

Where Is Teaching Most Attractive and Equitable?



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Summary

This brief introduces the *State of the Teacher Workforce* interactive map, which includes more than 40 indicators and 2 summary ratings that describe teaching conditions and equitable access to well-qualified teachers in all 50 states and the District of Columbia. Updated in 2024, the map draws from recent national data sources, including the 2021–22 Teacher Follow-Up Survey and the 2020–21 Civil Rights Data Collection, to incorporate the latest information on teacher retention, certification, completion in teacher preparation programs, and student enrollment. The data enables policymakers to monitor conditions in their states and make comparisons with other states and the national average. There are significant variations in teaching conditions across states, with Midwestern and Northeastern states generally offering more competitive salaries and more supportive working environments. The map also shows that many states do not provide equitable access to certified and experienced teachers for students of color and students in low-income households, including large inequities in several states that have high proportions of these students. By focusing on both teaching attractiveness and teacher equity, the map highlights states that have been relatively effective at creating supportive teaching conditions to attract a well-qualified teacher workforce and ensure that students have equitable access to these teachers.

Introduction

Teachers are critical for student success,¹ but many schools struggle to fill their classrooms with well-qualified teachers who are fully prepared and experienced.² These teachers are generally more effective and less likely to leave their schools or the profession, compared to uncertified or inexperienced teachers.³ When schools are unable to fill vacancies, they typically cancel classes, increase class sizes, or rely on a revolving door of substitute teachers.⁴ Teacher shortages are persistent and impact all states.⁵ They are highest in schools serving more students of color and students from low-income backgrounds, those who are already furthest from opportunity.⁶

Not only do shortages undermine learning conditions for students, the current context suggests that shortages might continue to be a persisting problem. Interest in teaching is at its lowest point in decades,⁷ and teachers are more than twice as likely as other working adults to report frequent job-related stress⁸ as they deal with increasing student mental health challenges⁹ and declines in student performance,

exacerbated during the COVID-19 pandemic.¹⁰ The end of federal Elementary and Secondary School Emergency Relief (ESSER) funds in 2024, especially if coupled with state funding cuts, may also create further instability in schools' staffing, as some districts may need to eliminate teaching or student support positions that were enabled by these funds.¹¹

Given these challenges, it is critical to understand the current conditions of the teaching profession that are important for attracting and retaining well-qualified teachers in the profession. These conditions, such as salaries and working conditions, vary substantially across states, as do school resources, teacher qualifications, and turnover.

The State of the Teacher Workforce: A State-by-State Analysis of Factors Influencing Teacher Shortages, Supply, Demand, and Equity, an interactive map updated in 2024, includes more than 40 indicators describing teaching conditions for the more than 3 million public school teachers in all 50 states and the District of Columbia. These indicators can be used to inform policy strategies to build a strong and diverse teacher workforce, address teacher shortages, and ensure equitable access to well-qualified and experienced teachers. So where are the best places to teach in the United States? Generally, compensation and other teaching conditions are more supportive in California, Kansas, Kentucky, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Vermont, Wisconsin, and Wyoming. For students, access to well-qualified teachers is more equitable in Connecticut, Hawaii, Iowa, Nebraska, North Dakota, Oregon, South Carolina, South Dakota, Vermont, and West Virginia. (See the map for exact ratings.)

About the Map

The map draws from recently released national data sources, including the 2021–22 Teacher Follow-Up survey and the 2020–21 Civil Rights Data Collection, to identify the conditions of teaching in each state, as well as factors influencing teacher supply and demand. It also illustrates the extent to which children have equitable access to certified and experienced teachers and access to a racially diverse teaching workforce. In addition, a companion piece compiling state-reported data provides details on teaching positions left vacant or filled by teachers without full certification—key indicators of the extent of shortages. In addition, a companion piece compiling state-reported data provides details on teaching positions left vacant or filled by teachers without full certification—key indicators of the extent of shortages.

The State of the Teacher Workforce map is part of the Learning Policy Institute's ongoing research on strategic policies that can build and sustain a strong, stable, and diverse teacher workforce. It illustrates over 40 indicators (see Appendix for a full list) and two summary ratings that capture:

- Teaching attractiveness: The extent to which there are supportive conditions in each state for teacher recruitment and retention, including compensation, working conditions, school resources, teacher turnover and hiring, and qualifications of the teacher workforce.
- Teacher equity: The extent to which students in high- and low-poverty schools and those in high- and low-minority schools in each state have equitable access to certified and experienced teachers.¹⁴

The map focuses on state-level measures, since state policies can greatly influence the condition of the teacher workforce. For example, state policies on teacher preparation, accountability, and funding formulas play a large role in shaping learning environments and, in turn, teacher working conditions.

