TEACHER QUALITY 2.0



AMERICAN ENTERPRISE INSTITUTE

SPECIAL REPORT 3

New Pathways for Teachers, New Promises for Students

A Vision for Developing Excellent Teachers

By Timothy Knowles | January 2013

Foreword

There is incredible interest and energy today in addressing issues of human capital in K–12 education, especially in the way we prepare, evaluate, pay, and manage teachers. States have been developing and implementing systems intended to improve these practices, with a considerable push from foundations and the federal government.

As we start to rethink outdated tenure, evaluation, and pay systems, we must take care to respect how uncertain our efforts are and avoid tying our hands in ways that we will regret in the decade ahead. Well-intentioned legislators too readily replace old credential- and paper-based micromanagement with mandates that rely heavily on still-nascent observational evaluations and student outcome measurements that posit as many questions as answers. The flood of new legislative activity is in many respects welcome, but it does pose a risk that premature solutions and imperfect metrics are being cemented into difficult-to-change statutes.

AEI's *Teacher Quality 2.0* series seeks to reinvigorate America's now-familiar conversations about teacher quality by looking at today's reform efforts as constituting initial steps on a long path forward. As we conceptualize it, "Teacher Quality 2.0" starts from the premise that while we've made great improvements in the past 10 years in creating systems and tools that allow us to evaluate, compensate, and deploy educators in smarter ways, we must not let today's "reform" conventions around hiring, evaluation, or pay limit school and system leaders' ability to adapt more promising staffing and school models.

In this paper, Timothy Knowles, John Dewey Director of the University of Chicago's Urban Education Institute, outlines a strategy by which to navigate that long path forward, proposing that we reconceptualize traditional, outdated notions of the teaching profession. He provides a set of specific recommendations for how we might build ambitious new systems to better recruit, prepare, place, evaluate, and incentivize teachers and institutions. This includes leveraging expert teachers and exemplary schools as well as testing out entirely new models for teaching and learning. Knowles argues that transforming schooling and transforming teaching must go hand in hand. Before getting to 2.0, we must take a step toward 1.5; by creating new, more flexible ways to manage America's teaching force that can be applied in new school configurations.

I found Knowles's paper to be enlightening and insightful and hope that you will also. For further information on the paper, Knowles can be reached at tknowles@uchicago.edu. For additional information on the activities of AEI's education policy program, please visit www.aei.org/hess or contact Lauren Aronson at lauren.aronson@aei.org.

—FREDERICK M. HESS Director of Education Policy Studies American Enterprise Institute

Executive Summary

If we are serious about significantly improving academic outcomes for children in America, teaching must focus on student learning, and schools must offer teachers opportunities to teach, lead, and innovate throughout their careers. Taking pragmatic steps at each stage of the pipeline and leveraging existing resources can help us get there.

- Recruitment: Aggressively subsidize teacher education programs that deliver results; eliminate federal policies that conflate certification with quality; increase beginning teacher salaries; improve tools to assess aspiring teacher candidates.
- **Preparation:** Demand an undergraduate major in the teaching subject area for all teacher candidates; dramatically diversify approaches to teacher training; institute results-based, renewable teacher licensure.
- Placement: Encourage "preparation to placement" pipelines; invest in district-level recruitment; place cohorts of teachers from particular training institutions in specific schools.
- Early Retention: Encourage school systems and teacher education programs to jointly support new teachers; measure and report on which schools are or are not good places to learn and work.
- Career Incentives: Diversify roles for exemplary teachers; base compensation on student success; provide ongoing, job-embedded training and development.
- Accountability: Develop tools that accurately measure multiple indicators of teacher success; measure and report on the extent to which schools are organized for improvement; hold all teacher training institutions publicly accountable for graduate hiring, retention, and classroom success; give students incentives to care about their learning.

The demand to improve teacher quality is not going away. To truly transform teaching, we must also transform schooling, and all stakeholders must take unfamiliar steps to make schools better places to work and learn. This includes organized labor, which must become a self-regulating entity—ever vigilant about improving the quality of the teacher workforce—or face growing existential threats.

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A Vision for Developing Excellent Teachers

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This paper outlines a set of ideas for improving teacher quality in America's schools. In it, I propose a combination of incremental steps and ambitious ones, designed to stimulate policymakers, practitioners, and the public to accelerate efforts to develop high-quality teachers. My ideas are not aimed at a distant future. Rather, they are aimed at what we might do now—from schoolhouse to state house—to improve teaching in America.

