



# Balancing the Equation:

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HOW TALENT DATA CAN LEAD TO  
BETTER DECISION-MAKING  
FOR K-12 LEADERS

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# Executive Summary

In 2018, a white paper titled “Balancing the Equation” proposed a vision for strategic human capital management (HCM) characterized by a holistic approach to building and maintaining a high-performing employee culture. It went on to say as part of this culture, leaders would make data-driven decisions aligned to their school system’s strategic objectives. Their teams would collaboratively set goals, measure results using data and benchmarks, and determine key opportunities for continual improvement in employee engagement, efficiency and effectiveness—all in support of improved student learnings. Finally, the white paper stated that with a commitment to leveraging data to support a carefully crafted vision for the future, all education systems can achieve this vision.

The Frontline Research & Learning Institute is revisiting to see if these visions for strategic human capital management hold true for districts, schools and states today. Here’s what we’ve learned.

## Human Capital Management in the Real World

Caledonia Community Schools is a high-performing suburban/rural district not far from Grand Rapids, MI. A strong sense of pride and purpose encourages collaboration

as all departments work toward a common goal: creating a positive learning environment and the optimum academic experience for all students.

After a period of slow, steady growth, Caledonia had recently started to experience growing pains as more city dwellers moved out to the suburbs. Caledonia kept their focus on their mission statement, empowering and equipping all persons to achieve their best by ensuring the highest quality system for learning. To promote this and to continue to attract and recruit employees for their high-performing district, Caledonia knew it was time to update their practices. That meant streamlining recruiting and hiring, onboarding, and training of new employees while meeting the professional growth needs of a diverse workforce at the same time.

The first step was to improve the hiring and on-boarding processes for HR. As part of a consortium of 23 districts using online recruiting and hiring solutions, Caledonia had access to a broader pool of candidates than standalone recruiting systems. With more applicants, they needed to find a way to sort and track their top choices.

*“As soon as a candidate is selected, their application is uploaded to their HR portal. References are completed separately and also saved to the HR portal once the onboarding process is complete.”*

— **Laurie King**, HR Assistant,  
Caledonia Community Schools

Having a talent management system designed for K-12 organizations, including the highest level of security, has been a major asset for every department, especially during COVID. Back when they were doing a lot of work manually, binders or folders kept in offices would not have been accessible to staff forced to work at home. But with a new talent management system, it is easy to access data remotely. Payroll still gets processed on time, subs are hired when needed, and professional growth is available to teachers and easy to track.

Their connected talent management system now manages all employee records, allowing them to synchronize their hiring, professional growth, and absences. They're no longer using different systems in each department and have revolutionized and streamlined their processes with workflow enhancements. Their new talent management system puts data within easy reach of all users from district administrators to employees themselves, when and where they need it.

Following Caledonia's strategic plan for growth involved shifting schedules and changing grade-level configurations. The pandemic added another twist when teachers unexpectedly retired or went on leave and substitutes were hard to find. Fortunately, with the absence management component of their new talent management system already in place, the HR department is able to help manage the astronomical number of staff changes.

*"Everyone's schedules are set. When there's a holiday, it's already preset in the talent management system."*

— **Sara DeVries**, Director of Finance and Business Services,  
Caledonia Community Schools

Grayson County Public Schools in Independence, VA is another district that is transforming HCM processes through the use of a connected talent management system. Prior to implementing their system, human resources and payroll had to generate many complex reports and spend a lot of time going through individual employee files to make updates. Grayson County implemented a new talent management system and gained more efficiencies by maximizing their resources and expediting their processes.

*"We now have a comprehensive view of all employees and staff with proactive notifications to keep our records current as well as comparative data and historical information to support our budget and planning needs."*

— **Amy Vaughan**, Human Resources Clerk and **Marlee Bertram**, Deputy Payroll Clerk, Grayson County School District

## Additional Learnings from School Leaders

“Balancing the Equation” poses a number of questions about human capital management systems. Do these systems indeed help to drive real-world results in school systems? **Additional discussions with leaders across districts, schools and states shed some light on these questions:**

**1** *Do the parts of the current system work together?* Investments in talent management systems are allowing districts, schools and states to provide HR and other departments access to connected and secure systems when they need it and from where they need it. With such systems, it becomes much easier to work collaboratively and strategically across departments while continuing to process payroll on time, hire subs when needed, and offer and track professional growth opportunities.

**2** *Does everyone have access to information from across the entire talent pipeline?* New talent management systems streamline employee lifecycle management, giving district leaders and employees secure access to a centralized hub where they can maintain and track current employee information.

**3** *Do leaders have the mandate and time to connect the dots?* With a connected talent management system, HR and cross-departmental leaders now have the ability to be proactive versus reactive as they manage their district. With access to their data they can monitor their progress against their strategic plans and make adjustments along the way. For example, they are better able to manage staffing changes for teachers retiring or going on leave.

