

Closing the Revolving Door: Understanding the Nature and Causes of Disparities in Access to Effective Teaching

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Significant race- and income-based disparities in access to effective teaching persist and have been continually reinforced over time, but well-crafted state and federal policies could help end them.

Note: Excerpted and adapted, with permission, from the research brief Closing the Revolving Door: Understanding the Nature and Causes of Disparities in Access to Effective Teaching, published by the Chief Justice Earl Warren Institute on Law and Social Policy, University of California Berkeley School of Law. The full research brief, available at <www.warreninstitute.org>, contains a comprehensive literature review and more detail about the research studies and statistical methods mentioned in this article.

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Over the past three years, a new focus on teachers as the critical unit of change has become a clamor for dramatic movement at all levels of policy, with substantial support by the Obama administration, state governors, and leaders of several major school districts. The current set of policy proposals are focused on universal reforms designed to increase all students' achievement levels in an effort to ensure the nation remains economically competitive internationally.

Much less emphasis has been placed on how these proposed reforms might impact the persistent gap in academic outcomes between low-income students and students of color and their more-privileged peers. If new reforms do not address race- and income-based gaps in achievement and in access to effective teaching, they risk perpetrating or exacerbating historic inequities that stand in stark contradiction to our nation's values of justice, democracy, and opportunity.

This article examines the nature and magnitude of disparities in access, the ways in which these disparities are created and reinforced over time, and the potential for state and federal policy to play a role in providing greater access to effective teaching among students of color and low-income students.

What Are the Disparities in Access?

If there were little variation in teaching effectiveness, it wouldn't matter much whether a student were assigned to Mrs. Gonzales's class or Mr. Anderson's class for third grade – the growth in their academic achievement that year would look similar in either case. Unfortunately, there is a good deal of variation in teaching effectiveness, raising the stakes associated with the assignment of students to teachers, especially for those students who need the most support.

Given this variation, the question arises of whether there is a pattern to the distribution of effective teaching. If there were no systematic disparities in access, there would be no correlation between a student's racial/ethnic or class status and their likelihood of receiving effective (or ineffective) teaching. Unsurprisingly, research suggests this not to be the case. Disparities in access to effective teaching both between *and* within schools systematically disadvantage students of color, low-income students, and those students who are furthest behind academically.¹

¹ For a full statistical explanation and citations regarding variation in teacher effectiveness and disparities in access, see the research brief.

The magnitude of these disparities, however, varies substantially depending on the measure used and the context in which it is applied.

Disparities between Schools

Studies that compare the quality of faculties in schools that have high proportions of students of color or low-income students and those serving more-privileged students find disparities ranging from modest to large that systematically disadvantage students attending schools serving less-privileged populations.

TEACHER CHARACTERISTICS AND QUALIFICATIONS

Large differences in access disfavor students of color and low-income students across a number of studies that use teacher characteristics and qualifications as proxies for effectiveness in the classroom. These results have been replicated using a variety of measures and in districts and states that represent a wide array of geographic, political, economic, and union environments.² Research has shown that the inexperience of novice teachers with only one or two years in the classroom has a negative impact on student achievement.³ Studies find that the faculties of schools serving students of color and low-income students tend to have a greater share of novice teachers than those serving more-privileged students (Clotfelter et al. 2007).

A similar pattern of inequity emerges in the prevalence of teachers who lack prior experience and expertise in their subject area, particularly at the middle and high school levels. Nationwide, nearly a third of the math classes in secondary schools with at

least 75 percent students of color were taught by “out-of-field” teachers, compared with just one-sixth of math classes in schools with 15 percent or less students of color (Education Trust 2007). A study in Illinois adds further evidence of race- and income-based inequities. Ranking schools according to a “teacher quality index” aggregates individual teachers’ characteristics on multiple dimensions. The study revealed that there is a subgroup of “truly disadvantaged” schools with extreme levels of racial isolation and severe poverty that are far more likely to have faculties with low-quality rankings (Presley, White & Gong 2005).⁴

VALUE-ADDED METHODS

Studies using value-added methods find modest to moderate disparities in access that disadvantage students of color and low-income students, depending on the district, grade, and subject. A recent study compared the average math and reading value-added scores of teachers in high-poverty and lower-poverty elementary schools in North Carolina and Florida. The greatest disparity, found in math value-added in North Carolina, was approximately equivalent to the detriment of having a teacher with only one or two years of experience compared to one with three or more years in the classroom. The researchers also observed that the weakest teachers in the high-poverty schools were considerably less effective than the weakest teachers in the lower-poverty schools, even though the strongest teachers in high-poverty schools appeared as effective as the strongest teachers in lower-poverty schools. This was not due to differences in effectiveness of incoming novice teachers,

² For citations, see the full research brief.

