

GETTING

**Latino
Students**

BETTER ACCESS TO

Non-Novice Teachers

[#Teachers](#)



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EVERY YEAR, THOUSANDS OF INDIVIDUALS TAKE ON ONE OF THE MOST IMPORTANT JOBS: **TEACHING**. While new teachers bring energy and passion into their classrooms and schools, they can find themselves incredibly challenged as they learn how to plan and implement lessons, collect, and use data to inform their instructional practices, build relationships with students and families, manage classroom behavior, and meet the varying academic, social, and emotional needs of their students.

Teachers can face a steep learning curve in their first few years of teaching,¹ and a significant percentage of teacher growth occurs in that very first year.² As they gain more experience, they can play a big part in increasing student motivation, increasing homework completion, and even reducing student absenteeism.³ Ultimately, teachers are the No.1 predictor of student success inside the classroom,⁴ estimated to have two to three times the effect of any other in-school factor.⁵

This is why having a teacher with more than just a year or two of teaching experience matters.

And yet, students of color and students from low-income backgrounds are more likely to attend schools with greater numbers of inexperienced teachers than their peers.⁶ This disparity, the result of a variety of factors (i.e., centuries of systemic racism, housing segregation, and resource inequity), means that groups of students are missing out, by no fault of their own, on the critical learning opportunities necessary to prepare them for success in college and/or the workforce.

There will always be — and should always be — new educators entering the teaching profession, bringing enthusiasm and fresh ideas into schools. States and districts should continue efforts to recruit new teachers into the profession to create a stronger and more diverse teacher workforce for all students. In particular, states and districts should continue recruiting new teachers of color into the profession, especially for the rapidly growing Latino student

“**Ultimately, teachers are the No.1 predictor of student success inside the classroom**”

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population. The Latino population is the largest ethnic group of students in America's schools, expected to grow to one-third by 2027, but they still attend schools and districts across the country with few or no teachers of color on staff.⁷ These recruitment efforts must also include supports for new teachers including mentorship, robust clinical experiences, and efforts to create more culturally sustaining and affirming environments for new teachers of color to ensure that they stay in the classroom and avoid the negative consequences of high turnover rates. Teachers of color are especially vulnerable to such conditions since they are more likely to teach in schools with fewer resources.⁸ (See: *Why Teachers Leave*, p. 7.)



Right now, many students attend schools where they have a brand-new teacher year after year after year. This “revolving door” of teachers can deeply affect student learning.⁹ High turnover creates instability, making it difficult for schools to create coherent instruction and to implement new initiatives.¹⁰ To no surprise, inexperienced teachers and high teacher turnover disproportionately affect the achievement of students who are most underserved. Education Resource Strategies paints a clear picture of this in their report, *Growing Great Teachers*, where they describe how an inexperienced workforce can impede efforts to improve conditions for teachers and students who have been underserved for far too long:



“The faculty are likely a mix of experienced and novice teachers, as well as several long-term substitutes. At least some of the staff, who were unable to secure another job in the district, have been force-placed into positions for which they are poorly prepared. Instructional support for teachers is limited, and development opportunities are undifferentiated and often crowded out by basic classroom and building management challenges. As a result, as many as 3 out of 10 of the school’s teachers leave the school each year. Some move quickly into schools or districts with fewer challenges; others leave education altogether. Some depart mid-year, leaving the school with open positions at a time when qualified candidates are in especially short supply. Each year, as the district struggles to fill vacancies, several classrooms are again staffed with teachers who lack experience in the subject matter, let alone with the district’s new, more rigorous curriculum.”¹¹



In many ways, the pandemic has only increased the educational inequities that underserved students are experiencing. As school, district, and state leaders look forward to recovery and providing students with what they need to solve unfinished learning exacerbated by the pandemic, now more than ever, they must ensure students have equitable access to educators with enough experience and support to help all students learn and thrive.

In this paper, we look closely at inequitable access to experienced teachers for Latino students across the country. Our findings reveal that, while Latino students have similar rates of non-novice teachers as their peers nationwide, drastic disparities still exist in several states. (See our accompanying report: *Getting Black Students Better Access to Non-Novice Teachers*.)

Our findings reveal whether these inequities are due to varying levels of teacher experience between the districts in a particular state or within a particular district. In either case, these disparities are not inevitable. State and district leaders and local school board members can set clear goals and identify and address barriers to preparing, recruiting, and retaining strong and racially diverse teachers. And school leaders can take steps to create working conditions that ensure teachers, including teachers of color, remain in schools and hone their craft.



Why Teachers Leave

THERE ARE MANY REASONS WHY TEACHERS MAY LEAVE THE WORKFORCE OR SWITCH SCHOOL DISTRICTS, INCLUDING:

- **Segregation & resource inequity.** Decades of discriminatory federal policy has led to an increasingly racially segregated school system in which students of color are concentrated in schools that are under-resourced.¹² This racial segregation has also led to an increasingly segregated teacher workforce in which teachers of color serve racially segregated schools.¹³ Due in part to poor working conditions and a lack of support,¹⁴ all teachers, particularly teachers of color, tend to leave these schools¹⁵ at a higher rate, and many of these teachers are attracted to schools with more resources and support.
- **Teacher shortages & compensation.** A confluence of factors, including implicit biases, our country's history of housing discrimination, which is directly linked to existing funding inequities among districts, and the fact that staff salaries and benefits make up most of the district spending, mean that some districts have more funds to pay educators and provide other resources for students and educators.¹⁶ These districts are better able to attract and retain teachers, particularly for hard-to-staff positions, including special education and STEM subjects.
- **School climate and working conditions.** Teachers, particularly teachers of color, may leave schools that have adverse working conditions, where they are not supported by other school staff or school leadership, or are discriminated against.¹⁷
- **The "invisible tax."** In addition, teachers of color, who are over-represented at higher needs schools, leave at higher rates than their White peers because of the "invisible tax" on teachers of color: the extra work they take on (such as translation) without compensation.¹⁸
- **School leadership.** Principals play an important role in teacher turnover, as they cultivate a school environment, collegial relationships, and collaboration. However, higher poverty schools tend to have less-effective principals than lower poverty schools.¹⁹ More effective and experienced teachers may be attracted to schools in districts that are higher-resourced and, therefore, higher performing.