**4** *Have the barriers to collaboration and feedback among talent leaders been eliminated?* With one system used and accessed across all departments, leaders are collaborating and sharing feedback, bringing efficiencies to processes like hiring and onboarding. They are now able to spend time on meaningful, actionable conversations rather than acting on assumptions.

**5** *Is talent data driving decision-making across school or district systems?* Talent data-informed decision-making is indeed occurring. Leaders are able to support individualized professional growth and access absence and demographic data to make better-informed decisions.

Based on these stories and conversations with many other district, school and state leaders, the Frontline Research & Learning Institute has found that the vision for strategic human capital management — and integrated talent management systems — is gaining ground.

## Conclusion

To provide students with the best education, it's critical to support teachers and staff. But providing that meaningful support can be challenging when so much time is spent on tedious, manual work — especially when working with disconnected systems, resulting in duplicate data entry and human error.

K-12 leaders leveraging these new talent management systems are able to compile data in one central location. Their teams collaboratively set goals, measure results using their data and benchmarks, and determine the key opportunities for continually improving employee engagement, efficiency and effectiveness — all in support of improved student learnings. These talent management systems are supporting educators' HCM strategies from “hire to retire.”

Continued investments in innovation in talent management systems will further strengthen and address critical K-12 needs. Our vision is that schools, districts and states will continue to implement these new talent management systems, and through them experience the streamlining of their human capital management processes, returning time and resources to their school staff and helping place qualified teachers in every classroom to support their students' growth and improve learning and outcomes.

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*The Frontline Research & Learning Institute recognizes that continued challenges in K-12, including teacher shortages and COVID-19, have impacted the way schools, districts and states are supporting educators and other key personnel. Even with these challenges, we're seeing great progress.*

*The organizations referenced within are using solutions that are part of Frontline Education's human capital management suite to gain efficiencies and streamline their HCM processes. To learn more visit [www.FrontlineEducation.com](http://www.FrontlineEducation.com).*


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# Introduction: Unlocking the Potential of the Human Capital Management System

When Bill Sanders first started to examine Tennessee's assessment data to understand what might underlie persistent achievement trends, he was driven by the notion that data viewed through the right lens can tell a story that changes everything.

The pioneer of “value-added” modeling, a statistical method for isolating and measuring teacher effects on students' test scores, Sanders recognized that the state had been collecting student assessment data for decades but never used it to explore trends that might affect policy or practice. With permission to use that data, he began to look for trends in ways that students with particular teachers scored on their assessments. He found that while there was some variation in between, some educators' students consistently scored well while others' students consistently scored poorly.

Many years later, Sanders' work has been variously used to drive educator evaluation policy and to discredit the very policy it inspired. Teacher quality advocates assiduously pointed out that having data that so clearly indicates that some educators are persistently ineffective and doing nothing about it is tantamount to providing no education at all (or worse). On those grounds, The New Teacher Project undertook a nationwide study to explore how data were and were not being used to make decisions at the school and district level. Their damning report, *The*



*Widget Effect*<sup>1</sup>, laid bare the disturbing truth; in their sample, only very limited data were being collected in the form of performance checklists—sometimes as rarely as every five years—and findings were disconnected from decision-making. Data did not inform professional learning. It did not inform teacher coaching. And it certainly did not inform critical personnel decisions.

Many have argued that what followed was a classic case of well-intentioned but poorly crafted reform in which policy, driven by a sense of urgency but not founded on proven practice, got ahead of science. The Obama administration leveraged virtually all mechanisms at its disposal to encourage passage of state and federal policies that required the collection and use of educator effectiveness data that went far beyond the seemingly ubiquitous evaluation checklist. The result was not more well-informed human capital systems, however.

Rather, much of the field—from educators to unions to leaders and local school board members—pushed back. While they may have accepted the premise of reforms, they spotted an ironic problem with the new policy: by trying to achieve more equitable human capital management practices using data, policymakers called for systems that were ill-equipped to account for the incredible diversity in the student population. Coupled with critiques about the components of educator evaluation outside of student data, reformed educator evaluation systems faced imminent death. Many have been modified to increase flexibility for districts and some have even been stripped of virtually all of the essential components called for by the reforms.

The story, however, does not end with a funeral for multi-measure educator evaluation systems. On the contrary, the efforts undertaken by school districts and schools over the last decade have actually

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1 “The Widget Effect: Our National Failure to Acknowledge and Act on Differences in Teacher Effectiveness.” June 8, 2009 <https://tntp.org/publications/view/the-widget-effect-failure-to-act-on-differences-in-teacher-effectiveness>

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given birth to both a shared appreciation for the opportunities that data present and the systems and processes needed to use data most effectively. Sanders' notion—that applying the right lens to data could tell a story that unlocks the doors to action—led to massive change in policy and practice. The lesson from this story? Big ideas are the fodder for action.