³ See Rice 2010, for example; more citations are included in the research brief.

⁴ For more detailed statistics and citations, see the full research brief.

however, but rather by the presence of extremely ineffective *experienced* teachers in the high-poverty schools (Sass et al. 2010).

The extent of disparities in access to effective teaching varies a great deal across districts. A recent study of ten districts found large, statistically significant disparities in access that disadvantaged the poorest schools in half of the districts included in the analysis at the middle school level, and one-fourth at the elementary level. In one of the districts, the poorest elementary schools actually had a disproportionately *high* share of the most effective teachers compared to their better-off peer institutions in the district (NCEERA 2011). Research in Fulton County Schools (Georgia) also found significant variation in the prevalence in schools of the district's most effective teachers; however, the disparities did not fall along traditional lines. They found "little difference" in the prevalence of the district's most effective teachers in high- versus low-poverty schools *on average*, but observed a large amount of variation between schools *within* each of the school-poverty quartiles. Looking only at schools in the highest-poverty quartile, 4 percent of the math teachers in one school ranked among the district's most effective teachers, compared to 68 percent in another school in the highest-poverty quartile (CEPR 2011).

PRACTICE-BASED MEASURES

There is less research using practice-based measures of teaching effectiveness on school-level disparities in access to effective teaching. But a 2010 analysis of data from the District of Columbia Public Schools' IMPACT evaluation system (which included multiple classroom observations for all teachers) revealed large disparities in the prevalence of highly effective teachers that

avored the schools in more-privileged neighborhoods. The best ratio of highly effective teachers to students (one highly effective teacher to every thirty-four students attending schools in the ward) was found in Ward 3, one of the District's wealthiest and most predominantly White wards. In contrast, the worst ratio of highly effective teachers to students (one highly effective teacher to 250 students) was found in Ward 8, one of the wards with the greatest proportion of Black residents and low average household income (Turque 2010).

Studies that compare the quality of faculties in schools that have high proportions of students of color or low-income students and those serving more-privileged students find disparities that systematically disadvantage students attending schools serving less-privileged populations.

Disparities within Schools

While much of the policy discussion to date has focused on these disparities *between* schools, the empirical literature suggests that we must look deeper *within* the school building to uncover the full extent of the disparities in access. Researchers have consistently documented that while it does indeed matter to which school a student is assigned, it matters even more to which classroom(s) they are assigned once placed in that school (Rivkin, Hanushek & Kain 2005; Buddin & Zamarro 2009b). One study of elementary schools in Los Angeles found twice as

much variation in teaching effectiveness within schools as between schools (Buddin & Zamarro 2009a).

The limited body of research that explores disparities in teacher/student matching within schools suggests that these matching processes further disadvantage the very students who need the most support – those students who are furthest behind academically. A recently released study by Kalogrides and colleagues (2011) using longitudinal data across elementary, middle, and high schools in Miami-Dade County Public Schools, revealed that within schools, teachers with higher value-added scores and master’s degrees are assigned less-difficult classes – those with students who have higher average prior achievement, fewer prior suspensions, and higher attendance rates, as well as higher-level, advanced courses with older, more mature students. In contrast, teachers who have lower value-added scores, or who are less experienced, Black or Latino, or female are assigned to students with lower prior academic achievement, more prior suspensions, and lower prior attendance rates than their experienced, White, and male colleagues.⁵

Research using data from North Carolina demonstrates that within individual schools, teachers with the lowest licensure test scores are more likely to be assigned to classrooms with above-average proportions of students of color and students whose parents are not college educated. Furthermore, the students in these low-scoring teachers’ classes have lower prior achievement than those enrolled in classes taught by teachers with higher licensure test scores. Similar patterns emerge for

5 The relationships between experience, race/ethnicity, gender, and class assignments remained even after the researchers controlled for human capital factors (e.g., value-added scores, teacher education level).

teachers with the least experience and those with degrees from the least competitive undergraduate institutions. In contrast, National Board Certified teachers instruct students with higher levels of prior achievement and whose parents are more affluent and more likely to be college educated (Clotfelter, Ladd & Vigdor 2005, 2006).