The paper has four main sections. First, I provide a brief assessment of the current state of teaching in America, identifying five core challenges reformers must address if they are serious about improving teacher quality. Second, I posit a new, broader conceptualization of the teaching profession. My aim is to hew to Horatio Greenough's maxim that form follow function: by defining what is required of teaching in the 21st century, we will be better positioned to build the human capital architecture we need, and avoid recreating a version of the system that already exists. Third, I provide specific recommendations for how to better recruit, prepare, place, incentivize, and hold accountable the teachers America requires. Finally, having recently lived and breathed the Chicago teacher strike, I conclude with some thoughts about the trajectory of organized labor, and what it might do to support the development of a stronger teacher workforce in America.

The Current State

Children growing up in America—particularly children growing up in disadvantaged communities—depend on

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effective teachers to succeed in school and life. This idea is increasingly well understood—undergirded by persuasive empirical evidence, reinforced by relentless attention in the media, and spurred on by advocates and policymakers nationwide. This is good news; we are focused on the right thing.

However, despite America's appetite to do something about teacher quality, the country's human capital systems are broken. There are five main problems. First, there is a massive and well-documented teacher retention issue. Approximately 50 percent of teachers leave the profession within five years. And in some urban districts, the turnover period can be as short as three years. This level of churn might be acceptable if the right teachers were leaving the profession. But according to TNTP's 2012 report titled *The Irreplaceables: Understanding the Real Retention Crisis in America's Urban Schools*, the best teachers leave the profession at the same high rates as the worst ones. Not only is this constant churn of teachers enormously expensive; it moreover undermines student learning, sealing the fates of many children who grow up poor.

Second, the profession is hobbled by extraordinarily weak accountability systems. For the vast majority of teachers, accountability is characterized by occasional and superficial observations of teaching. There are stunning consequences to these broken systems. A 2005 study of all 98,600 teachers in the State of Illinois revealed that three teachers were removed for poor performance every year, and just 54 teachers were removed for underperformance over an 18-year period.⁴

In a more recent analysis of all teacher evaluations in Chicago Public Schools, TNTP reported that 99.7 percent of teachers received satisfactory to superior ratings.⁵ Put simply, we rely on evaluation systems that not only lack rigor, but are also woefully inadequate at distinguishing between high- and low-performing teachers.

The third problem America faces is the almost total absence of substantive teacher support. Put bluntly, opportunities for teacher learning are sporadic, undifferentiated, and decoupled from daily practice. Ongoing, job-embedded teacher training is rarer still. Teachers continue to be herded into large conference halls, lectured on the topic of the day, and dismissed, typically earning "professional credits" that (when enough are accumulated) are redeemed for a salary increase. The vast majority of teachers view this as neither professional nor development. Rather, teachers view much of their professional support as something done to them, like getting a haircut or having their brakes fixed.

Fourth, we have an isolation problem. Teachers are assigned to single classrooms, responsible for single sets of students, and work largely by themselves throughout the course of their careers. This isolation means teaching remains a private and idiosyncratic endeavor—not the hallmarks of a legitimate profession—and results in tremendous and well-documented variation in teacher quality, both within and across schools.

Finally, there is an incentive problem. Teacher salaries do not reflect particular areas of expertise or the results teachers achieve. Instead, teacher pay increases simply based on the number of credits accumulated in higher education and the number of years of service. This may have worked when large numbers of women and people of color had few other options in the job market. But it does not work anymore. The incentives we use to reward teachers—codified in collective bargaining agreements, district policy, and state and federal law—are not only extremely weak proxies for quality, they drive many exceptional people away from teaching altogether.

The Future State

How might the work of teaching be reconfigured to address these challenges and better meet the needs of children? What might a reconceptualization of the teaching profession involve?

Two axioms should anchor discussions of the future state of the teaching profession. First, we must define teaching success based on student learning. If student learning is not at the heart of how we define and measure teacher success, efforts to improve the quality of teaching will be scattershot at best. To be clear, this is not an oblique argument for the monolithic use of standardized tests to measure teacher quality. To the contrary, reformers must remain clear-eyed about the limitations of

current approaches for linking teacher effectiveness to student learning—and continue to seek better methods of assessing the impact of teaching on students' cognitive and noncognitive skills.

Further, we must make better use of the currently existing measures. The best social science literature indicates unambiguously that staying "on track" through high school and completing postsecondary education is what really matters, leading to longer life expectancy; higher lifetime earnings; significantly less likelihood of going to prison; and greater likelihood of voting, volunteering, and having children with high levels of educational attainment. In essence, educational attainment predicts the important things, and should count—whether we are gauging the effect of teams of teachers or assessing overall school quality.⁶

The second axiom that should anchor discussions of the teaching profession is that focusing on teacher quality alone will not make this a successful endeavor. This may sound like heresy, particularly to policymakers and philanthropists who have made the improvement of teacher effectiveness a singular mission. But I would argue that teaching, leading, and innovating must become the hallmarks of the teaching profession, and (as I explore further on in this paper) the organization of the schoolhouse must become central to efforts to improve teacher quality.