Our thinking about the future of teaching and leading schools is driven by another big idea: if leaders take the systems they have already created to help manage the processes that support the adults in their organizations—everything from recruiting and hiring to absence management and professional learning and pathway development—and put those data together with the right lens, they can build human capital management ecosystems that are attractive to prospective educators and that help those educators to thrive throughout their careers.

***In short, the right lens on human capital management data could turn the tide on teacher recruitment and retention.***


The benefits to thriving educators expand to other elements of the school model, too. Educators who stay in their classrooms and continue teaching for at least three years are apt to see major performance improvements and strengthening of key skills—and that can result in measurably better outcomes for students<sup>2</sup>. Educators who stick around can also boost the efficacy of the school over time both by building their own skills and reducing disruptions that might harm school culture<sup>3</sup>. By some estimates, teacher turnover costs districts about \$2.2 billion per year nationwide<sup>4</sup>. Proactively engaging educators can lead to greater rates of retention of high quality educators—something that could free up capital resources to address other significant challenges.

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2 “The Myth of the Performance Plateau.” May 2016 [https://Scholar.harvard.edu/Files/Mkraft/Files/papay\\_and\\_kraft\\_\\_ed\\_leadership\\_\\_may\\_2016.Pdf?m=1469828841](https://Scholar.harvard.edu/Files/Mkraft/Files/papay_and_kraft__ed_leadership__may_2016.Pdf?m=1469828841)

3 “How Teacher Turnover Harms Student Achievement.” January 2012 <https://caldercenter.org/sites/default/files/Ronfeldt-et-al.pdf>

4 “On the Path to Equity: Improving the Effectiveness of Beginning Teachers.” July 2014 <https://all4ed.org/wp-content/uploads/2014/07/PathToEquity.pdf>



In the last years of the 2010s, the field of education faces a new set of challenges. Enrollments are down across educator preparation programs, and school systems must compete for talent with other companies and organizations that have the capacity to be nimble and disruptive in their approach to salaries, benefits and other quality of life offerings for prospective employees. Now more than ever, education must adapt to maximize every part of the talent management cycle to attract, develop and retain the world's best educators.

This historic moment presents an unprecedented opportunity to learn from the many difficult lessons from data collection and evaluation over the past few decades, as well as the policy and implementation missteps that distracted from the initial aims that motivated them. Perhaps most importantly, it is also a moment in which most schools and districts have already collected the data they need to make better decisions. The challenge—and the exciting opportunity of our time—is pulling the data together and finding the lens that will help us to make the right decisions at the right time.

This paper explores the historical events and lessons from policy reform efforts and student data movements that lead us to this moment and that can guide our thinking on lenses that lead to transformative improvement in human capital management systems.

## Creating a Data Framework to Drive Decision-making

The birth of education reform was nearly concurrent with the birth of compulsory public education in the U.S. And 35 years ago, the National Commission for Excellence in Education undertook the first concerted effort to establish and evaluate metrics of efficacy and equity across the

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nation<sup>5</sup>. Since then, federal, state and local policymakers have struggled to identify the right metrics for understanding whether schools are effective—and why.

Over the last 50 years, federal and state laws have been promulgated and repealed in efforts to improve equity and quality of schooling. During that time, schools and districts have begun to innovate independently, choosing to work within the law to meet the needs of their students. They're mapping their own routes to improvement by using personalized metrics of success and improvement. Those routes begin with establishing a vision and goals, then identifying the signposts that will help them know they're on the right track. The districts we've learned from have established signposts by using data to understand what constitutes progress—and what might need to be changed.

These schools, districts and states imported thinking about their data from experiences they already had working with student data. A decades-old idea, the data-driven decision-making framework may seem outdated—but it has helped apply a structure to an abyss of possible data. And that is the key to leveraging diverse types of data to make smarter decisions. When it came to better understanding how to support students, the framework eschewed looking at all available information about students' backgrounds, their performance on every assessment, their attendance, their participation rates, their family engagement and more, instead finding focus in urging leaders and staff to set clear and specific goals, then align a few specific metrics to those goals for tracking.

The data-driven decision-making structure itself was not a magic formula that was exportable from one district to another; there were far too many variables, including school context and staff capacity and student and community needs to establish just one approach to looking at data. The *process* used to describe that structure and bring discipline to the

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5 The Commission published the now infamous report, "A Nation at Risk." April 1983 <https://www2.ed.gov/pubs/NatAtRisk/risk.html>

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data collection and review process, however, could be adapted from one school or district to another. We can do the same to make better use of educator data to recruit, hire, support and retain educators that feel engaged and supported to provide an excellent education to their students.

