

Recommendations to Strengthen our Nation's Mathematics and Science Teaching Workforce

BHEF's recommendations address three key factors that contribute to a robust mathematics and science teacher workforce: recruitment, retention, and renewal

RECRUITMENT

Strengthen teacher recruitment policies in mathematics and science.

- Implement a comprehensive package of mathematics and science teacher education recruitment strategies, starting in P-12 and extending through graduate school, that include incentives such as scholarships, signing bonuses, and differential pay.
- Strengthen the content and pedagogy of teacher preparation programs to ensure a national mathematics and science teacher workforce capable of preparing P-12 students for success in higher education and the workplace.
- Expand strategies to attract talented individuals in STEM-related professions to teaching, and ensure that they are adequately trained for the classroom.

RETENTION

Improve the retention of both new and experienced teachers, and address the causes of teacher dissatisfaction.

- Develop and implement research-based induction programs for all new mathematics and science teachers.
- Implement comprehensive policies and programs that address the leading causes of teacher job dissatisfaction, including inadequate compensation, lack of administration support, and professional isolation.

RENEWAL

Ensure that all mathematics and science teachers participate in renewal activities that support their effectiveness in the classroom.

- Provide ongoing, research-based professional development programs, focused on both content and pedagogy, for all mathematics and science teachers.
- Revamp teacher license renewal programs to incorporate measures of teacher effectiveness.
- Establish comprehensive statewide data collection systems that track student progress, teacher effectiveness, and employment trends of mathematics and science teachers.