A Coming Crisis in Teaching?
Teacher Supply, Demand, and Shortages in the U.S.
Anecdotal Evidence

Teacher shortage keeps area schools scrambling, Washington not alone in hunt for teachers, new report says.

Oklahoma school districts look to fill 500 teacher vacancies.

Teacher shortage at public schools.

Fewer qualified applicants forcertified teaching positions.

Florida facing teacher shortages in many districts as new school year begins.

In Utah, schools can now hire teachers with no training whatsoever.

RPS dealing with teacher shortage as first day of school looms.

Teacher, staff shortage looms as school begins.
Teacher Preparation Enrollments Down

35%
National Supply and Demand Imbalance

The graph illustrates the supply and demand for teachers from 2005 to 2025. It shows a significant imbalance where the demand for teachers is increasing, while the supply is decreasing. By 2025, there is a projected shortage of 100,000 teachers. The graph includes lines for estimated supply, projected estimated supply, actual new hires demanded, and projected new hires demanded.
Variability of the Shortages by State

Arizona

- Low-salary competitiveness: 62% of non-teacher salary
- Below-average working conditions
- High teacher attrition—19%

Oregon

- Above average salary competitiveness: 75%
- Top working conditions
- Low teacher attrition—7%
Shortages Vary by Subject Area

Special Education

48+DC

Mathematics

42+DC

Science

40+DC

Reported Shortages

No Shortages
Equity Concerns: Uncertified Teachers

- Low-Minority Schools: 0.9%
- High-Minority Schools: 3.6%

3.6% is 4x more than the 0.9% rate in low-minority schools.
Inequitable States

Percent of Teachers Not Certified by Minority Quartile

Colorado

High-Minority Schools: 21.0%
Low-Minority Schools: 4.5%

Washington D.C.

High-Minority Schools: 22.9%
Low-Minority Schools: 20.7%
Exacerbating the Leaky Bucket

Teachers with no preparation ➔ Lower student outcomes ➔ Higher attrition
Teacher Attrition Drives Teacher Demand

- **2015-16**:
  - 66% Retirement Attrition
  - 31% Pre-retirement Attrition
  - 3% Other Attrition
  - Total: 259,500

- **2019-20**:
  - 59% Retirement Attrition
  - 28% Pre-retirement Attrition
  - 7% Workforce Growth due to Pupil/Teacher Ratio Reduction
  - 6% Workforce Growth due to Student Enrollment Increases
  - Total: 300,000

- **Attrition Percentage**:
  - 97% in 2015-16
  - 87% in 2019-20
The Importance of Attrition

![Graph showing the number of teachers over time with different attrition rates, with 8% and 4% highlighted at specific years.](image-url)
Who leaves teaching at higher rates?

- Beginning teachers
- Mathematics and science teachers
- Special education teachers
- Teachers of English learners
- Teachers in high-poverty, high-minority schools
- Teachers of color
Types of Reasons Given by Teachers for Leaving the Profession

- Accountability pressures: 55%
- Administration: 43%
- Working conditions: 31%
- Family/Personal Reasons: 31%
- Retirement: 31%
- To Pursue Another Job: 31%
- Financial Reasons: 18%
Administrative Support Impacts Turnover

SCHOOL ADMINISTRATION IS SUPPORTIVE

Strongly Agree  Somewhat Agree  Somewhat Disagree  Strongly Disagree

0%  10%  20%  25%
Administrative support

DC: 20%
Arkansas: 60%

Plans to leave

DC: 10%
Arkansas: 5%
What would bring leavers back?

Financial incentives
- Ability to maintain teaching retirement benefits
- An increase in salary
- Smaller class size or smaller student load
- Easier and less costly renewal of certification
- State certification reciprocity
- Availability of part-time teaching positions
- Availability of suitable child care options
- Forgiveness of student loans
- Housing incentives

Teaching conditions

Flexibility

0% 20% 40% 60% 80%
What Do High-Achieving Nations Do?

- Competitive, equitable salaries
- Strong universal preparation at little or no cost, with extensive training in partner schools
- Quality mentoring
- 15-20 hours per week for collaborative planning
- Sustained, practice-based collegial learning opportunities
- Teaching careers that reward, develop, and share expertise
- Sharing of best practices across classrooms & schools
What Matters in Recruiting and Retaining Teachers

- Compensation
- Preparation
- Mentoring and Induction
- Teaching Conditions
U.S. teachers make about 20% less than other college graduates; 30% by mid-career.

Salaries have lost ground since the 1990s.

Average starting salaries in 2013 ranged from $27,000 (MT) to $44,000 (AK).

In more than 30 states, a mid-career teacher heading a family of 4 is eligible for government assistance.
Preparation and Mentoring

• Preparation and early mentoring strongly influence teacher effectiveness and retention

• Funding for both has declined:
  ➢ The debt load for preparation has increased
  ➢ Only about 2/3 of teachers receive comprehensive preparation before entering
  ➢ Fewer teachers receive mentoring (down from 75% in 2008 to 59% by 2012)
Teaching Conditions

- U.S. teachers have more teaching hours and less planning time than others in the world
- Only 15% of teachers report collaborative work environments, down from 30% in 2000
- Resources for teaching declined during the recession; most states are still spending less in constant dollars than in 2007
- Growth in child poverty, homelessness, and trauma makes teaching more challenging
Alishia Morris, a 4th-grade teacher who transferred after 6 years in Oklahoma to a district 15 miles away across the border in Arkansas put it this way:

“It wasn’t the school’s fault. If it was, it wouldn’t have been so difficult for me to leave. It’s just that Arkansas has more resources—they just make teaching easier.”

On top of a salary increase of $9,000 over the $33,500 she previously made, Alishia now has reading and math facilitators to help her with her students, and a $500 annual allowance for classroom materials.
Teaching Attractiveness Varies Across States

Compensation
Turnover Rates
Teaching Conditions
Qualifications

Quintile
Lowest… Highest
1 2 3 4 5
Better compensation packages:
• Competitive, equitable salaries
• Financial incentives
  ✓ Housing
  ✓ Child care

Build lasting teacher supply:
• Forgivable loans, scholarships
• High-retention preparation pathways
  ✓ Grow Your Own programs
  ✓ Teacher Residencies

Improve retention:
• High-quality mentoring
• Collegial work environments
• Administrator training

Enhance mobility:
• License reciprocity
• Pension portability
We Have Solved This Problem Before

In the 1990s, CT and NC both eliminated shortages and increased achievement by:

- Increasing and equalizing salaries
- Offering service scholarships and loans
- Raising standards for teacher preparation
- Introducing strong mentoring systems
- Offering high-quality professional development
- Training principals to support teaching
"For the past decade, I’ve worked at a school where 97 percent of the children qualify for free and reduced-price lunch. I stay because the school climate is good for children and teachers alike. I stay because my principal is wonderful, supports us, does what’s best for children, and because I trust her. I stay because my colleagues are gifted teachers and good company and because I continually learn from them."

-- Kirsten Ragatz, 20-year Minneapolis teacher