

Your Question:

Generally, you were looking for more information about teacher shortages and their impacts across the country. Specifically, you were looking for: 1) a root cause analysis, 2) trends information, 3) associated impacts on the economy and on higher education institutions, and 5) state policy responses.

Our Response:

Our response is broken up into three sections. First, we provide you with background information and data about teacher shortages across the country. Second, we provide a high-level summary on the impacts of teacher shortages on K-12 schools, educator preparation programs and the students they serve. Third, we provide examples of recent state legislation meant to improve teacher recruitment and retention.

Teacher Shortages in the United States

As noted in our 2016 report [Teacher Shortages: What We Know](#), states across the nation are facing severe shortages of teachers, especially in certain subject areas (math, science, special education and bilingual education) and schools with specific characteristics (urban, rural, high-poverty, high-minority and low-achieving). Research suggests that teacher shortages are:

- **Impacted by misaligned supply and demand:** Despite serious claims of teacher shortages in states across the country, the United States produces more teachers than the market demands. As noted in [No Substitute for Trained Teachers](#) (NCSL, 2018), the annual demand for teachers can easily be met through three supply sources: 1) new teachers, of whom only about half are actually hired to teach in classrooms, 2) individuals who trained to become teachers but who never entered the classroom, and 3) teachers who only temporarily left the classroom. Regardless of the overabundance of teacher candidates nationally, many states struggle to align their own candidate supply with their workforce needs, overproducing candidates in areas where there is little demand for new teachers and underproducing candidates in areas where there is great demand.
- **Unique to each state:** Variations in state teacher policies (for example, salaries, licensure requirements, teaching conditions) and other state-level impacts (for example, quantity of preparation program providers, demographics, etc.) make for variations in the types of shortages experienced in each state. States facing shortages cite declining interest in the profession and unfavorable teacher attrition rates, among other factors, as key contributors to ongoing shortages.

Long-Term Trends

- According to the [National Center for Analysis of Longitudinal Data in Education Research](#), long-term trends indicate two major points about teacher production: 1) teacher production is cyclical and responsive to the state of the economy, and overall teacher production has grown steadily since 1985. For more information on these findings, see [Teacher Shortages: What We Know](#), p. 4.

- [National data](#) from 2012-13 suggests that just under eight percent of teachers leave the profession within five years, and are unlikely to return to the classroom. Teacher attrition rates increased through much of the 90s and 2000s, but have [decreased slightly](#) in recent years.

State Example: Pennsylvania

According to the Learning Policy Institute’s [State-by-State Analysis of the Factors Influencing Teacher Supply, Demand, and Equity](#), Pennsylvania’s teacher turnover and attrition are lower than the United States average, and the state has fewer inexperienced and uncertified teachers in classrooms than average. Still, in 2015-16, the Pennsylvania Department of Education [estimated](#) that 1,428 full-time equivalent positions were filled by emergency certificates or were undersupplied by teachers with new certificates. According to the [Learning Policy Institute](#), this count did not include the number of teachers uncertified for their assignments, “such as teachers on intern certificates or teachers who are defined as ‘not highly qualified.’”

Related Resources:

- [A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S.](#) (Learning Policy Institute, 2017)
- [Teacher Turnover: Why It Matters and What We Can Do About It](#) (Learning Policy Institute, 2017)
- [Analysis: Yes, Teacher Turnover Matters. But Much of What We Think We Know About It Is Wrong](#) (The 74, 2017)

Impacts on K-12 Schools and Educator Preparation Programs

Teacher shortages can have negative impacts on districts, schools and the students they serve. This is because shortages:

- **Are [costly](#):** When teachers leave, districts must hire and train new teachers.
- **Can negatively impact workforce quality and student learning:** Though [some teacher turnover](#) is beneficial to students, too much turnover can be harmful. To fill vacant positions, schools often resort to hiring inexperienced or unqualified teachers, increasing class sizes or cutting course offerings. In many cases, students are receiving instruction from the least experienced and/or least qualified teachers. [Some research](#) suggests teacher turnover can have harmful impacts on student achievement.
- **Can disrupt positive teaching cultures:** Persistent turnover can [disrupt](#) school stability, collegial relationships, collaboration and the accumulation of institutional knowledge.
- **Disproportionately impact certain student groups:** Staffing inadequacies and turnover are [most common](#) in high-poverty, urban and low-performing schools.

To address teacher shortages, and ensure teachers are prepared for long-term success in the classroom, states are changing requirements for educator education programs. This includes creating more rigorous approval and accountability processes and requiring data transparency, strengthened clinical experiences, and requiring performance assessments, [among other things](#). Some states are also working to ensure higher education institutions are preparing candidates for positions in which vacancies exists (see “Aligning Supply and Demand” below).

