One Year Later:

Can State Equity Plans Improve Access to Great Teaching?

ALLIANCE FOR EXCELLENT EDUCATION

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Introduction

Teaching quality is recognized as the most powerful school-based factor in student learning.[1] However, capacity and often commitment have been insufficient across states and districts to ensure all students have equitable access to excellent educators. Too often, students from low-income families and students of color experience educational "opportunity gaps," meaning they have less access to effective teaching and rigorous course work and encounter lower expectations from adults. The results are profound.

Having an effective teacher versus a less effective one for three years in a row can alter a student's achievement by as much as 50 percentage points—an impact sufficient to distinguish between students who struggle to graduate from high school and those who succeed in entering college or the workplace.[2]

To address the problem of inequitable access to effective teachers, the U.S. Department of Education (ED) asked each state to submit a plan by June 1, 2015, to ensure that "poor and minority children are not taught at higher rates than other children by inexperienced, unqualified, or out-of-field teachers."[3] In collaboration with broad constituencies, states were required to

- calculate equity gaps in access to effective teachers between schools serving high- and low-proportions of students from low-income families and students of color;
- determine and explain the root causes of those gaps;
- design strategies to eliminate the gaps in teaching quality; and
- describe the method and timeline for measuring progress toward ensuring equitable access.

The state teacher equity plans show that lack of access to great teaching is most acute in high-need districts and schools. Yet differences in student academic performance observed between schools often mask even greater variations in student performance *within* schools. The issue appears to be less about unequal schools and more about unequal classrooms—the classroom to which a student is assigned matters more than the school he or she attends.[4] While the unevenness in teaching quality is well-established,[5] the problem is becoming more acute as expectations for all students have changed, but the underlying systems for preparing and supporting educators have not.

Providing consistent, excellent teaching for each student in every classroom depends on whether states and districts commit to transforming teaching into a profession that reliably builds and grows teacher expertise over the career continuum. This report provides an overview of states' teacher equity plans and highlights promising approaches for eliminating chronic disparities in teaching quality. It focuses on efforts to (1) build a coherent system of educator development, (2) support beginning teachers, and (3) connect teacher performance with career advancement, particularly for those working with the most challenging students.

State Equity Plans to Increase Students' Access to Excellent Educators

As of December 22, 2015, ED had approved the teacher equity plans for all fifty states, the District of Columbia, and Puerto Rico.[6] Overall, the equity plans report that schools serving students of color and students from low-income families have double the percentage of inexperienced and unqualified teachers—particularly at the secondary level—along with higher teacher and principal turnover rates. A number of states, including Delaware and Massachusetts, also report that these students experience less access to highly effective teachers—defined as those scoring at the top proficiency levels on teacher evaluations.[7] Tennessee used teacher effectiveness data to identify equity gaps based on students' prior academic achievement. The state's 2014 analyses show that low-performing students had less access to highly effective teachers than their high-performing peers in sixty of 142 districts.[8] The identified gaps in access to effective teachers pose major policy concerns about longstanding "structural inequities hiding in plain sight in teacher preparation programs and school systems," writes David Berliner, educational psychologist, and Gene Glass, regents' professor emeritus at Arizona State University.[9]

With the passage of the federal Every Student Succeeds Act (ESSA) of 2015, states now have the opportunity to take their teacher equity plans to another level. ESSA requires states and school districts publicly to report annual data on students' access to qualified, experienced educators and describe how they will identify and address equity gaps. ESSA also authorizes federal funding to support these efforts through Title II and Title III of the law and through discretionary grant programs such as the Teacher and School Leader Incentive Fund.[10]

The teacher equity plans are consequential in bringing together state, district, and school leaders; teachers; community and advocacy groups; higher education; and businesses to develop solutions to ensure all students have access to effective educators. Many states already have engaged these diverse constituencies to examine root causes for the gaps in teaching quality related to teacher education and licensure, district human capital systems, and the professional learning culture within schools. At the same time, education leaders acknowledge the need to examine the unevenness in teaching quality more thoroughly using multiple data sources and comprehensive analytics to review teacher distribution and determine how schools contribute to staffing inequities as well. States also are working with school districts to set goals and develop and implement strategies to reduce equity gaps in ways that balance local adaptation with evidenced-based practices for teacher hiring, placement, and induction.