ABOUT OUR ANALYSIS

Our analysis begins by looking at whether Latino students have equitable access to non-novice and certified teachers, nationally and in each state. Specifically, we analyzed data from the U.S. Department of Education's 2017-18 Civil Rights Data Collection to compare percentages of first year, novice (first and second year), and uncertified teachers in schools serving the most and fewest Latino students across the country,²⁰ nationally and among states²¹ in which Latino students represent at least 3% of the student body.²² If Latino students had equitable access to experienced teachers, then schools serving the most Latino students would have higher rates of non-novice and certified teachers than other schools.

Recent research has examined whether students of color and students from low income-backgrounds have equitable access to non-novice teachers,²³ finding that schools with high enrollments of these student populations tend to have less access to experienced teachers.²⁴ In this report, we look at Latino students specifically to understand the unique experiences of this student group. (See our accompanying report about Black students' access to non-novice teachers). Research that is more dated, including analyses based on 2011-12 data from the Department of Education, has examined Black and Latino student experience separately and noted large disparities in access to experienced and certified teachers.²⁵ Since then, many states have made an explicit commitment to improving student access to non-novice teachers through their teacher equity plans submitted to the Department of Education. We also look at patterns related to teacher certification as an indicator of overall school quality, and resource equity, and for its connection to providing students with college readiness opportunities. (See: *Why We Looked at Teacher Certification*, page 9.) This report examines the status of gaps in access to non-novice and certified teachers since those plans were submitted in 2015.

Additionally, this report aims to better understand the root causes of the disparities, by examining how much of the variation in student access to non-novice teachers is due to within district differences versus between district differences.²⁶



Why We Looked at Teacher Certification

Research is inconclusive on whether there is a direct relationship between teacher certification and student outcomes. But importantly, teacher certification may be linked with other learning opportunities. For example, access to advanced coursework, such as gifted and talented programs, eighth grade Algebra I, and Advanced Placement courses and other STEM subjects, can prepare students for college and beyond. Yet, high-poverty schools that lack certified teachers may be less likely²⁷ to offer these rigorous courses, denying students the chance to take the classes that may be necessary to gain entry to four-year colleges.²⁸ What's more, without certified teachers to lead classes, schools may have to expand the sizes of other classes or turn to substitute teachers who do not have the appropriate content knowledge. For these reasons, our analysis also examines Latino student access to certified teachers.



OUR FINDINGS

LATINO STUDENT ACCESS TO EXPERIENCED TEACHERS

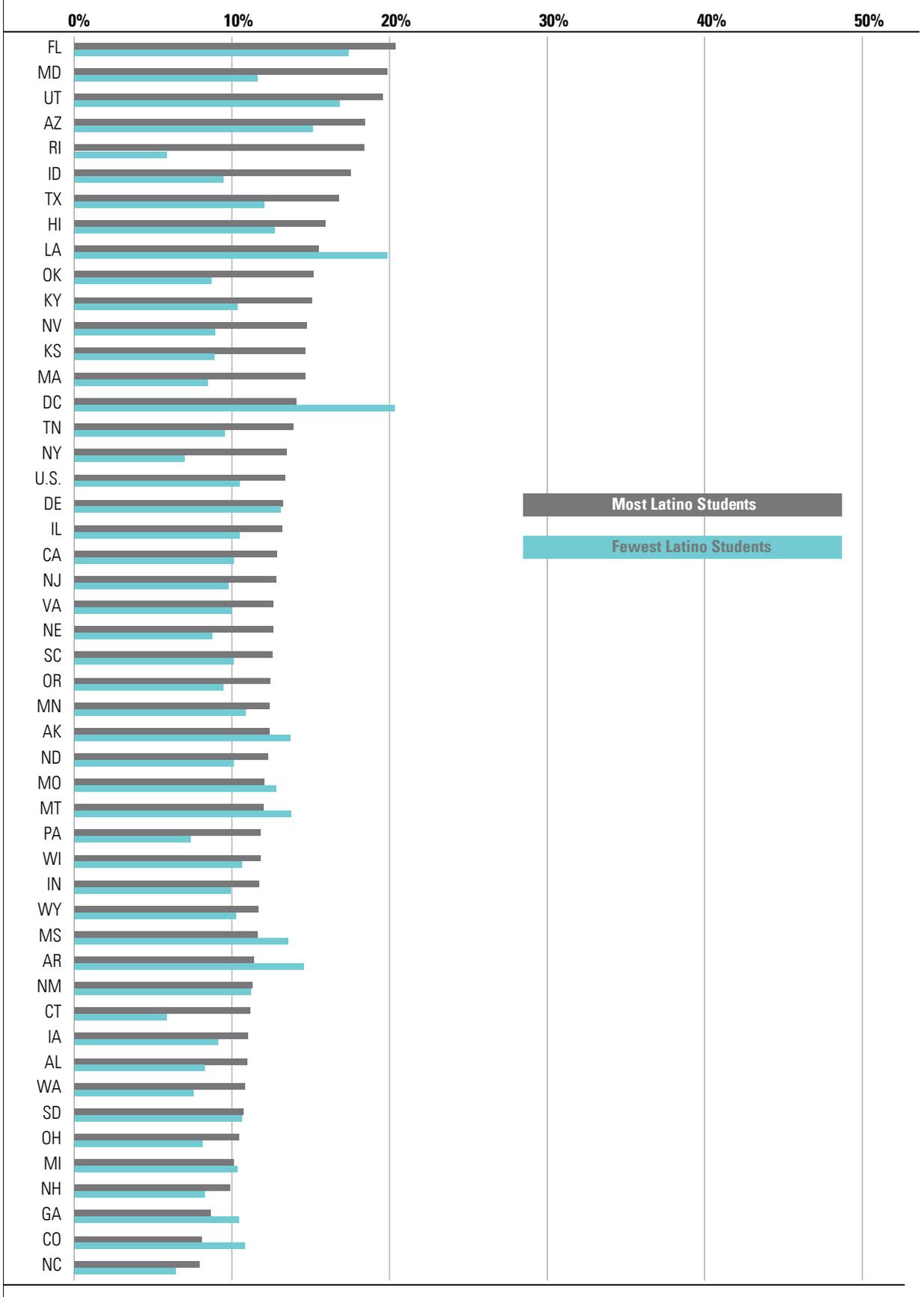
FINDING 1a: Latino students have more novice teachers in more than half of all states.