What Produces the Disparities?

Recognizing the existence of meaningful disparities in access to effective teaching is a crucial first step, but alone it is not enough to craft thoughtful, evidence-based policies that can reasonably be expected to address the observed disparities. To this end, it is essential that we understand the ways in which these disparities are being produced and reinforced.

Movement of Teachers out of Schools

When given the opportunity to leave their current school assignment, a lengthy body of research demonstrates that teachers of all demographic, educational, and professional profiles tend to leave schools serving higher proportions of students of color, low-income students, and those students who are further behind academically for positions in schools serving more-privileged and higher-performing students. This tendency is particularly true among those teachers with the strongest characteristics and qualifications; these teachers are also more likely to exit the profession altogether.⁶

In contrast, research using value-added methods contradicts the belief that high-need schools disproportionately lose their most effective teachers. While these schools experience far greater turnover – or “churn” – on

6 For a complete list of citations, see the research brief.

average than those serving more-affluent and White students, the value-added literature suggests high-need schools are actually most likely to lose their *least* effective teachers.⁷ West and Chingos (2009) found that the four-year retention rates of new teachers in Florida schools in which at least two-thirds of the enrollees were students of color favored the *most* effective teachers – teachers in the top-third of the value-added distribution had retention rates more than ten percentage points higher than those teachers in the bottom third of the distribution.

The West and Chingos study makes clear another more troubling point. Even if these schools manage to hang onto their highest-performing teachers at a higher rate than their lowest-performing teachers, they are nonetheless losing far too many high-performing teachers – teachers who have already proven they are effective in these environments. Indeed, barely one in three of the most effective (top third) Florida teachers remained in their original schools four years after starting when the proportion of students of color in their initial school was at least two-thirds. The researchers observed a similar story in schools serving high proportions of students in poverty and low-performing students.⁸ Schools with high-performing students, by contrast, demonstrate more “desirable” patterns of retention and attrition. While these schools retain nearly one in two (45 percent) of their most effective teachers four years in, barely

7 The majority of these departing teachers tend to stay employed as teachers within the education system, however, whether transferring to schools within their district or transferring districts, giving fuel to the widespread notion of the “dance of the lemons.” For a complete list of citations, see the research brief.

8 Additional analyses were provided by Martin West, February 2011.



one in four (27 percent) of their least effective teachers still remain (West & Chingos 2009).

Across regions and districts, researchers find that teachers are far more likely to leave schools that have poor working and learning conditions because these school environments do not enable and encourage their success as educators.⁹ Teachers are especially sensitive to the quality of support provided by administrators, the degree of collegiality and collaboration among their peers, the behavioral and learning climate of their schools, their own autonomy, class sizes, ties to parents and the community, and the quality of facilities and school resources, among others (Brown & Wynn 2009; Berry 2008). And high-needs schools are more likely to suffer from poor working and learning conditions. For example, investigators at the Consortium on Chicago School Research found that most of the differences in attrition rates that disadvantage schools serving low-income Black students in the Chicago Public Schools – some of which tend to lose more than one-fourth of their teachers each year – are due to teachers’ relationships with parents in the elementary grades and teachers’ perceptions

9 See research brief for full list of citations.

While there have been a fair amount of programmatic efforts at the school and district levels to alter the conditions that reproduce the inequitable distribution of effective teaching, making the link to state and federal policy has proved difficult.

of students' behavior at the high school level (West & Chingos 2009).

Feng and Sass (2011) underline the particular sensitivity of teachers to the quality of their colleagues. Teachers whose value-added scores rank them higher than their colleagues are more likely to transfer schools and exit the profession; the greater the gap between their effectiveness and the average of that of their colleagues, the more likely these teachers are to leave their initial school. Furthermore, the increased presence of colleagues with more experience and advanced degrees or professional certification diminished the likelihood that a teacher would leave his or her school.