Rather than focusing the framework on student learning data, we suggest an innovative application to teacher and staff data that can inform equally data-driven and documentation-informed decision-making about human capital management.

## Lessons from Data-driven Decision-making for Students

The era of using data to power instructional decisions for students progressed in fits and starts, encountered innumerable barriers, included at times draconian activities and expectations, and yet still resulted in a field that grew smarter and stronger as a result of the effort. Today, while still far from perfect, data on students and their learning are helping educators and leaders to guide and differentiate learning experiences, support deeper learning across ability levels, and even predict whether students are at increased risk for failure or dropout.


These capabilities are reflective of policies and procedures that result in data that are cleaner, timelier and more attuned to their intended uses—and a cohort of educators who are better prepared to use both data and technology to support their professional work. Yet despite these

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enormous strides in the effective capture and use of student data, the relative progress in defining and using the data that matter for educator success is far off pace. The practice of using data to drive decision-making at the classroom level provides several essential lessons to guide the use of educator data—and it may even help connect student and educator data in a way that better informs support for both students and educators.

***First, all data are not necessarily useful or relevant.*** There are many possible fields of data to collect on any given subject, but the decision to use them all causes two major problems. First, it means a great deal of time must be spent on data review. Ironically, choosing to look at more data often actually leads to looking at less data. Second, reviewing all data can distract from the data that can inform the high-leverage actions that lead to improvement. Without a theory of action behind the data that are reviewed, every use of the dataset requires a new exploration, a new hypothesis about action, and lots of time spent on inquiry rather than action. Losing valuable time to open-ended exploration of lots of data rather than more focused exploration of specific data necessarily means making fewer data-driven decisions.

***Second, the translation of data into action requires thoughtful planning, training and practice.*** With a clear theory of action in place to guide the data that are collected, those data can become the cornerstone of key decision-making processes. Before action, however, everyone responsible for collecting, analyzing and using the data needs training and support that can guide efforts and ensure the full team is prepared to employ data consistently and effectively. Decision-making processes are more easily defined when they are oriented toward specific and shared understanding of outcomes, and when everyone who is affected participates in the process of defining and implementing them—as well as measuring success and making course corrections along the way. That means dedicating time not just to communicating vision or strategic



planning, but to working together as a leadership team to understand what information the data collected will need to provide and, as a result, which data to collect and how.

For example, a leadership team interested in reducing unnecessary teacher absences may begin by looking at data on causes of educator absences. A recent report from the Frontline Research & Learning Institute found that 1 in 5 educator absences is professionally-related and therefore more controllable.<sup>6</sup> By first identifying causes of professionally-related absences and then working collaboratively with cross-departmental team members to reduce or eliminate them by addressing their root cause, instructional and professional learning leaders can leverage easy-to-collect data to make a big difference in teacher attendance while decreasing costs and increasing instructional time. Most importantly, starting from a shared understanding of why the data are being collected can help to encourage collaborative collection and use.

***Third, the data that are collected must be trusted.*** Educators need to feel that data used is honest, accurate and a reflection of reality. They also need to feel confident that data collected about them will not be used against them, but for them. Humans' role in the data-gathering process introduces many possibilities for error ranging from misinterpretation of their observations to accidental mis-keying of discrete data points. Error undermines trust in the data, so systems to ensure accuracy are essential to the strategic process. Leaders are well-served by systems that help ensure observers are calibrated, those entering data have reviewers and spot checks or redundancies are in place. Data should also be organized so they need not be collected multiple times. For example, data collected for recruiting and hiring could be connected with data from later in the talent cycle such as induction

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<sup>6</sup> "Professionally Related Absences: Incidence, Causes & Key Findings for School Districts." April 2016 <https://www.frontlineinstitute.com/reports/april-research-report/>

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or evaluation if there are appropriate linking identifiers in the data set. Educators also must be able to trust that their data are private and used for the purposes for which they were collected—that is, to help support better human capital management.

***Fourth, data collection and use must be part of an iterative cycle that involves testing hypotheses, measuring outcomes and making course adjustments.*** Even as a theory of action drives data collection and related decision-making processes, leaders must also be committed to ensuring that the theory is actually leading to the outcomes they intended. Learning early when hypotheses don't bear out helps clarify when course corrections are needed and allows data to suggest changes rather than shifting tides of interest or motivation. As a part of the data planning process, leaders should prepare for regular “step backs” to review the processes, ensure they are working as intended and compare outcomes or progress toward outcomes with the driving theory. A powerful mechanism for ensuring that data are on track is looking at benchmarks from across the field, including subsets well-matched to individual schools and districts. If there's a mismatch between a theory of action or reasonable benchmarks, it's time to either try alternative solutions or identify other questions that need to be answered to better achieve outcomes.

