

Effective Teachers, High Achievers: Investing in a Teaching Profession

Introduction

The welfare of our nation rests upon our system of public education. As Thomas Jefferson once said, “If Americans desire to be both ignorant and free, they want what never has been and what will never be.” Indeed, it is our democratic system of governing, based upon the twin pillars of equal rights and responsibilities, which requires we have a system of public education.

We continue to fall short of this most basic democratic commitment. We do not provide every child in this nation with equal access to a high-quality education. In fact, education is funded more unequally in the U.S. than in any industrialized country, and many students — especially those who are low-income and minority — go to school in crumbling facilities that lack an adequate supply of books and computers, have no libraries, science labs, or arts programs, and are staffed by a revolving door of inexperienced and underprepared teachers.

U.S. schools are also hampered by the factory model design adopted a century ago, and by measures of learning that are more suited to the industrial age than to the demands of a knowledge-based society. The results are low, inequitable, and declining performance on international assessments like PISA (the Programme of International Student Assessments), where the U.S. ranks 35th out of the top 40 countries in math and 29th in science. High school graduation rates are stagnating and are linked to growing incarceration rates. And there is a relative decline in U.S. students’ participation in higher education as compared to those in other countries, coupled with growing disparities in students’ access to college and high-quality careers.

Clearly, there is a pressing need to redesign our schools to meet the demands of a global 21st century society in which knowledge and technology are changing at a breath-taking pace and new forms of education are essential for individual and societal survival. However, our current policy strategies are constraining rather than enabling the educational innovation our school system needs.

We can do better.

With the impending reauthorization of the Elementary and Secondary Education Act (ESEA), the time is ripe to alter the current path of education. To do so, we must

restore the focus of education reform to its rightful bull’s-eye — on learning, and the core conditions that best support it. We must invest in the creation of a long-term teaching profession, not a short-term teaching force. And we must ensure a fair and equitable distribution of resources for education in all communities.

An Educational System for the 21st Century: Investing in Teaching

An appropriate vision for learning must be accompanied by serious investments in teaching. Researchers have discovered that the single most important school influence on student learning is the quality of the teacher. Students lucky enough to have teachers who know their content and how to teach it well achieve substantially more.¹ And the effects of a very good (or very poor) teacher last long beyond a single year, influencing their students’ learning for years to come.² Indeed, expert teachers are the most fundamental resource for improving education. Without them, no other reforms can ultimately succeed.

Unlike high-achieving nations, however, the U.S. leaves the supply of good teachers to chance, with no systematic approach to recruitment, preparation, evaluation, development, or retention in most states. Consequently, with few governmental supports for preparation or mentoring, teachers in the U.S. enter:

- With dramatically different levels of training — with those least prepared teaching the most educationally vulnerable children;
- At sharply disparate salaries — with those teaching the neediest students earning the least;
- Working under radically different teaching conditions — with those in the most affluent communities benefiting from small classes and supportive working conditions, while those in the poorest communities often teach large classes without the necessary books, materials, supplies, and supports;
- With little mentoring or on-the-job coaching to help teachers improve their skills.

In many states, schools serving the highest-need students experience continual turnover of teachers, which undermines both student learning and school progress, contributing to the long-term failure of both.³

Meanwhile, higher-achieving countries that rarely experience teacher shortages have made substantial investments in teacher training and equitable teacher distribution in the last two decades. These countries routinely prepare their teachers more extensively, pay them well in relation to competing occupations, and provide them with time for professional learning. They also distribute well-trained teachers to all students — rather than allowing some to be taught by untrained novices — by offering equitable salaries, and sometimes offering incentives for harder-to-staff locations. They provide:

- High-quality teacher education to all candidates, completely at government expense, including at least a year of practice teaching in a clinical school connected to the university;
- Mentoring from expert teachers for all beginners in their first years of teaching, coupled with other supports like a reduced teaching load and shared planning;
- Equitable salaries (often with additional stipends for hard-to-staff locations) which are competitive with other professions, such as engineering;
- Ongoing professional learning embedded in 15 to 25 hours a week of planning and professional development time.

While we worry about the supply of doctors, engineers, and technicians, we seem to ignore the supply of teachers who will educate the highly-skilled workers and thoughtful citizens of the future. We lack a national policy to increase the supply of good teachers, to support teachers while on the job, or to distribute good teachers to all our children. When we do not tend to those who will nurture our young in the skills and abilities that make engaged citizenship possible, we put our future as a democracy at risk.

We can do better.

