. We might walk into a store knowing we want a 60 " flat screen TV with integrated speakers and Dolby sound, but we may end up walking out of the store with a 56 " TV and separate speakers. We make a value judgment that the extra four inches is not worth the extra cost, and that separate speakers will work fine given how much less it will cost.

Most private-sector companies purchase in a way that is much more similar to the way an individual buys a TV than the process by which a school district makes its purchases. Many private sector companies have found that costs are lower and purchases are better made when trade-offs are evaluated. The problem, of course, is that schools are spending public money, unlike the consumer or a private company. Fortunately, some school districts have found ways to incorporate the best of private sector practices within the public sector regulatory context.

## Insights from the private-sector

Purchasing in the private-sector is more nuanced than school district purchasing and focuses on value and fit, not just

## Purchasing pitfalls

1Signing the vendor's contract - Contracts prepared by vendors often contain language to protect the vendor at the district's expense.

2
Uncapped hourly/daily rates - Contracts often leave uncapped the costs and the amount of services to be provided; instead, contracts should include absolute "not-toexceed" amounts to protect the district from unanticipated costs and services.

3
Incorporating inflexible termination
language - Districts should ensure the ability to terminate the agreement at any time, even without cause.

Agreeing to indemnify the vendor - Contracts that require districts to indemnify the vendor protect the vendor at the district's expense. Vendors may reasonably seek to limit their exposure or to have mutual indemnification, however.

5Letting multiple administrators, principals, and teachers sign contracts - Only a few well-trained and experienced people should approve all contracts.

6Blindly accepting shipping and handling
charges - Some vendors charge for shipping and handling based on the purchase price, not the actual cost of shipping. Arranging transportation directly can sometimes be worth the effort.

7
Failing to negotiate hard with solesource vendors - When buying a specific textbook, there is only one publisher. Old-fashioned hard bargaining, however, can greatly impact the final price paid.
meeting specifications. Private-sector purchasing starts by gaining a clear understanding of the goals of the product or service being purchased. With this understanding in place, the purchaser communicates with a number of potential vendors and asks the vendors to suggest the best solution. Unlike the school district purchasing process, detailed specifications are not predetermined or provided. The vendors receive a general description of need and any critical information. They are then expected to use their creativity, knowledge, and expertise to solve the organization's problem with the best solution at the best price.

A hallmark of this process is that vendors ask a lot of questions and have multiple conversations with key stakeholders to gain a deeper understanding of the need. This stands in stark contrast to school district purchasing where questions are generally required to be submitted in writing and only to the purchasing department. Vendors will in fact be disqualified in many districts if they contact end-users directly.

At the end of the conversations, vendors submit a full proposal with prices; sometimes they provide a variety of options. Purchasing and key stakeholders evaluate the options and make value judgments, trading off features for price and weighing which alternatives best fit the need. The purchasing decision is then made based on value (i.e., the best combination of feature and price), not exclusively based on price and $100 \%$ compliance to the specifications.

In the private sector, figuring out the specifications is the responsibility of the vendor, not the purchasing department. Purchasing staff is not expected to be the experts on all products and services for their organization. The expectation is that the purchasing staff will communicate within their organization to understand the problem and goals, and then will communicate externally with vendors to gather potential solutions to be considered.

In short, traditional school district purchasing requests a price for a predetermined set of requirements, which is often referred to as an RFQ (request for quote), whereas the private sector asks vendors to develop the specifications to a broad statement of need, which is called an RFP (request for proposal).

## The best of both worlds

Obviously, reality is much less black and white than described above. School districts do issue RFPs and private
sector firms do use RFQs. The proportions, however, are different. Schools seem to use RFPs for certain services like consulting, but most purchases of physical things, such as construction and technology are RFQs. Private sector reserves RFQs for simple, lower-cost items that do not merit the effort of evaluating alternatives. They seldom use RFQs for construction, technology, or strategically important or large purchases.

Public-sector and private-sector purchasing both have strengths. The good news is that their strengths are complementary. School district purchasing complies with the regulations associated with being a public entity. Private-sector purchasing relentlessly focuses on value and organizational fit. School districts can incorporate many elements of evaluating for value and making trade-offs, while still meeting all regulatory, compliance, fairness and transparency requirements.

The process begins with the purchasing department's identifying the end-users for the product or service being purchased. End-users could include the academic department or exemplary teachers when purchasing curriculum, clerical staff when purchasing copiers, or janitorial staff when making facility purchases. The end-users change based on the product or service sought.

The purchasing department is not expected to be an expert on everything the district buys, but it is expected to have strong facilitation skills and to be able to identify the right group of representatives to define the product or service needs on behalf of the district.

Based on conversations with users, the purchasing department creates a valuation rubric. For example, if many copies are made, some scanning is needed, and few faxes are sent, printing speed might be worth 50 points, since this is most critical, while the ability to scan may be worth 15 points, and the ease of scanning and fax speed may be worth only five points. Price would be given a weight of 25 points. If the needs were different, so would be the weights.

At this point, the purchasing staff is equipped to use the criteria and weights to create the RFP, which asks vendors to develop specifications to meet the statement of need. The expectation is that the organizations that are selling these products and services are experts in their field and can do this more effectively than the purchasing department. Districts are paying the vendor and should expect the vendor to work for the opportunity to receive the district's money.

| A Combination | Engage stake- <br> holders to define <br> the need (not the <br> of Public and | Prioritize criteria |  |  |
| :--- | :---: | :---: | :---: | :---: |
| for evaluation | Issue requests | Select vendor based <br> on value through a |  |  |
| frivate Sector proposals | structured analysis of |  |  |  |
| Approaches | solution) |  |  |  |

## Eliminating wasteful spending

Strategic purchasing is about moving from good to great. It is not that traditional purchasing does not work; in fact, few district leaders are clamoring for change, which is a sure sign that the status quo meets most needs. Regardless of which purchasing method is used, it is important to always keep an eye out for wasteful spending. In either system, good data to evaluate recurrent purchases and a tight feedback loop between endusers and the purchasing department ensure better outcomes.

Many superintendents have shared stories of learning of warehouses filled with unopened textbooks, discovering software licenses that had never been activated, or finding that supplies were constantly being reordered even though thousands were sitting unused somewhere in the district.

- Chicago Public Schools (IL), for example, discovered that a number of supplies were being purchased, stored, and then not used for years. They ended up saving $\$ 25$ million a year through a central office restructuring that included better supply purchasing. ${ }^{1}$
- A superintendent of a large district reported that more than $\$ 1.5$ million in software licenses were renewed each year for schools that had discontinued using the program. A group of principals had made the decision to opt out of the program, but Curriculum \& Instruction had not been informed of the decision and continued to make the purchasing request every year. Because the software licenses did not show up on a loading dock, there was no physical signal that they were not being used.
- Richmond Public Schools (VA) discovered that some schools were paying vastly different amounts for exactly the same supplies. Of the $\$ 52$ million that the district spent on supplies from a multitude of vendors, half of those purchases were documented only by paper receipts, which did not allow for easy price comparison. Centralizing purchasing helped the district save money by ensuring all supplies were bought at the best price available. Over 70\% was saved on boxes of paper clips; some schools had been spending $\$ 1$ a box when they could be purchased for less than 30 cents. ${ }^{2}$

The role of purchasing was to buy what was asked of them. Purchasing was not a watchdog for spending, but was focused on ensuring that the proper process was followed.

Most districts have strict controls for not spending money that is not budgeted, but they have fewer controls to ensure that routine purchases are not wasteful. To be sure, no one in these examples was knowingly wasting money; they simply did not have visibility across a large, complex organization.

Asking purchasing to ensure that every purchase is needed will require a shift in role to more proactively questioning requests, ensuring better data systems, and tracking purchases after they arrive. This is a lot of extra work, but a few extra full-time people might uncover millions of dollars of savings, which could be a very worthwhile investment.
${ }^{1}$ Frederick M. Hess, Cage Busting Leadership (Cambridge: Harvard Education Press, 2013), 147. ${ }^{2}$ Ibid, 147.

Ultimately, requesting proposals, rather than quotes, ends up providing a range of features and prices. School districts can think through the tradeoffs based on the various options proposed. The purchasing decision is then made based on value (i.e., the best combination of features and price), not exclusively price and rigid compliance. For example, if the evaluation committee considered 75 and 74 copies a minute to be virtually the same, each of these could receive virtually the same number of points, rather than excluding the slower offering altogether for failing to meet the specification of 75 copies per minute. At the end of the process, this provides the best value and fit from the product or service purchased.

## A change in mindset, not just forms

Implementing a more strategic approach to purchasing requires districts to do more than share the four process steps with the head of purchasing. If the takeaway is just to issue more RFPs than RFQs, then a key idea has been lost. In the new system, vendors are sources of ideas and will need ample access to key stakeholders. Bid openings become the start of a detailed review process, not the end of the process. Decisions are not black and white, but instead are structured and objective. For many districts, this is a big change in how purchasing interacts with internal and external partners. It is a change in mindset.

Superintendents need to provide visible support for the new purchasing process and approach. The leadership support could be framed with a message that explains to key district stakeholders why the new process is important and how it will save the district money that can be used to support the district's theory of action to help students.

A more strategic purchasing process that consistently focuses on evaluating alternatives and weighing trade-offs requires purchasing staff to become comfortable with more ambiguity. They will need to be confident in the process and be comfortable defending their decisions. Again, superintendent support can help create this comfort.

Perhaps the hardest part of making this transition will come from the purchasing department itself. Simply asking
purchasing staff to implement this buying approach may not be successful given that many in the department may have no experience with this type of approach. Some districts have sought to create a department with a mix of people that have both school-district and private-sector experience. Maintaining school-district experience as part of the purchasing department ensures that districts continue to comply with regulations associated with being a public entity. Infusing a private-sector point of view into the purchasing team helps develop a new focus on value and fit.

It might be surprising to some to learn that purchasing in the private sector is a field of study and area of certification, not just a skill learned through experience. Master's degrees in purchasing often take over 30 credit hours to complete, and students develop a number of skills and abilities. Not surprisingly, writing detailed specifications is not one of the capabilities mastered. Instead, the focus of the coursework is often on financial capabilities, cost analysis, negotiation skills, and project management.

When looking for private sector expertise, it can be advantageous to find people who have worked in a number of industries or purchased a wide array of products and services.

These "generalist" purchasing agents have had to learn new industries before and have had to work closely with internal stakeholders, rather than become experts themselves in a given product type or industry.

They will learn the ins and outs of public-sector regulations and school-type products quickly since they have had to learn other fields before.

## A good value

As school budgets remain tight and every dollar becomes harder to come by, creating a more strategic approach to purchasing has helped some school districts stretch their limited budgets, better meet the needs of students and staff, and save money for other uses.

## RETHINKING PURCHASING: <br> A Strategic Approach to Increasing the Value of Each Dollar Spent

Districts typically spend up to $20 \%$ of their budget on purchased expenses. Infusing private-sector purchasing strategies, such as weighing alternatives and evaluating tradeoffs, can free up funds for strategic priorities and increase the value of every dollar spent.