The state teacher equity plans describe a web of interrelated causes for the identified gaps in teaching quality, including persistent teacher shortages, weak teacher preparation, inadequate induction, low and stagnant salaries, less desirable working conditions, and fewer opportunities for career advancement. The following sections focus on the constellation of factors for why these disparities exist and how states plan to address the root causes behind the observed inequities.

What Is Behind Teacher Shortages?

States have long recognized chronic disparities in teaching quality. Frequent reports document persistent shortages in specific fields, such as mathematics, science, teaching English as a second language, and special education and in particular locales. Even though ED did not require states to report on inequities in the aforementioned areas, a number of states included them in their teacher equity plans. Wisconsin, for example, extended its analyses to emergency licensure data and discovered that of the 1,709 emergency credentials issued in School Year (SY) 2012–13, the largest two categories were for bilingual and special education.[11] Meanwhile, Oklahoma attributes a severe teacher shortage to low compensation and a 2010 moratorium on a "thriving teacher mentorship program that provided support and coaching to new teachers."[12]

In a similar vein, Delaware and North Carolina link supply challenges with high turnover rates for beginning teachers of nearly 50 percent in five years due to poor school climate and limited opportunities for career advancement and better compensation.[13] Since the 1970s, teacher salaries, as a percentage of average gross domestic product per capita,

have declined by 2 percent annually nationwide.[14] Without competitive salaries and good working conditions, schools, particularly those serving students from low-income families, struggle to attract and retain teachers as they gain experience and become more effective instructors.

Missouri, for instance, registered particular concern in its teacher equity plan about the devastating consequences of existing inequities in the availability of science, technology, engineering, and math (STEM) teachers. Consequently, Missouri developed a "shortage predictor model" to track supply and demand for teachers by region and certification area.[15] The state finds that about 65 percent of districts with the highest rates of less than fully qualified high school science teachers have no rigorous college-preparatory high school science courses.[16] Missouri's plan states that regional inequities severely diminish students' opportunities for employment in STEM fields, which are projected to grow at a rate of 15 percent during the next twenty years. A Missouri educator told officials at the state department of education, "We must reach and learn to educate those who are now disenfranchised and quickly becoming the majority."[17] Another teacher added, "There is a current need for prospective teacher candidates to have a deeper understanding of how to educate students beyond a superficial level of knowledge."[18]

There is no single cause for educator shortages, nor easy fix in light of the declining enrollments in teacher preparation and variable transition rates from preparation programs into classroom teaching. National data shows that enrollment in teacher-preparation programs declined 30 percent from SY 2009–10 to SY 2012–13 alone, according to the Education Policy Center at the American Institutes of Research.[19] Of those who complete a teacher-preparation program, between one-fourth and one-half never teach after graduation.[20] What is clear is that schools serving larger percentages of students of color and students from low-income families have a harder time recruiting and retaining top teachers, particularly in subject areas where teachers are in short supply. Consequently, those schools have to hire less qualified or unqualified educators to fill those spots or forgo those courses altogether, creating greater disparities in access to rigorous course work and effective teaching.

Making Teacher Preparation Meaningful

Most states identify teacher preparation, as currently designed, as a major factor in limiting students' access to skilled, experienced teachers. They recognize that although teacher production has grown steadily during two decades, the influx of new teachers has neither stabilized the teaching workforce nor improved teaching quality, particularly in schools serving students from low-income families and students of color. In fact, preparation is a major but overlooked factor in perennial shortages in teaching fields such as mathematics and science.[21]

Whether a teacher remains on the job after the first year is associated with aspects of his or her preparation—specifically, comprehensive pedagogical preparation (knowing *how* to teach). Richard Ingersoll, professor of education and sociology at the University of Pennsylvania, found that mathematics and science teachers were far less likely to leave teaching after their first year on the job if they had taken all of the following actions: (1) completed multiple courses in teaching methods, learning theory, and psychology; (2) participated in a full semester of practice teaching; (3) observed other teachers; and (4) received feedback on their teaching.[22] Furthermore, the findings show that incoming mathematics and science teachers, in particular, had less pedagogical preparation than other teachers. Those receiving little or no pedagogy were more than twice as likely to leave after one year. In contrast, the type of college, degree, or entry route into teaching—traditional versus alternative routes, the latter now comprising more than 40 percent of new teachers—mattered little.[23]

