To: U.S. Department of Education
From: Alliance for Excellent Education
Re: Equitable Distribution Recommendations
Date: January 30, 2014

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Background

Title I of the Elementary and Secondary Education Act requires states and districts to ensure that teachers of core subjects are highly qualified and that students from low-income families and students of color are not taught by inexperienced, unqualified, or out-of-field teachers at rates higher than those for other students. The latter provision, known as the teacher equity clause, is an attempt by federal policy to rectify one of the major problems facing low-performing schools that serve large numbers of low-income students and students of color. Research shows that students who have access to three consecutive years of effective teachers can overcome learning obstacles and close achievement gaps. However, low-performing schools are generally staffed by teachers who lack the experience, qualifications, and effectiveness needed to succeed in the classroom, making it more challenging to attract and retain effective teachers.[1] High-poverty schools tend to have higher attrition rates, provide less access to effective teachers overall, and offer students with the greatest need less access to the most effective teachers in the school.[2]

The challenge of meeting equitable distribution requirements is not rooted in teacher shortages. According to Linda Darling-Hammond and Gary Sykes, while there are some shortage areas within the profession,

> the United States does not face an overall shortage of qualified teachers. While some schools have dozens of qualified applicants for each position, others—mostly those with students from low-income families and students of color—suffer from shortfalls, a mismatch that stems from an array of factors. They range from disparities in pay and working conditions, interstate barriers to teacher mobility and inadequate recruitment incentives to bureaucratic hiring systems that discourage qualified applicants, transfer policies that can slow hiring and allocate staff inequitably, and financial incentives to hire cheaper, less qualified teachers.[3]

In addition to addressing the challenges of preparing, recruiting, and placing teachers, addressing teacher retention is critical to meeting Title I equitable distribution requirements. More than 30 percent of new teachers leave the classroom within their first five years. The "largest exodus is by newer teachers who are dissatisfied with working conditions or have had insufficient preparation for what they face in classrooms,"[4] researchers say, and teacher turnover is 50 percent higher in high-poverty schools than in more affluent ones.[5]

High rates of teacher turnover significantly hamper efforts to increase student access to effective teaching. Because of the high number of early-career teachers and low retention rates, the influx of new teachers has neither stabilized the teaching workforce nor improved teaching quality. For example, in 1988 the most common experience level was fifteen years; by 2008, the typical teacher was in his or her first year of teaching.[6] Since teacher effectiveness rises sharply after the first few years in the classroom, low retention, particularly among early-career teachers, reduces overall education productivity and drains financial and human resources.[7] Specifically, Darling-Hammond and Sykes write, low retention "consigns a large share of children in high-turnover schools to a parade of relatively ineffective teachers."[8] Other researchers say that "scarce resources are wasted trying to re-teach the basics each year to teachers who arrive with few tools and leave before they become skilled."[9] Full and equitable implementation of college- and career-ready standards is dependent on educator capacity to deliver the type of instruction needed to meet those standards.

State and district equitable distribution plans must include strategies for raising the bar to entering the profession and for building the capacity of those currently in the classroom, at all stages of their teaching career. Further, there must be greater nuance in the data collected to inform and measure those plans, as well as greater transparency regarding that data. Below is a list of policies and strategies that the Alliance for Excellent Education recommends states and districts include in their plans for ensuring equitable distribution of effective teachers.

I. Strengthen Initial Certification/Licensing Requirements

1. **Recommendation:** *State certification/licensing requirements should be awarded to teachers based on the full completion of a rigorous program that is aligned with the Council for the Accreditation of Educator Preparation (CAEP) standards and that provides strong content knowledge, extensive instructional strategies, and clinical experience.*

   Rationale: Certification/licensing should be based on whether a teacher has the knowledge and skills necessary to provide a classroom environment that fully prepares students to meet grade-level college- and career-ready standards set by the state. Harold Wenglinsky notes that student achievement is "influenced by both teacher content background (such as a major or minor in math or math education) *and* teacher education or professional development coursework, particularly in how to work with diverse student populations (including limited-English-proficient students and students with special needs)."[10] The Equity and Excellence Commission recommends "requiring that states set a uniform entry 'bar' into the profession that includes in-depth academic preparation, diverse clinical experiences and excellent performance on a licensing assessment that measures subject matter knowledge."[11] Licensure should "reflect the complexity of the work and include standards and rigorous performance assessments, set nationally, of actual ability to teach" while also increasing the "selectivity and effectiveness of teacher training and hiring."[12] Certification/licensure should only be awarded once candidates have demonstrated their ability to provide applied learning opportunities and the development of higher-order thinking skills.[13]

   One means by which states can ensure this level of rigor is to require that all teacher preparation programs, alternative and traditional, are aligned with the CAEP standards.[14] The purpose of these standards is to advance excellent educator preparation through evidence-based accreditation that assures quality, supports continuous improvement, and raises the bar in educator preparation. Certification/licensure that is based on full completion of an educator

preparation program is only effective if the program is fully aligned with what educators should be expected to know and be able to do.

A number of states have taken action to strengthen their licensing requirements, including Connecticut, Massachusetts, and North Carolina. For example, Connecticut certification requires a major in the content area taught; additional pedagogical training, including literacy instruction and working with students with special needs; and passing of a basic skills and content test before entry to teaching.[15] Connecticut also eliminated emergency licensing, toughened requirements for temporary licenses, and required teachers to complete a master's degree and a rigorous performance assessment modeled on that of the National Board for Professional Teaching Standards to gain a professional license.[16] North Carolina[a] likewise increased course work in content and pedagogy, as well as licensing tests, for teachers to meet licensing requirements and required schools of education to undertake professional accreditation through the National Council for Accreditation of Teacher Education.[17]

2. **Recommendation:** *Require states to adopt edTPA—the validated teacher performance assessment developed by the Stanford Center for Assessment, Learning, and Equity in partnership with the American Association of Colleges of Teacher Education—as part of their certification/licensing requirements so that teachers entering the profession are required to demonstrate their ability to be effective in the classroom.*

