



## ENSURING THE EQUITABLE DISTRIBUTION OF TEACHERS:

### STRATEGIES FOR SCHOOL, DISTRICT, AND STATE LEADERS

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This TQ Research & Policy Brief discusses the need for highly qualified and effective teachers to be distributed equitably in schools and districts across all states. It emphasizes the roles of education leaders at the school, district, and state levels in securing such teachers so that all students have equal opportunities to learn.

# CONTENTS

	<b>Page</b>
Introduction.....	1
Inequitable Teacher Distribution.....	2
The Role of School Leaders in Equitably Distributing Teachers.....	4
The Role of District Leaders in Equitably Distributing Teachers.....	10
The Role of State and Federal Leaders in Equitably Distributing Teachers.....	14
Resources.....	17
Conclusion.....	19
References.....	20

## INTRODUCTION

National and state-level policies recognize the critical role that talented teachers play in ensuring that all students learn and in building capacity for instructional excellence in schools. Teachers influence student learning more than any other factor in the school, and the dividends of effective teaching are cumulative (see “Defining the Terms”). A growing body of research suggests, however, that the distribution of high-quality teachers is not equitable within states, districts, or schools. Schools serving high percentages of minority students and students from families of low socioeconomic status are less likely to be taught by high-quality, experienced teachers (Clotfelter, Ladd, & Vigdor, 2005; Elfers, Plecki, & Knapp, 2006; Lankford, Loeb, & Wyckoff, 2002). Because teachers are central to the learning that takes place in classrooms, the equitable distribution of teachers is essential for ensuring that all students have equal opportunities to learn.

Although broader social factors also contribute to student performance, public education leaders at all levels of the education system have the opportunity and obligation to improve the distribution of teachers so that minority children and those from families of low socioeconomic status are not systematically denied access to effective teachers and high-quality learning. This TQ Research & Policy Brief discusses how school and district administrators, with the support of state and federal leaders, can influence the equitable distribution of teachers through hiring, placement, working conditions, and compensation policies and practices. The brief contains the following information:

- An explanation of the problem of inequitable teacher distribution.
- An overview of school policies and practices that appear to contribute to equitable teacher distribution.
- Strategies for school leaders to enhance teacher recruitment, hiring, and placement practices as well as improve working conditions.
- Strategies for district leaders to enhance teacher recruitment, hiring, and placement practices as well as improve teacher compensation policies.
- Strategies for state and federal leaders to facilitate district policymaking and build district capacity to support the equitable distribution of teachers.
- Resources to support leaders in promoting the equitable distribution of teachers.

### Defining the Terms

In the education field, educators and researchers use various terms to describe effective teachers and teaching quality. These differences in terminology translate to differences in research foci. When citing text, the authors of this TQ Research & Policy Brief stay true to the original researchers’ use of the following terms.

**High Quality.** This broadly used term encompasses many aspects of what makes teachers “good” at what they do. The term can be used to describe “inputs” (e.g., teacher qualifications, degrees, or experiences), practices (e.g., types of instruction used with students), or “outputs” (e.g., student performance or school performance).

**Highly Qualified.** This term, as defined in the Elementary and Secondary Education Act as reauthorized by the No Child Left Behind Act, refers to teachers who are teaching in their content area majors, have bachelor’s degrees, and are fully certified.

**Highly Effective.** This term refers to teacher contributions to student outcomes or school performance, as determined by scores on student tests or other measures of student, teacher, or school performance.

For more information about defining the terms associated with teacher quality, refer to *Communication Framework for Measuring Teacher Quality and Effectiveness* (Coggshall, 2007).

## INEQUITABLE TEACHER DISTRIBUTION

Understanding the scope and scale of teacher distribution issues is the first step toward developing effective solutions. Research indicates that teachers are not equitably distributed among schools within districts and among districts within states, which suggests that state policymakers and district superintendents should monitor teacher workforce placement and assignment and take action when necessary. Researchers have focused less on the problem of inequitable teacher distribution between classrooms in a given school, but several studies suggest that social norms and official policies can create staffing inequities within schools as well.

New research and greater emphasis on systematic data collection have contributed to a growing national concern about inequitable distribution of effective teachers. Studies consistently conclude that students attending high-poverty, high-minority schools are more likely than other students to be:

- Taught by less qualified and less experienced teachers (Clotfelter, Ladd, Vigdor, & Wheeler, 2007; DeAngelis, Presley, & White, 2005; Ingersoll, 2002).
- Taught by teachers assigned to classes outside their content area or grade-level specialization (Lashway, 2004).
- Taught by teachers trained at less competitive colleges or universities (Lankford et al., 2002).
- Subjected to higher teacher-turnover rates (Allensworth, Ponisciak, & Mazzeo, 2009; Hanushek, Kain, & Rivkin, 2004; Ingersoll & Perda, 2009; Malen, Croninger, Muncey, & Redmond-Jones, 2002).

Research has focused on teacher preference, mobility, and attrition as explanations for inequitable distribution within the teacher workforce.

## PREFERENCE

Polls of young teachers indicate that they are motivated to work in high-need schools to make a difference in students' lives (see "The Gen Y Silver Lining"). Many teachers have the opportunity to do so because, as Mazzeo and Berman (2003) suggest, novice teachers are more likely than experienced teachers to work in low-performing schools with high proportions of minority students and students from families of low socioeconomic status. Other studies indicate, however, that teachers would prefer to teach in communities similar to the places where they grew up (Loeb & Reininger, 2004), which—given national teacher demographics—is a challenge for recruiting teachers to urban and rural schools.

## MOBILITY

Teacher movement from one school to another can create imbalances in the teacher workforce. In a study conducted by Luekens, Lyter, Fox, and Chandler (2004) using the 2000–01 Teacher Follow-Up Survey, 40 percent of teachers who moved to a new school did so most commonly for an opportunity for a better teaching assignment. Evidence suggests that when novice teachers migrate

### The Gen Y Silver Lining

Results of a teacher survey, conducted as part of the Retaining Teacher Talent study (Learning Point Associates & Public Agenda, 2009) indicate that a critical factor in teachers' career choices, particularly for Generation Y (those born between 1977 and 1995), is the desire to positively affect children's lives. For 95 percent of Gen Y teachers, "the idea of putting underprivileged children on the path to success" was identified as the primary factor (39 percent) or a secondary factor (56 percent) that motivated their decision to enter the teaching profession (Public Agenda, 2009).

to new schools, they are more likely to leave schools with lower test scores and those that serve high proportions of minority students and students from families of low socioeconomic status (Scalfidi, Sjoquist, & Stinebrickner, 2007). Similar mobility patterns appear for more experienced teachers (see Clotfelter, Glennie, Ladd, & Vigdor, 2008).