Developing a World-Class Cadre of Professional Educators

Each year at back to school time, the single most important question in the minds of most parents and children is, “Who will my teacher be?” Their concerns are well-founded as research has consistently demonstrated that the single most important school influence on student learning is the quality of the teacher.⁴ Currently, too many teachers, especially in low wealth schools, enter without the knowledge and skills they need to be successful, and do not receive the supports they need to stay and succeed.

Indeed, a recent study found that the differences in achievement gains for students who have inexperienced, untrained teachers — as compared to similar students with well-qualified teachers — teachers with strong college preparation who are fully prepared and certified in the field they teach, with at least three years of experience and evidence of accomplished practice — is greater than the influence of race and parent education combined.⁵

Highly-effective teachers are an essential element for student academic achievement. Research shows that students in low-resource schools do not have access to these teachers at the same rate as students in high-resource schools. It is therefore vital that States not only encourage equal distribution of effective teachers, but also invest in high-quality preparation for these teachers so they can be successful in any school or classroom setting.

Furthermore, the knowledge teachers need to reach all students in today’s schools has increased considerably. Teachers not only need deep and flexible knowledge of the content areas they teach, they also need to know: how children learn at different stages so they can create a productive curriculum that will build on students’ prior knowledge and experiences; how to adapt instruction for the needs of new English language learners and students with special needs; how to assess learning continuously so they can diagnose students’ needs and respond with effective teaching strategies; and how to work collectively with parents and colleagues to build strong school programs.⁶

A 2007 McKinsey study of 25 of the world’s school systems, including 10 of the top performers, found that investments in teachers and teaching are central to improving student outcomes. Top school systems emphasize: 1) getting the right people to become teachers; 2) developing them into effective instructors; and 3) ensuring that the system is able to deliver the best possible instruction for every child.⁷

The United States has previously committed national resources to strengthening our teacher corps. In the 1950s, in response to the seeming technological superiority of the Soviet Union (flagged by its launch of the Sputnik satellite), President Eisenhower signed the National Defense and Education Act (NDEA). Key among the provisions of that law was funding for thousands of young people to become teachers in high-need fields and locations, as well as investments in a range of teacher education innovations. By the end of 1970s, the shortages of teachers that had been widespread were ended for a period of time. Unfortunately, these programs were cancelled in the early 1980s and were not re-instated as shortages of teachers later reemerged in response to declining salaries and underinvestment in training.

While the risk we face today is self-imposed, the lesson we learned nearly half a century ago still applies — we can make a national commitment to a high-quality teacher corps. Federal leadership in developing an adequate supply of well-qualified teachers is as essential as it has been in providing an adequate supply of physicians, developing teaching hospitals, and improving medical education for more than 40 years.

Investing in skilled educators is also critical to local school innovation. If schools are to be trusted to make good decisions about educational matters, teachers and school leaders must be deeply knowledgeable about teaching, learning, curriculum, and school improvement. When the public lacks confidence in the professional judgment of educators, legislators increase bureaucratic

straitjackets, even when these reduce, rather than increase, school effectiveness. Our failure to build a strong profession and to ensure that all educators have the supports they need has gradually reduced teachers' voices in how our children are educated. From the details of teaching children to read to rules for grade promotion, we have turned over more and more decisions to centralized authorities.

The problem with bureaucratic solutions is that children are not standardized; hence, effective practice cannot be reduced to routines. By its very nature, standardized practice is incapable of providing appropriate education for students who do not fit the mold upon which all of the prescriptions for practice are based. To be effective, teachers must be able to adapt instruction to students' individual needs. Ironically, prescriptive policies created in the name of public accountability can ultimately reduce a school's responsiveness to the needs of its students and the desires of its parents. Faceless regulations become the scapegoats for school failure, since no one person in the system takes responsibility for the collective impact the system has on the learning opportunities for all children.

Creating a responsive education system requires first and foremost that we invest heavily in the education of and support for our teachers and school leaders, so that every school has well-qualified and committed adults in charge of making important decisions. Then we must provide educators with the space and time for engaging with communities in guiding their joint work. In this way, we create a situation where the means of public education are consistent with its ends — as young children are in the company of caring and competent adults who demonstrate how to make important decisions in consultation with peers and the community.

The federal government has a unique and necessary role in accomplishing this. Although No Child Left Behind set an expectation for hiring highly qualified teachers, it did not include the policy supports for doing so. Like other nations, we must develop universal access to high-quality teacher education by building a long-term teaching profession that is well prepared in terms of both pedagogical skill and content knowledge. We must demand that our most vulnerable children have the most competent teachers. And we must provide incentives for redesigning schools, so that once teachers are on the job, they have the kind of time most countries build into their teaching day for professional consultation and development.