Certainly, good instruction is instrumental to student learning. As such, we must bring all we can to support the best instruction possible. This means teachers must possess deep content-area expertise; have the capacity to design and modify curricula and instruction based on evidence of student progress; and are afforded continual opportunities to plan, learn, and collaborate with colleagues and experts within their school and beyond. Further, it demands recruiting, training, and placing teachers with particular skills and dispositions—for example, those with passion, belief, reflection, cultural competence, and grit. But the thing is, even if we do all this—and do it well—it will not be enough.

An improved teaching profession would ensure that the nation's most capable teachers have consistent opportunities to lead. It is not enough for teachers to be paid in lock step each year—and have the same responsibilities on the first day of the job as the last day of their 35th year—regardless of how they perform. Such ideas are anachronistic and counterintuitive.

America's best teachers must become instrumental to the development of aspiring, new, and veteran teachers. We must create systematic and rigorous processes for identifying, enlisting, and rewarding teacher leaders

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(exemplary teachers who play an explicit role in helping other teachers improve their instructional practice) in every schoolhouse. Such teacher leaders must play as instrumental a role in the American school as principals or teachers themselves. Doing this will not only pay dividends for children; it will improve the workforce, incentivize the nation's most talented people to stay in the profession, and create a deeper pipeline from which to draw capable school leaders.

Further, a legitimate teaching profession requires placing more value on the capacity of teachers to innovate. Teachers must possess the skills and dispositions to learn which approaches are working and which are not, and rapidly adjust their methods based on evidence. And the best teacher innovators should have recognized roles in the school itself, dedicating themselves to helping create, test, and share new curricula; building learning tools and practices that accelerate student learning; and supporting adult development.

Teacher innovators exist in every school, but they must be identified, supported, incentivized, and enlisted to help scale what works. In the next section, I make pragmatic recommendations on five fronts, aimed both at addressing the human capital problems described previously and creating a profession that attracts and keeps the workforce America needs to make its schools work well.

Recruitment

It is well documented that the majority of teaching candidates in the United States come from the bottom quartile of college graduates. Conversely, higher-performing places such as Finland, South Korea, Hong Kong, and Singapore draw their teachers from the top quartile of college graduates. While organizations like Teach For America and TNTP have helped shift the public perception of the need for well-educated, dedicated teaching recruits, the reality is that they fill only a modest portion of the national teacher pipeline.

To increase the number and caliber of teachers entering the profession we must:

- Subsidize the cost of learning for teachers through aggressive loan forgiveness that is contingent on staying in the profession and achieving results;
- Provide substantially higher starting salaries and opportunities for significant salary growth in the course of a teaching career;

- Eliminate federal policies that conflate teacher certification and teacher quality (for example, policies that define teacher effectiveness based singularly on whether a teacher has a master's degree in teaching);
- Build and test better tools to screen for the content knowledge, dispositions, and pedagogical skills teachers require to teach effectively—a bar examination for teachers, as it has been recently described.

The best teacher innovators should have recognized roles in the school itself, dedicating themselves to helping create, test, and share new curricula; building learning tools and practices that accelerate student learning; and supporting adult development.

Certainly, in this fiscal climate, the notion of subsidizing the costs of learning to teach and creating a more competitive salary structure represents a significant challenge. The federal government must bear part of this burden. To be fair, it has made some effort to do so. For example, in 2007, Senator Ted Kennedy and Senator Barack Obama led an effort to repurpose a portion of the Higher Education Act of 1965 to support improved teacher training.

However, steps thus far have been largely incremental, and the federal government must set its sights higher. Specifically, it must provide incentives to attract large numbers of top-tier college graduates into teaching; underwrite the full costs of clinical training in the nation's most rigorous programs, reimbursing tuition contingent on a certain number of years of successful service; and make long-term investments in proven teacher preparation programs, enabling them to expand or replicate.

To pay for such reforms long term, we must summon the collective will to reallocate existing resources to build a stronger teaching force. The resources are there,

but they are spent on the wrong things. Perhaps most important would be leveraging the massive amount of money invested in paying for master's degrees and annual step and lane salary increases, which are currently distributed to teachers based on credits accumulated and years of service. States and local education agencies must use these resources in new ways, to support teacher preparation programs that demonstrate their graduates' effectiveness, reward incumbent teachers, and incent teacher leaders who demonstrate that they can help aspiring, new, and veteran teachers accelerate student learning.