## ATTRITION

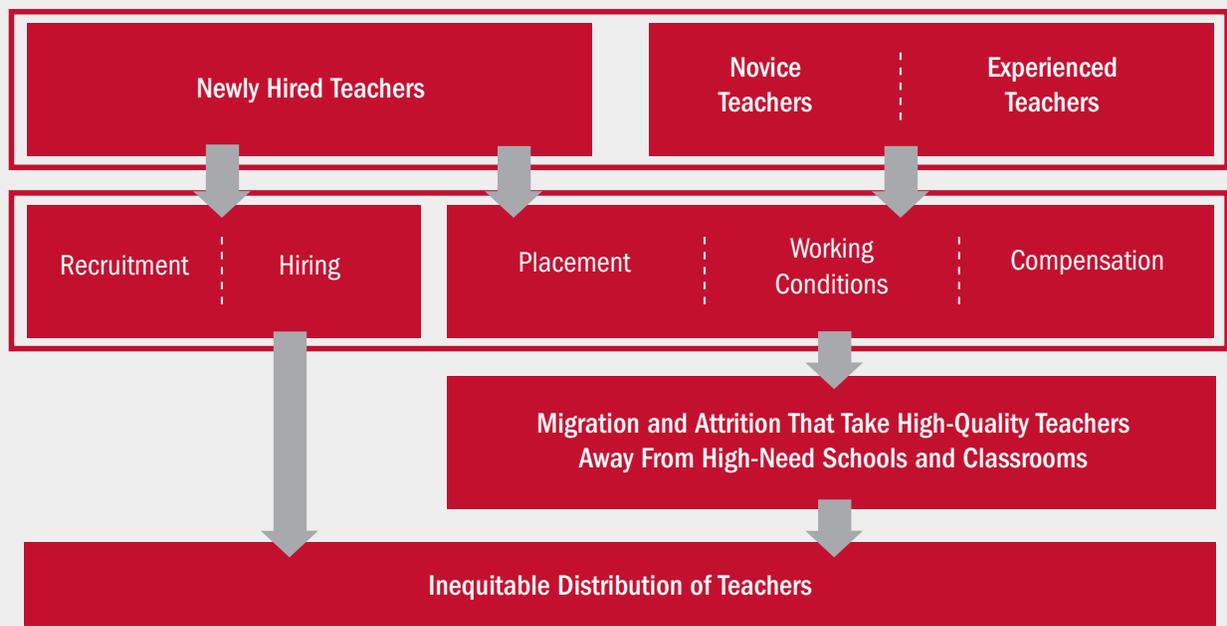
Finally, teacher workforce distribution is influenced by teacher attrition—when teachers opt to leave the classroom entirely for such reasons as retirement, administrative assignment, or employment outside the education sector. Ingersoll (2003) found that approximately 46 percent of all teachers leave the profession within five years of entering it. Although personal characteristics influence teacher attrition, Borman and Dowling (2008) found attrition to be strongly associated with teacher working conditions.

Preference, mobility, and attrition influence the distribution of teachers across the career continuum (i.e., new hire, novice, experienced) and whether different approaches to recruitment, hiring, placement, working conditions, and compensation will alleviate or exacerbate distribution problems (see Figure 1).

Research suggests that a complex mix of social and financial factors may contribute to teacher preference, mobility, and attrition trends. Fully addressing all factors is likely beyond the purview of individual education leaders. However, multiple education leaders—state policymakers, superintendents, union representatives, principals, and others—create programs and incentives that influence the distribution of teachers. Concerted efforts among state, district, and school-level leaders are necessary to facilitate equitable teacher distribution.



**Figure 1. Contributors to Inequitable Distribution Across the Teacher Career Continuum**



## THE ROLE OF SCHOOL LEADERS IN EQUITABLY DISTRIBUTING TEACHERS

As the second most influential school-level factor on student achievement—next to principals—principals and other school leaders directly and indirectly influence personnel recruitment, hiring, and retention through development and oversight of policy, budgets, and procedures (Leithwood, Louis, Anderson, & Wahlstrom, 2004). As shown in Figure 2, effective school leadership directly affects teachers and indirectly affects student learning by creating conditions that enable the recruitment, retention, and appropriate distribution of teachers and the quality of instruction that they deliver.

This section of the brief focuses on the following school-level factors: (1) recruitment, hiring, and placement and (2) working conditions.

### STRATEGIES FOR RECRUITMENT, HIRING, AND INITIAL PLACEMENT

Principals usually participate in teacher hiring for their school because they are in the best position to ascertain candidate fit to school culture. The district’s role in recruitment, hiring, and placement of teachers will be elaborated upon in the next section, but the following practices—targeted specifically to school principals—may be helpful when hiring teachers to improve equitable distribution.

### PARTICIPATE IN AN EDUCATION NETWORK

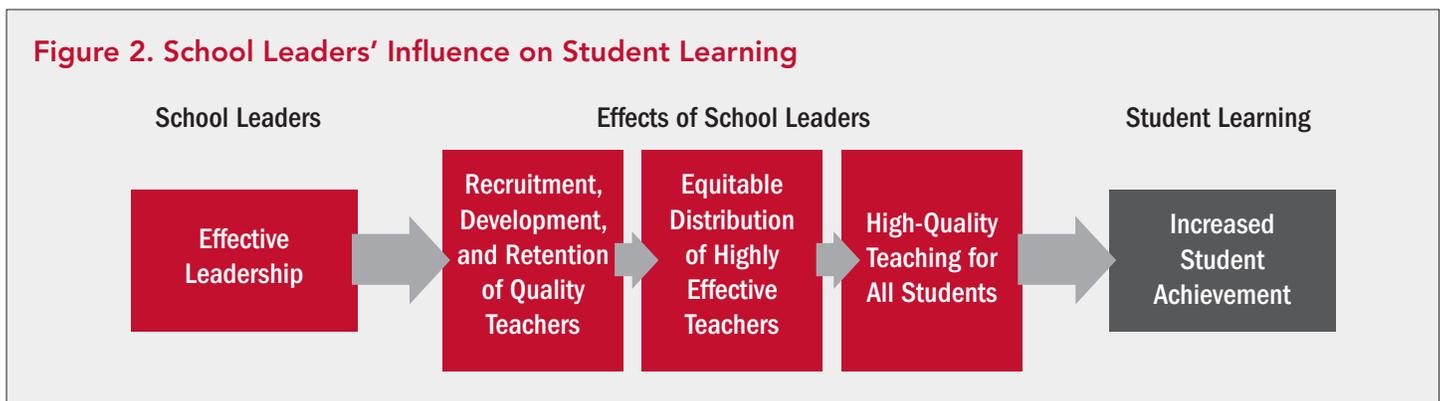
Developing formal and informal partnerships with other school principals, districts, and universities or colleges expedites recruitment and hiring processes and allows principals to better target high-quality novice and experienced candidates. Such networks should be broadened beyond a principal’s current network to include additional contacts for recruitment and hiring purposes.

### CREATE ACCURATE AND POSITIVE REPRESENTATIONS OF THE SCHOOL

A principal, particularly in a high-need school, should be available during the recruitment process to meet prospective applicants and share the school’s strengths and mission. The school website and print materials should accurately represent the school performance status and improvement agenda, highlighting the positive characteristics. The design and content of these materials should denote school culture and working conditions. School staff, particularly mentors, should be aware of these resources and have access to them.