    Rationale: EdTPA became fully operational in early September 2013, capturing multiple measures of teaching practice in twenty-seven subject areas and providing insight into a candidate's ability to effectively teach his or her specific content area to diverse learners. It is significant to note that more than 1,000 educators from twenty-nine states and the District of Columbia and more than 430 institutions of higher education participated in the edTPA design, development, piloting, and field testing.[18] Research has shown that rigorous, validated, standards-based performance measures can be a powerful tool for capturing high-leverage teaching behaviors linked to improved student performance.[19] EdTPA shares a common architecture and lineage with other successful performance assessments such as the National Board, California's Performance Assessment for California Teachers (for initial licensure), and Connecticut's Beginning Educator Support and Training (for professional licensure). Over the last two decades, validity studies have shown that well-designed teacher performance measures can differentiate between effective and ineffective teachers and predict gains in their students' learning and achievement. Of the five teacher competencies[b] at the center of edTPA, the "dimension of instruction" competency promotes pre-service skills in this area by focusing on classroom learning environments, student engagement in learning, deepening thinking, and

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[a] In addition, "[b]oth states also developed mentor programs for beginning teachers that extended assistance and assessment into the first year of teaching, and both introduced intensive professional development for veteran teachers. A recent study of North Carolina's reforms noted the strong quality of teachers in the state as a whole and in schools serving diverse student populations" (L. Darling-Hammond and G. Sykes, "Wanted: A National Teaching Supply Policy for Education: The Right Way to Meet the 'Highly Qualified Teacher' Challenge," *Education Policy Analysis Archives* 11, no. 33 [2003], http://epaa.asu.edu/ojs/article/viewFile/261/387 (accessed January 4, 2014)).

[b] The five competencies are planning instruction and assessment; engaging students and supporting learning; and assessing student learning. Two other dimensions, reflection and academic language (the ability of teacher candidates to develop students' language skills), are focal points for judging performance throughout the event. For more information on edTPA, visit http://edtpa.aacte.org/about-edtpa; http://edtpa.aacte.org/news-area/announcements/edtpa-summary-report-is-now-available.html; and http://all4ed.org/summary-report-available-on-2013-edtpa-field-test/.

subject-specific pedagogy. For example, one of the rubrics within the instruction task explicitly addresses evidence that the candidate demonstrates mutual respect and rapport with students and engages them in a positive and intellectually challenging learning environment. According to a study by the University of Maryland on whether edTPA preparation materials discouraged or inhibited the preparation of teachers to respond to the needs of diverse students, about 70 percent of text from edTPA materials provided either an opportunity or a prompt for candidates to reveal practices that reflect the elements of culturally relevant pedagogy.

The edTPA process illuminates how well prospective teachers are able to engage learners, assess students' current knowledge and skill development, and provide feedback to students to enable them to develop increased independence and skill in directing their own learning. This can be a powerful tool to ensure "readiness to teach" as well as to inform preparation program improvement.

3. **Recommendation:** *State certification/licensure should be based on the full completion of a teacher preparation program. Such certification/licensure should be required in order for a teacher to be the teacher of record. These requirements should not be waived at the state or district level.*

(1) **Rationale: Increasing student access to prepared and fully certified/licensed teachers positively impacts student achievement.**

Studies based on national and state data sets show significant links between teacher education and licensure measures (including education course work, credential status, and scores on licensure tests) and student achievement.[20] For example, in California, three school-level studies found significant negative relationships between the percentage of teachers on emergency permits and student scores on state exams.[21] Research demonstrates "that multiple factors are involved and that teachers with a combination of attributes—knowing how to instruct, motivate, manage and assess diverse students, strong verbal ability, sound subject matter, and knowledge of effective methods for teaching that subject matter—hold the greatest promise for producing student learning. Those aspects of preparation that enable teachers to teach students with the greatest educational needs are, of course, most needed for teachers who will work with such children.... States and local districts should be pursuing fully prepared teachers, especially for the neediest students."[22] Students—particularly struggling students with the greatest needs— should be placed with a teacher who is fully prepared to meet those needs on the first day of school, not one who is still in the early stages of the process of learning and developing the necessary foundational skills.[c]

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[c] While much attention is often given to certain high-profile alternative pathways into teaching, such as Teach for America (TFA), it is important to note that TFA represents less than 7 percent of the teachers placed through alternative certification. As with traditional pathways, there is significant variation in the preparation and quality of alternative certification pathways. However, data on the effectiveness of TFA recruits is often misrepresented. The primary study demonstrating the effectiveness of TFA recruits compared them to other inexperienced teachers in schools and classrooms serving high percentages of students of color and low-income students (M. Raymond, S. Fletcher, and J. Luque, *Teach for America: An Evaluation of Teacher Differences and Student Outcomes in Houston, Texas* [Stanford, CA: Hoover Institution, Center for Research on Education Outcomes, 2001]). Further, of the teachers sampled in the referenced study, about 50 percent of the new teachers were uncertified, and 35 percent of new hires lacked a bachelor's degree, therefore TFA teachers were compared to an extraordinarily ill-prepared group. The report did not compare TFA teachers' outcomes to those of trained and certified teachers (Darling-Hammond and Sykes, *Wanted*). An Arizona study found that students of TFA teachers did significantly less well than those of certified beginning teachers on math,

(2) Rationale: Teachers who are fully prepared upon entering the profession are more likely to remain in the profession, thereby building teacher and school capacity.

Research demonstrates that more extensive teacher training significantly increases teacher retention. According to a study by the National Center for Education Statistics, 49 percent of uncertified entrants left the profession within five years, more than three times the 14 percent of certified entrants who did so.[23] Further, the attrition rates for new teachers who lacked student teaching experience are double the rates for those who had student teaching experience.[24] Approximately two-thirds of novice teachers who enter the classroom without teacher education (neither certified nor eligible for certification) leave teaching within their first year.[25] In addition, studies of entry paths to teaching that offer only a few weeks of training before assumption of full teaching responsibilities have also found high attrition rates.

Conversely, accumulating evidence indicates that better-prepared teachers stay longer.[26] A longitudinal study of eleven institutions of higher education found that teachers who completed a preparation program that requires a major in a disciplinary field, intensive training for teaching, and long-term student teaching stay in the profession at higher rates than teachers who were hired through alternatives that offer only a few weeks of training before recruits are left on their own in classrooms.[27] They also report higher levels of satisfaction with their preparation and receive higher ratings from principals and colleagues.[28] Individuals who enter the classroom without student teaching leave the field at rates twice as high as those who have completed student teaching,[29] and those who enter the classroom without preparation in instructional methods, child development, and learning theory leave at rates at least double those for teachers who have had such training.[30] State and district plans to increase equitable distribution must address the root causes of low teacher retention rates, in particular the type of preparation received; otherwise, efforts to increase access by building teaching capacity will be extremely limited.