***Fifth, data systems must have the flexibility to help gather, measure and focus on the things that matter most.*** One consistent challenge with data has been its location in different and disconnected systems. If, for example, information about students' special education needs is separated from data about their general education class progress, it is hard for their teachers to make good decisions about their educational supports across the board. And if special education teachers' roles are not considered when preparing professional learning opportunities, those teachers may not receive sufficient support to meet their students' needs.

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Similarly, if data about educators' preparation and previous effectiveness are separated from current effectiveness and professional learning data, it is difficult to understand how best to support them. Organizing for better data sharing can begin by bringing people across administrative areas together to look at the same data. Looking together at data often begets collaborative efforts to address issues and build upon successes. Whenever possible, breaking down barriers and ensuring that information that matters across the professional life of the individual is fully connected creates a more coherent experience for educators and helps systems better understand how they are functioning relative to their most important asset: people.

## Using Educator Data to Support Educators


In just a couple of decades, data systems have taken on many of the arduous tasks that humans might prefer to avoid. They can organize information into limitless rows and columns, capture data points limited only by available memory and help call up a single piece of information from among trillions of its peers in microseconds. This development allows us to see, with just a few clicks, information that was inaccessible only a few years ago. And it provides access to a scale of data that offers unbounded insight into trends and phenomena that might otherwise be invisible. But while computers have enormous capacity to help make meaning from data—especially big data—they are still constrained by the quality of their inputs and the expertise of their users.

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By the early 2000s, everyone from the classroom to the state education agency, it seemed, fully adopted the proposition that education data—every single piece of information that one could record about students and their learning—were king. By 2001, lawmakers had taken note and constructed the No Child Left Behind Act legislation to reflect the fundamental expectation that data drive decision-making. Yet by 2009, the field largely moved toward investing in educators as an essential lever in moving student outcomes—driven by the belief that no amount of data mattered if professional educators didn't have the tools or supports to act on it. With the introduction of grant funds injected in the U.S. education system through the Race to the Top competitions came widespread efforts to better understand educators' strengths and weaknesses through reformed educator evaluation systems.

While educator evaluation systems of old left much to be desired in terms of detailed accounting of educator strengths and weaknesses, they were especially lacking in clarity about the competencies core to educator effectiveness and the extent to which educators made consistent progress toward mastering those competencies. States worked quickly to win grant funds by establishing specific competencies and processes to measure and improve effectiveness. At the same time, schools and districts across the nation began migrating the processes of recruiting, hiring and onboarding new educators to increasingly sophisticated platforms that helped maximize the scope of outreach to prospective candidates and more efficiently manage all interactions among district, school and prospective personnel. While effectively training evaluators remains a challenge in states and districts, the process left schools and districts—as well as some states—with mountains of new data.

Much like the student data movement that preceded it, the collection and use of educator talent data has largely disappeared from federal policy. But the shift in accountability metrics doesn't mean the data are




no longer valuable. Rather, it means that school and district leaders now have the flexibility to define the parameters of data that matter most to them—and work to leverage those data to make informed, personalized decisions that maximize the quality of teaching and learning for educators and students. Personalization of learning for educators in the form of competency-based learning and other technology-driven efforts exemplifies the need for more robust and actionable data that can help pinpoint places of strength and weakness and allowing educators to develop highly specialized skills that drive their instructional practice as well as better outcomes for students. To effectively leverage these new systems, data simply must transcend departmental boundaries and silos.

But simply relying on existing independent data stores to help understand the complex nature of human capital is not enough. Educational data systems for both students and educators have evolved rapidly in recent years, and leaders who are interested in unlocking new ways to build and support their staff have enormous opportunity to leverage these new capabilities to transform their own systems in short order.

## Leveraging Existing Data


The information we collect as a matter of practice has skyrocketed as our human capital systems have evolved. And while the ways we use the data today remain relatively nascent, the future is promising. As our ability to capture data easily and without adding significant new time-consuming processes has increased, the procedures we use in classrooms and schools to better understand what's happening have also



grown more systematic. Many school districts have even worked toward reducing data entry requirements by using mobile electronic platforms for capturing and tracking educator performance data, for example. Even more promising, the drive to give educators more detailed feedback has led to more nuanced and specific data capture that can give us more actionable information about where educators stand and inform our insights on trends among evaluations across hundreds of thousands of educators who teach students from across a range of needs, including special education students, English Language Learners and courses for others with special needs. More complete and connected hiring databases can also help to inform better alignment between educators' learning curves and responsibilities.