### ESTABLISH OBJECTIVE HIRING CRITERIA

Prior to interviewing teacher candidates, school leaders can establish hiring criteria and create rubrics to focus the attention of interviewers on criteria associated not only with teacher



qualifications and experience but also with teacher effectiveness (i.e., effective instructional practice that leads to improved student outcomes). Such criteria also should focus on attitudinal or dispositional characteristics that suggest a desire to teach in a high-need environment.

## RETHINK TEACHER PLACEMENT AND ASSIGNMENT PRACTICES

Principals can consider creating opportunities for coteaching assignments or pairings (e.g., an experienced teacher and a novice teacher offer the same class to different students). This approach can help acculturate new teachers to the school and provide them with opportunities for mentoring and coaching that will help them to focus on being effective and motivate them to remain in the classroom. By keeping administrative assignments to a minimum, school leaders also can help new teachers get acclimated.

## STRATEGIES RELATED TO IMPROVING WORKING CONDITIONS

School leadership also significantly affects the equitable distribution of teachers by creating—or failing to create—positive, supportive working conditions. School leaders greatly influence teachers' working conditions, including physical working conditions, teachers' instructional and noninstructional work assignments, professional learning opportunities, and the ways and spirit with which work is executed and learning takes place.

According to the survey conducted as part of the Retaining Teacher Talent study (Learning Point Associates & Public Agenda, 2009), teachers associate positive working conditions most strongly with the following: supportive school leadership, a spirit of teamwork and cooperation, and a positive and caring atmosphere (Public Agenda, 2009) (see “Positive Working Conditions”).

Luekens et al. (2004) found that 32 percent of teachers who moved to a new school did so because of dissatisfaction with workplace conditions. Similarly, research on former teachers in Illinois conducted by DeAngelis, Peddle, Trott, and Bergeron (2002) found that new teachers (those with one to five years of experience) who left the Illinois public sector school system in 2000 cited working conditions as the primary reason for not continuing in their jobs. Approximately one in five new teachers (19 percent) left for this reason.

School leaders need to focus on improving working conditions in order to facilitate equitable distribution, particularly in high-need schools (see “The Importance of Improving Working Conditions in High-Need Schools”). Many of the same approaches that school leaders can take to improve working conditions to achieve an equitable distribution of teachers also will create a learning atmosphere that is much more effective for students. As stated in the title of the report by Hirsch, Emerick, Church, and Fuller (2007), “Teacher working conditions are student learning conditions.”

## Positive Working Conditions

Research (e.g., Guarino, Santibañez, & Daley, 2006; Johnson, Berg, & Donaldson, 2005; Reeves, Emerick, & Hirsch, 2007) cites the following positive working conditions as being important to teachers:

- Work assignments
  - Input on schedules and class assignments
  - Total student load
  - Assignment to classes in area of expertise
  - Shared responsibility for managing student discipline
  - Reduced number of courses assigned in the first year of teaching
  - Access to teachers' aides and other support staff
  - Rotation of teaching responsibilities
  - Rotation of quasi-administrative roles
  - Limited committee involvement in first years of teaching
  - Freedom from too many disconnected initiatives or curricular reforms
- Opportunities for growth
  - Opportunities for leadership positions
  - Opportunities to collaborate with experts on curriculum and instructional design
  - Opportunities to receive constructive feedback from school leadership and peers
  - Access to induction and mentorship for new teachers
  - Access to ongoing, job-embedded, differentiated professional development
  - Administrative support when needed and instructional guidance whenever possible
- The atmosphere within the school and community
  - Positive student behavior
  - Student motivation to do well in school
  - Trusting, collegial, positive, and professional culture
  - Engagement with school leadership and their decision making
  - Engagement with wider community
  - Parental support and involvement
  - Administrative celebration of accomplishments and recognition when deserved
  - Violence free
- Physical working conditions
  - Functioning heating, air conditioning, and ventilation systems; toilets; copy machines, and so on
  - Clean, well-kept facilities
  - Functional, well-lit, and professional offices and classrooms
  - Modern, reliable, and accessible instructional technology

**The Importance of Improving Working Conditions in High-Need Schools**

The quality of school leaders and the working conditions they create are critical to any school’s ability to recruit and retain effective teachers. Ensuring equitable teacher distribution requires even greater attention to working conditions by school leaders in high-need schools for the following reasons:

- High-need schools tend to have a steeper “working conditions hill” to climb than low-need schools. On the whole, high-need schools must address a greater number and range of student behavioral issues, with less parental involvement and support, in what is often a more complex and diverse educational environment. As a result, creating equally attractive working conditions requires a greater effort.
- High-need schools tend to have fewer resources to compensate for less attractive working conditions than do low-need schools. Labor economics theory contends that in general, workplaces pay a “compensating differential” to motivate individuals to accept positions for which working conditions are comparatively unattractive. By contrast, in teaching, high-need schools tend to pay lower salaries to the teachers who work in the most challenging environments (Goldhaber, 2008). Therefore, working conditions in high-need districts must be better, and certainly no worse, than those in the low-need districts with which they are competing for teachers.

Unfortunately, evidence suggests that teacher working conditions are poor in urban and high-minority districts. A 2003 study by Public Agenda found that half of all the teachers surveyed think their class size and workload are manageable, with about 31 percent describing their working conditions as “very good.” Among teachers in urban schools and high-minority schools, the working conditions are considered “good” or “very good” by only 24 percent and 21 percent of teachers, respectively (Farkas, Johnson, & Duffett, 2003).

The following strategies can help teachers and school leaders to address undesirable working conditions and reverse negative teacher mobility and attrition trends.

**PROMOTE A SCHOOL ATMOSPHERE THAT IS TRUSTING AND RESPECTFUL**

Surveys of teachers across the country indicate that positive views about school atmosphere are correlated with teachers’ intentions to stay in their school (Hirsch, 2006; Hirsch, Emerick, Church, & Fuller, 2006; Hirsch et al., 2007). For example, 66 percent of teachers in North Carolina who intended to stay in their school agreed that their school atmosphere was trusting and respectful; only 22 percent of teachers who intended to leave their school agreed, whereas 44 percent of teachers who intended to leave the profession agreed

(Hirsch et al., 2006, 2007). In Alabama, 73 percent of teachers who intended to stay in their school agreed that their school atmosphere was trusting and respectful, whereas only 32 percent of teachers who intended to leave their school and 50 percent of teachers who intended to leave the profession agreed (Hirsch, 2006).

**ENSURE THAT THE ENTIRE TEACHING STAFF IS HIGHLY MOTIVATED, COLLEGIAL, AND COLLABORATIVE**

In the Retaining Teacher Talent survey, teachers were asked whether they intended to stay in the profession and, if not, what improvements might make them reconsider. Many of the factors that could change teachers’ minds about leaving are directly affected by school leaders.

