

## School Districts Roles for the Recruitment, Retention and Renewal of Mathematics and Science Teachers

<b>RECRUITMENT</b> <i>Strengthen teacher recruitment policies in mathematics and science.</i>		
<b>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.</b>	<b>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.</b>	<b>Expand strategies to attract talented individuals in STEM-related professions to teaching, and ensure that they are adequately trained for the classroom.</b>
<b>ROLES FOR SCHOOL DISTRICTS</b>		
<p>Develop plans to recruit new teachers and institute recruitment policies and programs, including signing bonuses; differential pay; student loan forgiveness; housing subsidies, loans, and stipends; and relocation costs.</p> <p>Establish programs that introduce middle and secondary school students to professional mathematics and science education organizations and that engage them in activities to nurture interest in STEM fields, such as mentoring and tutoring.</p>	<p>Collaborate with higher education to create a broad range of preprofessional activities, such as P-12 field experiences and internships and content-specific pedagogical institutes.</p>	<p>Develop/expand and evaluate alternative mathematics and science licensure programs that are based on relevant research and that are designed to attract STEM professionals.</p> <p>Create incentives to attract STEM professionals to enroll in alternative mathematics and science teacher licensure programs.</p> <p>Establish programs to strengthen the pedagogical skills of STEM professionals entering the teaching profession.</p>

*Transforming the Recruitment, Retention, and Renewal of Our Nation's Mathematics and Science Teaching Workforce*

School Districts Roles for the Recruitment, Retention and Renewal of Mathematics and Science Teachers (CONTINUED)

RETENTION		
<i>Improve the retention of both new and experienced teachers, and address the causes of teacher dissatisfaction.</i>		
<b>Develop and implement research-based induction programs for all new mathematics and science teachers.</b>	<b>Implement comprehensive policies and programs that address the leading causes of teacher job dissatisfaction, including inadequate compensation, lack of administration support, and professional isolation.</b>	
ROLES FOR SCHOOL DISTRICTS		
Establish, evaluate, and report on district-wide, comprehensive, research-based induction programs.	<p>Revamp mathematics and science teachers' compensation by raising starting salaries and offering differentiated pay to teachers for teaching in high-need or low-performing schools.</p> <p>Establish district policies and programs that address school-based teacher retention issues such as out-of-field teaching assignments, lack of planning time, and inadequate and inappropriate curriculum materials and professional development.</p> <p>Establish the position of vice principal for academic affairs in every school in the district to provide direct support to teachers.</p> <p>Work with teachers to design, support, and evaluate school-based professional development programs that address aspects of teacher job dissatisfaction.</p> <p>Establish learning communities for mathematics and science teachers.</p>	
RENEWAL		
<i>Ensure that all mathematics and science teachers participate in renewal activities that support their effectiveness in the classroom.</i>		
<b>Provide ongoing, research-based professional development programs, focused on both content and pedagogy, for all mathematics and science teachers.</b>	<b>Revamp teacher license renewal programs to incorporate measures of teacher effectiveness.</b>	<b>Establish comprehensive statewide data collection systems that track student progress, teacher effectiveness, and employment trends of mathematics and science teachers.</b>
ROLES FOR SCHOOL DISTRICTS		
Provide and evaluate research-based, comprehensive professional development programs that address identified needs of students based on student achievement data or by instructional improvement priorities identified by teachers.	Assess teacher effectiveness using classroom observations, reviews of student work, parent evaluations, and student performance data.	Ensure that all district data collection and reporting procedures are consistent with statewide longitudinal data systems.