Based on the combined indicators, we rate states on their attractiveness to teachers and their equity in distributing well-qualified teachers to different schools. These ratings represent an average of how states perform on various indicators and are relative rather than absolute measures. This means that a state with a high rating is doing better compared to other states in the country but may still have considerable room for improvement. For instance, even in states with the highest equity ratings, some students have less access to certified and experienced teachers. For more on the map's data sources and methodology, including details about the ratings and indicators, see the associated Technical Supplement.¹⁵

Where are conditions for teaching most attractive?

The map's teaching attractiveness rating summarizes 19 factors that can support recruiting and retaining an effective, stable, and diverse teacher workforce, including compensation and working conditions. Compensation influences who may be interested in becoming a teacher and whether teachers enter or stay in the profession; low compensation is often cited as a top barrier for college students considering a career in teaching. Other working conditions, like supportive school leadership, may be equally critical to retaining teachers and building a strong, stable, and diverse workforce. Additionally, the teaching attractiveness indicators capture school resources, teacher qualifications, and staffing metrics, including the share of teachers who left teaching in each state.

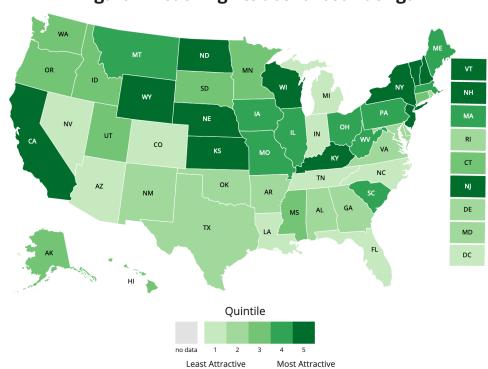


Figure 1. Teaching Attractiveness Ratings

Note: The teaching attractiveness rating is calculated as the average of each state's quintile grouping across 19 underlying indicators. The 20% of states with the highest rating are shaded in the darkest green, while the 20% of states with the lowest ratings are shaded in the lightest green.

Source: Learning Policy Institute. (2024). The state of the teacher workforce: A state-by-state analysis of the factors influencing teacher shortages, supply, demand, and equity [Interactive map].

Based on our analysis, California, Kansas, Kentucky, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Vermont, Wisconsin, and Wyoming have the highest teaching attractiveness ratings, indicating that teachers in these states experience, on average, more competitive salaries and more supportive teaching conditions. As shown in Figure 1, with the exception of California and Kentucky, these highest-rated states are clustered in the Midwestern and Northeastern United States, while states in the Southeastern and Southwestern United States tend to have lower teaching attractiveness ratings.

Where do students have equitable access to wellqualified teachers?

The teacher equity rating summarizes the degree to which students' access to certified and experienced teachers varies across schools within each state. The eight indicators in this rating compare whether schools serving more students of color or more students from low-income families are as likely to employ uncertified or inexperienced teachers as schools serving higher proportions of white students or students from more economically advantaged families. Although there are other measures of teaching quality and effectiveness, certified teachers—those entering the classroom having met all state standards—tend to have more positive impacts on student outcomes and are more likely to stay in the profession for a longer period of time. 19 Additionally, teachers tend to become more effective with experience, as measured by student learning and non-test outcomes like attendance and classroom behavior.²⁰

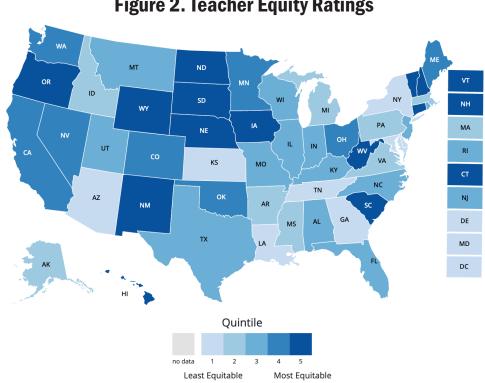


Figure 2. Teacher Equity Ratings

Note: The teacher equity rating is calculated as the average of each state's quintile grouping across eight underlying indicators. The 20% of states with the highest rating are shaded in the darkest blue, while the 20% of states with the lowest ratings are shaded in the lightest blue.