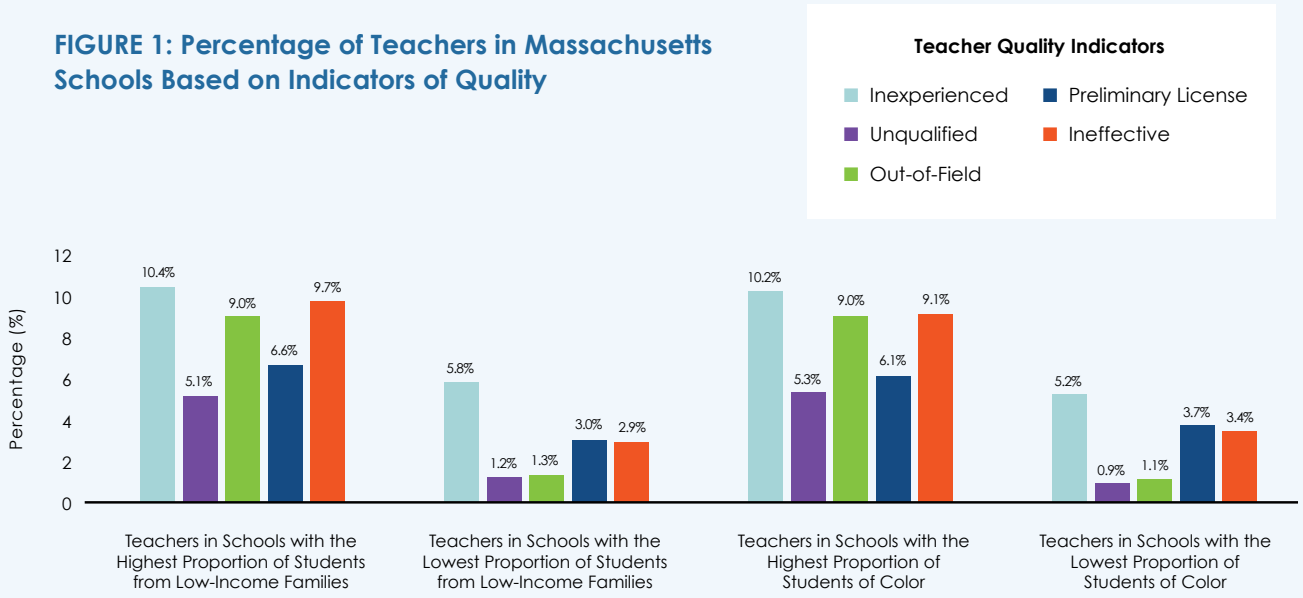
Inadequate preparation of educators for high-need schools contributes to persistent equity gaps and high turnover rates.[24] New teachers, often unprepared for the realities of the classroom, are placed more often in schools and classrooms with the most challenging students. Although substantial evidence indicates that powerful pedagogies and design principles can improve students' learning, teaching based on the science of how people learn is not the norm in most classrooms.[25]

Preparation programs continue to be lax in candidate selection and driven by what institutions of higher education want to offer—not by what schools or teachers need. Moreover, licensure remains poorly connected to how well educators impact student achievement and school performance.[26] As a result, high-need schools are particularly vulnerable to shortages because of the churn created by high teacher turnover rates and repeated hiring of novice teachers. Consequently, students in those schools too often are exposed to the least experienced and least effective teachers.

