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America's Teacher Corps



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EXECUTIVE SUMMARY

e propose the creation through federal legislation of America's Teacher Corps (ATC). Highly effective K-12 public school teachers, as documented through district or state evaluation systems that comply with federal standards, would qualify for membership in the ATC. Members of the ATC would receive visible recognition for teaching excellence and, conditional on service in high-poverty Title I schools, a salary supplement and portable credential. The ATC would encourage states and districts to establish effective teacher evaluation systems and to use those systems to guide the recruitment, retention, placement, professional development, and compensation of teachers. The ATC would serve to reduce unnecessary credentialing barriers to the movement of effective teachers from state to state. The ATC would serve the needs of economically disadvantaged students by providing incentives for the best teachers to work in schools that serve those students. By appealing directly to teachers, the ATC would complement the current federal program with similar goals, the Teacher Incentive Fund, and the Obama administration's proposed replacement, the Teacher and Leader Innovation fund, both of which require applications from school district administrations for competitive grants.

A body of high-quality research demonstrates that teachers vary substantially in their effectiveness, with dramatic consequences for the learning of students. There is also widespread agreement that the nation needs to increase the level of academic achievement of its students and address large achievement gaps between children from more and less advantaged families. Thus, it is imperative that we enhance the overall quality of the teacher workforce and enact policies that increase the opportunities for children from poor and minority backgrounds to access highly effective teachers. Yet, the current system for recruiting, retaining, placing, compensating, and providing professional development for teachers is neither rationally designed to create a high quality and equitably distributed workforce, nor is it successful in doing so. Many of the best and the brightest are less likely to enter teaching compared to other fields.^{1,2} Once in teaching they abandon the profession at high rates.^{3,4,5} If they do enter teaching and stay in the profession, they tend to serve in schools whose students are more advantaged.^{6,7} Further, schools that serve disadvantaged students have very high rates of teacher turnover, meaning that students in those schools are likely to be taught by inexperienced teachers and that efforts at professional development and creation of a school community are frustrated by the constant churn of staff.^{8,9} Finally, few existing programs and policies to address these problems through professional development, mentoring, and induction show any evidence of success. 10,11,12

We conclude that the conditions of teacher employment have to be restructured to recruit and select more promising teachers, provide opportunities for potentially good teachers to realize their potential, keep the very best teachers in the profession, and motivate them to serve in locations where students have the highest needs. The ATC aims to take an important step in this direction.

The preconditions for these changes are valid systems for evaluating and

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monitoring teachers and incentives for the best teachers to serve where they are most needed. There are school districts and states around the country that are innovating in these areas, but the pace of change for the nation is glacial whereas the imperative for reform is urgent. The principal federal effort in this area, the Teacher Incentive Fund (TIF), is designed to provide financial support for school districts that wish to innovate and can generate a competitive grant application for federal funds, but most districts operate under constraints that make it difficult for school administrators to introduce reforms in teachers' working conditions if they want to, and many do not. The same constraint arises with respect to the Obama administration's proposed replacement for TIF, the Teacher and Leader Innovation Fund.¹³ We believe that a federal grant program that depends on district superintendents to initiate applications to compete for funds to change district labor market practices for teachers is not sufficient to achieve widespread reform.

The new federal program we propose would support the development of meaningful teacher evaluation systems at the district and state level by providing incentives to teachers who can demonstrate their effectiveness through the performance evaluations that they receive in such systems. The incentives would be public recognition of teaching excellence through earned membership in the ATC and, contingent on service in a high-poverty school, a nationally portable credential and substantial salary supplement.