Source: Learning Policy Institute. (2024). The state of the teacher workforce: A state-by-state analysis of the factors influencing teacher shortages, supply, demand, and equity [Interactive map].

Relative to other states, Connecticut, Hawaii, Iowa, Nebraska, North Dakota, Oregon, South Carolina, South Dakota, Vermont, and West Virginia have the most equitable distribution of well-qualified teachers (see Figure 2). Several of these states tend to have smaller and less racially diverse populations. Importantly, gaps in access to certified and experienced teachers between those in high-poverty and low-poverty schools, and those schools with high and low proportions of students of color, are present in most states. Several states with high proportions of students of color and students from low-income backgrounds—including Arizona, the District of Columbia, Georgia, Louisiana, Maryland, and New York—have the least equitable access to certified and experienced teachers across their schools. Such findings point to the need for these states to further their efforts to ensure that all their students have access to well-qualified teachers, regardless of race/ethnicity or family economic status.

Ways to Use the Map

Along with the two ratings described above, the interactive map includes more than 40 indicators that capture valuable information about the teacher workforce in each state and nationally. The map can be used for multiple purposes, including to:

- Assess how well states are progressing toward specific goals or recommended parameters, such as having average starting teaching salaries above a certain threshold or ensuring a sufficient number of school counselors given student enrollment
- Identify areas of strength and weakness for a state in terms of teacher working conditions, equitable distribution of well-qualified teachers, or other indicators of the state of the teacher workforce. The map's downloadable PDFs summarize all the data points for a given state
- Compare a state to other states or the national average on all indicators, including starting salary, mentoring for early career teachers, or uncertified teachers in higher-poverty schools
- Identify states that are relatively successful in a given area, thus allowing policymakers to seek out examples of relevant policies and programs in those states

Additional Resources

The interactive map is accompanied by other resources, which can help meet different needs and goals of policymakers, education leaders, researchers, and other users interested in education. Among these:

- Downloadable PDFs, accessible though the map, provide two-page summaries for each state
 and for the United States, showing all the indicators, ratings, quintiles, and a comparison
 between the state and the national average. For example, see the summaries for the U.S.
 and Alabama.
- Technical Supplement that includes the map's data sources and methodology, including details about the ratings and indicators.
- Resource that compiles state-reported data and provides details on teaching positions left vacant or filled by teachers without full certification.

Why is it important to consider both teaching attractiveness and teacher equity?

Offering attractive teaching conditions helps to recruit and retain a well-qualified and diverse teacher workforce, while distributing teachers equitably across schools helps ensure that all students have access to certified and experienced teachers. Given that an excellent education system should pursue both goals, it can be useful to consider the map's two ratings together to assess a state's teacher workforce. States with high attractiveness but low equity could experience increasing disparities in both student and teacher outcomes, while high equity in a less attractive environment would indicate insufficient resources and support overall. States that are rated high in both teaching attractiveness and teacher equity may serve as models for policymakers in other places. Figure 3 shows states' relative positions in terms of both their teaching attractiveness and teacher equity ratings.

Higher Teacher Equity Rating ND OR NE SD ●SC ●WV HI CT NM WY NH NV OH OK MN ○ CO WA ME KY **●**MT Lower Teaching **Higher Teaching** O AL OIN Attractiveness **Attractiveness** wi Rating Rating NC ○RI UT ●NJ **OFL** \bigcirc TX IL OMO IDOMS AK OMI O VA MA $AR \bigcirc$ **PA** GA NY AZ TN DC KS \bigcirc ODE OMD LA Lower Teacher **Equity Rating**

Figure 3. Scatterplot of Teaching Attractiveness and Teacher Equity Ratings

Note: The scales of the axes have been adjusted for better visibility.

Source: Learning Policy Institute. (2024). The state of the teacher workforce: A state-by-state analysis of the factors influencing teacher shortages, supply, demand, and equity [Interactive map].