In Rhode Island, for example, in schools serving the greatest percentages of Latino students, 18% of teachers are novice teachers. In schools serving the smallest percentages of Latino students, 6% of the teachers are novice teachers. This means there are three times as many novice teachers in schools serving the largest percentages of Latino students as there are in schools serving the smallest percentages of Latino students. In New York and Connecticut, schools serving the most Latino students have about twice the percentage of novice teachers as schools serving the fewest (Figure 1).

In 32 states, Latino students also have more first-year teachers. In New York, for example, not only do Latino students have more novice teachers, but they also have more first-year teachers. In New York schools serving the most Latino students, 8% of the teaching force consists of first-year teachers compared to 4% at schools serving the fewest.

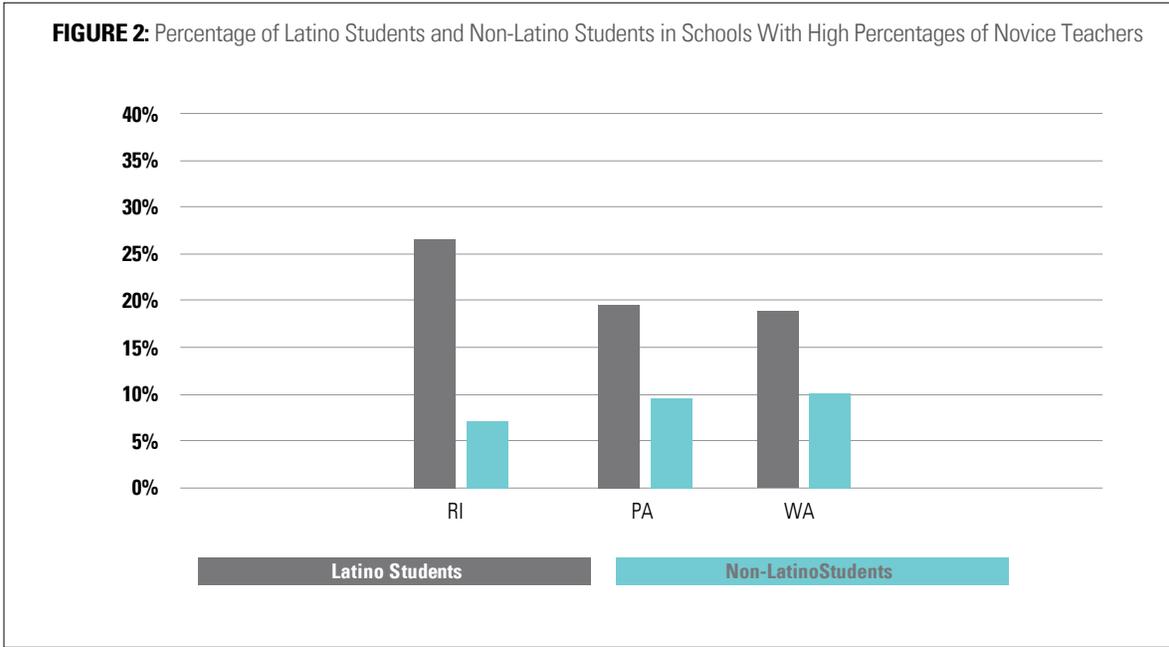


FIGURE 1: Percentage of Novice (1st & 2nd Year) Teachers in Schools Serving the Most and Fewest Latino Students