HERE'S HOW TO GET STARTED:

## 1 BUILD A PURCHASING TEAM WITH A MIX OF BACKGROUNDS

A more strategic purchasing function benefits from a blend of the private sector's focus on value and school districts' focus on compliance. A team with both private-sector and school-district expertise can be the best of both worlds.

2 SHIFT THE ROLE OF PURCHASING FROM "EXPERT" TO "FACILITATOR"
It is not reasonable or possible for purchasing officers to be experts on every product or service the district buys. But, it is reasonable to expect purchasing officers to engage end-users to identify needs and force trade-offs to get the best value for every dollar spent.

## 3 WRITE RFPs (REQUESTS FOR PROPOSALS) WITH THE NEED IN MIND

With RFQs (requests for quotes), the purchasing function is outlining the solution in the form of detailed specifications for a product or service; this often precludes the district from considering alternatives and making trade-offs to get the best value. Instead, outlining a need in an RFP allows vendors to use their creativity, knowledge, and expertise to come up with the best solutions at the best value for the district.

## 4 GIVE VENDORS ACCESS TO KEY STAKEHOLDERS

In order to propose the best solution at the best price, vendors need to have multiple conversations with key stakeholders to clearly understand their needs.

## 5 USE RUBRICS WHEN EVALUATING OFFERS THROUGH RFPS

Based on conversations with end-users, develop rubrics and weightings for different features to help in evaluating trade-offs. Start small, and develop this system with just a few purchases at first.

## A word to the wise: SUPPORT THE PURCHASING TEAM

A more strategic purchasing process that focuses on weighing trade-offs requires purchasing staff to become comfortable with more ambiguity. They need to be confident in the process and be comfortable defending their decisions. Public and deep support from the superintendent helps foster a trusting environment.

## DISTRICT MANAGEMENTCOUNCIL®

## LESSONS FROM THE FIELD

# RETHINKING PURCHASING: <br> A Strategic Approach to Increasing the Value of Each Dollar Spent 

DISTRICT MANAGEMENTCOUNCIL ${ }^{\circledR}$

Approximately $80 \%$ or more of a school's budget is spent on people, and therefore, many budget conversations rightly focus on managing staffing costs. The corollary to this reality is that non-staff expenses account for roughly $15 \%$ to $20 \%$ of the budget, which is still a big number. School districts spend meaningful dollars on curriculum and textbooks, transportation, utilities, technology, construction, maintenance, subcontracted staff, food service, and materials and supplies.

## It is not sufficient to allow smart people to weigh the options in their head like consumers do every time they shop.

| Lessons from the field |  |
| :---: | :--- |
| Lesson | Develop skills and systems <br> for evaluating trade-offs |
| Lesson | Include end-users early and <br> often, but don't hand over <br> the reins |
| Lesson | Some staff with private- <br> sector backgrounds can <br> help provide the needed <br> skills |
| Lesson | Superintendents need to <br> visibly support a shift to <br> strategic purchasing |

## LESSON <br> 1 <br> Develop skills and systems for evaluating trade-offs

Because school districts spend public dollars, there is rightfully a significant focus on transparency and fairness. There are also formal regulation and policy considerations. Accepting the lowest-priced offer that meets predetermined specifications is a fairly simple way to manage the process. So, what is the problem with this approach? The drawback is that the detailed specifications written at the beginning of the process generally do not position districts to get the best value. Detailed specifications rarely provide enough flexibility for alternative solutions to be considered and preclude considering trade-offs of less or lesser features for a lower price.

Districts that add a more strategic element to purchasing learn how to systematize evaluating trade-offs while maintaining fairness and openness. Some districts have turned to using rubrics to strategically evaluate differing offers through RFPs (requests for proposals). Scoring rubrics are developed based on conversations with end-users who intimately understand the needs and goals of the product or service being purchased.

For example, the purchasing specifications for the purchase of copiers/printers for school offices in one particular district specified fast printing and scanning capabilities. However, further probing revealed that numerous print jobs occurred each school day, but scanning was only needed a few times per year. This finding was then incorporated into the scoring rubric so that the printing capability might be worth 50 points, and the scanning capability might be worth just five points. The purchasing staff created an RFP that asked vendors to propose products based on this clearer communication of needs. The proposals that came back provided a range of features and prices. It turned out that fast scanning, which was of limited importance to the district, was a feature that greatly increased the price. The school district could then weigh the trade-offs based on the various options proposed and the prices offered. Choosing a unit with fast printing but slower scanning saved $20 \%$ over the model that would have been purchased otherwise. This option would not have surfaced in a more traditional pur-

> Districts that have found a way to buy for less or to get more for their dollar actively involve end-users early and often throughout the process.
chasing process.
Making trade-offs in the public eye requires skills and systems. It is not sufficient to allow smart people to weigh the options in their head like consumers do every time they shop. For public entities, three components are needed: l) staff with the skills to rigorously manage a more ambiguous process, 2) a system for creating thoughtful rubrics, and 3) bid and contract documents that are structured to reduce the possibility of vendor complaints and include a dispute resolution process.

## LESSON 2

## Include end-users early and often, but don't hand over the reins

The typical purchasing process in a school district gets underway when a department head or administrator decides to buy something. Purchasing helps write very detailed specifications, publicly announces that they are looking to make a purchase, and provides the specifications to everyone interested in bidding. Vendors provide a price to meet the specifications and the low price wins. There is little room for favoritism since anyone can bid, and everyone is bidding on the same requirements. This is fair, but not always strategic.
Notice who is not involved in the typical buying process: the end-user. Districts that have found a way to buy for less or to get more for their dollar actively involve end-users early and often throughout the process. The end-user changes based on the product or service being purchased by the district (e.g., administrative assistants might be involved in a photocopier purchase, while teachers might weigh in on classroom technology purchases).
As soon as the decision to buy is made, the district purchasing departments should identify the key end-users and hold a meeting or a series of meetings to gain a deep understanding of the needs and goals. These meetings typically have two objectives:

- To uncover the criteria that drive value from the end-users' perspective
- To prioritize the criteria to understand what is necessary versus what is nice to have but not essential

For one district in Texas, end-users regularly develop the functional criteria under the direction of a purchasing officer. This places the purchasing officer in a very different role from that in most districts. Rather than managing a bidding process, the purchasing officer is facilitating investigative conversations and forcing trade-offs. Simply asking, "What do you want and need?" is not helpful for a variety of reasons. Often, end-users do not know what is currently available, so basic research on options, models, and available features is necessary pre-work to guide the discussion. And, the end-users themselves may not have complete concrete knowledge of their needs; some hard data collection about usage patterns is helpful to create informed discussions. Finally, the process can turn into wish-list creation. The conversation must focus on trade-offs and prioritization, not wants. Targeted questions like, "Is X more important than Y?" or "If one feature could be $50 \%$ faster, bigger, or better, which one would you want?" are more effective than asking, "Would you like X? Would you like Y? And would you like it faster?"

Throughout the conversation, purchasing staff are infusing a sense of cost-effectiveness, making it known which features tend to increase the cost by a lot or a little and discerning which features are the most valuable to the end-user. This knowledge can be a significant driver of savings.

This purchasing process gets the end-users' point of view early, but does not turn over control of the process to end-users. The purchasing department, with guidance from the Chief Financial Officer, determines how the district will weigh the various criteria for evaluating bids. Purchasing staff listens to end-users, but then apply their professional judgment to help balance cost and need.

Just as including end-users early in the purchasing process is important, another lesson is to re-engage end-users near the end of the purchasing process to evaluate proposals. Another large district in Texas, for example, convenes end-users, facilitated by purchasing staff, for a series of structured meetings to evaluate proposals based on the criteria established.

## LESSON Some staff with private-sector backgrounds can help provide the needed skills

Just as top sports teams need players with a mix of skills, a number of districts with strategic purchasing departments have found that having a mix of skills and experiences has helped create a winning team. This need reflects, in part, how different strategic purchasing can be for a school system and how commonplace it is in the private sector.

A purchasing team with staff that has school-district experience ensures that districts continue to comply with district policy also bring knowledge of the sector, internal workings,
and culture. Adding some staff with a private-sector point of view can help ease the transition from focusing on the lowest bid to focusing on value and trade-offs, which are commonplace in the private sector.

Both districts created a mix of education-sector and pri-vate-sector people in their purchasing departments. The first district targeted about a third of the staff from the private sector at the start, and eventually hired new staff predominately from the private sector. The second district's purchasing officer has an impressive resume of both private-sector and school-district experience. The district has learned that having the head of purchasing know both spaces well has infused the entire department with the skills necessary to consistently focus on evaluating alternatives and weigh trade-offs. The district also learned that having individuals with private-sector experience gave the department more confidence in dealing with ambiguity and defending their decisions to various stakeholders.

Districts that have hired purchasing staff from the private sector have learned that looking for individuals that have worked in multiple industries has been advantageous. In the corporate world, some buyers specialize in an industry, gaining deep understanding of particular vendors and the intricacies of specific products. Other buyers work across a wide range of industries, honing both general skills and the skill of learning new products and vendors. These generalists can be a better fit for school districts since they have already demonstrated the capacity to learn a new industry and often can learn the inner workings of a school district fairly quickly.

## ITSSSON Superintendents need to visibly support a shift to strategic purchasing

It seems simple to task the CFO with shifting to a more strategic approach to purchasing, but superintendent support is also critical to making this transition successful. Superintendents do not need to be involved in the details of specific purchases, but do need to support and push the shift to a new approach to purchasing. They must ensure that staff with the right skills is hired, and they must firmly support the new process and eliminate barriers that might jeopardize implementation.

Influencing hiring and the mix of skills in the purchasing department is an example of a high-value decision that superintendents can weigh in on to transform purchasing in their district. Absent high-level intervention, it is common for most organizations to hire new staff that is a lot like the current staff. New job descriptions, statements of qualifications, a commitment to diverse work exprience, and openness to interview candidates that look different often require some nudging
from the superintendent.
Superintendents also need to support the change agents in the department. In one district, even when a non-traditional head of purchasing was hired with an explicit mandate to create greater value for each dollar spent though rubric-guided RFPs, the department regularly needed reassurances from the superintendent. The new approach to purchasing, especially a move towards more RFPs rather than purely deciding based on the lowest bid, can be disconcerting for staff that are used to and very comfortable with a less ambiguous way of deci-sion-making. Visible support from the superintendent, often in the form of verbal reassurance that the department is on the right course and that accidental missteps will be corrected but not punished, are critical to a successful transition to more strategic purchasing.

Superintendents that changed the way purchasing is done in their districts have communicated the need for the change, describing why the department was changing and outlining key aspects of how the change would happen. At another district, the superintendent set an expectation that the purchasing department align its role with the core work of the district. To reinforce the strategic nature of purchasing, the department was asked to write goals that started with the phrase, "We support student achievement by ...." This transformation of purpose resulted in the purchasing department's viewing savings on utilities as more than dollars and cents saved to appreciating that every $\$ 75,000$ they helped save could result in the hiring of a reading specialist to help struggling students.