There are few coherent connections between the places that train teachers and the places that hire them.

Preparation

America has a broken teacher preparation system. The majority of teachers attest to feeling ill-equipped for the classroom and leave the profession at astonishing rates. According to the National Commission on Teaching & America's Future (NCTAF), approximately 1,000 teachers leave the profession every day for reasons other than retirement.⁸ For historically underserved children, the consequences of such turnover are catastrophic.

The typical path of urban teachers attempting to enter the profession involves graduating with a bachelor's degree in education (without subject-matter expertise), receiving a teaching license, and heading straight to the classroom. Typically, teachers receive tenure shortly thereafter—based on only a cursory review of practice—and are subsequently guaranteed a job for life.

A new pathway to teaching would start with the requirement that all teachers have a degree in a particular subject area—not an undergraduate degree in education. This is not a new idea. The 1987 "Holmes Group Report: Why Reach Exceeds Grasp"—one of a series of publications authored by deans of leading schools of education—argued for the elimination of undergraduate education majors, stating bluntly that they produced teachers with limited content-area knowledge and limited clinical experience.⁹

More recently, Arthur Levine, former president of Columbia University's Teachers College, made a similar

case for making all teacher preparation programs five years in length—beginning with four years spent on a content-area major, followed by a year of clinical training.¹⁰ And in 2009, at a speech at Teachers College, Secretary of Education Duncan stepped into the fray:

By almost any standard, many if not most of the nation's 1,450 schools, colleges, and departments of education are doing a mediocre job of preparing teachers for the realities of the 21st century classroom. America's university-based teacher preparation programs need revolutionary change—not evolutionary tinkering.¹¹

But what might real change actually look like? What should rigorous clinical training actually involve? One possible path for clinical preparation is a teacher apprenticeship. With a strong grounding in a subject area (such as math or science) but limited exposure to pedagogy or schooling, aspiring teachers could enter accredited prekindergarten—12th-grade "teacher training schools" as apprentice teachers. Apprenticeships would be paid positions, where the apprentice would receive intensive instructional coaching and support over a defined time period by teachers and coaches trained to do so.

Apprentice teachers would be given increased responsibility for students as they demonstrate results (beginning in a tutoring role, transitioning to small group work, and, finally, to whole-class instruction). At the end of the apprenticeship, teachers demonstrating competence (gauged by instructional quality and indicators of student learning) would receive provisional certification and advance to full-classroom teaching responsibilities. The provisional teaching license would be awarded based on evidence of student learning and a results-based license would be awarded (and have to be subsequently renewed) based on evidence of student learning—not years of service or credits accumulated.

While states have begun to take steps toward resultsbased licensure, there are few, if any, examples of states that have built pathways to certification that depend on results in lieu of acquiring a traditional teaching degree. A rigorous apprenticeship coupled with a renewable, resultsbased license would be a sensible mechanism for doing so.

A second approach to clinical preparation is the teacher residency. In this model, aspiring teachers with strong grounding in particular subject areas enter a residency program that provides an in-depth immersion into teaching. Like an apprenticeship, the residency emphasizes clinical experience through increasingly challenging responsibilities under the guidance of expert practitioners.

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Residents learn to teach and use data to advance student learning, while studying human development and advanced subject matter and learning to develop lesson plans and assessments that are aligned with the Common Core State Standards.

Upon completion of the residency, candidates would receive teacher certification and enter the teaching profession. Like those entering the profession through an apprenticeship, their license would be awarded and renewed based on evidence of student learning. Distinct from the apprenticeship model, residents would receive a master's degree in teaching.

While there are a growing number of residency programs scattered across America today—New Visions in New York City, the Match Teacher Residency, the Boston Teacher Residency, the University of Chicago Urban Teacher Education Program—they remain on the fringes of the profession, supported in large part by philanthropy and federal grants, haphazardly evaluated, and very much the anomaly. We should undertake rigorous evaluation of these efforts and significantly expand those models that work.