This varied quality of educator preparation underlies students' differential access to excellent educators.[27] Massachusetts, for example, found large equity gaps in access to quality teaching between schools serving high and low proportions of students from low-income families and students of color. The largest equity gaps were in the percentage of classes taught by non-highly qualified teachers (HQTs),[28] the percentage of unlicensed teachers, and the percentage of teachers with ineffective evaluation ratings. Among Massachusetts's secondary classes taught by non-HQTs in SY 2012–13, 35 percent were taught by "licensed general education teachers who have not demonstrated subject knowledge for the subject(s) they were teaching."[29]

As shown in figure 1 below, schools serving predominantly students from low-income families or students of color were more than twice as likely to have less effective teachers than schools serving primarily affluent white students across five categories of measurement: teaching experience, teacher qualifications, out-of-field teaching, preliminary licensure status, and teacher

FIGURE 1: Percentage of Teachers in Massachusetts Schools Based on Indicators of Quality



Source: Massachusetts Department of Elementary and Secondary Education, "Massachusetts Equity Plan 2015–2019" (Malden, MA: Author, 2015).

Notes: Massachusetts identified teacher equity gaps by comparing the top and bottom quartile of schools clustered according to the percentage of students from low-income families and the percentage of students of color. "Inexperienced" refers to teachers in their first year of practice. "Unqualified" refers to teachers who do not hold a valid Massachusetts teaching license. "Out-of-Field" refers to core academic teachers who are not fully licensed and/or do not hold a bachelor's degree for the subject(s) they teach for more than 20 percent of their schedule. "Preliminary License" refers to teachers who have a bachelor's degree and have demonstrated content knowledge in the subjects they teach, but have not completed an educator-preparation program. "Ineffective" refers to teachers who have received a "needs improvement" or "unsatisfactory" rating on the Summative Performance Rating of the Educator Evaluation Framework.

effectiveness.[30] For example, just 1 percent of teachers in schools that serve predominantly white students were considered "out-of-field," whereas 9 percent of teachers in schools that enroll predominantly students of color received that designation.

Urban schools and schools with large populations of English language learners (ELLs), the state's fastest growing group of students, were particularly likely to have classes taught by non-HQTs. "Stakeholders reported that a lack of preparation and support for serving diverse students—including English language learners, students of different cultures, and those with social-emotional needs—contributed to educator turnover," according to Massachusetts's teacher equity plan.[31]

To eliminate these inequities, Massachusetts is implementing a set of coherent strategies to strengthen the quality of educator preparation and its connection to schooling and the needs of diverse learners.[32] These strategies include

- implementing updated 2015 *Guidelines for the Professional Standards for Teachers*,[33] designed to create alignment across the educator career continuum and strengthen the ability of educator-preparation programs (EPPs) to meet district needs;
- using standards to design teacher-preparation programs that require candidates to demonstrate competencies through course work and field-based experiences with emphasis on teaching diverse learners, social-emotional development, and English language development;
- requiring state performance assessments for teachers and leaders for program completion and/or licensure and for use as an indicator of preparation program quality;
- instituting a revised program approval process that emphasizes the outcomes of EPPs and the use of evidence of impact of their teacher graduates on student learning in K–12 schools;
- issuing educator-preparation profiles—public reports linking data from EPPs to the academic growth of students in K–12 schools, the district of employment, survey data, and other outcomes of program completers; and
- developing a "student learning experience report" that tracks the access of individual students to experienced, prepared, and effective teachers over a three- to five-year period.[34]

Massachusetts's teacher equity plan focuses on developing a system that is performance-based, anchored in professional teaching standards, and continuously improved through the availability of new data elements. The state is convening a professional learning network of districts and schools to help systems use data in identifying challenges, share promising practices, and develop local solutions to overcome inequities.

In a similar vein, other states are taking steps to align educator development across the career continuum focusing on ensuring educators have the competencies to work effectively in high-need schools. Consequently, many states are reorienting teacher preparation around supervised clinical preparation and strengthening their partnerships with K–12 schools. In addition, state education governing boards, which oversee teacher licensure, are establishing relevant and defensible standards regarding the knowledge and competencies teachers need to enter the profession.