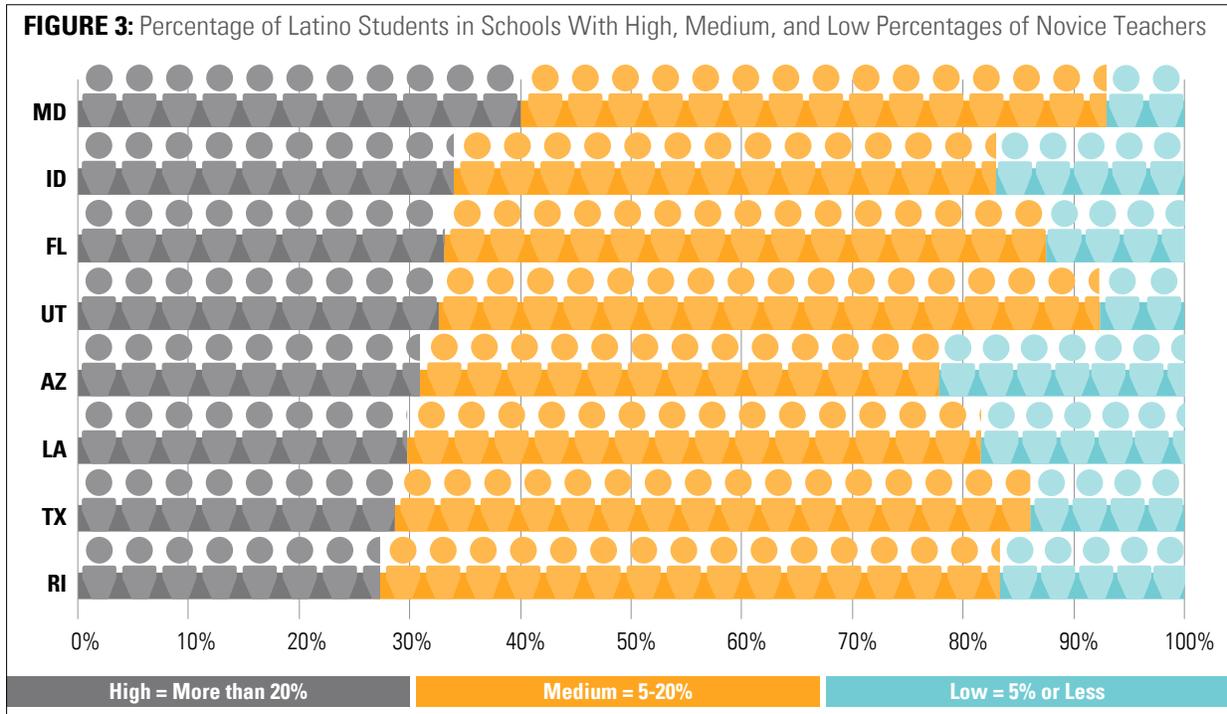


FINDING 1b: In three states — Rhode Island, Pennsylvania, and Washington — Latino students are 2 to 3 times more likely to attend schools that have high percentages of novice teachers.²⁹

In Rhode Island, for example, the disparities are striking: About 27% of Latino students attend schools with high percentages of novice teachers, compared to 7% of non-Latino students (Figure 2).



FINDING 1c: In eight states, more than 25% of Latino students attend schools with high percentages of novice teachers (Figure 3).

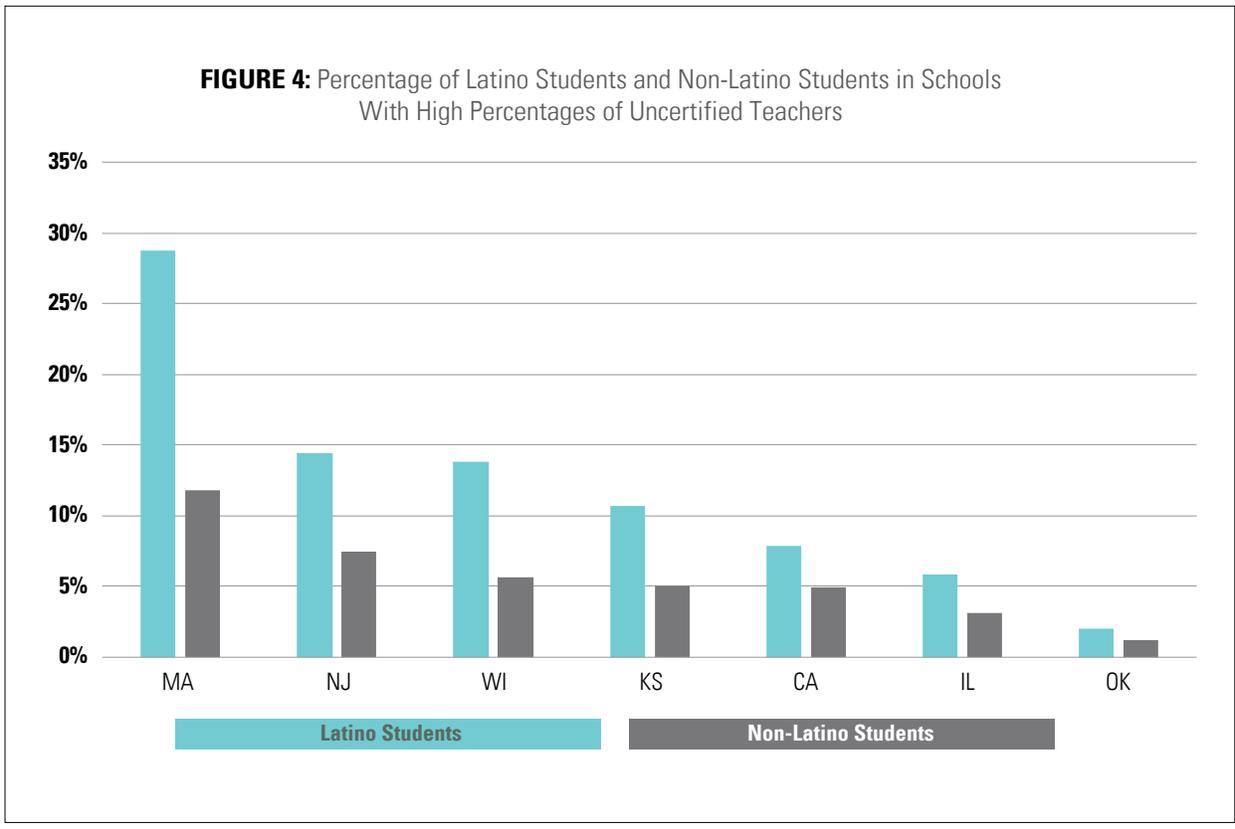




The implications of having high concentrations of novice teachers extend far beyond the numbers. Research suggests that novice teachers at these schools may be less likely to receive the resources and extra support they need to improve.³⁰ Novice teachers tend to have colleagues who are also less experienced and less effective.³¹ Research indicates that pairing teachers with highly effective teacher-mentors can foster teacher effectiveness; teachers have fewer opportunities to experience this mentorship at schools with high concentrations of novice teachers.³²

FINDING 2: In several states, Latino students are more likely to attend schools that have high percentages of uncertified teachers (greater than 10%).