Building on the forward-looking Miller-Kennedy TEACH Act, the federal government could support high quality teachers in every classroom. For an annual investment of \$4 billion, the nation could underwrite the high-quality preparation of 40,000 teachers annually (enough to fill all the vacancies that are filled by unprepared teachers each year), improve teacher preparation so they can meet the needs of students in today's schools, seed 100 top quality urban teacher education programs, ensure mentors for every new teacher hired each year, provide incentives to bring expert teachers into high-need schools by improving salaries and working conditions,

and dramatically improve professional learning opportunities for teachers and principals.⁸

Specifically, the federal government should:

Create incentives for recruiting teachers to high-need fields and locations.

Most high-achieving nations completely subsidize several years of teacher preparation for all candidates, so that the most talented will enter and all will be well-prepared. The U.S. should, at minimum, provide service scholarships that underwrite the full preparation of teachers who agree to teach in shortage areas and low-income schools for at least four years, the point at which most will continue in the profession. Those who prepare to teach mathematics, science, special education or bilingual education, and those who prepare to teach in inner city schools should be prepared completely at government expense in high-quality programs. Virtually all of the positions currently filled by unqualified teachers could be filled in this way for only \$800 million a year.

In addition, incentives should be put in place to attract to these schools expert teachers who can serve as mentors and curriculum leaders. These incentives should address the key factors found to affect recruitment and retention: principals who are strong instructional leaders; colleagues who are like-minded and similarly committed; supportive teaching conditions — including reasonable class sizes, plentiful materials and equipment, time for collaboration, and input into decisions; and adequate compensation.⁹ Experience shows that changing these conditions in hard-to-staff schools transforms their ability to recruit and retain teachers. Additional pay that rewards the commitment of teachers willing to take on these challenges should be part of the mix, and it must be paired with these other elements, as teachers are most strongly motivated by working in settings where they are enabled to succeed with students — the reason they entered the profession in the first place.

An annual allocation of \$500 million, matched by states and localities, could award \$10,000 to each of 100,000 accomplished teachers annually, recruiting them to high-need schools to serve as mentors and coaches. An additional \$300 million, also matched, could be used to improve working conditions so that these schools become attractive places to teach and learn.

Strengthen teacher preparation.

Studies show that teachers who are fully prepared when they enter the classroom stay in the profession longer and are more effective in promoting student learning.¹⁰ Yet the quality of both traditional schools of education and alternative route programs is highly variable. While there are some extraordinarily effective preparation programs,¹¹ there has been no mechanism to spread effective practices to others and to upgrade the quality of the enterprise as a whole. This important mission should be launched through incentive grants to schools of education to strengthen teachers' abilities to teach a wide range of diverse learners successfully, including students with exceptional needs and English language learners.

Investments should focus on the establishment of **professional development schools** which, like teaching hospitals in medicine, partner with universities to offer top-quality learning settings for children, prospective teachers, and veteran teachers alike. These school-university partnerships create the opportunity for those entering the profession to learn best practices and to develop their skills under the wing of experts while taking coursework on teaching and learning that is tightly integrated with clinical practice. Evidence shows that well-implemented professional development schools improve both teachers' skills and student learning¹² and are part of a necessary strategy for ensuring that teacher education is grounded in good practice. A total allocation of \$300 million, with incentives tied to accountability for performance, would enable major improvements in the quality of preparation.

These kinds of programs are most needed in communities where they are often least available and where schools have often been difficult to staff. Rather than bringing in teachers with the least training to teach the students with the greatest needs, the federal government should invest in **high-quality teaching residency programs** for candidates who will prepare in and commit to these districts. As piloted in cities like Chicago, Boston, and Denver, teaching residencies place prospective teachers in the classrooms of expert teachers — often in schools designed to exemplify high-quality practice for high-need students — for a full year, with a salary or stipend, while they complete tightly linked course work for certification and a master's degree from partner universities. Candidates learn sophisticated practices from the best urban teachers, and they pay back this investment by pledging to teach for four or five years in the district. Research shows that more than 90 percent of the graduates of these programs continue to teach in the districts where they were trained.¹³

Such programs can prepare prospective teachers to integrate seamlessly into the environments where they will likely hold their first jobs — and not only to survive but also to thrive and become leaders in the districts where their expertise is so needed. Further, schools of education can collaborate with local school systems to ensure that the professional learning from these residency programs and other professional development schools is made available to educators in others schools. Finally, these partnerships help train veteran teachers to provide mentorship to novices, to collaborate effectively with their peers, and to develop the skills necessary to participate in the continuous reflection and improvement efforts that improve student learning. The costs of such an initiative would be modest. To create 100 such programs located in the nation's largest cities, for example, by allocating \$1 million to each program for each of five years, the annual cost would be only about \$100 million — a small fraction of the cost of poor education and high attrition these cities normally experience.