Related Resources:

- [Provisional and Emergency Licensure, 50-state information](#) (NCTQ, 2017)
- [Teacher Preparation Program Performance Measures](#), 50-state information (NCTQ, 2017)

- [Teacher Preparation Program Reporting Requirements](#), 50-state information (NCTQ, 2017)
- [Transforming Educator Preparation: Lessons Learned from Leading States](#) (CCSSO, 2017)

State Teacher Recruitment and Retention Policies

States continue to consider and enact legislation meant to improve teacher recruitment and retention. Common strategies include, but are not limited to:

Aligning Supply and Demand

Many states are working to better align teacher supply and demand. According to [recently released data](#) from the National Council on Teacher Quality (NCTQ): eight states publish data connecting teacher supply to district hiring needs ([IL](#), [KY](#), [MD](#), [NC](#), [NY](#), [OH](#), [TN](#), [WV](#)) and 21 states publish some relevant teacher supply data but do not connect the data to district needs. During their 2017 legislative sessions, at least three states enacted policies focused on aligning teacher supply and demand:

- **North Carolina [SB 599](#)**: Requires a "State of the Teaching Profession Report," which will include supply and demand data for teachers throughout the state. Requires educator preparation programs include instruction on the current supply and demand for educators in the state. Requires the State Board of Education to compile an annual report on teaching positions that local boards of education are unable to fill by the 40th instructional day.
- **Oklahoma [SB 15](#)**: Directs the State Department of Education and the Oklahoma State Regents for Higher Education to, subject to the availability of funds, work in collaboration to give priority to developing and implementing recruitment programs to address the areas of teacher shortage identified and the recommendations made in the educator supply-and-demand study.
- **Oregon [SB 182](#)**: Establishes specific requirements and responsibilities for the Chief Education Office which include but are not limited to: conducting research to monitor teaching and learning conditions and workforce supply and demand, supporting a plan for increasing the supply of culturally diverse candidates, and recruiting effective teachers to work in high-need schools and subject areas.

Recruiting Minority Teachers

To address the large and growing gap between the percentage of students of color and the percentage of teachers of color, many states are considering recruitment policies targeted at minority candidates. Examples of enacted legislation from 2017 include:

- **Minnesota [HF 890](#)**: Amends the alternative teacher professional pay system to provide 1) hiring bonuses or added compensation for effective teachers and for teachers who work in high-need positions/hard-to-staff schools, 2) incentives for teachers to obtain credits required for teaching concurrent enrollment or college, or 3) funding a grow-your-own new teacher initiative. Added economic development regions where there is a shortage of teachers of color to the definition of "teacher shortage area." Expands teacher shortage loan forgiveness program eligibility to include teachers of color.
- **Oregon [SB 182](#)**: Establishes the Educator Advancement Council to provide resources related to educator professional learning and other educator supports. Among other things, requires the Chief Education Office: 1) conduct research to monitor teaching and learning conditions and workforce supply and demand, 2)

support a plan for increasing the supply of culturally diverse candidates, and 3) recruit effective teachers to work in high-need schools and subject areas.

- **Texas SB 1:** Appropriates funding to support the Teach for America program in Texas and requires Teach for America to provide demographic information for Teach for America corps members and graduates.

Related Resources:

- [Mitigating Teacher Shortages: Alternative Teacher Certification](#) (Education Commission of the States,, 2016)
- [State Information Request: Recruiting and Retaining Minority Teachers](#) (Education Commission of the States, 2017)

Recruiting Teachers to Rural Areas

To address consistent staffing problems in rural schools, many states are considering policies that help to recruit candidates to hard-to-staff regions. Examples of related enacted legislation from 2017 include:

- **Colorado HB 17-1176:** Permits a retiree to be hired by a rural school district and receive a salary without any reduction in the benefits the retiree receives from the Colorado Public Employees' Retirement Association (PERA). Permits a school district to hire a retired employee only if the retiree has not worked for any PERA eligible employer during the effective month of retirement, and the school district: 1) is rural, as identified by the Colorado Department of Education (CDE), 2) determines there is a critical shortage of qualified employees and that the retiree possesses unique skills or qualifications needed by the district, 3) hires the service retiree as a teacher, school bus driver, or food services cook, and 4) notifies PERA of any service retiree hired under these provisions each calendar year.
- **Idaho HB 113:** As one strategy to address teacher shortages, especially in rural school districts, permits a retired teacher who is 60 years of age or older (instead of 62 as previously provided), and who is not receiving a reduced benefit for early retirement, to return to work at any time, regardless of the length of the break in service, and not have their Public Employee Retirement System of Idaho benefit reduced.