Superintendents can also help by eliminating potential barriers that may hinder implementation. For one district, this meant that the superintendent revisited school board policies to ensure that they were aligned with how purchasing should be done to best support the interests of the district. Through this review, the district found some school board policies that would likely have been counterproductive to the new approach. Getting those policies changed helped ensure that there were no barriers and allayed fears of non-compliance.

## Find time for the important, and not just the urgent

Taking a more strategic approach to purchasing will save money and increase the value of many purchases, while generating limited pushback from stakeholders. With the right staff and a few lessons learned, the change is fairly straightforward to implement. The biggest drawback is that some attention and support from the superintendent is needed to launch and maintain the effort.

Because of the countless demands on district leaders, purchasing reform often falls to the bottom of the "to do" list. However, as budgets stay tight and taxpayers are asked for more funds, being able to highlight the savings and the focus on stretching each dollar can help win support and ease future budgets.

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## OPPORTUNITYBRIEF

# LOWERING THE COST OF EXTENDED LEARNING TIME: Creating Financial Sustainability 



DISTRICT MANAGEMENTCOUNCIL ${ }^{\circledR}$

The traditional school calendar of 180 days, each about $61 / 2$ hours long, has not changed much in the last half century. But, over this period of time, the needs of students have increased. There are more students in poverty, more English-language learners, and more students with disabilities in public schools today than before. In addition, standards have risen, first with No Child Left Behind, and again with Common Core State Standards. Yet, the school day and year have not changed in response. In addition, instructional time for academics has growing competition from other needs like social and emotional supports, renewed focus on world languages, and bullying prevention.

Some districts have responded to this time crunch by offering extended learning time (ELT) through a longer school day or longer school year at some schools. This common sense approach has been

FINANCIAL BENEFIT
 essential to the success of nearly all highperforming urban charter schools and embraced by a growing number of traditional urban schools.

Most ELT efforts target two extra hours a day, but some target only one extra hour a day. Other districts extend learning time by providing four to eight weeks of summer school.

Increasing time to learn and time for teachers to plan together can be a key lever to raising achievement; the challenge is to implement this in a cost-effective manner. The majority of ELT efforts began as grant-funded activities; sustaining these efforts under the operating budget after the grants dried up has often proven problematic.

As districts experiment and pioneer ELT, a number of strategies are emerging as to how to increase learning time in an affordable and sustainable way. Lower-cost ELT is not any more difficult to implement and does not generate more or less political pushback than its higher-priced alternatives. Extended learning time is in its infancy, and this brief draws upon emerging practices, with less of a research base than others in the series.

## Background

Since extended learning time is nearly always bundled with other reforms, little research exists as to the effectiveness of ELT specifically, since its effects cannot be separated from the other changes taking place at the same time. The research does suggest, however, that when implemented well and as part of comprehensive reform efforts, a longer school day or school year has helped raise academic outcomes for students - especially for students who struggle academically. ${ }^{1}$ The key benefits of ELT are:

1. More instructional time for students for core academics and related extra help
2. More time for students for non-core enrichment activities such as PE, art, and music
3. More time for teachers to plan, analyze data, and receive professional development
4. Summer learning-loss prevention

Extended learning time has been a key element of many successful school turnaround efforts. One high-poverty urban middle school in Massachusetts, for example, raised proficiency rates in ELA from $23 \%$ to $64 \%$ from 2006 to 2011. The school leaders credit ELT as a critical component of their improvement plan. (It is worth noting that some of these impressive gains began before the start of ELT, and some of the gains diminished under new school leadership; it is a reminder that more time is not a silver bullet, but an important part of a comprehensive plan.)

The downside to this promising strategy is the cost. Based on a DMC review of published research and district profiles, nearly all existing ELT efforts in traditional public schools (i.e., not charter schools) started with a significant increase in per-pupil spending, often from short-term funding sources.

A typical school spends roughly $\$ 1,000$ to $\$ 1,500$ per student for ELT, with a few spending $\$ 700$ and some spending well over $\$ 2,500$. In a recent detailed cost study of five ELT schools, there was a wide variance in the costs associated with adding fairly similar programming for students. The variation came in two forms: how much extra time was needed to provide more academic interventions, the arts, and teacher planning time, and how much was paid for each extra hour. One school added just 45 minutes per day while others added the equivalent of over two hours per day. One school paid $90 \%$ of the standard
hourly rate ( $9 \%$ more salary for $11 \%$ more teacher time) for the additional time while others paid just half the standard rate (such as $10 \%$ more pay for $20 \%$ more time). ${ }^{2}$

In nearly all cases, schools secured funds from state, federal, or private grants, sometimes with additional dollars from the district's operating budget. Based on interviews with leaders who started ELT efforts, limited time or attention was devoted to planning for long-term financial sustainability. The focus was on securing funds to get started; whether more dollars would be available to scale up efforts to other schools in the district or to sustain the first schools when their grants ended would be addressed later. As School Improvement Grants (SIG), Race to the Top (RTTT), and other startup funds dry up, some districts have realized that their early decisions have created future financial headaches, as it committed the entire district to less sustainable rules and expectations.

In its relatively short history of just five or so years, a number of promising efforts have already come to a halt due to lack of funds. One school in Pennsylvania extended its school year to 195 days in 2009, but in 2012 it returned to the traditional 180day calendar because of state budget cuts. Similarly, an elementary school in Florida tried a 200-day calendar for one year before abandoning it because of insufficient financing. Any plan for starting ELT should also include a plan for continuing the efforts for years and decades to come (assuming good outcomes and academic return on investment).

Financial sustainability comes in two forms. The first is to lower the cost of ELT and the other is to ensure a secure funding stream. Virtually every benefit of ELT has a lower-cost option. Many of these options can be locked out if initial decisions do not lay the appropriate groundwork from the start.

## Lower-cost options for more core academics and related extra help

Lengthening the school day by one or two hours to allow students to receive more time learning to read, master math or English, or to speak English is often at the heart of many ELT efforts. This longer school day for students is typically accompanied by a longer school day for teachers, who in turn expect more pay for more hours worked.

A very common, but expensive and likely unsustainable solution is to negotiate a proportional pay raise for teachers. Adding 30\% to a teacher's day (about two hours of extra time) adds about $16 \%$ to a school's budget or $\$ 720$ /student. ${ }^{3}$ If all school-based salaries are increased, such as paraprofessionals, secretaries, etc., the cost increase is, of course, larger. In an effort to overcome teacher resistance, some districts have paid north of $16 \%$ raises for just one extra hour of teacher time.

A sense of fairness and practical reality suggest that if teachers work a longer day, they will be paid more (although this is not true in many charter schools). Therefore, options that
extend the school day for students, but not for teachers are low-er-cost alternatives. This includes:

## - Staggered teacher start times

In this model, all staff work the traditional school day, but they do not all start work at the same time. Some staff such as guidance, art, music, PE, library, social workers, and some special education and ELL teachers begin their day at, for example, 8:00 a.m. and work until 2:30 p.m., while other teachers start at 9:00 a.m. and work until $3: 30 \mathrm{p} . \mathrm{m}$. All students now have a $71 / 2$ hour school day while teachers continue to have a $61 / 2$ work day, thus extending instruction by an hour at potentially no added cost (Exhibit l).

## Exhibit 1

## STAGGERED STAFF START TIMES EXAMPLE SCHEDULE

| 8am | 9am | 10am | 11am | 12pm | 1 pm | 2 pm | 3 pm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Some Support Staff |  |  |  |  |  |  |  |
| Other Staff |  |  |  |  |  |  |  |
| Students |  |  |  |  |  |  |  |

Source: The District Management Council

- Blended learning supported by paraprofessionals

Historically, learning has required a teacher, but as blended learning matures, some schools are extending instruction without the need for teachers to work a longer school day. Students spend extra time learning online with lower-cost paraprofessionals monitoring and addressing logistical concerns.

If one paraprofessional, rather than a teacher, supports a class of 20 students, the extra cost drops by roughly $60 \%$. If a lab or library is used with 40 students to a paraprofessional, the cost of two extra hours a day of blended learning drops to less than $\$ 150$ a student (plus the cost of technology at approximately $\$ 1,000 \mathrm{a}$ seat). Assuming 40 students to a lab, and replacing everything every five years, technology adds an additional $\$ 200$ / student. In the end, two hours a day of targeted, personalized instruction is provided for $\$ 350$ a student, not $\$ 1,500$. Key to the effectiveness of this approach is a structure in which the adult (paraprofessional) is not in a teaching role, but present to monitor behavior and address technical glitches. Because the technology is a capital item, unlike teacher time, this
investment can be used during the regular school day at no additional cost.

- Make better use of the existing school day

If the goal is to add two hours of instructional time each day for students, then this might be achieved by squeezing one more hour of learning out of the existing day, and then adding just an hour to the school day, thus potentially halving the cost.

In some middle and high schools, students have study halls, time in "resource rooms" that provide little direct instruction, or electives that do not interest them. If this time were used for supplemental instruction and were structured so teachers only help students already on their roster, then teachers would have more time with their students, but not more students to know and grade. Not much extra prep is required either. This may require a change in collective bargaining agreements, because some teachers will be teaching one more section each day. However, since this extra section does not increase the length of the workday or the number of students a teacher must instruct, any added pay to be negotiated is likely to be less than the cost of the teacher's working longer days.

- Have teachers focus on teaching, not other school duties

In many schools, teachers perform school duties, such as monitoring lunch and patrolling the halls. This, too, is time that could be reallocated for instruction. Paraprofessionals can be asked to take on these tasks.

- Have a longer regular school day

Another low-cost option for a longer school day is to have a longer regular school day. Surprisingly, some schools in a given district have a longer school day than others, often just driven by history. Before paying for extra time, ensure that a longer day cannot be had for free. This will not likely provide enough time for a full ELT effort, but it might reduce the cost. Most negotiations over extra pay for extra teacher time start like this: "If you want me to work $20 \%$ more, then pay me $20 \%$ more." Like most negotiations, the final outcome is seldom this straightforward, but the idea is if teachers feel they are only being asked to work $15 \%$ more, for example, because part of this extra time is not really extra compared to other schools in the district, then their opening bid might be for just $15 \%$ extra, not $20 \%$. This could save $\$ 375$ a student.

- Lengthen the class period

Equally quirky is that in a given district, some schools (especially middle schools) have 40-minute
periods, while others have longer periods such as 48 -minute, or even 55 -minute periods. Regardless, all students get one period of each core subject a day. Simply lengthening math and English classes from 40 to 55 minutes a day adds 45 hours of instruction a year for each subject at no cost; this is the equivalent of lengthening the school day by 30 minutes every day, and at no cost. The longer periods are possible through a combination of reducing time between class, having a slightly shorter lunch, and holding a quicker homeroom. In some cases, it requires dropping one period from the schedule (such as moving from an eight-period day to a seven-period day); this may mean reducing the number of electives or making foreign language an elective.