II. Create Greater Equity in Resources to Support Recruitment and Hiring

1. **Recommendation:** *States and districts should address inequities in resources (across and within districts) in an effort to provide competitive salaries and financial support to effective teachers working in high-need schools (and in subject areas in which there are shortages).*

   Rationale: The 2013 Organisation for Economic Co-operation and Development report on the results of the latest Programme for International Student Assessment reveals that the United States is one of a group of countries in which advantaged and disadvantaged schools show particularly wide differences in the level of teacher shortages.[31] Competitive starting teacher salaries are effective in attracting new teachers to a particular district. Further, they ensure that a teacher does not have to choose between teaching where he or she is most needed and being paid a salary that is reflective of the work they are being asked to do. Increasing the starting salaries for teachers improves a school's ability to attract high-quality teachers, particularly for schools serving large numbers of students from low-income families. For example, market research demonstrates that raising a teacher's starting pay from $37,000 to $65,000, and top

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reading, and language arts tests (I. Laczko-Kerr and D. C. Berliner, "The Effectiveness of 'Teach for America' and Other Under-Certified Teachers on Student Academic Achievement: A Case of Harmful Public Policy," *Education Policy Analysis* (2002)).

salaries from $70,000 to $150,000 (combined with increased investments in school leadership and working conditions), would "lift the percentage of new teachers in high-poverty schools coming from the top third of their academic cohort from 14 percent today to 68 percent and would cost about 5 percent of current K–12 spending."[32] This investment would result in other significant savings, including a reduction in teacher turnover, which currently costs an estimated $7 billion every year, and lower rates of student remediation, special education placements, and dropout services.[33] The U.S. Department of Education reports that the investment in human capital would help "close the achievement gaps between U.S. students and higher-performing systems abroad, and between students of color and their white counterparts," and that "the impact on GDP over time would dwarf the investment in higher-caliber teacher recruits in the years ahead."[34]

Connecticut, for example, passed the Educational Enhancement Act, which raised the average starting salary for new teachers by using state aid to make it possible for low-wealth districts to compete in the market for qualified teachers. At the same time, the state raised licensing standards,[d] requiring that a teacher hold a major in the discipline to be taught along with extensive knowledge of teaching and learning and that the state's teacher salary assistance could only be spent on fully certified teachers. This incentivized districts to recruit teachers who met these standards while also incentivizing individuals to meet these standards.[35]

Another example is North Carolina, which passed the Excellent Schools Act. This act serves to attract and retain high-quality teachers through enhanced pay and rewards for working in high-need areas and achieving continuing certification.[36] The legislation raises all teacher salaries in an effort to remain competitive with other states and provides additional salary increases for those who earn master's degrees or National Board certification.[37] North Carolina now has more teachers certified by the National Board than any other state.[38]

In addition, long-term financial incentives, such as scholarships and loan forgiveness, provide additional support to teachers who want to work in schools serving students with the greatest needs and are burdened by student loans. The U.S. Department of Education recommends that federal and state government invest in providing scholarships that fully pay the preparation costs for a "diverse pool of high-ability candidates to teach, and stay, in high-need fields and schools, as we've done in medicine to address shortages of highly qualified doctors in high-need areas and as higher-performing countries such as Finland, Singapore, Korea, Canada and Australia have done with teachers."[39] Scholarships or loan forgiveness should be targeted to areas of teaching shortages or to teachers who serve in high-need schools for a minimum of four years.[40] Further, stability in staffing helps to maintain and advance school improvement efforts, builds capacity, and reduces the high cost of teacher turnover.[41]

For example, North Carolina funded the North Carolina Teaching Fellows program, which paid for "all college costs, including an enhanced and fully funded teacher education program, for thousands of high-ability students in return for several years of teaching. Specifically, loan

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[d] Connecticut instituted performance-based examinations in subject matter and knowledge of teaching as a prerequisite for receiving a license. It also created a state-funded mentoring program to support teachers in their first year on the job and established an assessment program using state-trained assessors to determine which first-year teachers can continue teaching (for more information, visit http://bit.ly/tq-connecticut-3).

forgiveness is provided for those who teach four years at a public school or three years at a low-performing public school."[42]

After seven years, retention rates for teaching fellows in North Carolina exceeded 75 percent, with many of the remaining alumni holding public school leadership posts.[43] Connecticut's service scholarships and loan forgiveness provide incentives to teach in high-need schools and shortage fields, attracting high-quality candidates.[44] Illinois created the "Minority Teachers of Illinois Scholarship Program" which provides scholarships to encourage academically talented students from diverse backgrounds to pursue teaching careers, especially in certain disciplines or in hard-to-staff schools.[45] Further, the Illinois Special Education Tuition Waiver Program requires teaching for a specified length of time.[46]

2. **Recommendation:** *State and district plans should include strategies for improving current recruitment and placement processes, including efforts to hire and place teachers in a classroom position at least one month prior to the start of the school year.*

Rationale: More than one-third of new, young teachers are hired after the start of the school year.[e] This practice increases the likelihood that a teacher will be placed outside of their certification area in last-minute efforts to fill open positions. Further, this often prevents these teachers from participating in professional development or planning time that is provided to staff prior to the start of the school year. Darling-Hammond and Sykes note that late hiring and placement can be caused by "late budget decisions by state and local government, teacher transfer provisions that push new hiring decisions into August or September, lack of pension portability across states and loss of salary credit for teachers who move."[47] Further, research shows that "many districts do not hire the best applicants because of inadequate information systems or antiquated and cumbersome procedures that discourage or lose candidates in seas of paperwork."[48] Many large districts have inefficient hiring systems that feature long delays and can discourage potential applications and undermine recruitment efforts.[49]

A growing number of states and districts are implementing strategies to improve recruitment, hiring, and placement efforts.[50] For example,

- Philadelphia, Pennsylvania, and Toledo, Ohio revised their notification and assignment policies, as well as their interview-team selection criteria and candidate screening tools.
- Illinois passed the Grow Your Own Teacher Act to strengthen the pipeline into teaching. Chicago implemented the Golden Teachers New Teacher Induction and Mentoring Program.
- Baltimore City Public Schools in Maryland created the Reasons to Choose BCPSS marketing and recruitment campaign.
- San Diego, California, streamlined and sped up its hiring process by putting the entire system online, improving its capacity to manage hiring data, vacancy postings, and interviews.

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[e] HGSE News, *New Research Finds School Hiring and Support Practices Fall Short* (Cambridge, MA: Harvard University, 2003). This study also found that of these teachers, sampled across four states, only 23 percent had any sort of reduced load; 56 percent received no extra assistance; and 43 percent went through the entire first year with no observations from a mentor or more experienced teacher.