Administrators play a key mediating role in shaping the working conditions that are central to teachers' decisions to leave or remain in their schools. Unsurprisingly, then, many studies suggest that school leadership is the most important driver of teacher retention and, conversely, attrition (Boyd et al. 2009; Brown & Wynn 2009). In too many cases, administrators are unable to incubate the type of school environments that will retain teachers. This is particularly true in high-need schools. Too often, principals are inadequately trained in the specific skills and competencies required to lead such schools successfully (Berry 2008). Recent research suggests that high-need schools

experience high rates of principal turnover and that these schools have difficulty filling the resulting vacancies, leading them to hire less experienced and less qualified replacements. Predictably, principal departures are tied to higher rates of teacher turnover and lower rates of student performance, with more devastating effects on high-need schools in particular (Béteille, Kalogrides & Loeb 2011).

Filling of Vacancies with Replacements

The ways in which teachers fill open positions exacerbates the attrition patterns described above. High-need schools are more likely to hire novices, whom a number of studies have shown to be less effective, on average, than their colleagues with a couple more years of experience (Clotfelter et al. 2007; CEPR 2010). In addition to their obvious lack of experience in the classroom, the various programs and pathways designed to recruit and train novice teachers also fail to systematically prepare their teachers to teach successfully in schools serving high concentrations of poor students, students of color, and those students who are behind academically.¹⁰ Research suggests this is true across both "traditional" undergraduate and graduate-level programs and alternative pathways (Boyd et al. 2008).

Furthermore, as research in New York City and Florida found, the

¹⁰ See research brief for a list of citations.

most effective experienced teachers are drawn to – and hired by – schools with greater shares of higher performing and more privileged students than their less effective colleagues who also departed their initial schools for new positions (Boyd et al. 2008; Feng & Sass 2011). In short, the “rich get richer” and the “poor get poorer.”

The Experience of Replacement Teachers in Their New Schools

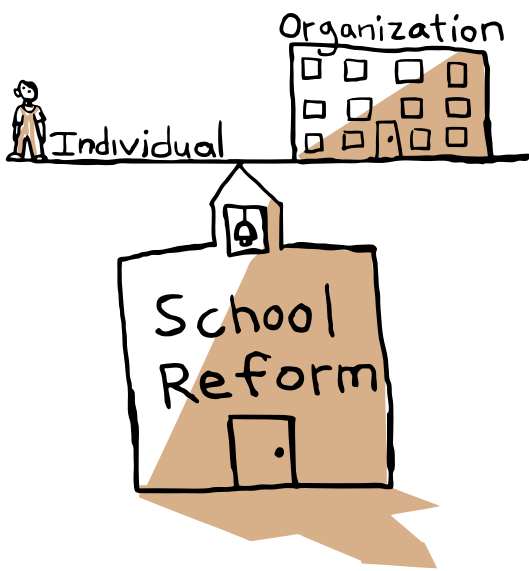
Once they arrive in these high-need schools, new teachers are not set up to succeed in the classroom. As described above, they are often assigned classes of students who are the furthest behind academically. Thus the teachers who need the most assistance are placed with the students who require the most support as well. In many cases, new teachers “receive little to no guidance about what to teach or how to teach it” (Kauffman et al. 2002). To the extent that there are induction programs available, many are in response to state mandates but funded with meager district resources (Berry, Hopkins-Thompson & Hoke 2002). Those that are far more substantial in scope and duration and have been rigorously evaluated have showed delayed impacts on academic achievement in some cases but have had no impact on retention of new teachers (Isenberg et al. 2010).

The recent analysis of data from North Carolina and Florida by Sass and colleagues underscores the challenges faced by new teachers in high-need schools and the importance of peer effects among teachers. While inexperienced teachers appear similarly effective initially in lower- and high-poverty schools, the teachers in high-poverty schools improve at a slower rate over

time than their colleagues in schools serving more privileged students – and these gaps in returns to experience grow with additional years in the classroom. The researchers hypothesize that teachers in these schools may “burn out” at a faster rate, or that this phenomenon reflects teacher peer effects in these schools (Sass et al. 2010). Given all this, it is not surprising that many of these high-need schools experience chronic, high levels of churn that undermine efforts to provide students of color and low-income students with access to the essential resource of effective teaching. When given challenging assignments that they feel unqualified to take on, new teachers are more likely to leave their school or the teaching profession altogether (Donaldson and Johnson 2010). Like most people, teachers want to feel that they can be effective in their work and will seek out those environments that encourage their success.