## - Target pay increases strategically with an eye to the future

The first deal a district cuts for ELT pay may set the standard for decades to come. Plan carefully from the start. Noted economist John Maynard Keynes postulated that wages are "downward sticky," meaning that even when outside forces should lower wages, such as during periods of high unemployment, wages tend not to go down. In short, people hate pay cuts.

Some districts have offered fairly generous increases for longer school days; armed with ample funds from School Improvement Grants or private foundations, they could afford to be generous. But when dollars get tight, it is human nature to fiercely resist doing the same work for less money. For example, teachers might have worked two extra hours a day for a $15 \%$ raise if this were all the district could afford, but they are much less likely to accept that same $15 \%$ after the grant ends if they already had a $20 \%$ raise when grant dollars were flowing. The first negotiation for extra pay for extra time sets a precedent for years to come. It is best to act as if money is tight, because it is likely to be tight in the near future.

How extra pay is provided also has a long-term impact on future costs. Offering a stipend of \$X (say $\$ 5,000$ ) can be less expensive over time than a percentage increase (say $10 \%$ ), which might equal $\$ 5,000$ at first. As teachers gain seniority and move up the pay scale, $10 \%$ grows into more absolute dollars, but a flat stipend does not. In some states a stipend does not add to future pension costs, but salary increases do. Who gets paid extra also has a big impact on financial sustainability. Paying only staff that must extend their day, but not others (elementary specialists, guidance, etc.), can also trim the total cost and help improve sustainability. In interviews, many involved in starting ELT
efforts said that when funds were available, they assumed all staff in the building would get the extra pay and work a longer day. This seems very equitable and eases implementation, but, unfortunately, it can lock the school (or district) into a model that cannot be funded in the future.

When considering options for extending the school day, it is also important to consider costs beyond teacher compensation. Some school-wide costs such as administration, front office, security staff, custodial and utilities may also increase. These costs are mostly tied to time, rather than number of students. If ten children or 100 stay at school longer, these costs may increase by the same amount; by contrast, the extrateacher costs increase proportionately as more students are served. For small schools, this could be a big deal, and should be carefully managed from the beginning.

## Lower-cost options for more arts enrichment

In some schools, the goal of ELT is not more academic instructional time, but rather to restore arts and enrichment that have been pared back over time. To meet this need, a few cost-effective alternatives are available beyond extending the day for all staff and raising salaries proportionately. This allows the goals of ELT to be met while limiting the added expense.

## - Engage partners

Some districts have found it easier and less expensive to use community-based or for-profit partners to provide afterschool enrichment. Since these organizations can draw upon volunteers, non-certified teachers, or non-union staff, they can be less costly. A typical teacher earns about $\$ 40$ per hour fully loaded (up to \$60 in some districts), but outside partners can sometimes provide services at a lower cost.

It can be easier to engage cost-effective partners to provide non-core instruction than core instruction. Teaching math, reading, and English to struggling students is a skill, and struggling students need and deserve highly-effective teachers. Having volunteers and lower-paid staff may save money, but there is no reason to believe they will be effective teachers. The skill set required to provide quality programing in art, PE, and other non-core offerings may be more widely available and at a lower cost from outside providers.

## - Staff with fewer adults

Many typical afterschool activities have relatively higher student-teacher ratios. Band, track, and drama all might have one teacher for 30 or even 50 students. If extended-day arts and enrichment were structured more like afterschool arts and enrichment, then costs
would drop. Automatically extending the during-theday class size rules to extended-day programs may be a costly decision.

This option dovetails nicely with the concept of ensuring that only targeted staff be required (and paid) to work a longer day. For example, since IEPs do not change, special education teachers need not work a longer day if the goal is added arts and enrichment. The same is true of guidance and even classroom teachers. In most schools with ELT, all staff (or at least all certified school staff) stay for a longer day. The simplicity and equity of this approach come at a significant price.

## Lower-cost options for more teacher-planning time

An often-cited benefit of a longer school day is that teachers have more time to plan, look at data, collaborate, work with coaches, share best practices, and get feedback from principals. This is seldom the primary driver for ELT, but is often part of the plan. Since ELT seems to work best as part of a comprehensive and coherent reform effort, this could be a critical component of ELT design.

If teacher-planning time can be accomplished during the regular school day, perhaps a shorter ELT period is needed. In most schools, adding an hour costs half as much as adding two hours. If some of the need can be met during the school day, then costs are reduced and the effort can be sustainable.

Principals and superintendents often lament the lack of common planning time, but quickly add that "there is no time in the day for teachers to meet and review data." While this is a widely-held belief, it is not actually so in most cases. The reality is, it is hard to schedule teacher-planning time during the school day, but it is not impossible.

In the hands of a scheduling expert, nearly every school with a typical school day can create daily common planning/data team meetings, and time for all students to get at least one extra instructional period, all without adding staff or lengthening the school day. How? The details would fill a book, and the book would not likely be a sufficient guide. The key is to find a scheduling guru who does not require a guidebook.

Many schools have found internally or hired externally someone who is just great at scheduling. It is a rare skill, but in their hands, seemingly impossible to schedule blocks of time can be found.

## It is best to act as if money is tight, because it is likely to be tight in the near future.

## Lower-cost options to avoid summer loss

Some districts solve the ELT puzzle by lengthening the school year, rather than the school day. Unlike middle-class and upper-class students who grow academically over the summer, most children living in poverty make no gains or fall further behind. The American Educational Research Association reports that lower-income students generally start the new year about where they had been the previous spring or even behind their spring levels of performance, while upper-income students improve over the summer months and begin the new school year ahead of where they had been the previous spring. ${ }^{4}$

Given these facts, a logical conclusion would be to provide summer school for students living in poverty. Like everything else in education, the quality of implementation is critical. Just providing extra time in the summer may not help students grow academically if the instruction is disconnected from the regular year's content and if the students do not show up.

- Know what is working and end or modify ineffective programs

Not all summer programs are effective and cost-effective, but often districts do not know whether their summer programs are or are not. Some districts make a fairly significant investment in summer efforts. District-run programs can cost $\$ 1,500$ per student or more; outside providers often charge even more (Exhibit 2). To reduce costs, some districts offer short (one or two week) programs that run from $\$ 350$ to $\$ 700$ a student, but this may be too short to make a substantive impact on student learning.

Providing effective summertime instruction is difficult. Summer programs are thus top candidates for measuring cost-effectiveness and taking actions as a result. This includes measuring costs (per student who actually attends, not just listed as enrolled) and tracking achievement gains. Nothing is more costly than spending money on efforts that do not raise student achievement. An ineffective summer program hurts students and the budget, and is a cost best cut or redesigned.

## - Stagger teacher vacations

Some schools and districts have created longer school years for students while maintaining 180-day schedules for teachers (Exhibit 3). Brooklyn Generation School (NY), for example, supports a 200-day school year for students, but a 180-day schedule for teachers.

Exhibit 2
COST ESTIMATES FOR SELECTED SUMMER LEARNING PROGRAMS (SUMMER, 2009)


Source: Jennifer Sloan McCombs, Catherine H. Augustine, Heather L. Schwartz, Susan J. Bodillly, Brian Mclinnis, Dahlia S. Lichter, and Amanda Brown Cross, "Making Summer Count: How Summer Programs Can Boost Children's Learning," RAND Education, 2011.
Note: Providers A, B, and C are national non-profit organizations that operate in multiple cities in the U.S. and serve at least 1,000 students each. The district providers each operate a summer program within their given district on some but not all school campuses.

## Exhibit 3

## STAGGERED SCHOOL YEAR SAMPLE 9TH GRADE SCHEDULE

|  | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9th grade core teachers | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | In school | Vacation | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | Vacation | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | In school | In school | Vacation | 9 |
| Other 9th grade staff | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | In School | Vacation | $\begin{aligned} & \text { In } \\ & \text { school } \end{aligned}$ | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | In school | Vacation | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | In school | In school | Vacation | 9 |
| 9th grade students | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | In school | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | $\begin{aligned} & \text { In } \\ & \text { school } \end{aligned}$ | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | $\begin{aligned} & \text { In } \\ & \text { school } \end{aligned}$ | $\begin{gathered} \text { In } \\ \text { school } \end{gathered}$ | In school | In school | Vacation | 11 |

Source: Adapted from "Staggered Schedules at Brooklyn Generation HS: Cost Saving Solution to Increased Learning Time", MASS2020,
http://www.mass2020.org/files/file/Increased\ Learning\ Time\ Partnership/Session\ 7/S7\ Resource\ -\ Brooklyn\ Generation\% 20Profile.pdf (accessed August 20, 2013).

The trick is to stagger when some teachers take vacation. In different months, different teachers take vacations. By carefully mapping which teachers are off, creating one-month academic supports, and using a fairly complex schedule, students get eleven months of school and intensive academic support without larger
classes or more staff.
In this model, ninth grade core teachers have three, staggered, month-long vacations throughout the school year. During two of these month-long vacations, students take intensive courses with other ninth grade staff. These could include project-based
learning, outside internships, or college-career readiness courses that are staffed with either full-time, parttime, or paraprofessional staff depending upon the course. All teachers and students are off the month of August for vacation. In this way, students have an extended 220-day school year, while teachers maintain a regular 180-day schedule.

## Use Stable Funding Sources

Regardless of which approach a district uses to extend learning time, many will require additional funds. Having a consistent, recurring funding source from the start can have a big impact on ELT's sustainability. Schools that used hefty SIG grants to pay all their staff for a longer day find themselves short on dollars when the grant ends, and teachers have come to believe a longer day deserves $\$ 5,000-\$ 7,500$ for everyone working in the school. It is hard to backtrack and cut pay for the same work.

Perhaps the most stable funding source is schoolwide Title I funds. This funding has never decreased (excluding the ARRA bump). The amount of Title I funding a school or district receives can shift based on changes in enrollment and state distribution rules, but it is generally stable from year to year.

It is not uncommon for a high-poverty school to receive $\$ 1,000$ to $\$ 1,500$ per student from Title I. One district was able to add an hour a day to the school day by paying teachers more (about $\$ 700$ per pupil) and thus only tapped a portion of its Title I funds. If only some teachers are paid extra, two hours of extra time can be funded and dollars still remain for other uses.

Another option for sustainability is to shift ELT from an add-on to a baseline component of teacher compensation as part of large-scale compensation reforms. A few districts are experimenting with innovative contracts, often differentiating pay by performance, subject taught, or for teaching in highneeds schools. This is a significant deviation from traditional steps and lanes and seniority. Perhaps these groundbreaking collective bargaining agreements can also move away from the 61⁄2-hour workday.

## A Warning

Extending the school day will, most likely, require shifting funds from other current sources or finding other sustainable funding. The design of the plan, however, can significantly alter the costs of providing a longer school day or school year. Equally important is the need to ensure that the extra time leads to extra learning. Spending scarce funds on a longer school day or longer school year can be an important element of a school reform effort, but it can also be a fruitless investment if it does not result in significant gains in achievement.