- Educational leaders in South Carolina created the Call Me MISTER initiative to increase the pool of talented and diverse educators, namely African American males. The program provides tuition assistance through loan forgiveness and assistance with job placement.[51]
- New York City Community School District #2 implemented aggressive recruitment strategies that include creating university partnerships to develop a pipeline of well-prepared teachers and supporting those teachers with strong mentoring and professional development.

III. Increasing Teacher Retention by Building Capacity

1. **Recommendation:** *States and districts should provide early-career teachers with opportunities to participate in residency, induction, and mentoring programs in an effort to provide support and build capacity. (Mentors should have a similar background as the teacher to whom they are assigned, such as grade level and content area.) These efforts should be sustained through the use of professional development funding, including federal Title II funding, to provide personalized professional development to teachers at all stages of their career.*

   Rationale: These types of opportunities provide additional support and resources to help new teachers better understand professional responsibilities, district and school expectations, and state content standards.[52] Studies of these types of programs demonstrate that these teachers stay in the profession at higher rates and become competent more quickly than those who learn by trial and error.[53] For example, teacher residency programs help create a pipeline of effective teachers who remain teaching in high-need schools, raising their effectiveness.[54] Further, the effects of strong initial preparation are likely enhanced by strong induction and mentoring in the early years of teaching.[55]

   Few state policies envision teacher induction as part of a system of teacher development, establish quality program standards, help identify and train effective mentors, or generally offer districts the guidance and resources to provide meaningful new teacher support. However, a number of states and districts are investing in providing residency, induction, or mentoring opportunities for new teachers to improve retention and capacity. For example,

   - Rochester, New York, and Cincinnati, Columbus, and Toledo, Ohio,[56] have reduced early new teacher attrition rates by more than two-thirds by providing expert mentors to new teachers during their first year.[57]
   - North Carolina launched a mentoring program for new teachers that has greatly increased their access to early-career support.[58]
   - Connecticut provides trained mentors for all beginning teachers and student teachers as part of its staged licensing process.
   - The Boston Teacher Residency master's program recruits college graduates, career changers, and community members to work in Boston Public Schools. Students spend a full academic year in a BPS classroom, teaching alongside an experienced mentor and applying theory to practice through rigorous course work. Their commitment earns them a master's degree in education from the University of Massachusetts Boston, a Massachusetts Initial Teacher License, and credit toward a dual license in special education.[59]
   - The Denver Teacher Residency program allows candidates to teach and learn alongside a mentor teacher in a Denver, Colorado, public school classroom for a full academic year,

while pairing this experience with earning a master's degree from the University of Denver's Morgridge College of Education. Residents receive data-driven instructional support and training in elementary or secondary education to best serve Denver Public Schools' highest-need students.[60]

2. **Recommendation:** *States and districts should use school, teacher, and student data to assess the working conditions within each school, identify areas of improvement, and implement responsive improvement strategies.*

Rationale: Teacher surveys consistently show that working conditions are a critical factor in teacher decisions to change schools or leave the profession, including how teachers view administrative support, available education resources, teacher input in decisionmaking, and school climate.[61] Further, one study, based on a "statewide sample of 280 high schools and controlling for school and neighborhood demographic differences, showed that both structure (measured by student- and teacher-reported clarity of school rules) and support (measured by teacher-reported help seeking) were associated with less teacher victimization."[62] When teachers feel supported by both the principal and their peers, they are more committed to their profession.[63] A positive school climate is also associated with the development of teachers' beliefs that they can positively affect student learning.[64] Research demonstrates that school climate[65] enhances or minimizes teacher/staff emotional exhaustion, depersonalization, and feelings of low personal accomplishment[66] as well as attrition.[67]

There are a number of strategies[f] for increasing support for teachers and improving school climate:

- Use professional development funding to significantly increase opportunities for teachers to participate in professional learning communities or other opportunities for collaboration. These opportunities should be aligned to college- and career-ready standards and enable teachers to master new content, pedagogy, and learning tools and incorporate them in their practice. This may include rethinking the traditional school schedule to give teachers more freedom and creativity in their professional practice to individualize their teaching, collaborate with colleagues, use data to better assess students' progress and needs, and plan lessons accordingly.[68]
- Increase the number of support staff, such as guidance counselors, social workers, and appropriately trained paraprofessionals and assistants to support student achievement.
- Use school climate data, such as data submitted for the Office for Civil Rights Data Collection, student referral data,[g] and student, staff, and family survey data to strengthen relationships between staff, and between students and staff, and target professional development to strengthen classroom practices that engage and support students.

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[f] For additional information on essential elements of the school climate improvement process, please visit http://www.schoolclimate.org/climate/documents/policy/sc-brief-v4.pdf.

[g] For example, during the 2010–11 school year, the Charlotte-Mecklenburg district took a close look at issues of disproportionality, including the disproportionate representation of African American males in special education classes. One key outcome of that investigation was the development of a semester-long course for Responsiveness to Intervention (RTI) coaches focused on struggling male students, with particular attention devoted to the needs of African American males. This course evolved into a one-day course for teachers. There is also a two-day version of the teacher course available during summers (see "Equity at the Core," *Strategies* 16, no. 1 [fall 2013], http://ucea.org/storage/pdf/16_01_2013.pdf (accessed January 4, 2014)).

- Implement equitable and effective approaches to school discipline (see the recent joint school discipline guiding principles and accompanying documents issued by the U.S. Department of Education and Department of Justice for specific strategies).[69] For example, strategies such as Restorative Justice and Response to Intervention have been demonstrated to be more effective approaches to addressing student behavior in a positive and inclusive way.
- Redesign career pathways for teachers so that recognition (and compensation) for accomplishment does not require leaving the classroom, so that collaboration among teachers is promoted[70] and teachers have a greater role in school improvement efforts.
- Provide opportunities for teachers to develop culturally relevant competencies and strategies for teaching diverse learners. Eight of the seventeen states that produce approximately 70 percent of the nation's dropouts have a large number of students of color and English language learners in their schools.[71] The rapidly changing faces of America's classrooms create new urgency for states and districts to develop an increasingly diverse teaching force. Staff must combine deep content knowledge and the skills to accelerate student learning with cultural competence and the ability to foster excellence in students of multiple cultures and ethnicities.[72] Efforts to recruit more diverse candidates should be paired with professional development that supports culturally relevant pedagogy and working in diverse communities. Numerous studies demonstrate the positive impact that culturally responsive teaching can have on strengthening teacher-student relationships and improving student engagement and outcomes.[73]
- Invest in strong and consistent leadership by improving the principal pipeline. This should include efforts to hire those who have experience building capacity and organizing time and structures to facilitate adult and student learning.[74] Just as with teachers, this effort regarding principals should include a close look at preparation, performance, and compensation, especially in high-need schools and districts.[75]