Related Resources:

- [State Information Request: Recruiting Teachers to Rural Areas](#)

Creating Career Pathways for High School Students

Some states are creating certified career pathways and grow-your-own programs aimed at recruiting high school students into the teaching profession. Examples of enacted legislation from 2017 include:

- **North Carolina SB 257:** Creates the Future Teachers of North Carolina program, providing high-achieving high school students with access to college-level teacher preparation courses in their respective high schools.
- **Minnesota HF 2:** Provides funding for a grow-your-own teacher initiative and encourages/provides access to grants for schools, school districts and postsecondary institutions that offer an “introduction to teaching/education” concurrent enrollment courses.
- **Washington HB 1445:** Requires the appropriation of funds in 2017 so that the Professional Educator Standards Board can, beginning in the 2017-19 biennium, administer the Bilingual Educator Initiative to recruit, prepare, and mentor bilingual high school students to become future bilingual teachers and counselors.

Offering Financial Incentives

Most states are implementing one or more financial incentive strategies to influence teacher pay, elevate the profession, and improve teacher recruitment and retention. Examples of related enacted legislation from 2017 include:

- **Arizona SB 1038:** Requires the Department of Education to establish a high-quality teacher professional development pilot program and issue scholarships and grants on a competitive basis to qualified applicants to obtain high-quality teacher professional development from a qualifying postsecondary institution that will support certificated teachers in additional accreditation for high-need content areas.
- **Arkansas SB 27:** Creates the structure of the Teacher Candidate Loan Forgiveness Program Provides that a student may receive a loan of five thousand dollars during each of the student's junior and senior years in an institution of higher education if the student is an Arkansas resident majoring in a degree program that will lead to being eligible for licensure as a teacher. Requires that to receive the loan, the student must enter into an agreement with the Department of Higher Education to teach, within one year of graduation and immediately upon licensure, in a geographic area of the state identified by the Department of Education as being a critical teacher shortage area.
- **Utah HB 212:** Creates the Effective Teachers in High Poverty Schools Incentive Program to provide an annual salary bonus (up to \$5,000) and pay an authorized employed-paid benefit for an eligible teacher who is employed in a high poverty school and achieves a median growth percentile of 70 or higher.

Related Resources:

- [Mitigating Teacher Shortages: Financial Incentives](#) (Education Commission of the States, 2016)
- [State Information Request: Incentives for National Board Certification](#) (Education Commission of the States, 2016)
- [State Information Request: Teacher Scholarships and Loan Forgiveness](#) (Education Commission of the States, 2017)
- [High-Need Schools and Subjects, 50-state information](#) (NCTQ, 2017)

Providing Meaningful Professional Development and Opportunities for Advancement

Many states looking to address teacher retention issues have, or are working to improve teacher professional development and create more opportunities for advancement. Examples of enacted legislation from 2017 include:

- **Nevada SB 300:** Makes an appropriation to the Department of Education for allocation to school districts to carry out a program of peer assistance and review of teachers. Provides that a school district that receives the allocation shall provide assistance to teachers in meeting the standards of effective teaching by: 1) conducting observations and peer assistance and review, and 2) providing information and resources to teachers about strategies for effective teaching. **AB 77:** Requires the State Board to adopt regulations prescribing standards for the professional development training provided to teachers and administrators employed by a school district or charter school. Requires the State Board to consider the findings and recommendations made by the Advisory Task Force on Educator Professional Development when adopting such regulations.
- **Indiana HB 1449:** Establishes more detailed requirements for recipients of the System for Teacher and Student Advancement (TAP) grant program. Permits school districts to receive a grant for a program that includes all of the following elements: 1) multiple career paths for teachers that include additional responsibilities, leadership opportunities, and compensation, 2) ongoing applied professional growth

opportunities for teachers tied to feedback from the teacher evaluation process and student achievement data, 3) instruction-focused accountability through an evaluation system based on multiple measures, including evidence of student learning growth, and 4) performance-based compensation for teachers and school leaders based on multiple measures.

Related Education Commission of the States Resources:

- [Mitigating Teacher Shortages: Evaluation & Feedback](#) (Education Commission of the States, 2016)
- [Mitigating Teacher Shortages: Teacher Leadership](#) (Education Commission of the States, 2016)
- [State Information Request: Micro-credentialing in Teacher Professional Development](#) (Education Commission of the States, 2017)