Any strategy that raises building-based spending by $10-30 \%$ must meet a high performance hurdle. A $15 \%$ pay increase for all teachers in a typical 500 -student elementary school could, for example, fund five reading teachers, two instructional coaches, and nearly two weeks of summer teacher-planning time for every classroom teacher.

ELT is a great candidate for Academic Return on Investment analysis. If not carefully implemented, more can become less. A common trade-off might be one extra hour with certified teachers or two extra hours with paraprofessionals and volunteers. If the use of the extra time is for enrichment, two might be better than one. If the time is devoted to core content, one extra hour with a skilled teacher will likely be more effective than two hours with non-teachers.

Some schools have reported that the extra time went to ineffective instruction with too many ineffective teachers. Others, in an effort to keep costs down, used lower-cost paraprofessionals to teach struggling students or recruited well-meaning volunteers or laymen to provide tutoring. These strategies seldom raise achievement. Teacher quality still remains the largest school-based factor in student achievement. Many high performing countries such as Korea and Finland have less instructional time than the traditional American school. ${ }^{5}$

## Staying Focused on Outcomes

The fact that the school day and school calendar have not changed in more than a half century or more seems on the surface out-of-date. The schedule was originally designed to support a farming lifestyle, leaving time to work the fields and harvest the crops, which seems rather silly in today's knowledge economy. A longer school day or school year is a com-mon-sense approach to meeting the greater needs of a student body asked to reach higher standards. As districts turn to this strategy, it is important to measure outcomes, build financial sustainability into the design from the start, and to be aggressive in stopping ineffective ELT efforts.

[^22]
## LOWERING THE COST OF EXTENDED LEARNING TIME: Creating Financial Sustainability

Extended learning time (ELT) is a common sense solution to one of the great paradoxes facing public schools in the United States: the traditional school calendar has not changed in the last half century, even though the needs of students have increased considerably during this same period. As districts and schools experiment and pioneer ELT programs, a common obstacle they face is the often-high price of more time. However, a number of more cost-effective, affordable, and sustainable strategies are emerging.

HERE'S HOW TO GET STARTED:

## 1 PLAN FOR FINANCIAL SUSTAINABILITY FROM DAY ONE

Many ELT efforts were launched with new grant dollars, but had to be abandoned when grant funding ended. Planning for sustainability from the beginning by reducing staffing in the current operating budget or minimizing new costs can pay big dividends in the future.

## 2 ALIGN AND EMBED ELT IN YOUR STRATEGIC PLAN

Integrating ELT with other reform strategies - with a focus on better instruction, not just more instruction - can increase the impact of the extra time.

## 3 DO NOT PAY FOR TIME THAT COULD BE HAD FOR FREE

Another way to plan for financial sustainability is to lower the cost of ELT. Rather than add land pay for) two hours of extra time, schools can begin by first trying to find an hour during the existing school day, and then adding only one hour to the day.

4 CONSIDER OPPORTUNITIES TO INCREASE SCHOOL TIME FOR STUDENTS, BUT NOT STAFF
Another creative way to lower the cost of ELT is to increase the school time for students, but not for staff (or at least not for all staff). By staggering teacher start-times or vacation schedules, more student time can be had without increasing the amount of teacher time.

## 5 ENSURE TEACHER BUY-IN, BUT DO NOT OVER-PAY FOR IT

Ensuring teacher enthusiasm and buy-in for ELT is critical, but many districts attempt to win support with large pay increases, which can't be sustained. Consider seeking active union participation from the beginning, making ELT voluntary, and involving teachers in the program design.

## A word to the wise: MONITOR CLOSELY

Nearly all reform efforts can benefit from careful measurement of cost-effectiveness, but ELT is an especially strong candidate for academic return on investment (A-ROI) analysis. ELT is a big expense and can be worth it, but only if the extra instructional time is effective. Districts should monitor closely and conduct rigorous analysis to ensure that more time results in more student achievement.

## DISTRICT MANAGEMENTCOUNCIL®

## LESSONS FROM THE FIELD

# LOWERING THE COST OF EXTENDED LEARNING TIME: Creating Financial Sustainability 

DISTRICT MANAGEMENTCOUNCIL ${ }^{\circledR}$

The length of the typical school day and year has not changed much since World War II, but the depth and breadth of what needs to be mastered by students certainly has. At the same time, many children come to school with greater needs and less support at home. More time in school seems to many a common sense step to helping more students become college and career ready.

## Lessons from the field <br> 

## LESSON <br> 1

Make ELT part of a comprehensive strategy, not the strategy

## Lesson Provide an intensive block of 2

LESSON
3
Lesson Modifying class size and teacher workload can help fund ELT in a sustainable way

Lesson Measure student growth 5 compared to a control group

A number of high-profile success stories, especially urban charter schools like KIPP and Green Dot, which have much longer school days and school years, have pushed extended learning time (ELT) onto the agenda of many urban districts. The relatively wide availability of grant funding from federal, state, and philanthropic sources has spurred adoption of ELT in a growing number of districts. This reliance on external funding has been a boon to kick-starting the effort, but can create challenges in the long run. As districts begin or expand ELT, they can gain insight from the emerging lessons of other districts on how best to increase the costeffectiveness and sustainability of a longer school day and/or school year.

## LESSON <br> 1

To date, research on the effectiveness of ELT is based heavily on the success of high-performing charter schools such as KIPP and Green Dot. ${ }^{1}$ These schools do have longer days and longer school years, but they also incorporate many other reform efforts during their additional hours. Few, if any, schools have raised student achievement solely through a longer, "more of the same" strategy.

In the cases where ELT has helped improve student outcomes, schools have used the new school calendar as a backdrop for redesigning teaching and learning, with a focus on better instruction, not just more instruction. Some districts redesigned instructional coaching and teacher training as part of their ELT plan. Other districts ensured that extra class time was provided by highly-effective teachers. For example, one district's ELT plan called for extending school for struggling students during vacations; since teachers across the country were on vacation at that same time, the district had a huge pool of educators from which to staff their extra-time academies. Teachers from across the country applied specifically to teach these vacation sessions. They received compensation, recognition, training, and satisfaction; students received access to "all star" teachers. The same district took the idea of ensuring that the extra time for students was with great instructors by staffing their extra-help period of the longer school day with tutors from the high-performing charter school organization MATCH Education.

In both examples, the district strategy explicitly linked ELT with ensuring highly-effective instruction. The results were impressive. In schools with MATCH tutors, focusing exclusively on high school math, proficiency rates on the state test rose from $41 \%$ to $63 \%$ in their first year. The student growth increase was even more significant, moving from the $23^{\text {rd }}$ percentile statewide to $75^{\text {th }}$, the largest gain in the state in any subject or grade during the four years that student growth has been measured. Strong results were also seen from the intensive vacation "acceleration academies" staffed with highly-effective teachers from across the country. Students who attended this ELT grew by 10 growth percentile points more than non-attendees in ELA and by 14 growth percentile points in math.

Extra time for teachers can be as important as extra time for students. Some schools use much of the extra time for teachers to plan together, to learn from instructional coaches, to review data, or meet with their principals. Schools have, through ELT, moved from less than an hour a week of teacher support and planning to a full day a week. Clever scheduling also provides extra time for students, but a core element of the plan was dramatically more time for teachers to improve their craft.

## LESSON 2

Provide an intensive block of targeted instructional time

Providing extra time for students can take many forms, with the most common including full-day kindergarten, longer school day, or longer school year. While the data is still emerging, many successful ELT models include intensive, targeted instructional support. This is a large block of time dedicated to addressing student-specific skill and content gaps. This can take the form of vacation boot camps, intensive summer instruction, a two-hour block each day, or even one full day each week of targeted instruction. This targeted instruction is guided by detailed student-specific data pinpointing specific student needs and learning gaps: one student may need help with fractions, another may be struggling with the concept of place value, and a third may have a misunderstanding of decimals.

These intensive blocks of targeted instructional time stand in sharp contrast to the "more of the regular school day" approach. This can include simply having longer periods of core instruction, such as moving from 45 -minute periods to 60 -minute periods, or providing two periods of Algebra 1. In each of these cases, the extra instruction is directed at the whole class and dictated by the current year's curriculum, rather than targeting student-specific learning gaps. The other less-than-effective, but somewhat common approach is using the extra time as homework help, which, again, is not tailored to focus on individual students' needs. Another form of "more of the same" can be extending kindergarten to full day, but leaving the rest of elementary school unchanged in terms of time, instructional practices, teacher quality, etc. In many districts, the gains from the longer kindergarten day are quickly dissipated as students advance to higher grades.

## LESSON 3

## Teacher buy-in is a non-negotiable

Just as the proverbial glass can be half-empty and half-full at the same time depending on your mindset, ELT can be viewed as a reward or a punishment by teachers. Since teacher effectiveness has a far greater impact on student learning than time-on-task, ensuring strong teacher commitment is critical to ensuring that ELT will, in fact, help students achieve at higher levels.

As a cautionary note, it should be recognized that the majority of ELT success stories such as high-performing charter schools started from Day One with a long school day and/or school year. This means all the teachers applied to work the longer hours and greater number of days. This is very different from most urban schools that adopt ELT, where the longer day
is a significant change in working conditions from what they first signed up for. At one school that adopted a longer school day after being named a failing school by the state, the staff openly referred to ELT as punishment for low test scores. It should be no surprise that ELT failed to raise achievement at this school.

Some districts flush with grant funds have tried to buy teacher commitment with hefty pay increases. In the short run, this can create some excitement from teachers, but unfortunately, this creates unsustainable expectations when the grant ends. Once the grant ends, working longer hours and extra days can feel like unpaid servitude and has generated much discord from some teachers.

Districts that have staff who embrace and value ELT have used a number of means to gain teacher buy-in. Some districts engaged union officials very early in the planning stage. This has been helpful in addressing seemingly small issues that can create much friction, such as provisions for childcare, adjustments to prep time, wages, and whether some or all staff will have longer hours.

Active union participation has smoothed the way and generated strong support, but it has sometimes created the least financially-sustainable plans. Two of the most costly provisions that have helped create staff acceptance are proportional pay, i.e. $25 \%$ more pay for $25 \%$ more time, and $100 \%$ of staff working the longer hours such as guidance counselors, art teachers and other elective teachers, clerical staff, etc. Both of these concepts fit neatly in the constructs of many union contracts, but they add much expense and can threaten long-term sustainability. Options like $10 \%$ pay for $20 \%$ longer school day and only having targeted staff stay longer are not instant winners with some teachers. Taking the time, early on, to explain the financial constraints and developing shared understanding of the trade-offs can help reduce friction.

Teacher choice can also be a very effective (and cost-effective) means of winning teacher support. Some districts, for example, make the longer school day or school year completely voluntary for existing staff. The pay and workday expectations are shared, and staff can opt in or ask to be transferred to a school with a traditional schedule. This allows teachers who think it is unfair or who have personal conflicts to avoid being forced into an unwanted situation. New hires to the school obviously join knowing what they are signing up for. Other forms of teacher choice can include allowing them to select early or late start times in a staggered work schedule or selecting which vacation periods to work in a boot camp model.