For example, working with a highly motivated team of teachers was identified as a factor that would *definitely* change the minds of 46 percent of teachers who plan to leave the profession and a factor that *might* change the minds of an additional 27 percent of such teachers (Public Agenda, 2009).

### ENSURE A SAFE SCHOOL ENVIRONMENT

School leaders can take the lead in ensuring that students (and teachers) are safe on school grounds. The Retaining Teacher Talent study found that 6 percent of teachers viewed threats to personal safety as a major drawback to the profession, and 32 percent viewed safety threats as a minor drawback (Public Agenda, 2009). These concerns are grounded in the reality of teaching in schools today. In U.S. cities, 10 percent of teachers were threatened with physical attack or actually physically attacked in the 2007–08 school year; in non-city schools, this figure was 5 percent (National Center for Education Statistics, 2009). In certain schools, the incidence of threats and attacks on teachers is even higher than that reflected by these averages. School leaders need to implement and maintain effective systems for school safety by establishing a fair and transparent student discipline policy that is implemented in a consistent manner.

### PROVIDE STRONG INSTRUCTIONAL SUPPORT

According to the Retaining Teacher Talent survey, working with a principal who really helps teachers improve their effectiveness was a factor that would *definitely* change the minds of 38 percent of teachers who plan to leave the profession, and it was indicated as a factor that *might* change the minds of an additional 29 percent of such teachers (Public Agenda, 2009). Similarly, inadequate administrative support can influence teachers either to leave the profession or to transfer to other schools in a way that may exacerbate distribution problems. For example, Luekens et al. (2004) found that 38 percent of the teachers they surveyed moved to a new school because of inadequate support from administrators.

### SYSTEMICALLY COLLECT AND USE DATA ON TEACHER WORKING CONDITIONS

Improving the distribution of teachers can start by systematically collecting and using data on teacher working conditions. With these data, school leaders can make strategic decisions about course assignments, staff development, and other programming. In addition to making strategic decisions, school leaders can garner support from teachers and other key stakeholders to make changes that will improve the equitable distribution of teachers.

### IMPROVE STUDENT BEHAVIOR AND MOTIVATION

According to a recent study by Allensworth et al. (2009), student behavior is perhaps the most critical factor affecting teacher retention rates in high-need schools. In other research, working with a principal who really focuses on ensuring that students are well-behaved was identified as a factor that would *definitely* change the minds of 40 percent of teachers who plan to leave the profession, and it was indicated as a factor that *might* change the minds of an additional 29 percent of such teachers (Public Agenda, 2009).

In addition, beginning teachers who left teaching due to “dissatisfaction” (as opposed to family reasons or pursuit of another job) commonly cited student discipline (35 percent) and poor student motivation (17 percent) as reasons for leaving the profession in a study conducted by Ingersoll and Smith (2003).

Similar results were found in a survey conducted by the National Comprehensive Center for Teacher Quality (TQ Center) and Public Agenda (2007) in which 51 percent of respondents at the high school level viewed having too many unmotivated students as a major drawback to the profession and 41 percent viewed disciplinary and behavioral problems as major drawback.

For more information about making improvements in this area, see “Resources for Improving Student Behavior and Motivation.”

## INCREASE PARENTAL INVOLVEMENT

Allensworth et al. (2009) suggest that next to student discipline, the most crucial teacher retention factor for high-need schools is parental engagement. They note that the level of parental interaction with teachers (e.g., at parent–teacher conferences) influences teacher retention more than general parental involvement with their children’s learning. Similarly, when asked to identify which single factor would improve the teaching profession, 23 percent of Gen Y teachers participating in the Retaining Teacher Talent survey cited increased parental involvement, accountability, support, and communication. This response was the most highly rated response, with twice as many teachers citing it than any other single change to the profession (Public Agenda, 2009).

### Resources for Improving Student Behavior and Motivation

- *Setting the Stage for Strong Standards: Elements of a Safe and Orderly School* (American Federation of Teachers, 2003)  
<http://archive.aft.org/pubs-reports/downloads/teachers/settingthestage.pdf>  
This guide for schools features strategies for creating safe and orderly environments.
- *School Safety and Security Toolkit: A Guide for Parents, Schools, and Communities* (National Crime Prevention Council, 2003)  
[http://www.ncpc.org/cms-upload/ncpc/File/BSSToolkit\\_Complete.pdf](http://www.ncpc.org/cms-upload/ncpc/File/BSSToolkit_Complete.pdf)  
This step-by-step guide offers tools for parents, schools, and communities to work together to improve school safety.

For more information about making improvements in this area, see “Resources for Increasing Parental Involvement.”

### Resources for Increasing Parental Involvement

- *Critical Issue: Supporting Ways Parents and Families Can Become Involved in Schools* (Nathan, 1996)  
<http://www.ncrel.org/sdrs/areas/issues/envrnmnt/famncomm/pa100.htm>  
*Critical Issue: Creating the School Climate and Structures to Support Parent and Family Involvement* (Comuntzis-Page, 1996)  
<http://www.ncrel.org/sdrs/areas/issues/envrnmnt/famncomm/pa300.htm>  
The resources found on these websites allow school leaders to hear directly from experts and offer strategies to involve parents and families with schools and to create a school climate that supports this involvement.
- *92 Ways to Involve Families and the Community in Education* (Pritchard Committee for Academic Excellence & Partnership for Kentucky Schools, 1997)  
[http://www.k12.hi.us/~konawahs/92\\_ways\\_to\\_involve\\_families.htm](http://www.k12.hi.us/~konawahs/92_ways_to_involve_families.htm)  
*Involving Parents: Best Practices in the Middle and High Schools* (Iowa Statewide Parent Information Resource Center, 2006)  
<http://www.iowaparents.org/files/involvingparentmshstch.pdf>  
These resources provide information to help schools engage families and communities in education.



## THE ROLE OF DISTRICT LEADERS IN EQUITABLY DISTRIBUTING TEACHERS

Whereas school-level leaders clearly influence equitable teacher distribution, particularly by establishing favorable working conditions, district-level leaders also influence teacher distribution by establishing policies and programs intended to recruit, hire, place, and retain the best teachers. District-level leaders also can monitor which schools are consistently hard to staff or underperforming and then negotiate appropriate staffing changes. By being strategic about allocating and building talent within the district, district leaders can achieve a stronger, more equitable teacher workforce so that all students enjoy adequate opportunities to achieve.

School districts vary in size, from more than 1 million students in New York City Public Schools to less than 200 students in more rural settings. The number of schools within a district also varies from one, in many cases, to more than 1,600. These variations imply that equitable teacher distribution has different meanings across districts. Regardless of such variations in context, achieving an equitable distribution of teachers within a district requires strategic, sustained attention and action focused on teacher recruitment and retention for all classrooms.

This section of the brief focuses on the following district practices: (1) recruitment, hiring, and placement and (2) compensation. In addition, the importance of ongoing monitoring by districts of the distribution of teachers within and between schools is addressed.