Like Massachusetts, Wisconsin has strengthened teachers' preservice clinical experiences and incorporated performance measures to guide program planning and development.[35] Beginning in 2016, Wisconsin will require a passing score for initial teacher licensure using the edTPA, a nationally developed teacher performance assessment for beginning teachers that provides useful data on pedagogical skills.[36] edTPA shares a

common architecture and framework for effective teaching with other successful performance assessments such as the National Board for Professional Teaching Standards's (NBPTS's) system for advanced certification. Validation studies show that well-designed teacher performance measures can differentiate between effective and ineffective teachers and predict gains in their students' learning and achievement.[37]

Meanwhile, Kentucky increased the amount of field experience teacher candidates must complete before student teaching, increased standards for literacy instruction, added requirements for training for cooperating teachers and university supervisors, and incorporated coteaching as a mandatory program component. "It is important for KDE [Kentucky Department of Education] to work with institutions of higher education to align current education practices as they relate to teacher preparation so that best practices are modeled and embedded in coursework [sic] and field experiences leading to strong teaching," says Kentucky's teacher equity plan.[38] In addition, Kentucky is revising the EPP accreditation process to align with new standards of the national program accreditor, the Council for the Accreditation of Educator Preparation (CAEP).[39] CAEP standards evaluate teacher-preparation programs based on solid evidence of positive impact on candidates' development and K–12 student learning. Traditional and alternate preparation programs must establish effective partnerships and high-quality clinical practice that provide extensive opportunities for candidates to work with diverse learners.

Similarly, Delaware's teacher equity plan cites the lack of explicit preparation of teachers and leaders to work in high-need schools as a major cause of high turnover rates and persistent equity gaps.[40] The state's educator excellence portfolio focuses on forging partnerships among districts, universities, and other organizations to develop innovative pathways and seamless transitions between preparation and induction into high-need schools. Delaware is one of only four states—along with Connecticut, Iowa, and Hawaii—that require and fund multiple-year induction programs for beginning teachers, according to a New Teacher Center (NTC) report on state policies to support new educators.[41] Delaware educators must complete a comprehensive induction program to renew their initial license. In addition, the state provides competitive grant opportunities to upgrade the mentoring and induction system, including options for school districts to target specific support to educators working in high-need schools.

Increasing Teacher Retention and Effectiveness

Teacher turnover is highest among beginning teachers, whose attrition rates steadily have increased during the past two decades.[42] State data shows that students of color, students from low-income families, as well as students with disabilities and ELLs, are taught disproportionately by first-year teachers. Not only do these students experience new teachers at higher rates, the teachers serving these students have less access to mentor support.[43] Studies repeatedly find that beginning teachers in their first year are, on average, at their lowest level of effectiveness.[44] The implications are dire for students with varied academic and social needs, who are more likely to pay the price for poor teacher retention.

Moreover, studies consistently find chronic turnover in schools with dysfunctional contexts and a lack of organizational support, imposing large financial costs on schools and reducing student achievement.[45] Estimates of the total cost per state range from $1 billion to $2.2 billion a year.[46] Comprehensive mentor-based induction, combining a package of multi-year support options, consistently shows increased teacher retention, teacher effectiveness, and student achievement.[47] "States must ensure that induction support for beginning educators is comprehensive," says Ingersoll.[48] "Limited mentoring programs of insufficient duration do not achieve the desired impact on

classroom teaching and student outcomes." [See the Alliance for Excellent Education's report *On the Path to Equity, Improving the Effectiveness of Beginning Teachers* for information on comprehensive induction and state-by-state attrition costs.]

Kentucky's analyses of its gaps in teaching quality created a sense of urgency to address the overall teacher turnover rate, particularly for high-need districts.[49] Transforming professional learning is a priority—moving to active, differentiated, and embedded experiences to expand teachers' repertoire of effective practices in closing achievement gaps. The state's teacher equity plan calls for mentoring and induction for beginning teachers beyond the first year and within the context of the districts' professional learning systems. It highlights the importance of school leadership in building and sustaining a collaborative professional culture that promotes teacher development and teamwork. Kentucky's plan emphasizes the critical role principals play in improving teachers' practice and influencing their decisions to remain in their schools.