A number of states and districts are implementing strategies to improve the working conditions for all teachers:

- Kentucky adopted the Teaching Conditions Standards and is one of nine states[h] to conduct the Teaching, Empowering, Learning and Leading (TELL) Survey.[76] The TELL Survey provides detailed information regarding the perceptions about the presence of teaching and learning conditions that research has shown increase student learning and teacher retention.[77] The conditions assessed include time, facilities and resources, professional development, school leadership, teacher leadership, instructional practices and support, managing student conduct, community support and involvement, and new teacher support for early-career teachers.[78]
- North Carolina also adopted the Teacher Working Conditions Standards.[79]
- Illinois conducts the Teaching and Working Conditions Survey under Public Act 97-0008.[80]
- Toledo, Ohio, has pioneered a highly successful approach to the challenge of modifying problem behavior by contracting with the Toledo Federation of Teachers to establish the Behavior Specialist Program.

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[h] These states are Colorado, Delaware, Kentucky, Maryland, Massachusetts, North Carolina, Ohio, Tennessee, and Vermont.

IV. Needs Assessment, Capacity Analysis, and Measures of Progress Toward Equitable Distribution

1. **Recommendation:** *State and district plans should include a comprehensive assessment of student access to effective teachers, an analysis of resources and enacted programs available to increase access, and additional data to measure the progress of such efforts and their impact on student access to effective teachers. This data should be transparent and made publicly available. Based on the previously discussed research, there should be continual and ongoing assessment based on the following data:*

- Where are there shortage areas (including school level, grade level, and subject area, such as STEM [science, technology, engineering, and mathematics], special education, and bilingual education)?
- How are teachers distributed by license/certification area (e.g., emergency, provisional, full, permanent, etc.)?
- Are teachers assigned to a classroom within the area of their certification/license?[i]
- Based on the state's teacher performance evaluation and improvement system, how are rated teachers distributed across districts, schools, grades, and subject areas by rating?
- For teachers not captured by the state's performance evaluation system, such as those in their first years of teaching for whom there is no rating or insufficient data:
  - What pre-service programs are teachers being recruited from?
  - Did the program provide clinical or residential experience?
  - How did they perform on an edTPA? Is an edTPA score required?
  - What measures will be used to determine their effectiveness?
- How are teachers in their first or second year of teaching distributed?[j]
- What are teacher and leader retention rates (by district, school, and grade level, and subject area)?
- What are the teacher and leader transfer rates (including within the district)?
- What are the individual teacher rates of student referral for discipline and special education?
- What are the effectiveness ratings for leaders?
- What current supports are in place for all teachers (e.g., induction, mentoring, opportunities for collaborative professional development, number of hours allocated for professional development, leadership opportunities, etc.)? What are the participation rates?
- What is the current salary structure?
- How are resources being allocated and used within the district by individual schools?
- What are the conditions for teaching and learning within the school? (This data can be provided in part by staff and student surveys and the data submitted for the Office for Civil Rights Data Collection.) Does the state or district use a survey to assess working conditions?

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[i] In high schools with a student population that is at least half African American, 25 percent of math teachers do not have a college degree in math and are not certified to teach math. For predominantly white schools, this figure is 8 percent (U.S. Department of Education, National Center for Education Statistics, "Status and Trends in the Education of Racial and Ethnic Groups," NCES Publication No. 20100015, 2001, http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2010015 (accessed January 3, 2014)).

[j] Fifteen percent of teachers in K–12 schools with the highest African American and Hispanic student populations are in their first or second year of teaching, compared to 8 percent in schools with the lowest African American and Hispanic populations (U.S. Department of Education, Office for Civil Rights, "The Transformed Civil Rights Data Collection," 2012, http://www2.ed.gov/about/offices/list/ocr/docs/crdc-2012-data-summary.pdf (accessed January 4, 2014)).

A growing number of states and districts (e.g., North Carolina, Tennessee, Kentucky, Maryland, Colorado, Massachusetts, Vermont, Ohio, and Delaware, and the Hillsborough County and Pittsburgh Public Schools) are using surveys of working conditions that are linked to improved student and learning and teacher retention (e.g., the TELL Survey).[81]

- Are there leadership opportunities for staff?[k]
- What percentage of teachers are National Board certified (district, school, and grade/subject area level)?[l]
- What efforts are being made to address increasing student diversity? Are there efforts to recruit from teacher preparation programs that primarily serve candidates of color? Are there opportunities for teachers to participate in professional development on culturally responsive practice?

Rationale regarding the role of school leaders: It is also critical to include the use of data regarding school leaders throughout the process of developing and monitoring Title I plans. A major report[m] from the Wallace Foundation asserts that among school-related influences on student achievement, school leadership is second in importance only to classroom instruction.[82] Principals[n] exert influence on teachers and teaching practice because of both their role in motivating teachers and the collegial professional climate they create. For example, a survey conducted of teachers and principals indicates that three specific leadership practices contribute to improved teaching and learning: (1) focusing the school on challenging goals and expectations for student achievement; (2) attending to teachers' professional learning; and (3) creating structures for teacher collaboration. Efforts to attract, retain, and build the capacity of all teachers are largely influenced by school leadership. Therefore Title I plans should reflect efforts to recruit, retain, and build the capacity of principals as well. Additional recommendations regarding strategies for improving leader recruitment, retention, and capacity can be provided upon request.

2. **Recommendation:** *States should continually assess whether current performance evaluation systems at the state and local levels are accurate measures of teacher effectiveness—*

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[k] One resource is the National Education Association's Teacher Leadership Initiative. For more information, visit http://www.nea.org/home/57611.htm and http://www.teachingquality.org/.

[l] See http://www.ncsl.org/research/education/national-board-for-professional-teaching-stand1097.aspx for information regarding the National Board certification process and demonstrated positive impact on teacher retention and improving practice. Specifically, according to studies, the process of analyzing students' work and assessing their own actions in relation to professional standards is valuable in improving teaching and illuminates how well teachers are able to engage learners, assess students' current knowledge and skill development, and alter instruction to advance students' performance.

[m] This study was conducted over a six-year period, the report includes data from nine states, forty-three school districts, and 180 schools.