Shifts in educator evaluation and development systems have not always been popular. There is, after all, a degree of comfort in “checkbox” style evaluations that leave little to interpretation. But evaluation process changes that provide detailed and actionable information have also helped create connections among previously disconnected parts of the talent management system. For example, a shift away from schoolwide professional learning driven by convenient providers and toward professional learning that is more tailored to teacher development needs requires some way of understanding those needs. And that necessitates the collection of information regularly and with enough detail that educators—both new and veteran—receive what they need when they need it.

While educator evaluation reforms may not have been a ringing success, they provided much in the way of information about how policies might more effectively be implemented in the future. They also established the groundwork for an approach to talent management that yields helpful data about how to better support teachers.



The field has also grown more complex for successful recruiting and hiring. Educators are leaving their careers or changing teaching jobs with greater frequency while persistently underfilled roles like middle school specialists and physical science teachers are growing to include many grade levels and subjects.<sup>7</sup> Prospective teachers are also facing a national, public narrative about teachers that is often negative, as well as a reality that is challenging and too often poorly compensated.<sup>8</sup> Further, young people of color so infrequently see educators of color because those educators are not entering the teaching force at the same rate as their white peers. The problem may be exacerbated by hiring practices that prioritize word-of-mouth referrals over other sources.<sup>9</sup> The good news is that most schools and districts that have shifted to data systems for better workflow management are already well positioned to use these data to inform smarter strategy when it comes to aligning recruiting with specific needs and effectively planning for ways to support incoming educators.

Using this groundwork, we can look toward a future in which the field refocuses on paving a pathway that supports educators' continuous development in service of the continuously evolving needs of students. With the foundation of robust and connected data systems driven by a coherent theory of action in place, school systems and states can be well-positioned to create a new future in which data are rigorously collected and evaluated to provide educators with tailored and robust support from their first application to a school through hiring and placement, evaluation, ongoing professional learning and career advancement.

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7 "Teacher Shortage Areas Nationwide Listing 1990–1991 through 2017–2018." June 2017 <https://www2.ed.gov/about/offices/list/oep/pol/bteachershortageareasreport201718.pdf>

8 "Hidden factors contributing to teacher strikes in Oklahoma, Kentucky, and beyond." April 6, 2018 <https://www.brookings.edu/blog/brown-center-chalkboard/2018/04/06/hidden-factors-contributing-to-teacher-strikes-in-oklahoma-kentucky-and-beyond/>

9 "A Leak in the Pipeline: How Hiring Bias Might Be Compounding the Teacher Shortage." 2018 <https://www.frontlineinstitute.com/reports/leak-pipeline-recruiting-report/>

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## Organizing for Success

While foundational data systems are in place, they are not well organized, consistently employed or carefully curated. Borrowing Stephen Covey's maxim to, "begin with the end in mind," most data systems' structure and concomitant processes need to be revisited and revised to better match the vision and goals for the schools, districts and states they serve. ***Reporting requirements have too often been the tail wagging the dog. Instead, information collection ought to be driven by the needs of districts and their teachers.*** And those needs must be better connected with those of the students that school systems serve.

The need to better organize data systems could be mistaken for the need to ensure that all of the data captured and managed in them is accurate and consistently entered. While those are important considerations, they are not the most essential work required to make data systems function effectively. Rather, electing which data to collect and what to leave behind in a world where everyone is conditioned to view everything as data is likely to be the most harrowing challenge. Honing the list of variables to review can be daunting, but national or representative benchmarks can be a helpful place to begin—and can help keep progress reviews tied to meaningful standards of improvement.

Making those decisions also forces attention to a narrower subset of strategies and practices that leaders collectively agree to invest in and apply consistently to support their faculty's continuous development, as well as their own. While strategies should evolve over time, the key consideration is that data systems need to be organized according to a theory of action—grounded in their own vision—to which leaders can commit for a prolonged period of time and not simply a catch-all for anything that might one day be interesting.

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# A New Data-driven Human Capital Strategy

Over the last 35 years, data systems have been improving to meet the requirements of federal- and state-mandated metrics. But even now, these data are far from perfect. Assessments aren't always well-suited to help understand educators' contributions to students' learning, and evaluators inevitably bring some bias to their observations.

Nevertheless, the data represent an enormous leap forward in unlocking the black box of instruction and adult (teacher and leader) learning. Most school districts have also adopted electronic systems for capturing and managing data from other parts of the talent management cycle like understanding educator absences, professional micro-credentialing and career pathway tracking. Taken together, these systems can tell a sophisticated story about what's happening in schools', districts' and states' human capital systems. They can also lead to smarter decisions about finding and supporting educators to maximize effectiveness.