To be clear, apprenticeships and residencies are just two methods of providing better clinical preparation for aspiring teachers. They should not be the only two methods. Indeed, the country would be well served to create a far more competitive teacher preparation land-scape—testing new methods of preparation and support, developing robust systems of accountability for all institutions that prepare teachers, and closing the places that deliver poor teachers to schools. Toward these ends, reformers should:

- Ensure that state boards charged with approving and renewing teacher preparation entities are oriented toward evidence-based, nontraditional methods of developing aspiring teachers. These boards should not be dominated by individuals representing institutions dedicated to maintaining the status quo;
- Build place-based teacher preparation programs to ensure many more aspiring teachers are fluent in local curricula, assessments, systems, and expectations before they start teaching, and to enable the places that train aspiring teachers to support them at the outset of their careers;
- Require or incentivize the places that educate teachers to support their graduates when they start teaching;

- Create prekindergarten—12th-grade "teaching schools" across the United States (akin to teaching hospitals) to train apprentices and residents. A small number of institutions are doing this, including higher-education institutions (The University of Chicago), stand-alone schools (High Tech High), and nonprofits (the Boston Teacher Residency). The programs with the best results should be accredited, expanded, and replicated, and they should be granted the ability to provide teaching degrees and certification and charge tuition;
- Weed out aspiring teachers who are not on track before they become teachers. Teacher preparation programs must be accountable for the success of their graduates and must use tested tools to assess and filter out ineffective teachers in training before they become teachers of record;
- Create intentional feedback loops between teacher preparation programs and school systems so knowledge gained about candidates while they are trained can be used to support candidates when they start teaching and inform improvements in teacher preparation programs.

Placement

By and large, teachers are trained in institutions of higher education and distributed to schools at random. There are few coherent connections between the places that train teachers and the places that hire them. Accordingly, newly minted teachers are left to find jobs (and navigate byzantine bureaucracies) alone. This haphazard approach to the most important asset in the schooling enterprise is shortsighted at best. The alternative is to build vertically integrated human capital pipelines, where teachers are trained, placed, and supported in ways that maximize success and would help attract high-quality applicants into teaching.

There are a small number of districts, charter management organizations, and nonprofits that are attempting to build more coherent approaches to the training and placement of teachers (Relay Graduate School of Education and the Academy of Urban School Leadership), but these efforts are extraordinarily rare. There are many reasons for the fragmented status quo, including local personnel policies, union contracts, limited human resource capacity in school systems, and broken norms

of practice. To crack these norms, several things would be helpful:

- Create federal, state, and philanthropic incentives to establish coherent pipelines from "preparation to placement," enabling teachers trained in particular ways—by particular institutions—to work in cohorts in high-need schools;
- Provide incentives for organizations that develop teachers to support or manage the schools where their teachers are placed;
- Hold teacher training institutions publicly accountable for the extent to which their teachers are hired, retained, and successful in the classroom;
- Provide district hiring assurances to teacher applicants from carefully vetted training institutions to "feed" particular networks of schools;
- Invest in district human resource capacity to support aggressive teacher recruitment and individualized support to ensure the most promising teacher candidates are placed first and retained.

The final recommendation (improving the human resource capacity of urban school systems) is worth underscoring. While serving as deputy superintendent in Boston, I was stunned by the poor condition of the district's human resource department. There were many underlying causes, but the fact remained that the department only attended to the basic transactional work—processing and screening applicants who happened to arrive at the district door.

There was almost no capacity to recruit top teacher candidates or differentiate between candidates. To get the best teachers to the schools that need them most, large urban school systems either need significantly more internal capacity to recruit and place teachers, or they should contract out human resource functions to organizations with the capacity to do so.

Retention

The consequences of massive teacher turnover are well-documented. It is costly—both in terms of actual expenses to replace teachers and loss of accumulated teacher experience in a school.¹² Certainly, improving teacher

recruitment, placement, and preparation should have a significant impact on retention. But there are other things we can do to develop retention of effective teachers.

One strategy would be to reconceive what it means to be a first-year teacher. Teaching is one of the few professions in which a novice is expected to do the same work and achieve the same results as a veteran. A first-year teacher should have extended opportunities to shadow exemplary teachers, team-teach, and practice particular routines under expert observation. Some other specific ideas for retaining talented teachers:

- Incentivize teacher training institutions and school systems to bear joint responsibility for a beginning teacher's success. In urban areas, this would mean investing in teacher-training programs that are dedicated to providing support to their graduates when they begin teaching—and incentivizing school districts to partner with a small(er) number of effective teacher preparation programs over time. This would be a relatively easy, productive step toward building more coherence and shared responsibility between the places that train teachers and the places that hire them;
- Measure what matters. One of the greatest barriers to the retention of quality teachers is the schoolhouse itself. If a school is not a supportive place for children and teachers, teachers seek better schools—or leave the profession altogether. The Consortium on Chicago School Research has demonstrated that schools organized for improvement in five essential areas are not only likely to reduce teacher turnover, they are also 10 times more likely to make substantial improvement.¹³

The Urban Education Institute's nonprofit—UChicago Impact—has created scalable tools and training to support schools to improve on the "5Essentials" (process, survey, scoring, reports, training, and research). ¹⁴ Such diagnostic tools should be used nationwide, for in addition to helping educators and parents focus on the levers that reliably lead to improvement, they clarify which schools accelerate learning and are healthy places for teachers to work;

 Create intentional partnerships between teacher training institutions and sets of schools to provide preferential hiring and placement of graduates. This would ensure that aspiring teachers know they will end up in schools with similarly trained teachers and will continue to receive support from the places that trained them.