[n] High school principals in particular are often faced with a number of roadblocks: disconnected departmental subcultures; a resistance to schoolwide interventions, norms for teacher autonomy, and teacher tracking; and a lack of training on and support for engaging disconnected adolescents who have significant learning gaps. M. W. McLaughlin and J. E. Talbert, Building Professional Learning Communities in High Schools: Challenges and Promising Practices, in *Professional Learning Communities: Divergence, Depth and Dilemmas* (Berkshire, UK: Open University Press, 2007); M. W. McLaughlin and J. E. Talbert, *Professional Communities and the Work of High School Teaching* (Chicago, IL: University of Chicago Press, 2001); J. E. Talbert, Professionalism and Politics in High School Teaching Reform, *Journal of Educational Change* 3, no. 3–4 (2002): 339–63.

specifically, whether the data is effectively being used to build teacher capacity to provide instruction that is aligned to standards for college and a career.

Rationale: Equitable distribution based on state performance systems is only as effective in meeting the goal of equity as the system is for measuring teacher performance and building capacity. A nationwide study of twenty-nine districts by the Institute of Education Sciences demonstrates that there are persistent gaps in access to effective teachers, yet most districts do not use evaluation data for system improvement and to improve the capacity of teachers to be effective.[83]

Moreover, as states and districts move toward the implementation of teacher evaluation systems, concerns arise regarding the quality of these systems. For example, a report by the American Psychological Association to the CAEP Commission states,

> The vast majority of protocols for observing teacher performance in present use, whether in teacher preparation or for practicing teachers in the field, lack evidence of reliability and validity. Most are "home-grown" assessments derived from focus groups or consensus. If they are "off the shelf," then the evidence for psychometric properties may well be lacking. In short, the "market" for selection and use of observational protocols lacks the very contingencies that would drive selection of appropriate instruments or the use of them in ways likely to produce results that are fair, valid, or useful for evaluation or improvement.[84]

Further, according to a 2013 report by the National Council on Teacher Quality,[85] there is significant variation in state performance evaluation systems and the extent to which data is used to inform policy and practice. It is also important to note that there may be variations at the local level depending upon the extent to which they have been approved to modify the state evaluation system. Specifically, the report finds that

- Teacher evaluation categories range from three to five and vary in name (e.g., effective vs. accomplished, unskilled vs. skilled, etc.), which may make cross-state comparisons a challenge.
- Twenty-seven states and the District of Columbia require annual evaluations for all teachers, and twenty-three do not.
- Ten states do not require that the use of student achievement measures be included in teacher evaluations. Of those that do require them to be included, student achievement/growth is a preponderant criterion in twenty of them.
- For the sixteen states that are "significantly" informed by student achievement and growth, only seven explicitly define "significant."
- Twenty-seven states and the District of Columbia require multiple measures of student growth and achievement, nineteen states have no such requirement, and three allow for multiple measures but do not require them.
- Fourteen states explicitly require that student learning objectives be used as a measure.
- Five states do not require observations, and in other states there is significant variation in the timing and number of observations required.
- In fifteen states some or all of the observations are unannounced.
- Twenty-one states and the District of Columbia require post-observation feedback or a conference. Twenty-nine states have no such requirement.

- Eighteen states and the District of Columbia have an explicit policy for non-tested grades and subjects. Thirty-two states have no explicit policy.
- In nineteen states and the District of Columbia, professional development is designed/assigned based on individual evaluation results for all teachers. Thirty-one states have no such policy.
- In twenty-five states and the District of Columbia, teachers who receive unsatisfactory evaluations must have an improvement plan. Twenty-five states have no such requirement.
- In eight states, teacher effectiveness is reported at the school level.
- In only three states are teaching candidates in preparation programs assigned to practice-teach in classrooms with effective teachers.
- Eight states use student surveys in teacher evaluation systems, six use parent surveys, and three use peer surveys.
- Thirty-four states and the District of Columbia require evaluator training, four states and the District of Columbia require the use of multiple evaluators/observers (four states allow but do not require the use), three states and the District of Columbia require evaluators to be effective teachers, and thirteen states and the District of Columbia require evaluator certification.

If equitable distribution is based on determinations of effectiveness, the systems that serve as the basis for that evaluation must be rigorous, comprehensive, aligned with standards for college and a career, and able to drive continuous improvement of practice. Otherwise, not only will students of color and students from low-income families continue to have less access to effective teaching, the magnitude of the disparity may never be fully captured and addressed.

Conclusion

What is evident from the research is that efforts to ensure that all students have access to well-prepared and effective teachers must include a comprehensive systems approach that uses extensive and varied data to identify barriers to that access. There is significant variation in access to effective teaching, not only across and within districts but also across and within schools. The use of more nuanced and extensive data can serve to identify those gaps in access as well as the conditions within the school and district that may be contributing to those gaps. For example, data from edTPA and the TELL Survey, combined with the other data recommended, can provide great insight into where there are weaknesses in entry into the profession and the subsequent working conditions and support provided to all teachers. State and district plans under Title I should be detailed in their efforts to increase the use of data and the comprehensiveness of their strategies to respond to the information provided by that data. These recommendations can also be used to inform requirements under federal grants, such as the Teacher Incentive Fund and TEACH grants, to further support these efforts.

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Endnotes

[1] H. Peske and K. Haycock, *Teaching Inequality* (Washington, DC: Education Trust, 2006).

[2] Institute of Education Sciences, "Access to Effective Teaching for Disadvantaged Students" (Washington, DC: U.S. Department of Education, November 2013), http://ies.ed.gov/ncee/pubs/20144001/pdf/20144001.pdf (accessed January 4, 2014).

[3] L. Darling-Hammond and G. Sykes, "Wanted: A National Teaching Supply Policy for Education: The Right Way to Meet the 'Highly Qualified Teacher' Challenge," *Education Policy Analysis Archives* 11, no. 33 (2003), http://epaa.asu.edu/ojs/article/viewFile/261/387 (accessed January 4, 2014).

[4] Ibid.; R. R. Henke, X. Chen, S. Geis, and P. Knepper, *Progress Through the Teacher Pipeline: 1992–93 College Graduates and Elementary/Secondary School Teaching as of 1997*, NCES 2000-152 (Washington, DC: National Center for Education Statistics, 2000).

[5] R. Ingersoll, "Teacher Turnover and Teacher Shortages: An Organizational Analysis," *American Educational Research Journal* (2001).