This is a particular challenge in seven states (Figure 4). In Massachusetts, for example, 29% of Latino students attend schools with high percentages of uncertified teachers compared to 12% of non-Latino students.



“ Teachers of color are more likely to teach in schools with fewer resources ”



What's Behind the Disparities in Access to Experienced Teachers

Why are some students more likely than others to have novice teachers? Is it because they attend schools in districts with more novice teachers than other districts in the state? Or is it because their school has more novice teachers than other schools in their district? Knowing the answer to that question is key to implementing the right solutions at the right level.

The disparities in how often students have novice teachers show up in two ways: (1) differences among districts within a state or (2) differences between schools within a district.

To further examine disparities in student access to non-novice and certified teachers, we analyzed how much variation in teacher experience is due to patterns within districts or patterns among districts.



FINDING 3: The extent to which disparities in student access to novice teachers are primarily found within districts or between districts varies widely by state.

In almost half of states,³⁹ there is more variation in the percentages of novice teachers between districts than within districts. And in some of those states, student access to novice teachers is very clearly a between-district issue. For example, in Arizona, Louisiana, North Carolina, Ohio, Rhode Island, and Utah, more than 75% of the variation in student access to experienced teachers occurs between districts. But in the other half of states, student access to novice teachers is not a between-district challenge. For example, in Florida, Iowa, Kentucky, Maryland, Nevada, Oregon, South Carolina, South Dakota, and Wyoming, less than 25% of the variation in student access to experienced teachers occurs between districts.



ROADMAP FOR SUCCESS

Our research notes that students of color disproportionately attend schools with more novice and uncertified teachers than their peers. Whether these disparities in access to novice teachers are due to differences between districts, rather than between schools within districts, varies widely by state.

Gaps in access to strong teachers have persisted for far too long. Students who are underserved can no longer be denied access to experienced and qualified teachers. District and state leaders can take actions that move beyond highlighting these inequities to proactively addressing them by following this roadmap:

1. Establish data systems and examine data for disparities. State leaders should look closely at their data for patterns of disparities, as we did in this analysis; patterns can indicate which districts within states need further investigation and which can be held up as bright spots. This important step is predicated on a commitment by states to collecting, disaggregating, and publicly reporting teacher equity data, disaggregated by race, including:

- Number of teachers who enter schools and districts, disaggregated by teacher prep programs
- Number and percentages of teachers who are inexperienced, out of field, or ineffective
- Number and percentages of substitute teachers by school and district
- Teacher retention rates by teacher effectiveness, and experience, disaggregated by teacher prep program
- Teacher climate surveys and exit surveys, disaggregated by teacher race, to understand the unique experiences of teachers of color in schools
- Opportunities for high-quality professional development

Massachusetts

Massachusetts' Student Learning Experience Report allows schools and district administrators to see the characteristics of teachers who teach each student over a number of years.³⁴ This data allows administrators to see the year-by-year impact on a student over time when they are not assigned to an experienced or diverse teacher.

2. Determine whether disparities are due to within- or between-district differences. Engage with teachers to determine the root causes of disparities and examine district policies.

Next, state leaders must determine the root causes of inequities, and whether they are being driven by differences within districts or between districts. As in Louisiana, state leaders must commit to listening to teachers and school leaders to examine the roots of inequities, including why teachers leave their schools or districts.

To be clear, inequities *within* schools exist as well. Too often, even within the same school, Black and Latino students are not assigned to experienced and qualified teachers due to decisions school leaders make about which courses students have access to and which teachers teach those courses. In other words, even in schools that look like they have a relatively experienced and qualified workforce, Black and Latino students may still be disproportionately assigned to courses taught by novice educators.³⁵ This is especially true in middle and high schools, but there are significant differences even at the elementary level.³⁶

3. Set clear goals and interim measures of progress. State leaders must make a plan that is informed by meaningful stakeholder engagement, with clear goals, evidence-based strategies, and a commitment to continually collect and report data that measures progress toward those goals. Establishing clear and numerical state and district goals that are ambitious and achievable, along with a clear timeline, will set the expectation that leaders at every level will be held accountable for ensuring students have access to strong teachers.

Maryland

Under the Blueprint for Maryland's Future, which the legislature passed in 2021, districts are required to submit a plan for addressing the disproportionate assignments of students from certain racial, ethnic, linguistic, or economic backgrounds and students with disabilities to novice teachers or "teachers providing instruction in fields in which they lack expertise."³⁷

“ Principals of color are more likely to recruit and retain teachers of color ”

4. Implement policy solutions based on data. After taking an honest look at data and disparities, and setting a goal for meaningful progress, state leaders should enact evidence-based policy solutions to pave the way forward, keeping in mind whether disparities in their state are greater within districts or between districts. It's important to note that there are many factors (e.g., whether a district is in an urban or rural area) that state and district leaders should consider when ensuring students have equitable access to strong teachers; within- versus between-district differences are just one potential cause. When addressing within- versus between-district differences, leaders could employ the following policies:

Invest in strengthening school leaders in high-need districts and schools. Principals and school leaders have a significant impact on school culture, and satisfaction with school leaders is key to retaining teachers in high-poverty schools.³⁸ States should:

- Ensure that **standards for principal preparation programs and professional standards** for principals reflect the necessary skills to improve achievement in struggling schools and for historically underserved groups of students.
- Offer competitive grants for high-need districts to create **principal pipelines** for strategically preparing, hiring, developing, and supporting school leaders, and offer incentives to recruit strong school leaders to high-need schools.³⁹
- Invest specifically in **developing and supporting leaders of color**, given the research showing that principals of color are more likely to recruit and retain teachers of color.⁴⁰
- Provide **professional development and supports** (e.g., coaching) for leaders in high-need schools.

Invest in evidence-based Grow Your Own and high-quality residency programs.