Many innovative leaders have already begun to leverage their data systems in new and unique ways. For example, leaders in Shaker Heights, Ohio recognized from their data that the approach they were taking to professional learning wasn't leading to the outcomes they'd hoped for. Rather than simply doubling down on investments, they instead created a new office of professional learning dedicated to bringing educators high-quality professional learning that was actually matched to their demonstrated needs. Leaders at Blue Valley Schools in Overland Park, Kansas felt a need to respond to the looming teacher shortage in their area. They built a collaborative process to review data across departments and drive decision-making accordingly. And

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leaders in Deerfield, Illinois use an applicant tracking system to monitor the hiring process and connect new employees with the mentoring and professional development they need right away. These approaches are all reflections on new opportunities to use data that had, until recently, been hiding in complex systems or databases that didn't lend themselves to insight-finding or action.

But imagine what might happen if all of the parts of the human capital management system could be connected with one another, and complex relationships easily highlighted using technologies that, at present, are still in development. For example, could artificial intelligence help us evaluate algorithms that show correlations we might not expect? ***The future of data-driven decision-making is replete with exciting possibilities. Taking advantage of those developments, however, requires some groundwork by education leaders at every level.*** To understand complex phenomena, the initial data points must be identified and carefully captured in systems organized for insight rather than for compliance. That means approaching data systems from the perspective that they hold the keys to better systems management and beginning with the key questions that leaders want to be able to answer rather than a list of descriptive data that states or the federal government require. Of course, capturing required data points is still a smart leadership move, but that can no longer be the only factor that informs data collection and organization.

Researchers at the Frontline Research & Learning Institute have begun to explore the ideas and insights that data taken from across human capital systems nationwide might offer practitioners. For example, in the *Bridging the Gap*<sup>10</sup> series, we set out to understand the extent to which data captured in professional learning management systems aligned with the Every Student Succeeds Act's definition of quality. By reviewing anonymized data from a representative sample of over

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<sup>10</sup> "Bridging the Gap." 2017 <https://www.frontlineinstitute.com/reports/essa-report/>



200 school systems, we were able to understand the extent to which professional learning reflected the law's basic tenets of quality. The findings were, unfortunately, abysmal. But the research project provided ample evidence that some leaders were making good progress and that improvements are possible. Moreover, reviewing the data helped practitioners to understand which improvements might help most. The report helped collect a benchmark that can serve as the driver for a theory of action that helps improve school district efforts to understand and continuously improve their professional learning systems. Our hypothesis is that if data are identified and collected based upon their relevance to metrics of quality, they can over time be tied to systemic improvements.

Similarly, the Institute regularly reviews available data to identify insights that might not be obvious at the school or district level. In the report, *A Leak in the Pipeline*<sup>11</sup>, a review of data on educator recruitment and hiring revealed an unexpected tendency to hire more educators from known sources even though more candidates hailed from public sites like job boards. The report reflects a practice that appears to be inadvertent in a domain that increasingly requires purposeful decision-making. Schools and districts with data organized for insight can also access these kinds of insights—and perhaps change their practices to better align with the outcomes they seek.

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11 "A Leak in the Pipeline: How Hiring Bias Might Be Compounding the Teacher Shortage." 2018 <https://www.frontlineinstitute.com/reports/leak-pipeline-recruiting-report/>

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# Trailblazing Strategic Human Capital Management

Today, key ingredients are in place to make great strides in the ways that schools, districts and states approach the systems they use to recruit, hire, place, train, support, evaluate and advance their staff.


First, the field is demanding action. Education reform efforts of the last two decades have left school staff largely overextended and with insufficient stability around expectations for themselves or their students. K-12 education is facing massive pipeline shortages in some geographies and subject or grade level domains. And educators in West Virginia, Kentucky, Oklahoma and Arizona began protesting relatively low rates of pay and receipt of benefits before the 2017-18 school year was out.<sup>12</sup> Some have complained that education holds declining appeal to prospective teachers as a result (although declines have been documented since before 2009).<sup>13</sup> Taken together, the case for smarter and more educator-focused policies is robust.

Second, the fundamental data systems elements are available and, in many cases, already in place in schools and districts. Because the arc of federal and state incentives bent toward the collection and reporting of more detailed teaching and learning data, many locales used the resources available to them to build the systems that can provide necessary infrastructure for a theory-driven approach to human capital systems management.

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<sup>12</sup> "The Data Tells All: Teacher Salaries Have Been Declining For Years." April 5, 2018 <https://www.edsurge.com/news/2018-04-05-the-data-tells-all-teacher-salaries-have-been-declining-for-years>

<sup>13</sup> "Enrollment in Teacher Preparation Programs." July 2015 [https://title2.ed.gov/Public/44077\\_Title\\_II\\_Issue\\_Brief\\_Enrollment\\_V4a.pdf](https://title2.ed.gov/Public/44077_Title_II_Issue_Brief_Enrollment_V4a.pdf)



Third, the framework for better human capital systems design and management stands before us. We can learn key lessons from our own experience implementing more data-driven decision-making to impact student learning and outcomes. We can also take cues from the broader field of human capital management about ways to compete in a talent marketplace where employers must demonstrate their edge to attract talent and where workers no longer commit to single careers for a lifetime. The field more broadly has recognized the value of pre-configured performance indicators that go beyond simply providing dashboards to include benchmarking capabilities using aggregated data from across a cohort. These kinds of tools are now becoming available for K-12 too.