[6] R. Ingersoll and M. Strong, "The Impact of Induction and Mentoring Programs for Beginning Teachers: A Critical Review of the Research," *Review of Education Research* (2011); T. Carroll and E. Foster, "Who Will Teach?: Experience Matters" (Washington, DC: National Commission on Teaching and America's Future, January 2010), http://www.nctaf.org/NCTAFWhoWillTeach.pdf (accessed August 20, 2011).

[7] E. Hanushek, J. Kain, and S. Rivkin, *Teachers, Schools, and Academic Achievement* (Cambridge, MA: National Bureau of Economic Research, 1998); J. Kain and K. Singleton, "Equality of Educational Opportunity Revisited," *New England Economic Review* (May/June 1996).

[8] Darling-Hammond and Sykes, "Wanted."

[9] S. Carroll, R. Reichardt, and C. Guarino, *The Distribution of Teachers Among California's School Districts and Schools* (Santa Monica, CA: RAND Corporation, 2000).

[10] This study examines how the math and science achievement levels of more than 7,000 eighth graders on the 1996 National Assessment of Educational Progress were related to measures of teaching quality, teacher characteristics, and students' social class background. See H. Wenglinsky, "How Schools Matter: The Link Between Teacher Classroom Practices and Student Academic Performance," *Education Policy Analysis Archives* 10, no. 12 (2002), http://epaa.asu.edu/epaa/v10n12/ (accessed January 4, 2014).

[11] U.S. Department of Education, "For Each and Every Child—A Strategy for Education Equity and Excellence," 2013, http://www2.ed.gov/about/bdscomm/list/eec/equity-excellencecommission-report.pdf (accessed January 3, 2014).

[12] Ibid.

[13] Ibid.

[14] For more information on the CAEP Standards, visit http://caepnet.org/about/strategicplan/.

[15] Darling-Hammond and Sykes, "Wanted."

[16] Ibid.

[17] Ibid.

[18] Stanford Center for Assessment, Learning and Equity, "2013 edTPA Field Test: Summary Report" (Stanford, CA: Author, November 2013).

[19] M. Haynes, *Ensuring Readiness to Teach: EdTPA Support and Assessment* (Washington, DC: Alliance for Excellent Education, 2013).

[20] Darling-Hammond and Sykes, "Wanted."

[21] J. R. Betts, K. S. Rueben, and A. Danenberg, *Equal Resources, Equal Outcomes?: The Distribution of School Resources and Student Achievement in California* (San Francisco, CA: Public Policy Institute of California, 2000); M. Fetler, "High School Staff Characteristics and Mathematics Test Results," *Education Policy Analysis Archives* 7, no. 9 (1999), http://epaa.asu.edu/epaa/v7n9.html (accessed January 4, 2014); L. Goe, "Legislating Equity: The Distribution of Emergency Permit Teachers in California," *Educational Policy Analysis Archives* 10, no. 42 (2002), http://epaa.asu.edu/epaa/v10n42 (accessed January 4, 2014).

[22] Darling-Hammond and Sykes, "Wanted."

[23] Henke, Chen, Geis, and Knepper, *Progress Through the Teacher Pipeline*.

[24] National Commission on Teaching and America's Future, *No Dream Denied: A Pledge to America's Children* (New York, NY: Author, 2003).

[25] L. Grey et al., *New Teachers in the Job Market* (Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, 1991).

[26] Darling-Hammond and Sykes, "Wanted."

[27] L. Darling-Hammond, ed., *Studies of Excellence in Teacher Education* (Washington, DC: American Association of Colleges for Teacher Education, 2000).

[28] Ibid.

[29] Henke, Chen, Geis, and Knepper, *Progress Through the Teacher Pipeline*.

[30] National Commission on Teaching and America's Future, *No Dream Denied*.

[31] OECD, *Lessons from PISA 2012 for the United States: Strong Performers and Successful Reformers in Education*, 2013, http://www.oecd.org/pisa/keyfindings/PISA2012_US report_ebook(eng).pdf (accessed January 4, 2014).

[32] B. Auguste, P. Kihn, and M. Miller, "Closing the Talent Gap: Attracting and Retaining Top-Third Graduates to Careers in Teaching," McKinsey & Company Report (September 2010), http://mckinseyonsociety.com/downloads/reports/Education/Closing_the_talent_gap.pdf (accessed January 3, 2014).

[33] T. G. Carroll, *The High Cost of Teacher Turnover* (Washington, DC: National Commission on Teaching and America's Future, 2007).

[34] U.S. Department of Education, "For Each and Every Child—A Strategy for Education Equity and Excellence."

[35] Darling-Hammond and Sykes, "Wanted."

[36] Stanford Center for Opportunity Policy in Education, "Excellent Teachers for Each and Every Child: A Guide for State Policy," December 2013, http://www.teachingquality.org/sites/default/files/teaching-quality-policy-guide%281%29.pdf (accessed January 3, 2014). The legislation also includes a subsidy to cover participation fees for board certification and three days of approved paid leave, increases licensure requirements for teachers and principals, invests in improvements in teacher education curriculum, and funds a mentoring program for novice teachers (see http://bit.ly/tq-north-carolina-3).

[37] Ibid.

[38] For more information, visit http://www.nbpts.org/north-carolina.

[39] U.S. Department of Education, "For Each and Every Child—A Strategy for Education Equity and Excellence."

[40] There are large gains in teacher effectiveness between the first and second years of teaching. A four-year requirement allows for the time to increase effectiveness, provides students with at least two to three years of access to that teaching, and helps schools build and sustain capacity. See R. Gordon, T. J. Kane, and D. O. Staiger, *Identifying Effective Teachers Using Performance on the Job* (Washington, DC: Brookings Institution, April 2006).

[41] For example, according to a report by Linda Darling-Hammond and Gary Sykes, if 40,000 new teachers were supported by such scholarships and each candidate received up to $20,000 to cover tuition for undergraduate or graduate teacher preparation, the cost would be $800 million per year and could meet most of the nation's teacher supply needs in a few years. The U.S. currently loses billions of dollars each year due to early attrition from teaching, often resulting in the hiring of underprepared teachers; therefore, this type of program would repay itself many times over if it induced teachers to remain in teaching for an extended minimum number of years. See Darling-Hammond and Sykes, "Wanted."

[42] For more information, visit http://bit.ly/tq-north-carolina.

[43] Ibid.

[44] For more information, visit http://bit.ly/tq-connecticut-3.

[45] For more information, visit http://bit.ly/tq-illinois.

[46] Ibid.

[47] Darling-Hammond and Sykes, "Wanted."

[48] A. Wise, L. Darling-Hammond, and B. Berry, *Effective Teacher Selection: From Recruitment to Retention* (Santa Monica, CA: RAND Corporation, 1987).