State leaders must invest in and encourage school districts to implement high-retention pathways, such as high-quality residency and Grow Your Own programs through strong partnerships between state-approved educator preparation programs and school districts. These programs may include support from community organizations and can increase access to high-quality pathways into the teaching profession for populations underrepresented in the workforce. Investments in these programs can address teacher shortages and minimize teacher turnover by providing supports on issues that many teachers, particularly teachers of color, cite as among the leading factors for leaving the profession.

Pay teachers more to work in high-need districts, schools, and subjects. While all teachers should be fairly compensated for the hard work they do, states can offer differential pay to entice excellent teachers to teach in districts and schools that need them most. This usually takes the form of a salary increase or stipend, although it could include housing incentives or loan forgiveness.⁴¹ Because staff salaries and benefits comprise the majority of district spending, funding inequities between districts often prevent districts serving more students from low-income households and students of color from offering competitive salaries that might attract and help retain high-quality teachers, especially for hard-to-staff positions.⁴² States should work to reduce the influence of neighborhood property values on school district budgets.

Connecticut

Connecticut shows how states can incentivize and reduce burdens for new teachers entering the field. Teachers of color working in Connecticut may receive an annual grant for reimbursement of federal or state education loans. This is part of a multipronged approach to support districts in the development and implementation of a plan to attract, recruit, hire, and retain teachers of color.⁴³

Support high-need districts in hiring early. In one recent study of a large urban district, nearly 20% of teachers were hired after the school year began.⁴⁴ Late hiring may make it difficult for districts to recruit strong teachers, who have already accepted positions elsewhere. Teachers who start late don't have time to plan and prepare and may struggle to create a positive classroom culture after students have been with an interim teacher or in a very large class. States should support districts struggling to recruit strong candidates to move up hiring timelines, which may include finalizing district budgets earlier in the year and reworking internal teacher transfer processes. States should also **implement more holistic layoff policies** that require or encourage districts to consider multiple criteria — including teacher seniority, performance, and licensure status, as well as school-specific needs— so that districts and schools with large percentages of novice teachers don't experience disproportionate turnover in difficult economic times.⁴⁵

“Late hiring may make it difficult for districts to recruit strong teachers, who have already accepted positions elsewhere”

Provide teachers, especially novice teachers, with mentoring, support, and other professional learning opportunities. States could do this through competitive grants and by creating meaningful opportunities for teacher leadership, prioritizing roles in high-need schools and for educators of color. State leaders should encourage school and district leaders to create teacher leadership roles in high-need schools that allow strong teachers that have demonstrated experience successfully teaching students from low-income families and students of color to advance professionally while remaining in the classroom. For example, the Opportunity Culture (OC) initiative aims to extend the reach of highly effective teachers by restructuring P-12 schools and providing direct professional development, collaboration, and planning time for these educators.⁴⁶ New teachers in OC schools receive deep support and regular coaching.⁴⁷

Texas

Since 2015, the Texas Education Agency has supported multiple districts in implementing Opportunity Culture models to provide teacher leadership opportunities and new teacher supports.⁴⁸

Develop networks of district leaders to problem-solve together. Communities of practice among district leaders can help practitioners learn from their peers about best practices for building strong data systems, setting goals for ensuring students of color have access to experienced and qualified educators, and supporting teachers and school leaders within districts with similar geographic and socioeconomic contexts.



- 5. Commit to ongoing data transparency, monitoring, and holding leaders accountable.** To ensure these policy solutions are being implemented with fidelity, state leaders must make sure they are holding district and school leaders accountable, and continuously collecting and publishing data to monitor for improvement. For example, Oregon publishes an Educator Equity Report every year that provides an “an updated review of the current research on recruitment and retention for educator diversity, recent data on Oregon’s educator workforce diversity, evidence of initiatives to create racially affirming and culturally sustaining environments among preparation and P-12 programs.”⁴⁹ Tools like this help keep states on track to ensuring all students have access to strong teachers.

Federal Actions to Improve Teacher Equity

Title I of ESSA requires states to collect, publicly report, and act to close educator equity gaps for students of color and students from low-income backgrounds. Unfortunately, many states do not even publish data related to these inequities and leave families and advocates unaware of the severity of the issue. As schools, districts, and states look to accelerate learning after the pandemic, there is a huge opportunity to use funds allocated from the American Rescue Plan to invest in developing strategies to address educator inequities.⁵⁰

- For additional state and federal policy recommendations, review the list of resources below:
 - [Alliance for Resource Equity Guidebooks: Teaching Quality & Diversity](#)
 - [Distributing Teacher Talent Equitably \(NCTQ\)](#)
 - [Ed Trust resource for educator equity plans](#)
 - [Education Resource Strategies \(ERS\) Toolkit: New Teacher Support](#)
 - [Inequitable Opportunity to Learn: Student Access to Certified and Experienced Teachers \(LPI\)](#)
 - [Moving Toward Equity Toolkit \(AIR\)](#)