Recommendations for Federal and State Policy

The research presented above suggests the challenge for those working at the state and federal levels to increase access to effective teaching among students of color and low-income students is significant. Their task is to craft policies that successfully impact individual and organizational behavior at the district level and, even more importantly, within schools themselves. While there have been a fair amount of programmatic efforts at the school and district levels to alter the conditions that reproduce the inequitable distribution of effective teaching, making the link to state and federal policy has proved difficult. Given the research to date, we recommend three areas where state and federal policy can take action to increase the access of students of color and low-income students to effective teaching.



Emphasize Solutions at the Organizational Level

Much of the emphasis in the policy community to date has applied an individualistic lens to the issue of providing equitable access to effective teaching – for example, proposing the use of financial incentives to change teacher behavior. Research suggests that teachers do respond to salary differentials in deciding where to teach (Lankford, Loeb & Wyckoff 2002). However, the literature on the efficacy of bonuses intended to increase teacher performance and retention in high-need schools does not support the hypothesis that teachers will respond to such incentives as desired in the absence of other supports (Springer et al. 2010).

Evidence cited in this article, the research brief, and elsewhere (see, for example, Bryk et al. 2009) makes clear that a strong, intentional emphasis on the organizational context of schools is essential to both influencing teachers' decisions where to teach and improving their success in the classroom. Furthermore, as Bryk and colleagues demonstrate in their recent book on school

improvement in Chicago, such an organizational perspective is necessary to realize the potential of the presence of a high-quality staff (Bryk et al. 2009). Thus, though admittedly far more difficult than supporting more individual-oriented policies around teacher recruitment, evaluation, pay, tenure, and dismissal, state and federal policy must find ways of effectively supporting such an organizational focus.

Three organizational elements have a notable impact on teaching effectiveness: (a) the role of a teacher's colleagues in mediating her own effectiveness and her decision to remain in or leave her current position; (b) strong school leadership in areas such as establishing a flourishing learning community among teachers and students, setting cultural norms throughout the school, determining the assignment of teachers and students, and building connections with and marshaling resources from the surrounding community; and (c) at the state level, establishing and monitoring standards for working conditions.

Recognize the Variation across “High-Minority, High-Poverty” Schools

As described above, there is a great deal of variation within the group of schools often classified as “high minority, high poverty.” Specifically, as the research in Illinois cited previously suggests, hyper-segregated, hyper-impoverished schools appear to bear a vastly disproportionate share of the burden in terms of inequitable access to effective teaching. Masked in the large band of schools with high rates of free and reduced price lunch eligibility, such schools are situated in neighborhoods with extraordinarily low average household

incomes, low social capital, and high rates of crime and involvement in foster care, among other characteristics. As seen in the implementation of Title I of the Elementary and Secondary Education Act, federal and state policies tend to use blunt measures that treat schools serving high proportions of poor students as a homogeneous group in terms of need and response. While this entire body of schools clearly is in need of greater educational resources – including effective teaching – the unique challenges faced by a subset of these schools are not, and will never be, adequately addressed under the current policy framework. Rather, a successful policy response will likely need to distinguish amongst this broader group of schools, targeting resources and specific interventions at these “truly disadvantaged” schools that serve a disproportionate, concentrated body of students with severe challenges outside of school, such as a substantiated history of abuse and involvement with the child welfare system (Bryk et al. 2009). These considerations are particularly relevant in current policy discussions around “turnaround” schools.

Build Equity into Reform

In this time of significant change to our public education system and larger political and policy landscape, it will be essential to insert equity into broader reforms that affect the teaching profession, either by intention or implication. When considering policies targeting everything from pre-service training to pensions, policymakers and advocates will need to carefully analyze these policies’ potential impact on the distribution of effective teaching and proactively use these opportunities to improve equitable access at all levels. As an example, rather than applying a general strategy of pay-for-performance

programs for urban districts, such an equity lens would prioritize merit pay specifically targeted to those educators teaching in classrooms with disproportionate numbers of high-need and low-performing students.

Finally, it is important to remember that achieving an equitable distribution of effective teaching will, at best, perpetuate the underlying achievement gaps that track along racial/ethnic and socio-economic lines. To fully close the gap, we will need more: from an intentionally inequitable distribution of effective teaching that favors those students furthest behind academically to a complementary suite of policies and programmatic interventions designed to ameliorate the broader disparities in our communities.

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