[49] National Commission on Teaching and America's Future, *What Matters Most: Teaching for America's Future* (New York: Author, 1996).

[50] The New Teacher Project provides the following resources for improving teacher recruitment efforts: http://tntp.org/teacher-talent-toolbox/explore/hiring (accessed January 4, 2014).

[51] For more information, visit http://www.clemson.edu/hehd/departments/education/research/callmemister/.

[52] American Federation of Teachers, "Meeting the Challenge: Recruiting and Retaining Teachers in Hard-to-Staff Schools," 2007, http://www.aft.org/pdfs/teachers/hardtostaff0607.pdf (accessed January 3, 2014).

[53] L. Darling-Hammond, *Solving the Dilemmas of Teacher Supply, Demand, and Standards: How We Can Ensure a Competent, Caring, and Qualified Teacher for Every Child* (New York, NY: National Commission on Teaching and America's Future, 2000).

[54] L. Darling-Hammond, "Recognizing and Developing Effective Teaching: What Policy Makers Should Know and Do," May 2010, http://www.nea.org/assets/docs/HE/Effective_Teaching_-_Linda_Darling-Hammond.pdf (accessed January 3, 2014).

[55] Ibid.

[56] For the Ohio Resident Educator Program, see http://bit.ly/tq-ohio. See also the Oregon Network of Quality Teaching

and Learning, http://bit.ly/tq-oregon.

57 National Commission on Teaching and America's Future and NCTAF State Partners, "Unraveling the 'Teacher Shortage' Problem: Teaching Retention Is the Key," http://www.ncsu.edu/mentorjunction/text_files/teacher_retentionsymposium.pdf (accessed January 3, 2014).

58 National Education Goals Panel, *Reading Achievement State by State* (Washington, DC: U.S. Government Printing Office, 1999).

59 For more information, visit http://www.bostonteacherresidency.org/about/.

60 For more information, visit http://www.denverteacherresidency.org/.

61 L. Darling-Hammond, *Doing What Matters Most: Investing in Quality Teaching* (New York, NY: National Commission on Teaching and America's Future, 1997); Ingersoll, "Teacher Turnover and Teacher Shortages"; R. Ingersoll, *Out-of-Field Teaching, Educational Inequality, and the Organization of Schools: An Exploratory Analysis* (Seattle, WA: Center for the Study of Teaching and Policy, 2002).

62 D. Cornell, P. Sheras, A. Gregory, and X. Fan, "A Retrospective Study of School Safety Conditions in High Schools Using the Virginia Threat Assessment Guidelines Versus Alternative Approaches," *School Psychology Quarterly* (2009).

63 K. Singh and B. S. Billingsley, "Professional Support and Its Effects on Teachers' Commitment," *Journal of Educational Research* (1998).

64 P. Guo and A. Higgins-D'Alessandro, "The Place of Teachers' Views of Teaching in Promoting Positive School Culture and Student Prosocial and Academic Outcomes," paper presented at the Association for Moral Education annual conference, Nanjing, China, October 2011; W. K. Hoy and A. E. Woolfolk, "Teachers' Sense of Efficacy and the Organizational Health of Schools," *Elementary School Journal* (1993).

65 The National Commission on Teaching and America's Future defines school climate in terms of a learning community and provides evidence that school climate is an important contributing factor to teacher retention. See I. K. Fulton, I. Yoon, and C. Lee, *Induction into Learning Communities* (Washington, DC: National Commission on Teaching and America's Future, 2005).

66 J. L. Grayson and H. K. Alvarez, "School Climate Factors Relating to Teacher Burnout: A Mediator Model," *Teaching & Teacher Education* (2008); A. Higgins-D'Alessandro, "The Necessity of Teacher Development," in *Science for Society: Informing Policy and Practice Through Research in Developmental Psychology*, ed. A. Higgins-D'Alessandro and K. Jankowski (Chicago, IL: Jossey-Bass, 2002).

67 D. M. Miller, M. T. Brownell, and S. W. Smith, "Factors That Predict Teachers Staying in, Leaving, or Transferring from the Special Education Classroom," *Exceptional Children* (1999).

68 U.S. Department of Education, "For Each and Every Child—A Strategy for Education Equity and Excellence."

69 For more information, visit http://www2.ed.gov/policy/gen/guid/school-discipline/index.html.

70 Ibid.

71 R. Balfanz et al., "Graduating America: Meeting the Challenge of Low Graduation-Rate High Schools," July 2009, http://www.jff.org/sites/default/files/graduating_america_072209_0.pdf (accessed January 3, 2014).

72 Ibid.

73 G. Gay, *Culturally Responsive Teaching: Theory, Research, and Practice* (New York, NY: Teachers College Press, 2010). See also H. Richards, A. Brown, and T. Forde, *Addressing Diversity in Schools: Culturally Responsive Pedagogy, Teaching Exceptional Children* (Arlington, VA: Council for Exceptional Children, 2011).

74 U.S. Department of Education, "For Each and Every Child—A Strategy for Education Equity and Excellence."

75 Ibid.

76 For more information, visit http://bit.ly/tq-kentucky.

77 For more information on the New Teacher Center and the TELL Survey, visit http://www.newteachercenter.org/node/1359.

78 Ibid.

79 For more information, visit http://bit.ly/tq-north-carolina-2.

80 For more information, visit http://bit.ly/tq-illinois-3.

81 For more information, see http://www.newteachercenter.org/sites/default/files/ntc/main/resources/cross-state_analysis_report_20130919.pdf.

82 K. Seashore Louis et al., *Investigating the Links to Improved Student Learning: Final Report of Research Findings*, a report to the Wallace Foundation (University of Minnesota, Center for Applied Research and Education Improvement; University of Toronto, Ontario Institute for Studies in Education, 2010).

83 Institute of Education Sciences, *Access to Effective Teaching for Disadvantaged Students* (Washington, DC: U.S. Department of Education, November 2013), http://ies.ed.gov/ncee/pubs/20144001/pdf/20144001.pdf (accessed January 4, 2014).

[84] American Psychological Association, "Applying Psychological Science to Using Data for Continuous Teacher Preparation Program Improvement," report of a Board of Educational Affairs task force.

[85] National Council on Teacher Quality, "State of the States 2013—Connect the Dots: Using Evaluations of Teacher Effectiveness to Inform Policy and Practice," http://www.nctq.org/dmsView/State_of_the_States_2013_Using_Teacher_Evaluations_NCTQ_Report (accessed January 4, 2014).