ENDNOTES

1. Kane, T.J., & Rockoff, J.E. (2006). What Does Certification Tell Us About Teacher Effectiveness? Evidence from New York City. *Economics of Education Review*, 27(6), 615-632. <https://www.nber.org/papers/w12155>
2. Harris, D., & Sass, T. (2007). Teacher Training, Teacher Quality and Student Achievement. Center for Analysis of Longitudinal Data in Education Research. <https://files.eric.ed.gov/fulltext/ED509656.pdf>
3. Ladd, H.F. & Sorensen, L.C. (2017). Returns to Teacher Experience: Student Achievement and Motivation in Middle School. *Education Finance and Policy*, 12(2), 241-279. http://dx.doi.org/10.1162/EDFP_a_00194
4. Rivkin, S.G., Hanushek, E.A., & Kain, J.F. (2005). Teachers, Schools, and Academic Achievement. *Econometrica*, 73(2), 417-458. <https://econ.ucsb.edu/~jon/Econ230C/HanushekRivkin.pdf>
5. Opper, I.M., (2019). Teachers Matter: Understanding Teachers' Impact on Student Achievement. RAND Corporation. <https://doi.org/10.7249/RR4312>
6. Goldhaber, D., Quince, V. & Theobald, R. (2017). Has It Always Been This Way? Tracing the Evolution of Teacher Quality Gaps in U.S. Public Schools. *American Education Research Journal*, 55(1), 171-201. <https://doi.org/10.3102/0002831217733445>
7. The Education Trust. (2020). Is Your State Prioritizing Teacher Diversity & Equity? <https://edtrust.org/educator-diversity/#US>.
8. Office of Planning, Evaluation and Policy Development, US Department of Education. (2016). The State of Racial Diversity in the Educator Workforce. <https://files.eric.ed.gov/fulltext/ED571989.pdf>
9. Ronfeldt, M., Loeb, S., Wyckoff, J. (2013). How teacher turnover harms student achievement. *American Educational Research Journal*, 50(1), 4-36. <http://aer.sagepub.com/content/50/1/4>
10. Balu, R., Beteille, T, & Loeb, S. (2009). Examining teacher turnover: The role of school leadership. *Politique Americaine* 15, 55–79. https://www.cairn.info/revue-politique-americaine-2009-3-page-55.htm?try_download=1
11. Rosenberg, D., & Hawley Miles, K. (2018). Growing Great Teachers. *Education Resource Strategies*. <https://www.erstrategies.org/cms/files/4046-growing-great-teachers-report.pdf>
12. ProPublica. (2017). School Segregation Data. <https://www.propublica.org/datastore/dataset/school-segregation-charter-district-data>
13. Hansen, M., & Quintero, D. (2018). Teachers in the US are even more segregated than students. Brown Center Chalkboard: Brookings Institution. <https://www.brookings.edu/blog/brown-center-chalkboard/2018/08/15/teachers-in-the-us-are-even-more-segregated-than-students/>
14. Almy, S., & Tooley, M. (2012). Building and Sustaining Talent: Creating Conditions in High-Poverty Schools That Support Effective Teaching and Learning. The Education Trust. https://edtrust.org/wp-content/uploads/2013/10/Building_and_Sustaining_Talent.pdf
15. Dixon, D., Griffin, A., & Teoh, M. (2019). If You Listen, We Will Stay: Why Teachers of Color Leave and How to Disrupt Teacher Turnover. The Education Trust. <https://edtrustmain.s3.us-east-2.amazonaws.com/wp-content/uploads/2014/09/15140833/If-You-Listen-We-Will-Stay-Why-Teachers-of-Color-Learn-and-How-to-Disrupt-Teacher-Turnover-2019-September.pdf>

16. Quick, K., & Kahlenberg, R. Attacking the Black–White Opportunity Gap That Comes from Residential Segregation. (2019). The Century Foundation. <https://tcf.org/content/report/attacking-black-white-opportunity-gap-comes-residential-segregation/?agreed=1>
17. Dixon, D., Griffin, A., & Teoh, M. (2019). If You Listen, We Will Stay: Why Teachers of Color Leave and How to Disrupt Teacher Turnover. The Education Trust. <https://edtrustmain.s3.us-east-2.amazonaws.com/wp-content/uploads/2014/09/15140833/If-You-Listen-We-Will-Stay-Why-Teachers-of-Color-Leave-and-How-to-Disrupt-Teacher-Turnover-2019-September.pdf>
18. Dixon, D., Griffin, A., & Teoh, M. (2019). If You Listen, We Will Stay: Why Teachers of Color Leave and How to Disrupt Teacher Turnover. The Education Trust. <https://edtrustmain.s3.us-east-2.amazonaws.com/wp-content/uploads/2014/09/15140833/If-You-Listen-We-Will-Stay-Why-Teachers-of-Color-Leave-and-How-to-Disrupt-Teacher-Turnover-2019-September.pdf>
19. The Learning Policy Institute: The Role of Principals in Addressing Teacher Shortages. (2017). Learning Policy Institute. https://learningpolicyinstitute.org/sites/default/files/product-files/Role_Principals_Addressing_Teacher_Shortage_BRIEF.pdf
20. These are the schools, in each state, in the highest and lowest quartiles for percentages of Black students and percentages of Latino students.
21. One limitation of this analysis is that it does not include the unique experiences of Afro-Latino students.
22. The states that are excluded from state-specific findings because Latino students represent less than 3% of the student body are: Maine, Vermont, and West Virginia.
23. Cardichon, J., Darling-Hammond, L., Yang, M., Scott, C., Shields, P. M., & Burns, D. (2020). *Inequitable opportunity to learn: Student access to certified and experienced teachers*. Palo Alto, CA: Learning Policy Institute. <https://learningpolicyinstitute.org/product/crdc-teacher-access-report>
24. Isenberg, E., Max, J., Gleason, P., Johnson, M., Deutsch, J., & Michael Hansen (2016). Do Low-Income Students Have Equal Access to Effective Teachers? Evidence from 26 Districts (NCEE 2017-4007). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. <https://ies.ed.gov/ncee/pubs/20174008/pdf/20174007.pdf>
25. U.S. Department of Education Office for Civil Rights. (2014). Civil Rights Data Collection Data Snapshot: Teacher Equity. <https://www2.ed.gov/about/offices/list/ocr/docs/crdc-teacher-equity-snapshot.pdf>
26. This analysis estimates the intraclass correlation, which is a measure of how similar the percentages of novice teachers are within each school district.
27. The United States Government Accountability Office. (2018). K-12 Education: Public High Schools with More Students in Poverty and Smaller Schools Provide Fewer Academic Offerings to Prepare for College. <https://www.gao.gov/assets/gao-19-8.pdf>