Incentives

Even with strong subject-area expertise; rigorous clinical preparation; and a renewable, results-based licensure, teachers need opportunities to learn and develop throughout their careers through a combination of supports and incentives. By increasing access to high-quality, jobembedded professional development; providing opportunities and incentives for teachers to become teacher leaders; and rewarding high performers with increased pay and differentiated roles, we can attract and keep our best people in the field.

Professional Development. While there are too few empirical studies that indicate the precise kinds of professional development that lead to increased teacher effectiveness, we do know that teachers crave support, and often leave the profession because they do not get it. According to NCTAF, among the teachers who leave the profession, the vast majority cite lack of support and poor working conditions as their primary reasons for leaving.¹⁵

Teachers require rich, job-embedded opportunities and incentives to improve their effectiveness. They must be paired with high-quality mentors early in their career; be part of a professional community that spans across a school or network of schools; and have access to coaches, inquiry groups, and opportunities to observe best practices within and across schools. These job-embedded supports promise not just to keep people in the teaching profession, but to increase their performance over time.

Roles. Teaching remains one of the least differentiated professions on the planet, with core responsibilities remaining virtually the same for an entire career. This works for individuals who are passionately committed to teaching and teaching alone. But it does not work at scale. To keep larger numbers of effective teachers in the field, teachers should be able to change the relative emphasis on teaching, leading, and innovating—as outlined at the outset of this paper—in the course of their careers. Diversifying roles for exemplary teachers will require release time, incentives to take on expanded roles, and refined methods of measuring impact for teachers playing school-wide roles. But without diverse roles and differentiated pay awarded based on credible evidence of

effectiveness, we will continue to churn through vast numbers of top-notch teachers.

Compensation. Over the last decade, there have been a handful of merit-pay initiatives, which have generated very mixed results. As such, the vast majority of teacher compensation schemes remain based on two metrics: years of service and the number of credits accumulated. Each year a teacher works, his or her salary increases by an agreed-upon percentage. And a teacher with a master's degree gets a certain amount, while a teacher with a master's degree and 30 additional credits gets a different amount. This has been beneficial for higher education, but decoupling teacher compensation from performance has not been good for teachers or children.

Job-embedded supports promise not just to keep people in the teaching profession, but to increase their performance over time.

Put simply, teacher compensation must be based on student learning, and compensation for teacher leaders must be based on instructional improvement and the student learning outcomes of the teachers with whom they work. We must continue to develop and test new models of teacher compensation, tethered tightly to student learning and groups of teachers who work together to achieve results. This could occur at no additional cost to schools or school systems by allocating a portion of annual step and lane increases to teachers based on student learning and the expanded roles teachers play.

Accountability

Certainly, incentives alone will not suffice. Yet, as posited at the outset of this paper, America's teacher accountability systems are basically broken. Current methods to improve accountability can be boiled down to two main ideas. The first is to use value-added measures on yearend standardized tests to measure teacher effectiveness. The second is to use better evaluation instruments to observe teachers teaching. There are a few locations nationwide that are experimenting with other methods

(such as using student evaluations of teacher practice), but they are few and far between.

If we are serious about building fuller, fairer accountability systems for the teacher workforce, there is much work to be done—inside and outside the classroom. What follows is a set of ideas for improving accountability for individual teachers, schools, teacher training institutions, and students themselves.

Accountability for Teachers. The first order of business is to acknowledge we have miles to go before we sleep. The education sector needs to design, develop, and test a range of instruments for measuring student progress. Assuming we can summon both the will and resources to undertake the work, teachers should be judged across (at least) five dimensions:

- Evidence of Instructional Quality. This would include formal and informal reviews of teacher practice—using reliable, valid teacher observation tools—employed by well-trained school leaders, teacher leaders, and external experts;
- Evidence of Student Learning. If teacher-level valueadded analysis can be undertaken reliably and growth is based on tests that legitimately predict college readiness, these analyses should be included as one determinate of teacher quality.
- Evidence of Contributions to the School as a Whole. Schools, like any human endeavor, work best when people work collaboratively toward shared aims. All teachers can and should contribute to literacy learning—therefore, it seems worthwhile to consider building accountability systems that reward and hold accountable groups of teachers for improving literacy achievement. This idea of sharing responsibility for particular goals could be extended to grade levels, departments, or schoolwide progress on other vital measures such as attendance, ninth-grade on-track rates and graduation rates, or postsecondary success.
- Evidence of Progress from Other Forms of Student Work. Relying singularly on standardized test scores to gauge teacher quality is shortsighted. Writing samples, validated end-of-course exams, presentations, or student survey data should serve as important indicators of student progress and teacher contributions.