As shown in Figure 3, lowa, Nebraska, New Hampshire, North Dakota, Vermont, West Virginia, and Wyoming have relatively high ratings for both teaching attractiveness and equity. These states tend to be in the Midwest and Northeast and are less racially diverse compared to other states. In contrast, Arizona, the District of Columbia, Louisiana, Maryland, and Tennessee are rated low on both measures. They tend to be in the South with a relatively diverse student population. Other states may be ranked high in one of the ratings, but not the other. For example, Kansas and New York have relatively high teaching attractiveness ratings, but their certified and experienced teachers are not equitably distributed across schools. Policymakers in these states should prioritize improving both teaching attractiveness and equity to ensure that all students benefit from a well-qualified teacher workforce.

What other factors influence the supply and demand of teachers?

Beyond the ratings described above, other factors also shape the supply and demand for teachers. In the interactive map, we provide 15 additional indicators that state policymakers may want to consider when thinking about state efforts to support an adequate and diverse supply of teachers. These include indicators describing the teacher pipeline, student enrollment, workforce demographic characteristics, and teacher financial strain. For example, the map includes trends over time in the supply of new teachers by tracking enrollment and completion in the state's teacher preparation programs²¹ and trends in student enrollment that may influence the demand for teachers. The map also offers information about the characteristics of the state's current teacher workforce, such as the share of teachers approaching retirement age and the relative racial diversity of the teacher workforce compared to the state's workforce.²² The map also captures potential financial strains affecting teachers, including the percentage of teachers with outstanding student loans and teachers' unreimbursed spending on school supplies.²³

The interactive map and the state-level data scan depict the state of the teacher workforce and teacher shortages, which can inform policymaking in supporting and strengthening the teacher workforce and ensuring that all students have access to well-qualified teachers. The Learning Policy Institute has numerous other resources that identify and describe different policy strategies to strengthen the teacher workforce. For the most up-to-date resources, please see our website pages on Educator Diversity, Educator Quality, Teacher Preparation and Professional Learning, and Teacher Recruitment, Retention, and Shortages.

Appendix: List of Indicators in the Map

Table 1. Indicators in the State of the Teacher Workforce Interactive Map (updated in 2024)

Teaching attractive indicators	Teacher equity indicators	Additional factors influencing teacher supply and demand
Compensation	Equity by School Minority Enrollment	Teacher Pipeline
Starting salary Wage competitiveness	Gap in percentage of uncertified teachers between high- and lower-minority schools Uncertified teachers in higher-minority schools Uncertified teachers in lower-minority schools Gap in percentage of inexperienced teachers between high- and lower-minority schools Inexperienced teachers in higher-minority schools Inexperienced teachers in lower-minority schools Inexperienced teachers in lower-minority schools	Total number of teacher preparation program (TPP) completers Change in TPP completers over past 5 years
Working Conditions • Leadership support		
Collegiality Classroom autonomy		Total number of TPP enrollees Change in TPP enrollees over past 5 years
Exclusion from school policymaking		Workforce Characteristics
 Mentoring for early-career teachers Time for professional development Perceptions of evaluation Dissatisfaction Test-related job insecurity 		Total number of teachers Change in number of teachers over past 5 years Teachers of color Ratio of adults of color to teachers of color Teachers over 60 years old
School Resources	Equity by School Poverty	Teacher Financial Strain
 Expenditures per pupil Pupil-to-teacher ratio Schools meeting the recommended pupil-to-counselor ratio 	Gap in percentage of uncertified teachers between high- and lower-poverty schools Uncertified teachers in higher-poverty schools Uncertified teachers in lower-poverty schools Gap in percentage of inexperienced teachers between high- and lower-poverty schools Inexperienced teachers in higher-poverty schools Inexperienced teachers in lower-poverty schools	Work outside the school system Money spent on classroom supplies Outstanding student loans
Teacher Turnover and Hiring		Student Enrollment
Stayed teaching in same school Left teaching Plan to leave teaching School vacancies unfilled or hard to fill Teacher Qualifications Uncertified teachers		 Total number of students Change in student enrollment over past 5 years Change in projected student enrollment over next decade
• Oncertified teachers		

Source: For details on each indicator, see García, E., Leung-Gagné, M., & Patrick, S. K. (2024). The state of the teacher workforce: A state-by-state analysis of the factors influencing teacher shortages, supply, demand, and equity [Technical supplement—2024]. Learning Policy Institute.

Endnotes

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