Engaging the union in helping craft the dimensions of teacher choice, rather than teacher compensation, can be a cost-effective way of engaging teachers and their representatives while helping ensure that staff who do not want to be part of ELT are not forced to. Obviously, each district's collective
bargaining agreements and state laws will greatly influence if these options are even possible.

## IESSON Modifying class size and teacher workload can help fund ELT in a sustainable way

ELT can be expensive, and while grants can provide a shortterm bridge, modifying class size and teacher workload has been a path to sustainable funding in some districts. Few other strategies can free up such significant funds. Just as ELT should be part of a comprehensive teaching and learning strategy, some districts have also made it part of a comprehensive financial strategy as well.

On the simplest level, raising class size by $10 \%$ can reduce teaching costs by $10 \%$, which in turn, has funded an extra one to two hours a day of instructional time in some districts. This is consistent with a theory of action that values time-on-task or teacher planning time, rather than small classes. Districts with a strategy that prioritizes increased teacher effectiveness as well as more student learning time have increased class size to fund extensive coaching positions while using grant dollars to fund the longer school day or year. This approach helps ensure the extra time leads to extra learning.

Reducing the teaching load during the "regular" school day can also allow a longer school day without a hefty premium. Districts have paid as little as $10 \%$ extra or as much as 30\% extra for a longer school day, which is a sizable swing. By substituting blended learning or online courses during the "regular" day, staff in some schools have accepted less of a premium for the "extra" time, because less was asked of them during their regular school day.

Finally, some districts revamped the role of some classroom teachers to take on building management or instructional coaching roles normally filled by administrators or full-time coaches. Teachers applied for these dual positions in exchange for a stipend and career growth. This empowered teachers, reduced some full-time support positions, and thus freed up funds for ELT.
All of these strategies have one common theme - reducing the number of staff needed in a school in order to free up funds for extended learning time. In nearly all cases, it has been easier to make these changes from Day One, rather than when ELT startup funds run dry.

## LESSON 5 <br> Measure student growth compared to a control group

It is easy to know if a district has implemented extended learning time by simply looking at the official school calendar and schedule, but it is much more difficult to know if it has been implemented effectively. Nearly all reform efforts can benefit from careful measurement of effectiveness and cost-effectiveness, but ELT is an especially strong candidate for three reasons:

1. ELT is often a very large expense
2. ELT effectiveness and cost-effectiveness is relatively easy to measure
3. ELT has been ineffective in raising achievement in many schools

Since the research base is thin, and in many ways, disappointing, it is especially important that districts know if this often-large expenditure is improving student outcomes. The need is amplified because ELT is almost always just one component of a multi-pronged reform effort, and often the most costly component.

In order to determine if ELT is effective, and thus an investment worth continuing, districts need to focus on measurable gains rather than extra minutes. This includes ensuring that baseline data is available, building a system for measuring student growth, and designating a control group. The control group is key to teasing out if the extra time is leading to extra learning.

There are two approaches to establishing a control, either within a school or across schools. The first works best when not all students receive extra time. Intensive vacation week or summer programs fit this mold. One district that used this form of ELT conducted two types of analyses. First they assessed
specific skills at the start and end of the extra time to assess what, if any, new skills were mastered, and by how many students. They also compared year over year growth compared to the students who did not participate in these extra weeks of instruction.
Another way to measure the impact of ELT within a school is to compare results from the school prior to the extra time. Sadly, a number of schools have experienced an actual decline in scores in ELT schools, a clear sign that the effort is not bearing fruit, despite the added expense. Even rising test scores is not adequate proof of the effectiveness of ELT. While some schools add extra time due to chronic low performance, some schools with dynamic principals and strong track records add ELT to their list of reforms. Some of these schools have pointed with pride to rising scores during the period of ELT, but a look back showed that scores had been rising at the same rate prior to the additional time and additional expense.

Cross-school comparisons require the most sophisticated analysis, since the schools must have very similar structures other than ELT, and school-wide results must be adjusted for any differences in student demographics. Given the oftenhefty expense, any rollout of ELT should incorporate from the outset a robust means to gauge its effectiveness and cost-effectiveness.

## Trust, but verify

Extended learning time is an increasingly common component of school turnaround efforts, backed by both common sense and some striking success stories. Too often, however, districts have assumed ELT must be helpful, but have not created the context for staff buy-in, long-term financial sustainability, or actionable accountability measures. Approaching ELT with a healthy skepticism can be a powerful approach to ensuring success.

## OPPORTUNTTYBRIEF

# TARGETING NEW INVESTMENTS: Funding a Better Future, Despite Declining Resources 

DISTRICT MANAGEMENTCOUNCIL ${ }^{\circledR}$

As K-12 budgets shrink, it is not uncommon for district leaders to subtly and perhaps subconsciously shift to a defensive posture - trying to preserve as much as possible and minimize the impacts of budget cuts, given the weak hand they have been dealt. This is an understandable reaction to budget shortfalls and a very reasonable way to ride out a temporary budget crunch.

The recent pressures on district budgets are different, and require a different reaction. A recent New Yorker cartoon showed a caveman having a talk with his son. The caption read, "When I was your age, everything was exactly the same." Nothing could be further from reality for today's district leaders. A superintendent in 2013 talking to a superintendent from 2007 about school budgets could honestly say, "Practically nothing is the same!"

FINANCIAL BENEFIT

## Negative/



IMPACT ON STUDENT ACHIEVEMENT

Negative
 Positive

POLITICAL FEASIBILITY
Very Politically
Difficult


CERTAINTY OF GAIN, RELATIVE TO IMPLEMENTATION COMPLEXITY

Uncertain
 Certain

A seismic shift has taken place - many districts today are facing sustained, multi-year funding gaps. In the past, tough times came, and then a few years later, spending levels typically returned to normal. As Secretary Duncan aptly noted, school districts are now facing a "new normal."

## Sustained Unsustainability

What is different? The traditional budgeting process in many districts in years past started by "rolling everyone forward." Sometimes called the "everyone comes back" budget, the CFO built the first draft of next year's budget by advancing each existing staff member one step in the salary schedule, adding for any known lane
movements, factoring in anticipated increases for health insurance, and finally topping it off with a cost of living increase. It is common for these standard increases to represent a $2 \%-6 \%$ increase over the prior year.

In the past, K-12 funding allowed districts to bring everyone back as well as add some new staff each year. In fact, per-pupil spending has increased every year in the past hundred years, with the exception of brief periods during the Great Depression and World War II (Exhibit l). ${ }^{1}$ The last five decades have also been marked by a constant increase in the number of adults working in schools, even when adjusted for increases in enrollment (Exhibit 2).

## Exhibit 1

PER-PUPIL TOTAL ELEMENTARY AND SECONDARY SCHOOL EXPENDITURES (1950-2009)


Source: National Center for Education Statistics, Digest of Education Statistics 2011

## Exhibit 2

PUPIL TEACHER RATIO IN PUBLIC ELEMENTARY AND SECONDARY SCHOOLS (1955-2010)


[^23] Statistics 2011

Short-term factors like the 2008 financial meltdown threw most districts into the position of not having the funding needed to maintain the status quo levels of staffing and services. Districts had seen this before, and employed past strategies of protecting the classroom, hunkering down, and riding out the storm. These budget gaps were often managed through short-term fixes, such as delaying textbook and technology purchases, deferring maintenance, reducing professional development, and cutting back on coaching.

Now, however, a number of long-term trends will shape district finances for years to come, and the familiar short-term solutions will not suffice. Many economists believe that the cost of health insurance and unfunded pension liabilities will strain future district budgets. They will also strain the budgets of city, state, and federal governments, which provide the lion's share of funds to many urban districts. Funding problems will be compounded as the federal government wrestles with a mounting deficit. It is unlikely that many school districts will, year after year, have enough money from these sources to maintain the status quo, let alone fund new efforts to raise student achievement, implement the Common Core, increase the use of technology, pay for longer school days, and implement other reform efforts.

Revenue from new tax increases is unlikely to be available to address the budget gap. In many communities, it is increasingly difficult to raise taxes; any new tax dollars are split between health and pension costs as well as deficit reduction, and are not just for K-12 staff and programs. For example, during the good years, from 2000 to 2007, the Massachusetts legislature raised taxes and increased K-12 spending by $13.6 \%$ each year, but rather than being used to supercharge educational improvement, fully $30 \%$ of the increase was needed to cover increased teacher benefit costs. ${ }^{2}$ These external, mac-ro-economic forces suggest that many districts will experience tight budgets for many years to come.

Years of tight budgets are not only a headache for district leaders, but can dramatically slow the pace of school improvement.

## Investing While Cutting

"If things are to change, some things must change" is a simple but profound truism. If student achievement is to rise (or increase more quickly), then some things must change in our schools and classrooms. Historically, many school districts have linked new improvements to having new funds. Often a new grant kickstarts a new reading initiative or a tax increase supports large-scale technology purchases. Longer school days or intensive teacher coaching is often contingent upon larger than usual budget increases. In a world of costs rising faster than revenue, this approach to education reform can no longer be the norm. The new normal will require school
districts to fund improvement efforts, while also cutting the budget, programs and/or staff.

It can feel wrong to add new programs or invest in new staff while also cutting the budget, but this juggling act is fast becoming a key aspect of district leadership. For students not yet ready for college and career, it is a moral imperative to invest and improve.

The downside for staff is clear: lost jobs, more work, and much change. The upside for staff of investing while cutting is less obvious, but real. If a district simply struggles to minimize the pain of cuts, morale can drop because the budget becomes more about survival than mission. Being able to highlight steps that move the district forward can buoy the energy and commitment in the district. For example, one district, faced with the unpleasant task of closing schools, found the mood turned from one of defeatism to resolve and even optimism that some of the funds freed up from having fewer schools would go towards adding needed services to the remaining schools. The pain was paired with a gain.

One midsized urban school district in Pennsylvania exemplified the "investing while cutting" mindset. A visionary superintendent and school board embarked on a strategic planning process. They honestly assessed their strengths and needs and found they were wanting in a few critical areas. For example, they lacked a robust reading program at the secondary level and needed a more significant summer program to help reduce the number of students dropping out. This is not an uncommon list. What was atypical was that they made the list at all. In a state with a $15 \%$ decrease in funding for districts over a four-year period, the district had just experienced largescale layoffs. The next year, the budget was forecasted to drop another $5 \%$.

Declining funding did not change the fact that the district needed reading teachers at their middle and high schools and more staff during the summer. Rather than delay, water down, or abandon these efforts, the district leaders reminded stakeholders that the strategic plan clearly prioritized these efforts. By definition, most other spending was less important - not unimportant, but not the top priority.

As the following year's budget was built, new reading teachers and summer school were budgeted first, and deeper cuts were made elsewhere. The results were good for both students and staff. More students learned to read and comprehend, and
more students stayed in high school. Despite more layoffs, many staff were energized by the decision to invest in critical areas of need. A few years of deep cuts had started to create a sense that things would be going from bad to worse in the district. These high profile investments and subsequent positive outcomes showed that while the budget was "bad, and maybe getting worse," the district and its students were getting better.