## STRATEGIES RELATED TO TEACHER RECRUITMENT, HIRING, AND PLACEMENT

Effective teacher recruitment and hiring ensures that the right people “get on the bus” (Collins, 2001). Wellins, Smith, and Erker (2009) cite the comment of Douglas Bray, Ph.D., a corporate sector talent management expert: “If you have only one dollar to spend on either improving the way you develop people or improving your selection and hiring process, pick the latter” (p. 8). Wellins et al. go on to explain:

Hiring for the right skills is more efficient than developing those skills. What about the areas that are developable, like interpersonal skills, decision-making, or technical skills? Assessing those areas at the time of hire is likely to cost less than developing them later. (p. 8)

In addition, Wellins et al. indicate that some critical skills, such as judgment and adaptability, “are impossible, or at least very difficult, to develop.... But you can get a read on these areas during a well-designed hiring/promotion process” (p. 8).

A study by The New Teacher Project found that with targeted recruitment efforts, large urban districts are able to attract many more high-quality applicants than they need. These high-quality candidates apply not as a back-up plan but due to genuine interest in teaching in these typically high-need schools. In fact, it was found that roughly 80 percent of these teachers prefer such districts to low-need ones (Levin & Quinn, 2003). In addition, a study of Illinois teachers’ workplace preferences found that for approximately half of newly certified teachers, there was no school or district in the state where they would not be willing to teach; the other half of the teachers surveyed indicate that their minds could be changed if improvements occurred in safety, student behavior, and availability of resources for teaching in these at-risk schools (DeAngelis et al., 2002).

At the time of hiring, teacher assignment and placement also must be considered. When selecting a teacher candidate, hiring committees often have in mind a particular placement for a new teacher. But too often, novice teachers are placed with more challenging students or in other less desirable situations while more experienced teachers secure the more coveted assignments based on their seniority. Being informed and strategic at the time of hiring about placing teachers in schools and classrooms that are appropriate in light of both the teachers' *and* students' needs allows districts to contribute positively to the effectiveness of new hires and avoid restaffing later.

Moreover, strategic hiring and placement decisions can help districts achieve their distribution objectives. Hiring and placement for equitable distribution, however, is not a once-a-year issue to be dealt with only when extending job offers. Rather, it is an ongoing goal, requiring the sustained involvement of teacher associations and the effective use of data to guide staffing decisions. District leaders should consider the following strategies to promote equitable teacher distribution.

## EXPAND THE CANDIDATE POOL

The ideal way to achieve equitable teacher distribution is to expand the pool of highly talented teachers so that there are excellent teachers available to be hired to staff each and every position within the district. Districts can expand the pool through any number of outreach activities, including advertising campaigns, online recruitment, creative incentives, targeted attendance at job fairs, and the implementation of programs such as “grow-your-own” programs (see Hayes & Behrstock, 2009, for examples of district efforts to promote the teaching profession). Furthermore, districts can avoid the shrinking of this pool over time by implementing efficient, early hiring schedules that facilitate rather than hamper the applications of the most effective teachers to work in high-need areas (Levin & Quinn, 2003).

## REWARD SENIORITY WITHOUT PUNISHING HIGH-NEED STUDENTS

As teachers progress through the stages of their careers, there is a proclivity toward taking advantage of policies that reward their seniority by allowing them to select the types of classrooms or schools where they teach. As a result, more experienced teachers tend to move away from teaching students with disciplinary problems and lower level “gateway” or introductory classes. Many district–union collective bargaining agreements require this seniority-based privilege. Yet these policies often are not as stringent as critics suggest, and many teachers unions are willing to work with districts to modify contracts for the sake of improvements in student learning (Cohen-Vogel & Osborne-Lampkin, 2007).

## SCREEN AND SELECT NEW CANDIDATES

The applicant screening and selection process is the opportune time to choose teacher candidates who are capable of achieving success in high-need schools. Districts should create a pool of teachers who have been carefully screened and found to meet district criteria. Hiring committees should be trained in making effective selection decisions. According to Teach For America officials, some of the predictors of success in a high-need setting that can be assessed at the time of hiring include a track record of perseverance or “grit,” high level of “life satisfaction,” and, most importantly, a history of setting ambitious goals and leading them to fruition (Ripley, 2010).

The screening and hiring process involves both district and school-level officials, with districts like Chicago and Seattle leading a trend toward greater school-level decision making related to hiring (Plecki, Alejano, Knapp, & Lochmiller, 2006). In the majority of cases, principals are key players in the interview process (Liu & Johnson, 2006). Decentralized hiring can facilitate equitable distribution in that these individuals are better placed to hire candidates who will fit within the

school atmosphere and, thus, be more likely to stay and succeed. However, school-based hiring may negatively affect equitable teacher distribution if the poorer performing schools in effect “select” less effective teachers. For example, Rutledge, Harris, Thompson, and Ingle (2008) found that principals value different types of teacher characteristics, and these values are reflected in their teacher hiring decisions. In theory, this could result in the possibility that ineffective school leaders and existing teachers hire ineffective teachers. To avoid a cycle of low-quality hiring, districts can carefully screen all applicants in advance, train leaders to hire effective teachers, and provide oversight to guarantee that no students are short-changed.

### INVOLVE TEACHERS AND SCHOOL LEADERS IN ONGOING DISCUSSIONS ABOUT DISTRIBUTION

Career decisions are not made overnight, and in some cases, transferring from a low-need to a high-need school can be a significant life change for teachers. District officials should engage teachers in dialogue regarding the district’s distribution status and needs and, to the extent possible, spark interest and create opportunities for high-performing teachers to learn more about their options for transferring to the schools and classes where their impact would be greatest. In a recent speech, Secretary of Education Arne Duncan noted how programs like Teach For America have succeeded in making teaching “cool” (Duncan, 2009). In fact, they have succeeded in making teaching in high-need schools “cool.” More generally, education and promoting positive change are valued by the incoming generation of workers even more so than in the past. District officials can capitalize on this change in outlook when they engage teachers in conversation about the value the district places on ensuring that teachers’ expertise and student needs are well aligned and about opportunities in the district to maximize their impact on children and society.

### INCREASE THE NUMBER OF TEACHING AND OTHER STAFF POSITIONS

In addition to teacher *quality* considerations, districts need to consider teacher quantity. The quantity of teachers working in a school may affect class size and course load (e.g., total student load) and the amount of non-classroom time available to teachers for planning, collaborating, and professional growth. Although evidence on the importance of class size is mixed (Finn, 1998; Finn & Achilles, 1999; Hoxby, 2000), teachers clearly indicate that a lack of time for these activities and an overwhelming workload influence their decisions to leave the profession (Hirsch et al., 2006; Ingersoll, 2003; Reichardt, Snow, Schlang, & Hupfeld, 2008). When asked what one change would most improve student achievement, 13 percent of respondents in the Retaining Teacher Talent survey cited reducing class size. The survey also found that 38 percent of teachers felt that inadequate planning time prevented them from creating high-quality lesson plans (Public Agenda, 2009). Therefore, more manageable class sizes and schedules can incent teachers to high-need schools. Coupled with professional development on how to change instructional practices for smaller classes, such practices also improve the effectiveness of these teachers.