These insights from our own and others' experiences can inform a new approach to human capital management that makes teaching and school leadership more compelling from a prospective worker's perspective—and that succeeds in helping educators develop the skills they need to be effective with the students of tomorrow. It must begin with leveraging lessons from the field and applying them to the data we largely already have about educators themselves.

We proffer a vision for more strategic human capital management that is characterized by a holistic approach to building and maintaining a high-performing employee culture, in which leaders make data-driven decisions aligned to the school system's strategic objectives and in which teams collaboratively set goals, measure results using data and benchmarks, and determine key opportunities for continual improvement in employee engagement, efficiency and effectiveness in support of improved student learnings. With a commitment to leveraging data, we believe all education systems can achieve this vision.

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## Strategic Human Capital Management: A Working Definition

Human capital management has long been an essential part of ensuring that things run as smoothly as possible in every school and every district. Great staff help to make everything from operations to learning experience the best they can be. But if the future of human capital management demands a more sophisticated approach to thinking about the role of talent and how leaders use tools to help maximize experiences for both educators and students, most school districts will need to take steps to upgrade their thinking as much as their management systems.

We suggest five questions to explore existing systems and begin to lay the groundwork for growth.

### 1. Do the parts of the current system work together?

In many central office hallways around the nation, education leaders can be heard bemoaning the “silo” effects often created by differentiating roles and establishing offices with related, but separate, functions. Many have made valiant efforts to dismantle silos, break down walls and encourage their teams to work together. Yet progress is often slow or absent. The core challenge seems to be that adding more work (e.g. consulting colleagues) to already busy schedules often doesn’t help change behavior because people are already juggling too much. When it comes to strategic human capital management, working together must cease to be an additional task and become the central task of leaders. Everyone should regularly be looking at the same data—together—and making a collaborative assessment of how to act.

### 2. Do leaders have the mandate and the time to connect the dots?

If collaborating and using the same data to make shared decisions becomes the central work of leadership teams, then other work may change or transform. The addition of “strategic” to human capital management might mean both the addition of new review and decision-making processes, as well as the equally strategic abandonment or reprioritization of other efforts. It may also mean shifting staff roles and changing responsibilities to match new expectations.

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### 3. Does everyone have access to information from across the entire talent pipeline?

Too often, data systems and access to those systems are available only to the people who narrowly focus on a particular function. For example, hiring managers may not have access to professional learning libraries—two parts of the human capital management system that may seem unrelated to each other. But when educators are hired, they arrive with strengths and weaknesses that can be assessed at the outset. Ensuring connection with the available supports in the system can help ensure educators enter with a growth trajectory that makes sense and that effectively invests in their future with the school or district.

### 4. Have the barriers to collaboration and feedback among talent leaders been eliminated?

Many of the barriers to collaboration are invisible to managers or system leaders. They range from geographical and time constraints to different departments using distinct language for the same ideas. That means promoting strategic processes needs to go beyond establishing a mandate to evaluating what might get in the way—possibly through a process audit or through a facilitated discussion with those who will participate—so that fixable problems can be addressed before they interrupt the transition toward more strategic efforts.

### 5. Is talent data driving decision-making across school or district systems?

What does it mean to make human capital management strategic? First and foremost, it means elevating talent to the top of the pyramid when it comes to the resources that schools and districts have to build the strongest learning communities possible. New teachers will demand meaningful environments in which they are encouraged and supported to grow themselves as much as their students. And school systems will need to grow into ecosystems that honor the core role of talent in building the relationships and establishing the trust required to maximize student learning and development experiences. That means every leader in the system will need to ensure that talent data is a part of their daily workflow, and a consideration in virtually every major decision.

A strategic approach to human capital management can be transformative for school systems by ensuring that schools are places that talented people want to be. The shift requires a new way of thinking, but one that—for most leaders—only builds upon what they already know:

***it's the people who make the difference.***

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# In Gratitude

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# Learn More

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## About the Institute

The Frontline Research & Learning Institute generates data-driven research, resources and observations to support and advance the education community. The Institute's research is powered by Frontline Education data and analytics capabilities in partnership with thousands of school districts and educational organizations, representing several million users nationwide. The Institute's research reports and analysis are designed to provide practical insights for teachers and leaders as well as benchmarks to inform strategic decision-making within their organizations.