• Evidence of Noncognitive Development. Essential human qualities—like persistence, the ability to work productively with peers, and the development of an academic mindset—matter in school, work, and life. And it seems safe to conclude that teachers influence such dimensions of human development. However, we have no reliable, scalable means by which to measure the effects a teacher may have on such domains. Designing and testing tools to do so could lead to much fuller, fairer measures of student development and teacher effectiveness.

Finally, an editorial comment about what not to do. There is a growing appetite to report individual teacher performance ratings to the public. This is a mistake. Such exercises have a corrosive effect on efforts to improve the quality of human capital in schools; distract from substantive discussions of how to improve teacher effectiveness; create perverse incentives for teachers to compete, not collaborate; undermine the relationships between teachers and parents that are vital for school success; and, ultimately, make teaching a less attractive profession for the very people who are best suited to it.

Accountability for Schools. Clearly, schools should be accountable for student achievement, graduation rates, attendance, postsecondary entry, and success. Such outcomes do not warrant explication.

However, there is more to attend to. As mentioned previously, 20 years of empirical evidence from the University of Chicago Consortium on Chicago School Research suggests that if a schoolhouse is properly organized, students—even those attending schools in the most disadvantaged neighborhoods—are 10 times more likely to make substantial progress than those students in schools that are not. Specifically, schools succeed if they are organized to support ambitious instruction; involve parents and communities in school life; build a safe, supportive culture; support teacher collaboration; and are led by effective leaders. ¹⁶

To seriously address improving the organization of the schoolhouse and make schools places where good teachers will stay, we need to hold schools accountable for tackling these indicators. Given that there are reliable, scalable tools that measure and report on these qualities of school organization in nuanced ways—designed to be actionable for teachers, parents, and school leaders—we should make use of them widely.

Accountability for Teacher Training Programs. Perhaps the lowest-hanging fruit on the accountability tree is the opportunity to publicly and systematically report the effectiveness of institutions that prepare teachers. Some cities and states have begun to do this (Louisiana and Tennessee are perhaps the furthest along), but it has not been undertaken consistently or at scale. Specifically, I would recommend a straightforward annual report—at the state and city level—that would provide the following information to the public on every teacher training institution:

- How many teachers a particular institution delivers to particular districts per year;
- Background information on graduates (for example: demographics, majors, grade-point average, and mean scores on basic skills tests);
- Where the teachers teach (for example: high-need schools);
- What they teach;
- How long they stay;
- What results those teachers get over time.

The opportunities here are multifold. First, such a report would allow prospective teachers to identify the institutions that deliver the best teachers to the field. Second, it would allow the places that actually hire teachers schools and school districts—to exert control over supply. If a particular institution develops successful math teachers, the district could hire more of them, reward graduates from the program, or incentivize the program to expand. Conversely, if an institution delivers ineffective teachers, or large numbers of teachers who leave the profession, the district could demand the program make changes before more graduates were hired. Third, and perhaps most important, reporting regularly to the public about the quality of the teacher training institutions would allow us to learn more about the most successful methods for developing high-quality teachers, and replicate them.

Student Accountability. Like most complicated problems, addressing the human capital challenge requires multifaceted solutions. The ideas presented here would help create a more robust pipeline of exemplary teachers for American schools. That said, there are other important steps to take to make schools places where good teachers want to work and children can succeed.

Massachusetts is well known as the top-performing state in the nation—on par with many of the highest-performing nations worldwide. There are many reasons for this. One essential reason is that Massachusetts demands that students take responsibility for learning. In 1993, Massachusetts passed an omnibus education reform act that introduced a new state-level assessment, the Massachusetts Comprehensive Assessment System (MCAS).

The 1993 law required that, by 2003, all students would have to pass the MCAS to receive a high-school diploma. The MCAS is universally considered among the most rigorous state-level assessments in the nation—demanding students read and write with precision; solve challenging, multistep math problems; and possess a strong foundation in science.

If the instruments for gauging teacher quality are too blunt, labor should enlist the best educators across the country to sharpen them.