The ATC is consistent with long-established principles for federal involvement in the education of the disadvantaged because it supports rather than usurps the state and local roles in monitoring teachers. The funding for salary supplements will flow from the federal government through districts just as it does for other Elementary and Secondary Education Act (ESEA) programs that underwrite the costs of educating disadvantaged students. We believe that the incentives of extra compensation, a portable credential, and national recognition provided to excellent teachers will motivate teachers to encourage the school districts that employ them to institute systems for documenting their performance that comply with the ATC requirements. For this to happen, the ATC will have to provide enough extra salary compensation to motivate teachers to participate and the recognition of teaching excellence afforded by the ATC will need to develop a strong positive reputation within the teaching profession. We envision a scenario whereby excellent teachers who are ineligible for the ATC because they serve in districts that have not established an acceptable evaluation system will become advocates within their districts to establish such a system, or they will migrate to districts in which their teaching excellence can be recognized and rewarded.

The ATC can be budget-neutral if a portion of the funds that are appropriated for the Teacher Incentive Fund or the Obama administration's proposed replacement, the Teacher and Leader Innovation Fund, are redirected to the ATC. Because the ATC has goals that are well aligned with those of TIF and the Teacher and Leader Innovation Fund, we believe that political supporters of those programs could also support the ATC and that the programs could co-exist.

Encouraging and Identifying High Quality Teachers

The Importance of Good Teachers

Although the contribution of teachers to student learning may seem intuitively obvious, a generation of research dating from the 1966 study by James Coleman supported the conclusion that most of the differences in achievement among students were attributable to differences in family background. We now know that teachers vary substantially in terms of their effectiveness and that these differences matter because significant differences in the achievement of students are attributable to differences in teachers. For example, a study in Tennessee found that differences among teachers accounted for 12 percent to 14 percent of the total variability in students' mathematics achievement gains in each of grades 1, 2, and 3. These are large effects, and it is important to note that they are for one year of instruction. The effects of teachers would be much larger to the extent that they cumulated across multiple years of instruction. 16,17

Some portion of the differences in teacher effectiveness can be predicted by known characteristics of teachers such as their college coursework and their scores on tests. ^{18,19} However, prior on-the-job performance of teachers is by far the strongest predictor of their future on-the-job performance. ²⁰ Research using data from the Los Angeles Unified School District for teachers in grades 3 through 5 reported that the average effect on mathematics achievement of having a top-quartile versus a bottom-quartile teacher was 10 percentile points in one year. ²¹ To put this in perspective, this is about one-third of the size of the gap in achievement nationally between white and black students. A similar study using ninth-grade data from the Chicago Public Schools found even larger mathematics achievement effects when students had a highly effective teacher. ²²

Whereas poor and minority students would greatly benefit from having a highly effective teacher, the current system is not well-designed to create a high quality and equitably distributed workforce. Many of the human resource components of the management of the teacher workforce are deficient, including those deployed in recruiting, retaining, placing, compensating, and providing professional development to teachers.²³

In the recruitment stage, the quality of education candidates, as measured through SAT and IQ scores, has declined considerably since the 1970s.^{24,25} The SAT scores of teacher education majors have increased slightly in the past few years, but they are still below the national average SAT score, meaning that the best and brightest are still seeking other professions.²⁶ And while some of the brightest enter the teaching profession, they tend to abandon it at disproportionately high rates.^{27,28,29}

Of the teachers who remain in the profession, those with characteristics that are associated with greater effectiveness, such as length of experience and extent of college coursework in the subject matter they teach, tend to serve in schools with fewer disadvantaged students.^{30,31,32,33} The reasons teachers leave schools serving

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higher proportions of disadvantaged students are well-known and include difficult working conditions, fewer resources, and more student problems.^{34,35} The high rates of teacher turnover mean that students in those schools are taught by less experienced teachers and that efforts at professional development and creation of a school community are likely to be frustrated by the constant churn of staff.^{36,37} Unfortunately, few programs and policies that address teacher retention and effectiveness in high needs schools through professional development, mentoring, and induction have shown any evidence of success.^{38,39,40}

We believe that the teaching profession must be restructured to keep the best teachers in the classroom, enhance the likelihood that more qualified people will enter teaching, provide opportunities for potentially good teachers to realize their potential through additional support and development, motivate effective teachers to teach in hard-to-staff schools, and encourage ineffective teachers to leave the profession.