## A Few Guiding Principles

Staying focused on improving student achievement while budgets are shrinking can be challenging. Starting or expanding new efforts while others are being cut can be particularly difficult to justify and to implement. A few ideas can help ease the way.

## Believe doing more with less is possible

It is difficult to support and fight for a losing proposition. If leaders believe that higher student achievement requires higher spending, then it is unlikely that there will be much support for the hard work ahead. Fortunately, district leaders have a few tools beyond personal salesmanship to turn naysayers into believers. Performance measurement and benchmarking are two effective ways of persuading others that doing more with less is not just propaganda, but a $21^{\text {st }}$ century reality.

Performance measurement is a rigorous process of tracking the effectiveness of current spending. If leaders know for certain, for example, that a particular dropout prevention effort was not reducing the number of dropouts, or that a costly summer school program did not stem summer learning loss, then cutting these programs and investing the funds saved into new efforts or expanding effective programs will not feel like a terrible loss.

Benchmarking is the process of comparing one system to other best-practice organizations. The power of benchmarking is that it helps highlight what is possible. Human nature can make the familiar seem inevitable. If a district for decades did or had X , people might over time start to believe that X is absolutely required, and its loss would lead to worse outcomes for students. All the while, many higher-performing, like-districts do not do X at all.
The Xerox Corporation might have been the first to

## Targeting New Investments



Normalize strategic abandonment and invest in the budget development cycle

Don't ignore the power of away-from-classroom investments
formalize benchmarking in 1976. At that time, the company was the largest manufacturer of copiers in the world. They were flourishing, and it was believed that everything they did contributed to their success. Big opportunities for improvement were not obvious, and cuts would likely jeopardize their winning formula. Then, their world changed. A small number of Japanese companies seemed to make better copiers at a much lower cost. Still, it did not seem possible to cut costs and maintain, let alone improve, quality. Benchmarking changed these beliefs. Through detailed benchmarking, they learned that Xerox, as compared to best-practice companies, had twice as many supervisory and support staff, ten times more rejects during production, and shipped machines with seven times more defects. ${ }^{3}$

Imagine, before the benchmarking study, a leader's suggesting that Xerox cut supervisory and support staff by half, reduce prices, and dramatically improve quality. Many would have felt it was a fool's effort. Few would have backed such a reform effort. However, fortified by the benchmarking data, the company was energized to do more with less; quality improved, costs came down, and they continued to flourish.

Over time, benchmarking has expanded to government agencies and municipalities and, to a smaller degree, public schools. As districts seek to cut in one area in order to free up funds to invest elsewhere, they can increase support for such a plan if it is clear that other high-performing similar districts have already experienced success with this as well.

Benchmarking can be helpful in aspects of district management, including operations like custodial, maintenance, and food service, as well as for leadership staffing such as assistant principals and central office, and for workload and teaching load for special education, ELL, Title I, and reading teachers.


## Say you believe

Simply believing that a district can raise achievement and should invest scarce dollars in new efforts despite tight budgets is not enough. District leaders need to help win support for these initiatives by publicly and privately voicing their beliefs.

The challenge is that leaders often say just the opposite, for understandable reasons. As districts jostle for funding from city leaders or taxpayers, they sometimes paint a picture of impending doom if more funds are not provided. It is not uncommon to hear district leaders declare proposed funding cuts to be devastating if not reversed.

> Each year, if districts methodically discuss what not to do before they start building a budget, it can create space to discuss what to add.

Advocating for funding is an important part of leadership, but staff also listens to the debate. While lobbying for more, district leaders are also messaging to staff that children will suffer and learning will decline. When the cuts are not restored, staff could reasonably believe that improvement is not likely and that lackluster results are inevitable.

It might be more productive when advocating for needed funds to describe the alternative as requiring hard choices and new approaches, rather than disaster. Even the most compelling benchmarking data and a passionate vision of higher achievement despite fewer funds cannot be very persuasive after months of voicing the opposite.

In one district, the superintendent's cabinet read as a teambuilding exercise the story of Ernest Shackleton's 1914 Antarctic expedition. They learned how the crew came together to survive their boat's becoming frozen and subsequently destroyed by polar ice flows. It is a great example of people coming together in adversity. It is also a powerful example of effective leadership during tough times. Shackleton gave his crew hope; he believed and communicated that all would end well.

The importance of a leader's sustaining a positive attitude within the organization is a lesson worth emulating. Superintendents can certainly regret having to make cuts, and should empathize with those impacted by reductions, but superintendents must also energize the vast majority of staff who remain serving students. Providing targeted investments and new ways to meet old demands can help staff believe that improving student outcomes is possible, despite limited resources.

## Normalize strategic abandonment and invest in the budget development cycle

Often, when building the following year's budget, the first step is, as mentioned earlier, to build the "everyone comes back" budget that rolls forward all programs and people. Then, the painful process of cutting begins. Each potential cut is debated as advocates try to save the existing program and staff, and push to cut elsewhere. Implicit in this approach is the idea that every program and strategy should be continued and cuts are only being made because sufficient funds are not available.

Student and taxpayers would be better served if, before the first draft budget is built, district leaders spent time
examining what is helping children and what is not. District leaders should take a fresh look to determine what is aligned with the strategic plan and what is no longer in sync with district strategy and should be abandoned.

Jim Collins, author of Good to Great, has long advocated that what you stop doing matters as much as what you do. He suggests, "You should create a 'stop doing' list to complement your 'to do' list. Set aside time to explicitly discuss with your managers what to stop doing. The world is full of smart executives who take decisive action. It is woefully short of wise executives who take decisive inaction." ${ }^{4}$ In some districts, when these kinds of "stop doing" conversations do occur, they tend to focus on what other departments or more senior leaders could/should abandon. Often, the process is not self-reflective or grounded in data.

Each year, if districts methodically discuss what not to do before they start building a budget, it can create space to discuss what to add, even when the overall budget is shrinking. There are a number of side benefits to formalizing abandonment as a part of building a budget. It creates an expectation that programs, strategies, and efforts must be effective if they are to continue. It also heightens the need to create systems to measure effectiveness and cost-effectiveness. Imagine if a program were deemed "ineffective" unless data proved otherwise. Raising the burden of proof could squarely keep the focus on results. Lastly, by pairing abandonment with investment, district leaders may challenge old spending with the confidence that cuts to ineffective programs make possible new spending on programs expected to have higher efficacy.

## Don't ignore the power of away-from-classroom investments

When confronting a budget gap, there can be a strong desire to preserve what we have. It is hard to consider adding new programs or investments, while budgets and even some staff are being cut. This locks in the status quo, at best. When cuts cannot be avoided, an equally strong desire can be "to protect the classroom." At one superintendents' conference devoted to balancing budgets, speaker after speaker exhorted the need to keep the cuts away from the classroom. A generous interpretation of this advice is that students come first, and the budget should also put their needs first. This focus on the classroom, however, can undermine the importance of leadership, management, and expertise which is also critical to helping students learn.

Relatively small investments away from the classroom can magnify the impact teachers have on student learning. For example, clerical support for principals can allow building leaders to spend more time in classrooms; adding data analysts can allow districts to pinpoint what is working and what is not; instructional coaches can improve teacher effectiveness; and,
a skilled purchasing manager can save millions, thus freeing up funds for students.

Paying for expertise can also be a fruitful investment. School reform efforts depend on school leaders assuming prominent roles as instructional leaders, yet few districts have found cost-effective ways to free up principals' time and energy to devote more attention to supporting instructional excellence. One small urban district of 14,000 students in Massachusetts accomplished just that by investing \$200,000 to employ two lawyers to work directly with principals and assistant principals in matters related to student discipline hearings, student records, parental rights, Section 504 on handicapping conditions, civil rights, and special education. Each of the district's 29 school leaders and their assistants can call the district lawyers at nearly any hour of the day or night. The administrators have an expert to provide advice and support, especially in high-stress situations. Additionally, the lawyers collaborate to spot trends so that procedures can be updated and relevant.

Principals report that the legal support has helped them free up time to play more active roles in educator evaluation and other instructional leadership efforts. Just as importantly, district leaders point to the following gains: more consistent implementation of district policies and new state mandates related to student services; an improved reputation of the district with special education advocates, local police and county courts; and a $\$ 200,000$ net savings in virtually every year of the ten years the staff counsel positions have been in place.
Away-from-classroom expenditures like these can seem frivolous during declining budgets. In fact, they are equally important in tight or flush times and ultimately benefit students.

## Rebirth, not Destruction

Cutting a budget will always be hard. Good people may be let go or moved, and cherished programs may end, but this is also the beginning of new, hopefully more effective, initiatives. Just as a forest fire can cause much damage, it also is a needed step in maintaining a healthy ecosystem. The ash nourishes new growth, and a healthier forest emerges. Districts that create a culture of cutting and adding even as budgets shrink will also see a better future.

[^24]
# TARGETING NEW INVESTMENTS: Funding a Better Future, Despite Declining Resources 

With years of tough budgets ahead, districts cannot wait for better times to fund new or expanded improvement efforts. Districts have an obligation to their students to invest in staff and programs that can raise student achievement, even though it can feel wrong and uncomfortable to do so when other staff and programs are being cut.

HERE'S HOW TO GET STARTED:

## 1 VOICE YOUR BELIEF THAT MORE CAN BE DONE WITH LESS

If district leadership, staff, and stakeholders believe that higher student achievement requires higher spending, it is unlikely that they will support the hard work ahead. It is essential that superintendents message both publicly and privately that their districts can and will raise student achievement even as funding declines.

## 2 USE DATA TO CONVINCE OTHERS THAT IT IS POSSIBLE

Performance measurement (tracking the effectiveness of current spending) and benchmarking (comparing systems to best-practice organizations) can highlight what works and what is possible. They can be powerful tools for persuading skeptics that districts can do more with less.

3 MAKE A "STOP DOING" LIST
During the budget development process, many districts roll forward the budget from the previous year and then begin the painful process of cutting. Instead, before building the budget, methodically address what not to fund in order to ensure that ineffective programs are abandoned to make space for more promising efforts.

## 4 PAIR A LOSS WITH A WIN

Pairing abandonment with investment can help boost morale. Staff and stakeholders can witness the district's commitment to improvement, which can help to turn defeatism into resolve.

5 SHIFT THE MINDSET FROM "PROTECTING THE CLASSROOM" TO MAXIMIZING THE IMPACT OF EVERY DOLLAR SPENT
When confronting a budget gap, many superintendents feel the need to "protect the classroom" from budget cuts. Yet, relatively small investments in leadership, systems, and expertise (such as instructional coaching, increased data-analysis capacity, etc.) can have a big impact on the classroom and on student learning.