A growing body of research reveals that improvement of teaching should be viewed as a collective rather than individual enterprise.[50] Teachers who collaborate frequently, receive meaningful feedback about their instructional practices, and are recognized for their efforts become more effective at raising student achievement at faster rates than those in schools where such practices are absent.[51] Beginning teachers, in particular, are more likely to change their teaching practices and improve student learning in collaboration with effective peers.[52] These findings challenge policymakers' common assumptions that treat teacher effectiveness as fixed. Previous educator policies often fail to consider the substantial degree to which individual teachers improve during their careers and the large variation in the pace at which teachers improve their effectiveness.[53]

Recognizing the powerful impact of the school context on teacher development, Kentucky launched a set of interrelated initiatives to empower and elevate teachers as experts and leaders and improve the teaching and learning conditions in which they work. Using school- and district-level results of NTC's Teaching, Empowering, Leading, and Learning (TELL) survey, the state developed a number of strategies to improve leadership support and align professional learning with educator need.[54] The Kentucky TELL survey data shows that approximately 70 percent of teachers and 55 percent of principals surveyed believe that the available learning opportunities are not aligned with improving teachers' professional skills or improving student performance.[55] Teachers report needing professional learning in the areas of the Common Core State Standards, differentiation of instruction, special education, closing achievement gaps, and integrating technology into instruction.

In response, Kentucky is funding a number of strategies to support teacher professionalism and extend the reach of excellent teachers. These initiatives link compensation and career advancement for educators who demonstrate their effectiveness in teaching students with the greatest needs. For example, the Kentucky Department of Education (KDE) is continuing to fund the Minority Educator Recruitment and Retention Scholarship along with the tuition assistance Traineeship Program to expand certification of special education teachers. Providing rewards and recognition for improving one's own teaching as well as the expertise and impact of others is central to advancing teaching as a profession.[56]

To build professional learning networks, Kentucky plans to tap the expertise of teachers who pass the rigorous NBPTS exams for advanced certification in their field. This new initiative—the Network to Transform Teaching, funded through ED's Supporting Effective Educator Development Grant Program—expands the number of National Board Certified teachers and offers them teacher leadership roles in providing content and pedagogical support to teachers throughout the state. The state also is funding eighteen districts to incentivize deep change in teaching practice based on research about effective professional learning. Studies show teachers improve most when provided active learning opportunities that are intensive, focused on discrete skills, aligned with curriculum and assessments, and applied in context.[57]

KDE also is launching Co-Teaching for Gap Closure, a system of coaching from the state level to the classroom level, to increase teachers' abilities to implement evidence-based instructional practices with fidelity. This initiative advances a consistent vision of excellent teaching and engages teachers in disciplined inquiry to solve problems of practice with struggling learners. Its effective implementation demands broad commitment from KDE, university partners, district and school leaders, and practitioners to transform schools into learning organizations with teaching professionals at the helm.

Equally important, Kentucky is using federal funds strategically and reviewing alternate funding streams to improve districts' teacher recruitment, hiring, compensation, and placement practices. Close collaboration with districts is ongoing to assess the impact of policies and procedures on equity gaps. For example, Kentucky is investigating ways to increase teacher pay in high-need schools through federal grant programs and plans on redirecting funding from the state legislature for staffing allocations for these schools based on the impact of districts' recruitment and diversification efforts. The state also will review districts' use of federal Title II funds to determine if professional learning activities have evidence of effectiveness and align directly with the district's student achievement goals and professional learning needs.[58]

Conclusion

Most state teacher equity plans convey deep concerns about the identified disparities in access to quality teaching and the inherent limitations within the current system for developing and supporting teachers and leaders. As the exemplars provided in this report show, all states urgently need a coherent system of educator development, implemented as a continuous improvement process and restructured to elevate the teaching profession. "America needs and our children deserve the best teacher workforce in the world: one held in high regard by our citizens, recruited from among the best and the brightest, well trained and supported on the job, and competitively compensated for their effectiveness and hard work," writes the federal Equity and Excellence Commission in its 2013 report to the U.S. Secretary of Education.[59]

It has now been one year since states first submitted their teacher equity plans to ED. A sustained commitment to raising the academic bar and closing the achievement gap for all students must be an essential part of federal and state efforts to ensure equitable access to great teaching.[60] Ultimately, the goal is to improve instructional practice, linked to student engagement and success, for all teachers, all the time.

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