In Eugene, Oregon, for example, the district strategically created additional teacher positions in at-risk schools. The superintendent and school board designated five elementary schools with declining enrollment and/or a large number of students in need of academic improvement as “academy elementary schools.” The schools received additional resources to hire student achievement coordinators (staff members who focus on increasing student achievement among the most at-risk students by analyzing data and determining the appropriate interventions and teaching strategies to improve learning) (Anthes, 2009). Such strategies can lessen the load of teachers in high-need schools.

In addition to bearing in mind the number of teachers that must be hired to keep class size manageable and time for planning and preparation available, districts also should consider hiring other nonteaching staff to lessen the load of paperwork on teachers. Another finding from the Retaining Teacher Talent survey indicated that having less paperwork to fill out was a factor that would *definitely* change the minds of 37 percent of teachers who plan to leave the profession; and it was claimed to be a factor that *might* change the minds of an additional 32 percent of such teachers (Public Agenda, 2009).

Having hired and placed teachers with equitable distribution in mind, district leaders should make sure that teachers in high-need settings have access to training and support specifically related to working with students from diverse cultural backgrounds and students from families of low socioeconomic status. District leaders also are well-positioned to balance financial and human resource allocations to ensure that teacher allocations to high-need schools do not have unintended, detrimental effects for other schools' staffing.

## STRATEGIES RELATED TO TEACHER COMPENSATION

Examining the responses of beginning teachers in the nationally representative Schools and Staffing and Teacher Follow-Up Survey, Ingersoll and Smith (2003) found that a large majority (79 percent) of teachers who left the teaching profession due to dissatisfaction cited salary as a reason for leaving. Salary policies often exacerbate the inequitable distribution of teachers because the highest poverty schools tend to offer the *least* attractive salaries (Goldhaber, 2008).

Although teachers typically do not enter the profession with salary as a primary consideration, they do cite it as a key drawback to the status of the profession, as a contributor to their decisions to leave, and as an issue that lowers the overall quality of potential teacher candidates (Ingersoll & Perda, 2009; Learning Point Associates & Public Agenda, 2009). Moreover, despite their willingness to join the profession notwithstanding salaries, new teachers tend to gravitate toward higher salaried positions that typically exist in more affluent schools. In addition, although teachers do not join the profession for the salaries paid, other potentially highly effective teachers *do not* join the profession because the salaries paid are often viewed as inadequate compared to their other options. Combined, these issues affect teacher recruitment and retention in ways that are detrimental to equitable distribution goals.

## COMPENSATE TEACHERS WHO TEACH IN HIGH-NEED SCHOOLS

To equitably distribute teachers, districts can create salary policies that incorporate incentives for teaching in high-need settings. Bonuses for teaching in challenging classrooms, schools, or neighborhoods encourage the movement of effective teachers to high-need schools and classrooms through choice rather than force. Some evidence suggests that such salary incentives are effective in that they provide not only a monetary incentive but also recognition for a teacher's choice to work in a challenging environment (Clotfelter, Glennie, Ladd, & Vigdor, 2006). Although teachers are not necessarily supportive of all forms of differentiated or performance-based pay, roughly 70 percent of teachers support bonuses for teachers who take on more challenging assignments (Coggshall, Ott, Behrstock, & Lasagna, 2009).

## COLLABORATE WITH ALL STAKEHOLDERS IN SETTING TEACHER COMPENSATION POLICY

Districts and school boards should work collaboratively—both with unions to differentiate pay as an incentive for equitable distribution and with taxpayers to generate the resources needed to provide sufficient salaries—to attract effective teachers for all students.

## MONITORING THE DISTRIBUTION OF TEACHERS BETWEEN AND WITHIN SCHOOLS

To use hiring, assignment, and compensation policies effectively, districts must monitor the distribution of teachers between and *within* schools. In so doing, districts should go beyond compliance with the requirements outlined in the Elementary and Secondary Education Act (ESEA) as reauthorized by the No Child Left Behind (NCLB) Act (Title I, Part A, Subpart 1, Section 1111[b][8][c]) on which they are monitored by their state education agency (SEA) to ensure that minority students and those from families of low socioeconomic status are not taught disproportionately by out-of-field, inexperienced, or unqualified teachers. Rather, they should assess *between-* and *within-*school teacher distribution using as many indicators of teacher effectiveness as possible, such as the proportion of teachers who are highly qualified, experienced, and certified by the National Board for Professional Teaching Standards; teach out-of-field subjects; consistently receive strong evaluations; and achieve high value-added student test score gains. Because this distribution changes over time as teachers obtain more experience and expertise and student demographics evolve, ongoing monitoring is critical.



## THE ROLE OF STATE AND FEDERAL LEADERS IN EQUITABLY DISTRIBUTING TEACHERS

Since 2002, under the current provisions of ESEA (Title I, Part A, Subpart 1, Section 1111[b][8][c]), the federal government has required SEAs to collect data on the distribution of teachers within their districts and, where inequities exist, develop strategies to address those inequities. These strategies, which are required to be updated on an ongoing basis, are summarized in teacher equity plans that each state submits to the U.S. Department of Education.

The bipartisan federal prioritization of teacher effectiveness and, in particular, equitable distribution of teachers, has been reiterated more recently in the American Recovery and Reinvestment Act (ARRA) of 2009. As one of four assurances that must be met to be eligible for federal grant funding, teacher effectiveness and distribution are issues that are likely to remain in the national policy spotlight.

To create a more equitable distribution of teachers, the state and federal government can encourage, require, support, and fund local initiatives aimed at providing high-quality teachers for all students. This section of the brief focuses on the following state and federal strategies: (1) facilitating district policymaking and (2) building district capacity.

## STRATEGIES TO FACILITATE DISTRICT POLICYMAKING

Although most states consider themselves to have local control, great authority over the equitable distribution of teachers lies with state and federal leaders because they can influence systemwide decisions at the district level. Among the types of policy instruments at the state and federal governments' disposal are mandates and inducements. Mandates are intended to force

compliance with state regulations; they can lead to immediate action but come with the cost of enforcement. Inducements provide financial incentives in exchange for certain policy developments. They leave more choice to those implementing the policy but are associated with various costs including the following (McDonnell & Grubb, 1991):

- The direct costs of the inducement itself
- Costs associated with overseeing or monitoring the use of funds
- Slippage costs associated with previous funding being supplanted, rather than supplemented by the inducement
- Opportunity costs of the inducement detracting from engagement in other initiatives
- Matching costs, which are sometimes required to demonstrate the commitment of one funding source to another
- Excess costs of expanding or continuing the policy above and beyond the initial funding

State leaders can encourage districts and schools to adopt policies and practices that are likely to promote equitable teacher distribution. They can either provide funds to districts to use as they please if they adopt a certain policy, or they can provide the funds to incentivize teachers to distribute themselves more equitably (e.g., a housing incentive for teachers in high-need settings). Where inducement fails, state leaders can mandate that districts adopt policies or procedures to facilitate equitable distribution.