Make teacher education performance-based.

Federal investments should also include support for developing and implementing teacher performance assessments that evaluate whether prospective teachers can actually teach successfully in classrooms. Current tests used for licensing and program accountability usually measure basic skills and subject matter knowledge in ways that demonstrate little about teachers' abilities to teach effectively. Several states, including Connecticut and California, have incorporated performance assessments in the licensing process. These measures of performance — which can provide data to inform the accreditation process — have been found to be strong levers for improving preparation and mentoring, as well as determining teachers' competence.¹⁴ Federal support for the development of a nationally available performance assessment for licensing would not only provide a useful tool for accountability and improvement, but also facilitate teacher mobility across states by creating a portable license.

Rather than debating traditional vs. alternative routes, states should seek to expand *effective* programs for preparing teachers, based on evidence of candidates' effectiveness when they become teachers of record, regardless of their path to certification. States should evaluate all of their programs and ensure that they include the features of programs found to increase teacher effectiveness, as well as producing teachers who are able to demonstrate, in a meaningful, valid, and reliable performance assessment, that they are prepared to teach competently from their first day in the classroom. Programs should also be evaluated and approved based on how well their candidates succeed in the classroom after they are hired.

Support mentoring for all beginning teachers.

With one-third of new teachers leaving within five years and with higher rates for those who are under-prepared, current recruitment efforts are like pouring water into a leaky bucket. Yet research has shown that mentoring for beginning teachers sharply stems attrition and increases competence.¹⁵ For \$500 million annually, a federal program that matches state and local investments in mentoring programs for novices could ensure coaching support for every new teacher in the nation, as is provided in every high-achieving nation as a matter of course.

Such a program would more than pay for itself, as the costs of teacher attrition are enormous. Current estimates suggest that most school districts spend close to \$20,000 in replacement costs for every teacher who leaves, putting the national bill for teacher turnover at well over \$7 billion per year — money that could more productively be spent on a range of pressing educational needs.¹⁶

5

Create sustained, practice-based collegial learning opportunities for teachers.

As part of its school improvement investments under ESEA, the federal government should invest in the systems needed to provide teachers with high-quality, sustained professional development, ensuring that teachers continue to learn. The critical need for investment in teacher learning has been made clear over and over again in efforts at educational change. Those who have worked to improve schools have found that every aspect of effective school reform depends on highly-skilled teachers.¹⁷

Recent research has made clear both the qualities and impact of successful professional development, which differs substantially from the “hit-and-run” workshops typically held for teachers after school. Teacher learning that enhances student learning is:

- Focused on teaching specific students and specific curricular content,
- Anchored by attention to students’ thinking and learning progress in relation to curricular goals, teaching strategies, and formative assessments, and
- Embedded in long-term collaborative teacher planning, along with observation and analysis of classroom practice.¹⁸

A recent study of high-performing, high-poverty schools confirmed these features, noting that such “turnaround” schools emphasize teacher collaboration and joint problem-solving that occurs when teachers work together to diagnose student learning needs through formative assessments, adapt instruction to meet these needs, and support each other in improving their practices.¹⁹ A review of well-designed studies found that teachers who received substantial professional development — an average of 49 hours on specific areas of practice across the studies reviewed — boosted their students’ achievement by more than 20 percentile points on average,²⁰ a significant increase in performance. This kind of improvement in practice can occur through guided learning at the school site, through content-based institutes and coaching, and through vehicles like National Board Certification that focus on close analysis of practice.²¹

If we want to improve the quality of learning in our schools, we need to direct incentives toward this kind of professional learning both by outlining the features of programs that will receive support in existing federal programs and by creating incentives for the rethinking of school schedules and organizational designs so they can routinely provide time for such collaboration to occur. Such incentives can be stimulated through grants — like the federal Small Learning Communities grants — that promote the redesign of the factory model schools we have inherited, as well as through incentives in professional development grants — which are part of most federal programs — prioritizing the design of school structures that can enable intensive study and improvement of teaching. Much of this work could be done by better focusing the funds for professional learning in existing federal programs. An additional \$600

million could be used to triple the investments in Small Learning Communities grants and to provide \$2,000 per teacher for job-embedded professional learning for every teacher in the neediest 25 percent of schools.