Evaluation Systems

To begin this restructuring, a better mechanism for identifying highly effective teachers is needed. Although there is a consensus that a good teacher can be identified, current evaluation systems fail to do so rigorously.⁴¹

Evaluations of tenured teachers are infrequent—ranging from annual in some states to every five years in others—preventing timely feedback on performance.⁴² When feedback is provided, it is often unproductive.⁴³ A recent survey of thousands of teachers and administrators spanning twelve districts in four states revealed that even though all the districts employed some formal evaluation process for teachers, all failed to differentiate meaningfully among levels of teaching effectiveness.⁴⁴ In districts that used binary ratings, more than 99 percent of teachers were rated satisfactory. In districts using a broader range of ratings, 94 percent received one of the top two ratings and less than 1 percent received an unsatisfactory rating.

Such evaluation systems are incapable of differentiating among teachers in any meaningful way and most teachers and administrators recognize this. In the same study, 59 percent of teachers and 63 percent of administrators said their district was not doing enough to identify, compensate, promote, and retain the most effective teachers. Systems that do not differentiate levels of performance cannot target professional development to the teachers and areas of performance where the need is greatest and cannot succeed in shaping the quality of the teaching workforce through retention practices. For example, 93 percent and 98 percent of probationary teachers receive tenure in the New York City Public Schools and the Los Angeles Unified School District, respectively. 45,46 And very small numbers of tenured teachers are ever dismissed for poor performance. 47 Likewise, evaluation systems that do not differentiate levels of teacher effectiveness cannot support professional development that is based on inculcating the practices that characterize highly effective teaching, for example by having highly effective

teachers mentor less effective ones.

Teacher Pay and Credentialing Systems

Influencing teachers' salaries is a key way in which the federal government can act to encourage more promising students to pursue a teaching career and to reward more effective teachers and persuade them to serve in high-needs schools. Incentive pay for service in hard-to-staff schools is one possible mechanism to counter the well-documented tendency of the most qualified teachers to select or migrate towards schools that serve the most economically advantaged children. For example, researchers found that a moderately-sized addition to salary (\$1,800) was effective in encouraging senior math and science teachers to stay in high-needs districts in North Carolina. Much larger incentives may be necessary to encourage effective teachers to migrate into high-needs schools from locations that are closer to middle-class housing and have fewer disadvantaged students.

The ATC would provide salary supplements to ATC members who agree to teach in a high-poverty Title I school, defined as having at least 75 percent of its student population eligible for a free or reduced price lunch. It is important to stress that the salary supplements for effective teachers under the ATC are not designed to function primarily as pay-for-performance or merit pay, i.e., a system in which teachers are expected to be motivated to work harder or smarter over the course of the school year by the prospect of a salary bonus. Rather, the salary supplements in the ATC are available to teachers who have already demonstrated sustained effectiveness in the classroom and are intended to encourage such teachers to remain in the profession and serve where they are most needed. The salary supplements also send a signal to those who might consider teaching as a career that performance matters and excellence is recognized.

Characteristics of the credentialing system likely also constrain the ability of school districts to attract the best pool of applicants. Prior to the 1970s, college graduates, teachers in particular, stayed at the same job for many years; whereas current college graduates have four jobs by the age of thirty.⁵³ Twenty-four percent of school teachers who are younger than 30 change jobs or teaching location in a single year.⁵⁴ If a teacher decides to move to a different state the teacher must become certified in the new state. Even if the new state has a reciprocity system, the teacher may be required to obtain a provisional license subject to additional testing and sometimes additional course requirements—all of which cost time and money—and the required tested content varies from state to state. Thus, the current system imposes a penalty for mobility on many teachers, even if they want to move to teach in high-poverty schools. The mobility penalty also discourages talented people from entering into the profession.