Mandates are likely to be better received if they are backed up by compelling data that convey the nature of the problem being addressed. In a 2009 TQ Center Research & Policy Brief, Jennifer Imazeki and Laura Goe provide nine recommendations for SEAs to collect evidence that will help facilitate local efforts to promote equitable teacher distribution (see “Recommendations for States: Collecting Data to Facilitate Local Equitable Distribution Efforts”).

## STRATEGIES TO BUILD DISTRICT CAPACITY

In addition to mandating or incentivizing districts to adopt policies that are conducive to providing effective teachers for students from all backgrounds, state and federal leaders can help them build capacity to make effective decisions. For example, states can provide technical assistance to local decisionmakers, such as data, models or guides, and expertise related to improving teacher effectiveness.

Other ways to build district capacity are to allocate resources to facilitate practices, such as enhancing the instructional resources and physical working environments in high-need schools.

State efforts related to equitable teacher distribution are entangled in the wider debate about equitable funding distribution. Costs associated with staffing typically consume 60 percent to 80 percent of a school’s budget (Barber & Mourshed, 2007). The comparability provision in Title I (Part A, Subpart 1, Section 1120 [c]) aims to equalize funding by requiring that states allocate resources equitably—so that high-poverty and low-poverty schools have access to comparable dollars (Alliance for Excellent Education, 2008). In recent decades, campaigns to equalize per-pupil expenditures have emerged in state legislatures and the courts, and the resulting decisions have affected the resources available to high-need districts for securing enough effective teachers. Although the political implications of school funding reform are many, the Retaining Teacher Talent survey found that Generation Y teachers viewed more secure and equitable funding as the second most important change needed to improve the teaching profession (Public Agenda, 2009). This finding lends hope to the idea that more high-quality educational opportunities will be available to students in at-risk settings in the future.



## Recommendations for States: Collecting Data to Facilitate Local Equitable Distribution Efforts

Collecting relevant data can be an effective first step for state leaders in addressing inequitable distribution issues. In the TQ Research & Policy Brief titled *The Distribution of Highly Qualified, Experienced Teachers: Challenges and Opportunities*, Imazeki and Goe (2009) offer the following recommendations for state leaders:

**Recommendation 1.** Use key indicators to identify schools most in need of assistance rather than targeting all schools that fall into the top quartile.

**Recommendation 2.** Maintain comprehensive data on characteristics of teachers, including teaching experience, certification, teacher test scores (e.g., Praxis or other certification examinations), participation in induction programs and other professional development, salary and other compensation, and course-level teaching assignments.

**Recommendation 3.** Link teachers with all students they teach, thus making it possible to collect and analyze data about student characteristics and outcomes related to specific teacher characteristics, such as teacher experience and qualifications. Analyses of these data will help illuminate both who teaches whom and the interaction between teacher and student characteristics, as reflected in teacher outcomes (e.g., retention and transfer) and student outcomes (e.g., achievement, promotion, graduation).

**Recommendation 4.** Track teacher movements both within and across districts, as well as exits out of the profession. This step should include identifying both the school to which a teacher moves and the school from which he or she moves (so as to compare characteristics of schools before and after transferring).

**Recommendation 5.** Investigate the reasons for inequities within and across districts because they will vary across districts. Understanding the reasons behind the distribution can help ensure that appropriate solutions are applied.

**Recommendation 6.** Analyze the specifics of union contracts—particularly hiring and assignment policies—in order to identify areas where reform may be needed.

**Recommendation 7.** To make implementation of new programs smoother and more effective, involve all stakeholders: teachers, board members, union representatives, parents, and community members.

**Recommendation 8.** Weigh the relative cost-effectiveness of policies—both short-term and long-term—to determine how to ensure the maximum benefit to targeted schools.

**Recommendation 9.** Collect and analyze detailed information connected specifically to policies designed to affect the distribution of teachers, including specifics of the policies themselves, such as the type and amount of financial incentives and eligibility requirements. Collect data on which teachers receive incentives through programs targeted to high-need schools and the type and amount of the incentive, which teachers are eligible but did not take the incentive, and where those teachers ended up. (Administrative data sets may or may not report an individual teacher's actual salary; even if a teacher's total salary and benefits are reported, it is important to know how much of that salary is coming from specific incentive programs.)

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## RESOURCES

A three-year project sponsored by The Wallace Foundation found that school, district, and state leaders want help in identifying the practices that are the most effective in the allocation of resources, particularly the allocation of staff (Anthes, 2009). Several resources and organizations offer ideas and guidance on how educational leaders can achieve a more equitable distribution of teachers.

After leaders assess how their teacher talent is currently managed and identify gaps in current policy and practice that lead to inequitable teacher distribution, they should consult research-based and emerging practices to guide their plans for improving the recruitment, development, and retention of teachers, particularly for high-need schools. The following tools and resources may be useful during that process:

- **U.S. Department of Education Equity Assistance Centers.** There are 10 equity assistance centers (EACs) in the United States that are funded by the U.S. Department of Education to promote equal educational opportunity within their regions. The EACs focus on educational equity broadly, but some of their resources are specific to equitable teacher distribution. For example, the Mid-Atlantic Equity Center (MAEC) developed the following resources: *Access to High Quality Teachers for All Students* (MAEC, 2009a) and “Structuring District Offices for Equity” (MAEC, 2009b).
  - ***Increasing Teacher Retention to Facilitate the Equitable Distribution of Effective Teachers* (Lasagna, 2009).** This online resource was developed by the TQ Center to aid school and other educational leaders in retaining effective teachers, particularly in hard-to-staff schools, with the goal of improving teacher distribution. It includes a number of strategies and substrategies, each supported by links to resources and examples
- of initiatives taking place in settings throughout the country. The four areas of focus are induction and mentoring, working conditions, compensation reform, and advancement and leadership opportunities.
- ***Diagnostic Resource for Developing, Aligning and Sustaining Human and Resource Capital in Districts and Schools* (The Wallace Foundation Resource Allocation and Incentives Leadership Issue Group, 2008a).** This resource was created by the Resource Allocation and Incentives Leadership Issue Group, a collaborative professional learning community funded by The Wallace Foundation and led by Katy Anthes, Ph.D. The guiding question in the development of this resource is as follows: How can education leaders think more critically about how they align resources to achieve coherent, instructionally focused districts and schools that will contribute to closing achievement gaps? The tool was designed to provide education leaders with ideas and examples of promising practices to help them effectively use a variety of administrative controls (e.g., budgeting, schedules, and teacher assignments); build capacity for leaders to effectively develop resource concentration processes to generate greater unity of purpose; and recommend actions to improve student learning.
  - ***The Human Capital Inventory and Alignment Worksheet* (The Wallace Foundation Resource Allocation and Incentives Leadership Issue Group, 2008b).** This tool, developed by a collaborative community of education leaders, funded by The Wallace Foundation, and led by Katy Anthes, Ph.D., is intended to help leaders improve student achievement and close achievement gaps. It focuses on the development, alignment, and sustainability of a strong teacher workforce. Specifically, it helps leaders identify and think strategically about teacher quality assets and how best to allocate them and enhance them within schools and districts to enhance student achievement.