28. Patrick, K., Socol, A., & Morgan, I. (2020). Inequities in Advanced Coursework: What's Driving Them and What Leaders Can Do. The Education Trust. <https://edtrustmain.s3.us-east-2.amazonaws.com/wp-content/uploads/2014/09/08183916/Inequities-in-Advanced-Coursework-Whats-Driving-Them-and-What-Leaders-Can-Do-January-2019.pdf>
29. We define a critical value at greater than 20% of new teachers. This captures the top 85% of schools with the largest share of novice teachers.
30. García, E. & Weiss, E. (2019). The Role of Early Career Supports, Continuous Professional Development, and Learning Communities in the Teacher Shortage. <https://www.epi.org/publication/teacher-shortage-professional-development-and-learning-communities/>
31. Bruno, P., Rabovsky, S., & Strunk, K. (2019). Taking their First Steps: The Distribution of New Teachers into School and Classroom Contexts and Implications for Teacher Effectiveness and Growth. CALDER Working Paper. <https://caldercenter.org/sites/default/files/CALDER%20WP%20212-0119-1.pdf>
32. Ronfeldt, M., Brockman, S. L., & Campbell, S.L. (2018). Does Cooperating Teachers' Instructional Effectiveness Improve Preservice Teachers' Future Performance? *Educational Researcher*, 47(7), 405-418. <https://doi.org/10.3102/0013189X18782906>
33. Of 48 states; this excludes the District of Columbia and Hawaii because they each have one traditional school district. It excludes West Virginia because the estimated variation was almost zero.
34. Massachusetts Consolidated State Plan Under the Every Student Succeeds Act (ESSA). (2017). <http://www.doe.mass.edu/federalgrants/essa/stateplan/consolidated-plan.docx>
35. Knight, D. S., Olofson M. W., Yang, S. (2018). Access to High-Quality Instruction: Assessing the Distribution of Teacher and Principal Quality in Texas. Texas Education Research Center. <https://eric.ed.gov/?id=ED612263>
36. Kalogrides, D. & Loeb, S. (2013). Different Teachers, different Peers: the Magnitude of Student Sorting Within Schools. *Educational Researcher*. <https://journals.sagepub.com/doi/abs/10.3102/0013189X13495087>
37. Maryland House Hill 1300 of the 2020 Regular Session: Blueprint for Maryland's Future – Implementation. (2020). <https://mgaleg.maryland.gov/mgaweb/Legislation/Details/hb1300?ys=2020RS>
38. Almy, S., & Tooley, M. (2012). Building and Sustaining Talent: Creating Conditions in High-Poverty Schools That Support Effective Teaching and Learning. The Education Trust. https://edtrust.org/wp-content/uploads/2013/10/Building_and_Sustaining_Talent.pdf
39. Gates, S.M. Baird, M. D., Master, B.K., & Chavez-Herrerias, E.R. (2019). Principal Pipelines: A Feasible, Affordable, and Effective Way for Districts to Improve Schools. RAND Corporations. https://www.rand.org/pubs/research_reports/RR2666.html
40. Public Impact. (2008, 2016). School turnaround leaders: Competencies for success. http://www.publicimpact.com/publications/Turnaround_Leader_Competencies.pdf
41. Gerber, Nicole. (2018). How Are Districts and States Using Pay to Staff High-need Schools and subjects? <https://www.nctq.org/blog/How-are-districts-and-states-using-pay-to-staff-high--need-schools-and-subjects>

42. Morgan, I. & Amerikaner, A. (2018). Funding Gaps 2018. <https://edtrust.org/resource/funding-gaps-2018/>
43. Connecticut State Board of Education. (2020). Increasing the Racial, Ethnic, Linguistic Diversity of the Connecticut Educator Workforce Update and Next Steps. https://portal.ct.gov/-/media/SDE/Board/BoardMaterials100720/Increasing_the_Racial_Ethnic_and_Linguistic_Diversity_of_the_CT_Educator_Workforce.pdf
44. Papay, J. P., & Kraft, M.A. (2016). The productivity costs of inefficient hiring practices: Evidence from late teacher hiring. *Journal of Policy Analysis and Management*, 35(4), 791-871. <https://scholar.harvard.edu/mkraft/publications/delayed-teacher-hiring-and-student-achievement-missed-opportunities-labor-market>
45. National Council on Teacher Quality. (2012). Teacher Layoffs: Rethinking “Last-Hired, First-Fired” Policies. National Council on Teacher Quality. https://www.nctq.org/dmsView/Teacher_Layoffs_Rethinking_Last-Hired_First-Fired_Policies_NCTQ_Report
46. Public Impact: What is an Opportunity Culture? <https://www.opportunityculture.org/what-is-an-opportunity-culture/>
47. Public Impact: Daily Coaching for New Teachers. <https://www.opportunityculture.org/2017/09/13/daily-coaching-for-new-teachers/>
48. Texas Opportunity Culture: an Initiative of Public Impact. <https://www.opportunityculture.org/>
49. Educator Advancement Council. Annual Educator Equity Reports. <https://www.oregon.gov/eac/Pages/Educator-Equity.aspx>
50. The Education Trust. (2021). Equity Lessons Learned from Schools in the Time of COVID-19: Education Resources for State Leaders. <https://edtrust.org/wp-content/uploads/2014/09/Equity-Lessons-Learned-from-Schools-in-the-Time-of-COVID-19-October-2021.pdf>



The Education Trust

ABOUT THE EDUCATION TRUST

The Education Trust is a national nonprofit that works to close opportunity gaps that disproportionately affect students of color and students from low-income families. Through our research and advocacy, Ed Trust supports efforts that expand excellence and equity in education from preschool through college; increase college access and completion, particularly for historically underserved students; engage diverse communities dedicated to education equity; and increase political and public will to act on equity issues.

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