When I served as deputy superintendent in Boston Public Schools in 2001, the first group of high-school sophomores was required to pass the MCAS to graduate. That year, approximately 40 percent passed. In response, there was significant resistance from parents, educators, and advocates who felt it was not fair to demand students meet such a high bar. However, Massachusetts held the line and, critically, did not water down the test. In 2003 (by the time the sophomores reached their senior year), approximately 90 percent passed. Certainly, part of the Massachusetts strategy involved significant investments in teacher preparation and support. However, there were real stakes for students, too—and, accordingly, they took the MCAS seriously. This aspect of the Massachusetts "miracle" should be emulated nationwide.

Organized Labor

A paper about teachers would be incomplete without a few comments about the role of organized labor. It is well understood that labor faces a growing number of existential threats, posed by the burgeoning number of charter schools, school closures, ballooning pension obligations, and increasing calls for vouchers from both sides of the aisle. These threats are real. According to the National Education Association, America's largest teachers union, they expect their membership to shrink by 16 percent between 2010 and 2013.¹⁷ What might labor do not only to reduce the existential threats but also to improve the quality of the teaching workforce?

The reformers' basic critique of organized labor is that it resists reform. In many cases, labor's concerns are legitimate. There are bad charter schools. The vast majority of merit-pay schemes do lack merit. And most voucher systems virtually guarantee private schools will pick and choose the children they want to educate, and public schools will end up with disproportionate numbers of children who come to school with the greatest needs.

However, no matter how elegantly labor makes the case against these or other reforms, the message is consistently turned against it. Labor is protecting jobs, propping up a broken status quo, and resisting needed change. So how might labor shift its stance?

If I were Randi Weingarten, president of the American Federation of Teachers, I would take a different tack. I would invite labor leaders from across the nation to my war room, and say something like this:

Resisting reform will not work. We may win some battles, but we will lose the war. Even if we are right to oppose some reforms—if resisting change is what labor is perceived as standing for—we will be chipped away, inch by inch, day by day, until we lose the ground we stand on.

Instead, labor must become a singular, unabashed voice for improving the teaching profession. Everyone—not just education reformers, but parents, the public, politicians, and educators—want American schools to improve. Labor should make improvement of the teaching workforce its singular mission—even if it requires goring sacred cows en route.

What would this mean? It would mean supporting the closure of schools that have failed children for generations, for opposing the closure of broken schools makes labor complicit in sealing children's fates. And like it or not, the message will be jobs over children. And labor cannot win that way.

It would mean supporting teacher evaluation systems that identify and reward exemplary teachers. And if the instruments for gauging teacher quality are too blunt, labor should enlist the best educators across the country to sharpen them. However, decrying nascent efforts—whether in Chicago or across the nation—to fix account-

ability systems that everyone recognizes are fundamentally flawed only strengthens the case against labor. Again, labor cannot win that way.

It would mean labor supporting the removal of ineffective teachers. Certainly, there should be fair due process to guard against arbitrary or capricious supervisors. But firing a chronically underperforming teacher should happen, and happen regularly. Put another way, fighting for an accountable profession is far and away more credible than protecting ineffective teachers.

It would mean labor advocating for a significantly higher bar for getting and keeping tenure. Defending a system where almost everyone who stays receives tenure—based on years of service and credits accumulated—is not building a profession; it is protecting a job guarantee. Again, labor cannot win that way.

Of course, there are costs to labor taking such positions. Some senior labor leaders and veteran members will resist. And the idea of job protection no matter what goes away, replaced by a more sensible and sustainable idea that good and great teachers are rewarded and chronically underperforming teachers are systematically—even enthusiastically—removed.

But the long-term benefits of these positions are significant. First, labor would remain a key partner in improving American schooling. Second, labor can seize the high ground, supporting evidence-based reforms, not resisting them. Third—and perhaps most important of all—labor helps make teaching a legitimate profession where teachers are backed by a union dedicated to self-regulation (akin to the bar for lawyers or the American Medical Association for doctors), ever vigilant about improving the quality of the workforce. And in so doing, labor would chase the existential threats away.

Conclusion

If we are to significantly improve academic outcomes for American children, we must reconceptualize what it means to teach, and build ambitious new systems to recruit, prepare, place, retain, incent, and hold individuals and institutions accountable for results. And we must recognize that even if we do this well, it will not be enough. For teaching 2.0 and schooling 2.0 must go hand in hand.

This will demand that we systematically leverage the expert teachers and exemplary schools in our midst; create diverse portfolios of schools, including schools designed to train the next generation of teachers and schools; test new models for teaching and learning that

redefine the work, rewards, and accountability systems for teachers; hold students accountable for learning; and attend carefully to the organization of the schoolhouse itself. And, finally, everyone—organized labor included—must put a stake in the ground, and take unfamiliar steps toward making teaching a legitimate profession.

Notes

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