

STEM Tutors to Teachers Bill

In this section:

- a. **Education Service Agency**-The term “educational service agency” is a regional public multiservice agency that is authorized by state law to develop, manage, and provide services or programs to local education agencies, such as public-school districts.
- b. **Educator Preparation Program**-The term “educator preparation program” means a state-accredited program at a public or nonprofit institution of higher education or other nonprofit provider that prepares individuals to serve as educators.
- c. **Hard-to-Staff School**-The term “hard-to-staff school” means a high-need school that has a high rate of teacher turnover or a large concentration of teachers in their first or second year of teaching.
- d. **High-Need-School**-The term “high-need school” has the meaning given in section 2211 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6631).
- e. **Local Educational Agency**-The term “local educational agency” as defined in ESEA is a public board of education or other public authority legally constituted within a State for either administrative control or direction of, or to perform a service function for, public elementary schools or secondary schools in a city, county, township, school district, or other political subdivision of a State, or for a combination of school districts or counties that is recognized in a State as an administrative agency for its public elementary schools or secondary schools.
- f. **Hard-to-staff Subject Areas**-The term “hard-to-staff subject area” means a subject taught in primary and secondary schools where substantial proportions of teachers who are not certified in the appropriate field are being hired to teach such courses, where significant vacancies exist and where postsecondary institutions do not produce enough graduates to meet the needs of the student population.
- g. **STEM Tutor**-The term “STEM tutor” means--a postsecondary student who is enrolled in an educator preparation program; a recent graduate of an educator preparation program; an individual serving as an education paraprofessional or teaching aide who offers supplemental systematic, structured learning experience to core academic instruction in Science, Technology, Engineering, or Mathematics (STEM) subject areas.

Teacher Shortages in Hard to Staff Subject Areas

(1) Teacher shortages in hard-to-staff subject areas such as advanced math and science have been a pervasive problem further exacerbated by the covid-19 pandemic,

The combination of training requirements and high alternative wages for qualified teacher candidates make it difficult to retain high quality teachers in advanced math and science which often lead to long-lasting negative impacts on student achievement, impacting every part of society;

Lack of qualified teachers and staff instability that accompanies turnover, threaten students’ ability to learn, reduce teachers’ effectiveness, and the high teacher turnover consumes economic resources that could be better deployed elsewhere,

In addition, teacher shortages are distributed unevenly among students of different socioeconomic backgrounds and high-poverty schools face teacher shortages in key subject

areas such as secondary math and science at a significantly higher rate which in turn lead to negative impacts on student achievement,

Across all states, teacher shortages, especially in STEM subject areas like advanced math and science, make it more difficult to build a solid reputation for teaching which further contribute to perpetuating shortages,

The Impact of Tutors in High Need Schools

Addressing student learning loss through increased access to high dosage and high impact tutoring resources has been proven to narrow achievement gaps in critical STEM subjects such as advanced math and science,

Research defines high-quality, high-impact tutoring programs as having the following characteristics:

- (i) tutoring is provided in groups of four or fewer students;
- (ii) the same tutor tutors the group of students throughout the school year;
- (iii) tutoring is provided a minimum of three times per week with at least 30-50 minutes of instruction;
- (iv) tutoring is implemented throughout the school day, and is supplemental to core academic instruction, have opportunities for enrichment, and not a replacement for such instruction;
- (v) high-quality trained tutors provide the tutoring, including paraprofessionals, teaching candidates, community providers, Americorps members, and other individuals who have received training;
- (vi) the program emphasizes student attendance and educator support,
- (vii) the program uses a high-quality curriculum that is aligned with academic standards and practices;
- (viii) the program prioritizes coordination between classroom educators, tutors, and school leaders
- (ix) tutoring is data-driven, with interim assessments to monitor student progress, and
- (x) the program provides ongoing professional training and development for tutors.

Data shows that students with access to quality tutors and high dosage tutoring opportunities average more than four months of additional learning in elementary literacy, thereby strengthening vital early reading and writing skills, and gains as high as 2.5 years (.37 standard deviations) of growth in high school math

Tutors, especially STEM tutors in high need schools provide significant support for student academic gains through a variety of ways including implementing blended-learning models and facilitating personalized or group instruction;

Additionally, STEM tutors implement state approved curriculum to foster academic success and help students reach their goals by providing individualized instruction specifically targeted to their students needs,

Also, STEM tutors work intently to build strong, meaningful relationships with their students and often serve as student advocates and mentors;

However, many quality STEM tutors with a proven track record of student success and achievement, encounter numerous challenges including lack of acknowledgment and credentialing of prior tutoring experience when they aspire to receive teaching credentials to become teachers in hard to staff subject areas ;