- **The District Resource Allocation Modeler (DREAM) (Education Resource Strategies, 2009).** This Web-based tool allows district leaders to test a variety of scenarios for resource use and focus resources more strategically on their highest priority needs. According to *Education Resource Strategies* (2006), DREAM aids with the following:
  - “Identifies the key school system cost drivers and budget levers.
  - Allows users to explore the impact of changes to key system-wide budget levers.
  - Provides a framework of how high-performing urban schools organize resources to improve performance.
  - Links research to specific district budget options.
  - Allows users to experiment with specific design decisions around improved performance and see their budgetary impact.”
- ***Planning Tool to Provide Evidence of Progress Toward Equitable Teacher Distribution* (Goe, 2006).** This resource, provided by the TQ Center, is intended for SEAs. It assists states in determining what data they already collect and what additional data they might consider collecting, outlining equitable distribution goals, definitions, indicators of interest, and methods of demonstrating improvements in distribution over time.
- ***America’s Challenge: Effective Teachers for At-Risk Schools and Students* (Dwyer, 2007).** In this 2007 inaugural biennial report, the TQ Center provides a tremendous amount of information regarding the availability, recruitment, and retention of teachers for at-risk schools and students. The report includes findings from a nationally representative public opinion survey of first-year teachers conducted in spring 2007.
- ***America’s Opportunity: Teacher Effectiveness and Equity in K–12 Classrooms* (Goe, 2009).** The TQ Center’s second biennial report is designed to help RCCs and SEAs as they move away from piecemeal reform strategies and think systemically about policies and practices that support an effective educator workforce. The 2009 report illustrates advances in building state capacity to lead change in reforming the teaching profession; examines multiple interconnected components among the educator career continuum; reviews challenges in and highlights steps toward ensuring equitable distribution of teachers; and discusses how to define, evaluate, and compensate educators based on effective practice.
- ***Systems and Strategies for Addressing the Inequitable Distribution of Teachers* [Webcast] (National Comprehensive Center for Teacher Quality, 2009).** This webcast, which was held May 21, 2009, brought together experts and practitioners to discuss existing research and strategies that address the inequitable distribution of teachers. Presentations included an overview of the research on this topic, information about the requirements and potential funding through ARRA that can be used to address the inequitable distribution of teachers, and a discussion of useful TQ Center resources.
- ***The Distribution of Highly Qualified, Experienced Teachers: Challenges and Opportunities* (Imazeki & Goe, 2009).** This brief includes a discussion of policy responses to equitable distribution challenges and their relative cost-effectiveness; ways for states to identify districts and schools in need of targeted assistance with attracting and retaining these teachers; data that states and districts should be collecting and analyzing to assess the effectiveness of new programs; and strategies currently being used by states to improve teacher distribution.
- **Equitable Distribution Maps.** As part of its technical assistance to RCCs and SEAs, the TQ Center can create a map of state or district teacher distribution trends. These maps overlay various indicators of teacher quality on top of district and school poverty in order to provide a visual tool for identifying and further understanding the nature of inequities in teacher distribution. RCC and SEA staff who are interested in this type of support may contact the TQ Center at <http://www.tqsource.org/contact.php>.



## CONCLUSION

Although many highly effective, experienced, and dedicated teachers work tirelessly in high-need settings, minority children and those from families of low socioeconomic status continue to have a lower probability than other students of being taught by high-quality teachers. This inequity leads to differences in the quality of education that children from different backgrounds receive, which may affect their lifetime opportunities and success.

For most teachers, an underlying motivation for joining the profession is to help put underprivileged children on a path toward success. The inequitable distribution of teachers, therefore, results not from an unwillingness to work with high-need children, but from a whole host of school conditions that tend to make teaching in a low-need school more attractive than teaching in a high-need school for the large majority of teachers. Were these conditions changed, problems with teacher distribution might improve.

This TQ Research & Policy Brief has focused primarily on workforce policies intended to improve the abilities of underperforming and hard-to-staff schools to recruit, support, and retain high-quality teachers. School and district leaders have the power to reshape policies to, for example, improve working conditions and monitor teacher distribution. Working with colleagues, school and district leaders have the ability to develop and enact well-constructed policies and programs that build trust, incentives, and supports for high-quality novice and experienced teachers who choose to teach in high-need settings.

Future work might also address the relationship between the distribution of teachers and school financing. The challenging conditions in high-need schools and districts may arise in part from the

efforts, or lack thereof, of district, school, and teacher leaders, but certainly also are affected by differential levels of school funding. The United States is unique in that *fewer* resources and *fewer* highly effective teachers are allocated to the schools that have the greatest need. In comparing U.S. education reform with that of other countries, Sir Michael Barber said, “Even the best education laws [in the United States] are only leveling up to the same funding per pupil so that high-poverty areas have funding on par with other communities. Whereas in any sensible system you’d spend more money per pupil in a high-poverty area than another area” (as cited in Mead, 2006).

Finally, in reviewing the role of the state and federal government in supporting local efforts, states clearly have important contributions to make in advancing the ability of the education system to provide all students with highly effective teachers, particularly by more equitably distributing educational resources. But until these changes take place, schools and districts must do what they can within the current system to create the conditions that will attract and, most importantly, retain effective teachers for the students who most need them. It is critical that districts recruit, select, place, support, and compensate teachers with this goal in mind. Through strategic, systemic, and sustained effort, education leaders can eventually secure not only equitable access to excellent teachers but also a system in which *all* teachers are truly excellent, so all students—regardless of their background—have teachers who believe in them and are able to equip them with the knowledge and skills they need to succeed in their ambitions.



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# ABOUT THE NATIONAL COMPREHENSIVE CENTER FOR TEACHER QUALITY

The National Comprehensive Center for Teacher Quality (TQ Center) was created to serve as the national resource to which the regional comprehensive centers, states, and other education stakeholders turn for strengthening the quality of teaching—especially in high-poverty, low-performing, and hard-to-staff schools—and for finding guidance in addressing specific needs, thereby ensuring that highly qualified teachers are serving students with special needs.

The TQ Center is funded by the U.S. Department of Education and is a collaborative effort of ETS, Learning Point Associates, and Vanderbilt University. Integral to the TQ Center’s charge is the provision of timely and relevant resources to build the capacity of regional comprehensive centers and states to effectively implement state policy and practice by ensuring that all teachers meet the federal teacher requirements of the current provisions of the Elementary and Secondary Education Act (ESEA), as reauthorized by the No Child Left Behind (NCLB) Act.

The TQ Center is part of the U.S. Department of Education’s Comprehensive Centers program, which includes 16 regional comprehensive centers that provide technical assistance to states within a specified boundary and five content centers that provide expert assistance to benefit states and districts nationwide on key issues related to current provisions of ESEA.

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