The inflexibility of teacher credentialing has come under question in light of the evidence that teacher effectiveness as measured by on-the-job performance is only weakly associated with pathways into teaching, e.g., traditional versus

alternative certification, or teacher certification examination scores.^{55,56,57} Whatever one's perspective on the value of traditional teacher preparation and certification for the teacher workforce in general, it is difficult to justify jurisdictional certification barriers on teachers who have already demonstrated in the classroom that they are among the best of their peers. The ATC is designed to provide a portable credential for teachers demonstrating superior performance who are willing to serve in high-poverty Title I schools.

Existing Teacher Effectiveness and License Portability Programs

There are some existing programs designed to encourage the identification of teacher effectiveness, encourage teachers to serve in hard-to-staff schools, and create licensure portability. For example, the existing federal legislative involvement is the Teacher Incentive Fund (TIF) and the Obama administration proposed TIF replacement, the Teacher and Leader Innovation Fund. Both support efforts to develop and implement performance-based teacher and principal compensation systems through competitive grants to states or local education agencies and their partners. Neither contains reforms of teacher licensure nor provides a mechanism for recognizing superior teachers nationally.

In addition to existing and proposed federal programs and local initiatives to recognize high quality teachers, teachers may apply individually to be recognized through National Board Certification, which advertises portable credentials and increased pay. However, the decision whether to recognize National Board certification, cover the considerable costs for individual teachers to be go though the review process, or increase the pay of those who achieve certification is at the discretion of individual states and districts.⁵⁸ National Board teachers are more likely to teach in easy-to-staff rather than in hard-to-staff schools.⁵⁹ Further, evidence on whether National Board certified teachers are more effective than demographically similar non-certified peers is equivocal.^{60,61,62}

The American Board for Certification of Teacher Excellence (ABCTE) provides a credential that is portable across some states. It is an alternative route for teacher certification in which individuals demonstrate competency for initial licensure by completing subject area and teaching knowledge examinations. Traditional coursework in schools of education and student teaching are not required. Nine states currently accept ABCTE certification.⁶³ Unlike the ATC and the other programs reviewed here, the ABCTE is designed to reduce artificial barriers to entry into the teaching profession rather than to recognize superior teaching. Consistent with that purpose, ABCTE certified teachers as a group are no better than and sometimes worse than similar traditionally certified teachers in raising student achievement.⁶⁴

The ATC complements existing programs by creating a ground up incentive for teachers to push for reforms that should lead to a greater recognition of teacher effectiveness, a fairer distribution of teachers across schools, credential portability, and a more desirable teaching profession. Unlike ABCTE certification, only highly

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effective teachers would receive the flexibility of a portable credential. Unlike both National Board and ABCTE certification, the ATC addresses the need for districts or states to establish reliable and valid systems for evaluating the on-the-job performance of all teachers. Such evaluation systems are a fundamental prerequisite to many structural reforms in teaching. The ATC proposal is focused on and designed to jump-start the creation of such systems.

The Design of America's Teacher Corps

Benefits to Teachers

Any teacher who demonstrates sustained, superior performance in the classroom would be eligible for the ATC. The ATC credential would be portable from state to state with no additional coursework or examination for teachers who accept teaching positions in a high-poverty Title I school. Moreover, teachers who obtain this credential would receive an annual salary supplement of \$10,000 conditional on service in a high-poverty Title I school.

ATC Program Requirements

Teachers would have to:

- consent to their school district or state nominating them;
- have their school district or state provide documentation that they
 have averaged in the top quartile of teachers for their most recent
 three years of service; and
- re-certify their continued status as highly effective every five years to retain any federal salary supplement associated with employment in a high-poverty Title I school.