Alternative Teaching Programs for High Impact/High Dosage Tutors

(3) The state has an urgent and immediate need to expand the number of high quality teachers available to high need schools and address the teacher shortages they experience by creating unobstructed pathways to the teaching profession for STEM tutors that aspire to enter the teaching profession and teach hard to staff subject areas,

Therefore, the State Department of Education, Educator Preparation and Licensure Board, State Board of Education, Higher Ed Institutions, and State Educator Preparation programs shall work in partnership with state approved high impact/high dosage tutoring providers to develop and implement an alternative certificate pathway for STEM Tutors in hard to staff subject areas aspiring to be teachers across the state,

This alternative certificate pathway program will ensure that tutors actively tutoring through high dosage tutoring programs receive a clear and unobstructed pathway to teacher certifications to prioritize an important pathway into the profession and create a key pipeline for high-need districts,

Additionally, expanding this alternate route to certification for STEM tutors across the state in high-needs subject areas such as mathematics and science is an important step in eliminating achievement gaps for students, including expanding opportunity to bring talented and deeply committed individuals into the teaching profession, and providing quality educators into our schools,

Requirements & Criteria for Candidates

To receive consideration through this alternative certification pathway model, candidates must meet basic entry requirements including:

- a. Complete the state mandated minimum hours of tutoring instruction through a research based, high impact-high dosage tutoring provider,
- b. Receive a bachelor's degree with at least a 2.70 GPA
- c. A degree in the area for which teaching certification is sought or passing licensure exam in subject area
- d. A transcript that provides evidence that the individual possesses content competency in the certification area sought,
- e. Strong performance in a structured interview
- f. A resident of the state in which certification is sought or a resident in a state that provides certification reciprocity with the state

(a) With the understanding that STEM tutors in high need schools often serve the most vulnerable and high need students, the Tutors to Teachers pathway certification program shall provide relevant training and curriculum for candidate subject area and also include content within the curriculum that:

(1) prepares teacher candidates to use evidence based trauma informed classroom instruction, and recognition of social, emotional, and behavioral reactions to classroom practices that are conducive to supporting students who have experienced trauma that may interfere with a student's academic functioning; and

(b) training on evidence based social emotional learning classroom practices that are consistent with the state's social emotional learning competencies established by the department;

Interested participants shall fulfill the following guidelines to receive certification:

- a. Spend a state mandated instructional period in an intensive, full-time tutoring program, and upon successful completion of the program, complete additional courses as determined on an individual basis,
- b. After successfully tutoring for state mandated instructional period with demonstrated data on student success and achievement, receiving a satisfactory score on the state mandated licensure exams necessary to be taken before and after first day of teaching
- c. Candidates shall be placed in paid teaching positions in public schools across the state for a probationary period with a practitioner license,
- d. After state mandated years of demonstrated student success and and growth during the probationary period, the state shall recommend the candidate for a certified teachers certification;

There shall be no exception to the listed requirements. No candidate shall be allowed to receive certification until all requirements are met. The State Board of Education shall develop such rules as may be needed to ensure uniformity from year to year for aspiring candidates.

Using state mandated guidelines, standards, and evaluation tools that provide a structured pathway for former tutors, the state shall develop alternative teacher training programs for former high dosage STEM tutors to help meet teacher shortages, particularly in critical areas of science and mathematics,

Monitoring & Evaluation of High Impact Tutoring Pathway

Using the guidelines for state mandated metrics for approved alternative preparation programs, the State Board of Education, in consultation with the State Educator Preparation and Licensure Board, shall design and implement a system of examinations, which shall be required prior to the issuance of probationary educator licenses,

Understanding that these alternative pathway programs shall meet the same academic and pedagogical (or instructional strategies) standards as those used by traditional programs to frame the teaching of mathematics and other core subjects, each alternative teacher certification pathway program shall undergo:

- a. a cyclical, evidenced-based peer review associated with traditional state program approval metrics for each candidate to earn teacher certification in an academic area upon passing the content-area teaching test,

These examinations and indicators must be based on national and State professional teaching standards, as determined by the State Board of Education, in consultation with the State Educator Preparation and Licensure Board and other state certification agencies.

Pursuant to the criteria presented above, the state must adhere to the following guidelines:

- a. an individual who receives an alternative teacher certification is authorized to teach the subject and educational level that the individual has successfully completed.
- b. An individual who receives an initial practitioner license through the STEM tutors to teacher pathway model shall be treated in the same manner as an individual who receives an initial practitioner license after completing a traditional teacher preparation program.
- c. An individual who graduates from an alternative teacher certification program must be treated in the same manner as a traditional teacher preparation program graduate during the transition from an initial practitioner license to a certified license.

The in-state alternative teacher certification program shall operate in accordance with the procedures and program approval standards and requirements set by the department and the state board for teacher education programs for the licensure of teachers.