

Teacher Shortages: An Overview of the Evidence

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Maryland can address teacher shortages by using multiple evidence-based strategies to reduce teacher turnover and increase recruitment.

Maryland is experiencing a shortage of high-quality teachers; yet high-quality teachers are one of the most important factors in improving student outcomes.¹

Multiple studies find high-quality teachers lead to improved student achievement. Although there are ongoing debates on how to measure teacher quality, some research finds that experienced and certified teachers are typically more effective and more likely to stay in teaching.

To address its teaching shortage, Maryland has room to grow in building supportive teaching conditions and providing equitable access to qualified teachers.⁴ A 2024 Learning Policy Institute study rates Maryland in the bottom half of states on teaching attractiveness and teacher equity. Teaching attractiveness is the extent to which a state has competitive salaries and supportive teaching conditions. Teacher equity is the extent to which students of color and low-income students have equitable access to certified experienced teachers.

Teacher turnover is a major contributor to teacher shortages.²

One national study finds that although multiple factors contribute to teacher shortages (e.g., insufficient supply of new teachers, increased enrollment), teacher turnover accounts for two-thirds to nearly all annual teacher demand. The authors state “reducing attrition could virtually eliminate overall shortages.”³ Teacher turnover leads to lower student achievement and disproportionately affects low-income students of color. One study finds that school districts may spend from \$10,000 to \$17,000 to replace each teacher that leaves.

Research identifies key predictors of teacher turnover and promising state strategies.⁴

School-level working conditions, including opportunities for teacher collaboration, shared decision-making, accountability systems, and resources for teaching and learning, are associated with teacher retention.

States can support teacher collaboration to improve working conditions

Schools with teacher collaborative time have stronger academic outcomes but implementation matters. During teacher shortages, states may have to balance collaboration time with instructional time.

States can provide time for teachers to collaborate, plan together, review student work, and self-reflect. How teacher collaboration is implemented and different approaches to teacher collaboration may impact the effectiveness of collaboration.

However, research does **not** provide guidance on how much time teachers should spend on instruction versus non-instructional activities during teacher shortages. Multiple studies also show that instructional time – that is, classroom time spent on a particular subject – is associated with increased academic achievement.

School leadership and administrative support. Principal support is crucial for teacher retention. One meta-analysis finds that a teacher is 80% more likely to leave a school with less administrative support.

✓ States can invest in school leader professional development and preparation.

High-quality professional development can include collaborative learning opportunities and authentic learning experiences around concrete problems.

Salaries and other compensation. Teacher salaries affect teacher supply, quality and retention. One study found that increases in teachers' salaries were associated with reduced turnover in California.

✓ States can provide competitive compensation, service scholarships and loan forgiveness.

States can set a statewide salary minimum and adjust salaries to reflect regional cost-of-living differences. They can also use service scholarships or loan forgiveness to cover costs of preparation programs.

High-quality teacher preparation. Well-prepared teachers typically stay the longest. One study finds that novice teachers with no or partial preparation were two to three times more likely to leave teaching than those with comprehensive preparation (e.g., teaching practice, feedback on their teaching).

✓ Two promising preparation programs for states to consider:

Grow Your Own Programs and Teacher Residencies.

Grow Your Own (GYO) programs recruit and train local community members to teach in their community.

Teacher Residencies are paid apprenticeships where individuals teach alongside expert teachers, earn a credential, and agree to teach in the district.

Targeted supports and induction for novice teachers. Even with strong preparation, new teachers need additional support when they start teaching. One study found that novice teachers who participated in new teacher induction were two times as likely to stay in teaching than teachers without these supports.

✓ States can invest in new teacher induction and support.

High-quality teacher induction can include mentoring from more experienced teachers, collaborative planning time, and classroom observations of expert teachers.

States can also invest in intentional recruitment to expand the supply of prepared teachers.⁵

States can support teachers in transferring their teaching license across state lines by reviewing licensure requirements. They can also hire recently retired teachers to fill shortages. States should not reduce requirements for teacher licensure as they risk hiring underprepared teachers.

Methods for Rapid Evidence Review

We searched online databases for research on teacher shortages and turnover. We prioritized systematic reviews and meta-analyses, because they condense a large body of research and mitigate bias from single studies. As necessary, we also reviewed individual studies. We prioritized recent evidence in the last ten years.

References

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