The top-quartile ranking could be within any aggregation of teachers that is large enough to produce stable results (i.e., a normally shaped distribution with reasonable stability in the upper and lower quartiles). The evaluations that form the basis for the averaged three-year rankings would have to occur at least annually. Typically, the ranking would occur within districts, or within categories of schools within districts, e.g., elementary schools. However, the ranking could occur at the state level for states that have the requisite database, or among consortia of schools or districts, e.g., small rural districts, as necessary to create a database of sufficient size to make a teacher's evaluation scores meaningful relative to the overall distribution of evaluation scores.

The evaluation system generating the data for teachers to qualify for the ATC would be the same one used ordinarily by the ranking entity. The only federal mandates would be that:

the system be carefully documented;

- include a spread of verifiable and comparable teacher evaluations that distinguish teacher effectiveness;
- include value-added data in subjects and grades in which the necessary assessments are administered to produce such estimates;
- not include requirements that penalize early career teachers; and
- be demonstrated to be sufficiently reliable to support identification of persistently superior teaching.

For the value-added component, the weighting of value-added estimates relative to other components of evaluation such as peer judgments, principal ratings, and parental satisfaction would be at the discretion of the ranking entity. Examples of data that would permit the calculation of a value-added component include beginning- and end-of-course examination scores for individual students in subject areas such as physics and chemistry, and changes from one grade to the next in the performance of individual students on statewide assessments such as those that are required under ESEA.

The ATC credential would be portable from state to state. States accepting Title I funding would be required to establish an efficient and expeditious credentialing mechanism for ATC members from other states who accept teaching positions in high-poverty Title I schools within the state (i.e., schools in which 75 percent or more of the students are eligible for free or reduced price lunch). The credentialing mechanism would require no additional coursework or examination. States would not be required to accept the ATC credential of teachers who migrate to the state to teach in schools that are not high poverty, although we expect that many would do so. In any case, a teacher migrating to a new state and obtaining certification by virtue of ATC membership and initial service in a high-poverty Title I school would retain the certification if the teacher subsequently transferred to teach in a school that was not high-poverty. In other words, the teaching certificate, once granted, would be standard and subject to the rights and obligations of any standard teaching certificate within the state.

Districts would be responsible for paying the salary bonus for service in a high-poverty Title I school directly to the ATC member and would be reimbursed by the federal government. Recognizing ATC membership and acting as the pay agent for the ATC salary bonus would be a condition of receipt of Title I funds for school wide programs under a reauthorized ESEA. To simplify program administration as well as cost estimates we assume that the bonus would not be included in the calculation of fringe benefits. For example, the salary bonus would not be used in calculating a teacher's retirement benefits or otherwise carry with it additional benefits or costs. Thus other than the administrative costs associated with managing payroll, districts would incur no additional expenses for paying a salary bonus to ATC members. As well, subject only to tax withholding, the teacher's net bonus would be the same as the supplement amount stipulated in legislation.

Estimated Costs

The federal costs would depend on the size of the awards and the number of participants. The \$1,800 bonus once offered to math and science teachers in North Carolina was sufficient to increase teacher retention in high-poverty schools; however, the effect was relatively small.⁶⁵ An estimate derived from Texas suggests that it would take much more (25-43 percent of base salary for women and 10 percent for men) to get teachers to move from a suburban to a central city school.⁶⁶ In addition, the bonus needs to be substantial enough to motivate teachers to support the development of effective monitoring and evaluation systems in the district or state so as to allow them to qualify for the ATC.

Given these findings, we suggest a relatively large incentive. The average teacher's salary in the U.S. is about \$50,000.67 We propose an annual salary supplement for ATC teachers who serve in high-poverty Title I schools of \$10,000, or approximately 20 percent of the average base salary. As teacher salaries rise over time due to inflation and more is learned about the effects of the ATC on teacher career decisions, Congress can adjust the bonus amount.

We estimate that no more than \$200 million per year would need to be authorized to implement the ATC in its initial years of operation. This calculation is based on our estimates of the numbers of teachers who could qualify based on experience, performance, and geographical proximity to high-poverty schools. It is also based on assumptions about take up rates by eligible teachers.