## A word to the wise: WHEN ADVOCATING FOR FUNDING, AVOID "DOOM AND GLOOM" RHETORIC

As districts lobby for more funding from city leaders or taxpayers, they sometimes paint a picture of impending disaster if more dollars are not provided. Staff and stakeholders, who listen to the funding debate, may believe that learning will inevitably decline if funding declines. It is essential that district leadership message a "can-do" attitude while acknowledging the difficult circumstances.

## DISTRICT MANAGEMENT COUNCIL ${ }^{\oplus}$

## APPENDIX I

## Original list of 71 opportunities for resource realignment

1. Achieve economies of scale and/or provide higher quality of services by partnering with other school districts or local/county governments (e.g., shared staff, departments and/or facilities)
2. Adopt fixed-costs benefits (could include greater flexibility in benefits selection)
3. Adopt in-house alternatives to outside vendors for professional development
4. Adopt lower cost, more effective service delivery models
5. Adopt market-based benefits package
6. Adopt school-day, school-year professional development and common planning time in place of out-of-school professional development time
7. Build new schools more cost-effectively
8. Carefully manage the location and staffing of substantially separate / self-contained classrooms based on shifting student needs
9. Consider and align all funding sources (local, state, federal, and private) when developing and managing the district budget
10. Contract with community colleges to provide some high school courses
11. Contract with private or non-profit sectors to provide enrichment or remediation services
12. Create incentives for principals and central office staff to determine cost-effectiveness of past spending on school academic support services and programs to make decisions about which investments to increase, preserve, or abandon
13. Determine cost-effectiveness of past spending on district academic support services and programs to make decisions about which investments to increase, preserve, or abandon
14. Differentiate benefits packages based on bargaining units or employee status
15. Differentiate class size (and compensation) based on teacher effectiveness
16. Differentiate pay based on market demand
17. Establish minimum enrollment in all courses
18. Expand the use of teacher-leaders
19. Identify and take advantage of the flexibility in allowable uses of federal funding (e.g., Title I, Title II, Title III) in order to more effectively integrate and align their use with each other and local funds
20. Identify the full costs of programs and services by including all related costs and all funding sources, and disaggregating broad spending categories by program or service to link spending to specific programs and services
21. Improve and strengthen general education reading instruction to reduce both special education and remediation and intervention costs
22. Improve cost-effective service delivery for English Language Learners (ELL)
23. Improve cost-effective service delivery for other remediation and intervention efforts
24. Improve management of special education costs by integrating special education and general education budgeting processes and including related grants
25. Improving tracking and reporting of enrollment
26. Incentivize opting-out of district-provided benefits (e.g., sick leave buy-back, health insurance)
27. Incentivize placement of most effective personnel in schools and classrooms with the greatest need
28. Increase class size in core classes
29. Increase class size in non-core classes
30. Increase class size while maintaining or reducing student load
31. Increase in-district options for educating students with severe disabilities
32. Increase number of periods taught in exchange for higher compensation
33. Invest in and/or reallocate resources for instructional coaching
34. Invest in improved technology and tools to more tightly match staffing to enrollment and student needs
35. Link compensation to teacher effectiveness rather than seniority and degrees
36. Link compensation to teaching load rather than seniority and graduate degrees
37. Maintain regular maintenance schedule for preventative maintenance in order to reduce high-cost repair or replacement costs
38. Make general education transportation routing more efficient
39. Make special education transportation routing more efficient and coordinated
40. Manage allocation and scheduling of special education staff more effectively
41. Manage the effectiveness of professional development provided by understanding its costs and benefits
42. Manage the staffing and programs of alternative schools to ensure cost-effective operations
43. Outsource operational components (e.g., food services, custodial services, and/or maintenance)
44. Outsource related services and paraprofessional services (e.g.. collaboratives, private providers)
45. Provide students with social, mental health, and health services through partnerships with non-profits, universities, local agencies, and/or for-profits
46. Redesign processes to maximize cost-effectiveness of purchasing and contracting by professionalizing their function and modifying "use it or lose it" policy
47. Redesign processes to maximize district benefits in purchasing and contracting, including outsourcing, by increased cost-benefit analyses
48. Reduce cost of common planning time and paid professional development time through scheduling and staffing innovation
49. Reduce costs and increase staff effectiveness through automation of administrative and clerical duties (e.g., recording absences, parent notification, IEP processing)
50. Reduce hardware/software expenditures through a more rigorous analysis of learning impact and likely usage
51. Reduce overall compensation through multi-tiered wage scales
52. Reduce overall compensation through wage cuts
53. Reduce over-identification of students with special needs through more objective IEP eligibility and exit criteria
54. Reduce the number of school buildings as enrollment declines (with appropriate reductions in staff)
55. Reduce the number of students served in substantially separate / self-contained classes by
refining eligibility criteria
56. Reduce total benefits cost by managing part-time and full-time status
57. Rent facilities for community, non-profits and/or private use
58. Replace paraprofessional support with certified reading specialists by revising the roles and/or schedules of special education paraprofessionals
59. Revise the hiring process to ensure that principals are hired based on their demonstrated ability to improve teaching effectiveness
60. Secure all possible Medicaid reimbursements
61. Shift to lower cost, non-certified staff
62. Small investments or reallocation of resources to free up principals to spend more time in classes and/or coaching and support for providing effective feedback
63. Staff to enrollment (e.g., secondary teachers, elementary specialists, specialized roles) and eliminate one-per-school staffing guidelines
64. Staggered start times for lower cost extended day
65. Tightly manage and monitor overtime for custodial, janitorial, and maintenance services
66. Tightly manage staffing to projected enrollment and existing class size targets
67. Use college-style classes at the high school level
68. Use part-time positions for non-core staff when the need is less than full-time
69. Utilize benchmarking data to improve staffing and other budget-related decisions
70. Utilize blended learning and/or personalized technology systems to offer courses at a lower per-pupil cost and/or with greater academic return on investment
71. Vary class size based on differentiated student needs

## APPENDIX II

## Intermediate list of 21 opportunities for resource realignment

## Blended Learning

1. Utilize blended learning and/or personalized technology systems to offer courses at a lower per-pupil cost and with greater academic return on investment

## Class size and teaching load

2. Differentiate class size (and compensation) based on teacher effectiveness
3. Increase class size in core classes
4. Increase class size in non-core classes
5. Increase number of periods taught in exchange for higher compensation, which could be offered based on teacher effectiveness
6. Staff to enrollment and student needs based on existing class size targets and contractual work load requirements

## Academic intervention and remediation

7. Carefully manage the location and staffing of substantially separate / self-contained special education classrooms based on shifting student needs
8. Identify the full costs and determine cost-effectiveness of programs and academic support services in order to adopt lower cost, more effective service delivery models
9. Improve management of intervention and remediation by integrating special education and general education budgeting processes and taking advantage of flexibility in allowable uses of federal funding (e.g., IDEA, Title I, Title III)
10. Manage allocation and scheduling of remediation and intervention staff more effectively
11. Replace paraprofessional support with certified reading specialists in order to improve and strengthen general education reading instruction to reduce both special education and remediation and intervention costs

## Extended school day

12. Stagger start times for lower-cost extended day

## Business operations

13. Outsource operational functions (e.g., food services, custodial services, and/or maintenance)
14. Outsource related services and paraprofessional services
15. Redesign purchasing and contracting by professionalizing the function and modifying "use it or lose it" policies

## Professional development

16. Understand the costs and benefits of professional development and shift to more cost-effective options such as adopting in-house, school-day, school-year professional development and common planning time in place of vendor-provided, or afterschool professional development

## Partnerships

17. Provide students with social, mental health, and health services through partnerships with non-profits, universities, local agencies, or for-profits

## School closures

18. Reduce the number of school buildings as enrollment declines (with appropriate reductions in staff) or rent excess facilities for community, non-profits or private use

## Targeted investments

19. Improve tracking, reporting, and managing of enrollment and attendance for both students and teachers
20. Invest in or reallocate resources for instructional coaching
21. Small investments or reallocation of resources to free up principals to spend more time in classes and provide effective feedback

## About the Authors

Nathan Levenson is Senior Managing Director of The District Management Council (DMC). After a career in the private sector and six years as an elected school board member, he served as superintendent in Arlington, Massachusetts. His work at DMC has led him to more than 50 districts, always looking to help them do more with less.

> James C. Smith, Senior Director at The District Management Council, has a combination of human capital consulting and classroom teaching experience. James works on projects across several areas including human capital, strategic planning, special education, and stakeholder engagement.

Karla Baehr is Senior Advisor and Consultant at The District Management Council. Her many years of experience as a superintendent in both urban and affluent districts provide a unique perspective. Karla also served as deputy commissioner of the Massachusetts Department of Elementary and Secondary Education.

Claire Sullivan is an Associate at The District Management Council. Having worked in the classroom prior to joining DMC, Claire now works with a number of districts on mapping resource allocation, with particular focus on datadriven budgeting and improving special education and remediation and intervention staffing.

## About the District Management Council

The District Management Council (DMC) partners with public school district leaders to help improve student outcomes, operational efficiency, and resource allocation. DMC was founded in 2004 to address the most pressing and important management challenges facing American educators. The trusted advisor to school district leaders, DMC works with districts on these important issues to achieve measurable results. With the firm belief that leadership and management matter, DMC helps to strengthen and increase the managerial capacity of the people leading school districts to systemically improve the performance of the American public education system. To learn more, visit www.dmcouncil.org.

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[^0]:    Note: In this scenario, there is no student transfer between schools
    Source: The District Management Council

[^1]:    Source: The District Management Council

[^2]:    ${ }^{1}$ Martin R. West and Guido Schwerdt, "The Middle School Plunge," Education
    Next, v.l2, No. 2.
    ${ }^{2}$ United States Census Bureau, 2010 Census.

[^3]:    *Assumes each struggling reader receives instruction 30 minutes a week, 5 times a week
    Source: The District Management Council

[^4]:    Source: The District Management Council

[^5]:    Note: SWDs refers to students with disabilities

[^6]:    Source: Adapted from draft of "Innovating Toward Sustainability: How

[^7]:    1 "A Better Blend: A Vision for Boosting Student Outcomes with Digital Learning," Public Impact. http:// opportunityculture.org/wpcontent/up-loads/2013/04/A_Better_Blend_A_Vision_for_Boost-ing_Student_Outcomes_with_Digital_Learning-Public_Impact.pdf (accessed May 31, 2013).

[^8]:    ${ }^{1}$ Education Week, "Setting Class-Size Limits," http://www.edweek.org/ew/section/infographics/l3class_size_map.html (accessed May 30, 2013).
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[^9]:    A word to the wise: DO NOT BOTHER TRYING TO CONVINCE SKEPTICS WITH RESEARCH Research has shown that in most cases, increasing class size by a few students will not negatively impact student learning. While the research is very solid, it has failed to convince many parents, teachers, and principals. Reiterating the findings seldom garners many converts. Instead, starting the conversation with in-district data - or changing the conversation entirely - can be more effective.

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    ${ }^{5}$ Patrick Lencioni, The Five Dysfunctions of a Team: A Leadership Fable (San Francisco: Jossey-Bass, 2002).
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