Develop teaching careers that reward, develop, and share expertise.

6

The current structure of the teaching career places teachers in egg-crate classrooms, doing the same thing on the first day they enter the profession as they do 30 years later, with little opportunity to share what they know with others. These systems create career pathways that place classroom teaching at the bottom, provide teachers with little influence in making key education decisions, and require teachers to leave the classroom if they want greater responsibility or substantially higher pay. The message is clear: those who work with children have the lowest status.

We can do better.

We need a different career continuum, one that places teaching at the top and creates a career progression that supports teachers as they become increasingly expert. Rewarding teachers for knowledge of subjects, additional knowledge for meeting special kinds of student and school needs, and ensuring excellence in the classroom — as well as a willingness to take on mentoring, curricular development, and other leadership responsibilities — would enhance the expertise available within schools. Creating stronger pathways for continuous teacher learning and sharing of expertise — through vehicles like National Board Certification as well as high quality on-the-job evaluation and other professional development focused directly on practice — has been shown to improve overall school performance as well as classroom teaching.²² Federal incentives could support innovative districts where teachers take leadership in designing such career pathways that create productive and useful evaluation systems, enhance teacher compensation, help keep veteran expert teachers in the field, reward teachers for taking on tough assignments, provide supports for teacher learning, and enhance the opportunities for accomplished teachers to share what they know so that practice improves.

An initiative that encourages districts to develop career ladders should incorporate beginning teacher mentoring by expert teachers chosen for their effectiveness in the classroom, and enable other roles for expert teachers as well. It should be accompanied by a performance-based teacher evaluation system that provides information about teacher effectiveness by conducting standards-based evaluations of teaching practices conducted through classroom observations by expert peers or supervisors, as well as a systematic collection of evidence about the teacher’s planning, instruction, and assessment practices, work with parents and students, and contributions to the school. This collection of evidence could also include evidence of student learning and progress drawn from student work samples; classroom, district or state assessments, as appropriate; and teacher documentation.

A productive career development system should be organized around high-quality professional learning opportunities, including time for teachers to work and learn together during the school day. It could include additional incentives for teachers to take on mentor and master teacher roles in high-need schools, and even, as part of a group of teachers, to take on redesigning and reconstituting failing schools so that they become more effective.

7 Mount a major initiative to prepare and support expert school leaders.

Studies find that the quality of the school principal — especially the extent to which he or she engages in instructional leadership practices — is the second most important determinant of a healthy learning environment, right after teacher quality.²³ Furthermore, the single most important determinant of whether teachers stay in a particular school is the quality of the administrative support they receive from their school leader. In short, principals create the conditions that foster or undermine teaching quality — and either build or destroy the school culture that allows teachers and students to succeed.

Growing shortages of principals are a function both of the growing complexity of the job and the shortage of high-quality recruitment and preparation programs that enable principals to be well-prepared for the enormous challenges they face. While we have growing knowledge of the traits and skills that make principals effective — including their strong background as expert teachers of both children and adults — in most communities, we lack explicit strategies for identifying talented teachers with these traits and reaching out to them to cultivate their leadership abilities. One important role of the career ladders described above would be to consciously strengthen the principal preparation pipeline for those instructionally skilled teachers who also want to contribute to the management of the overall organization.

A major federal initiative would underwrite talented candidates who are recruited to attend leadership programs that offer strong training in how to support instructional improvement, organize productive schools, and lead change — and that provide a full-time internship under the wing of expert principals who have developed successful schools.²⁴ An average of 100 top-flight principals per state could be trained in state-of-the-art programs each year for \$300 million, providing a pipeline of well-trained human capital to lead the reforms that are essential to our success. Federal investments through a new ESEA should provide another \$300 million in funds for districts to develop strong professional development for principals, through learning networks and continuing engagement in instructional leadership training. And the federal government should set aside \$100 million to create a top-flight School Leadership Academy — a “West Point” for developing sophisticated expertise among the most able school leaders — so that they can take on the challenge of turning around failing schools in high-need communities with the all the knowledge and tools available to the profession.

These investments in educator quality will both develop greater excellence in our schools and address the federal role of ensuring equal access to high-quality education for all of America’s children. While the federal government cannot obliterate the long-standing educational debt overnight, it can enact policies that will provide qualified teachers for every child.

Now is the time to act.

Endnotes

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