There are approximately 3.2 million full-time public school teachers in the U.S.68 Only about 2 million of those teachers have been teaching in their present location long enough to qualify for the ATC, i.e., being in at least the fourth year and thus having been subject to evaluation for each of the three previous years.⁶⁹ Teachers must average in the top-quartile of performance for three years running to qualify for the ATC. Some degree of instability in ratings from year to year can be expected of any personnel evaluation system that produces a spread in scores, including evaluation systems for teachers.⁷⁰ The evaluation systems deployed by districts that participate in ATC certification will likely include multiple sources of information. Some, such as appraisals by supervisors, are likely to be relatively stable whereas others, such as value-added measures, will be less so. The stability of any particular evaluation system will depend on the mix and reliability of the components of the system. We believe it is reasonable to estimate the aggregate year-to-year stability of the top-quartile of teachers nationally to be approximately .50. In this scenario the number of teachers nationally who could be eligible for membership in the ATC in its first year would be 125,000 [500,000 (the top quartile in one year of the 2 million teachers who have served long enough to have three years of data) x .5 (the proportion of those teachers who would remain in the top quartile for a second year) x .5 (the proportion who would remain the third year)].

Of these 125,000 teachers, a sizable proportion does not reside within a reasonable commuting distance of a high-poverty school. Teachers who are already employed and have established their residence are unlikely to change their

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place of residence or undertake a lengthy daily commute to a high-poverty school in order to qualify for a \$10,000 salary bonus. To estimate the residual of highly effective teachers who are geographically available to serve in high-poverty schools we take the percentage of all teachers who serve in high-poverty, typically urban school districts, which is about 20 percent.⁷¹ Another 10 percent of the pool of highly effective teachers live and teach in the suburbs within a one hour commute of high-poverty schools.⁷² Thus we estimate that 30 percent of the 125,000 eligible teachers nationally, or 37,500, are geographically available to the ATC. If 50 percent of this pool entered the ATC and served in a school that made them eligible for a salary bonus, the annual cost of the program's salary supplements would be about \$188 million.

There will be additional costs at the federal level in administering the ATC. In particular, states and school districts will need technical assistance to establish appropriate evaluation systems, and a vetting system will need to be in place to determine whether those systems meet the ATC requirements for establishing teachers' qualifications. Further, the ATC program will need to be carefully evaluated. We recommend an additional \$12 million appropriation for these national activities, which brings the total recommended appropriation authority to \$200 million per year.

To handle startup lags associated with advertising the program and districts having to improve and document their teacher evaluation systems, the budget allocation could be fungible between TIF, the Teacher and Leader Innovation Fund (should it be enacted), and the ATC. Each is a discretionary program that has uncertain demand.

Outcomes

We anticipate that the ATC would have four primary, measurable goals. It would:

- Accelerate the development and deployment of evaluation systems that make meaningful differentiations in teacher performance;
- Increase the equity of student access to highly effective teachers;
- Reduce the number of top performing teachers who leave teaching because they move from one state to another and find the process of re-entering the teacher labor market to be confusing or onerous; and
- Make the teaching profession more attractive to prospective teachers, particularly those who believe they will be among the top performers.

We recommend that the initial implementation of the ATC include a requirement for a rigorous evaluation of its impact and cost effectiveness with respect to these four goals. The evaluation should be implemented in two phases for two purposes: program improvement and a decision on continuation or

expansion.

Good educational outcomes for students depend on good teachers. The nation will not make significant progress towards its goal of having all students graduate from high school career or college ready until the labor market for teachers is substantially restructured. We must be able to identify those teachers who are most effective, recognize their accomplishments, and reward them for service where they are most needed. America's Teacher Corps is a bold and practical initiative to reform the labor market for teachers in ways that will benefit the teaching profession and the students it serves.

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