Date of Hearing: April 24, 2019

ASSEMBLY COMMITTEE ON EDUCATION
Patrick O'Donnell, Chair
AB 578 (Mullin) – As Amended April 22, 2019

SUBJECT: Teachers: The California STEM Professional Teaching Pathway Act of 2019

SUMMARY: Establishes the California STEM Teaching Pathway Act of 2019 for the purpose of recruiting, preparing, supporting, and retaining qualified STEM professionals as mathematics, science, and computer science teachers in California, and appropriates $27 million for this purpose. Specifically, **this bill**:

1) Establishes the California STEM Teaching Pathway Act of 2019 for purposes of recruiting, preparing, supporting, and retaining qualified science, technology, engineering, and mathematics (STEM) professionals, including military veterans, and current teachers as mathematics, science, and computer science teachers in California.

2) States that the activities associated with the California STEM Teaching Pathway may include all of the following:

    a) Developing and distributing statewide recruitment materials encouraging interested STEM professionals and current teachers to pursue teaching careers in mathematics, science, and computer science.

    b) Conducting outreach to interested current teachers and STEM professionals, including military veterans, designed to recruit them to second careers in mathematics, science, and computer science teaching.

    c) Developing partnerships with the STEM business and industry community to support recruitment of retiring STEM professionals as tutors, supporting educators, and credentialed teachers, and establishing public-private partnerships that build and sustain the STEM teacher pipeline.

    d) Providing information to STEM professionals regarding all of the following:

        i. Requirements for obtaining a teaching credential in mathematics, science, and computer science

        ii. Applying to teacher preparation programs

        iii. Accessing financial aid

        iv. Completing steps required to obtain a teaching credential

        v. Supporting California STEM Teaching Pathway fellowships to assist program participants in transitions into the teaching profession and completion of teaching credential programs

vi. Placing STEM professionals interested in teaching in instructional roles in-school and out-of-school in order for them to support STEM learning and motivation among pupils in kindergarten to grade 12

vii. Establishing agreements with teacher credentialing programs to facilitate rapid achievement of teaching credentials by STEM professionals, and placement of participants in high-need schools for clinical preparation and subsequent employment

3) Preparing STEM professionals for effectiveness in integrating at least one of the following:

   a) Mathematical practices

   b) Science and engineering practices

   c) Computer science core practices

4) Preparing STEM professionals by developing their expertise in each of the following:

   a) Implementing learning experiences inside and outside of the classroom

   b) Advancing problem solving skills and hands-on real world learning experiences

   c) Addressing cultural relevance in teaching

   d) Supporting STEM professionals in experiences leading to STEM teacher leadership, including obtaining one or more additional teaching authorizations in STEM disciplines

   e) Providing ongoing support and professional learning for California STEM Teaching Pathway participants to ensure high rates of retention and opportunities for teacher leadership

   f) Conducting the required annual evaluation of the California STEM Teaching Pathway

5) Requires that a report be submitted to the Legislature and the Governor by the California Department of Education (CDE) by May 1 of each year following the awarding of grants through the program, documenting the impacts of the California STEM Teaching Pathway, including:

   a) The number of STEM professionals and current teachers who participated in the California STEM Professional Teaching Pathway and their demographic characteristics.

   b) The number and demographic characteristics of new mathematics, science, and computer science teachers who received their teaching credential annually through the California STEM Teaching Pathway, the schools in which they teach, and the number of pupils in the schools of employment.

c) Annual job placement data for the new mathematics, science, and computer science teachers, including placement rates, subjects taught, number of students eligible for free and reduced meals, and achievement levels of students in the schools of employment.

d) The total number of STEM professionals and current teachers prepared and retained in STEM teaching positions, specifically in mathematics, science, and computer science through the California STEM Teaching Pathway.

e) The total number and demographic data of schools that offer computer science or science courses taught by a STEM professional or current teacher prepared through the California STEM Teaching Pathway.

f) The total number of computer science or science courses offered, and demographic data of the students who took them, prior to and after the placement of STEM professionals who have been prepared through the California STEM Teaching Pathway.

6) Appropriates $27 million to the CDE for purposes of allocating the funds for the 2019-20 fiscal year for allocation for the purposes of the California STEM Teaching Pathway.

7) Requires that the funds be allocated as one time grants to partnerships including local educational agencies (LEAs) in high needs school districts, in conjunction with institutions of higher education with a teacher preparation program, subject to a competitive grant process developed by the CDE.

8) Permits funds to be used for, among other purposes, teacher residency programs, teacher recruitment stipends, teacher retention stipends, teacher mentor stipends, co-teaching programs.

9) Appropriates these funds as follows:

a) $9 million to provide one-time competitive grants to grant applicants to recruit and support the preparation of computer science teachers.

b) $9 million to provide one-time competitive grants to grant applicants to recruit and support the preparation of science teachers.

c) $9 million to provide one-time competitive grants to grant applicants to recruit and support the preparation of mathematics teachers.

10) Requires that these funds be allocated in a manner that ensures geographic diversity among grant recipients representing rural, suburban, and urban areas.

11) States that, if sufficient funds are provided in the 2020-21 fiscal year or in subsequent fiscal years, the CDE may award additional one-time grants in the fiscal years in which funds are made available. Permits awards to include applicants previously awarded and new applicants.

EXISTING LAW:

1) Authorizes the Commission on Teacher Credentialing to issue intern credentials as an alternate route to earning a teaching credential. This credential is valid for a period of two years and authorizes the holder to teach in a self-contained classroom while completing their teacher preparation course work. Approved intern programs are sponsored by colleges, universities, school districts, or county offices of education. To qualify, an individual must possess a bachelor's degree, satisfy the basic skills requirements, meet subject matter competence, and obtain character and identification clearance. University intern programs are cooperative teaching, counseling, school psychology, and administrative programs between a university and an employing school district that are administered by the university. District intern programs are for teachers only and are administered by employing school districts whose programs may or may not involve university course work. Completion of an intern program results in the issuance of a preliminary or clear credential (Education Code (EC) 44325, et seq.).

2) Required the State Board of Education (SBE) to adopt, on or before November 30, 2013, science content standards that would replace the previous science standards (EC 60605.85).

3) Established the Local Solutions Grant program in the 2018-19 state budget, which provided $125 million to the CTC to administer in the form of grants to address teacher shortages. $75 million in grants was provided to support teacher residency programs to prepare new special education, science, mathematics, or bilingual teachers. An additional $50 million was made available to recruit, prepare, and retain special education teachers.

4) Established the Governor's Teaching Fellowships Program, which awarded $20,000 fellowships to candidates who committed to teach in a high priority school for four years. High priority schools are defined as schools in the bottom half of the Academic Performance Index.

FISCAL EFFECT: Unknown

COMMENTS:

Need for the bill. The author states, "California's economic strength is rooted in STEM professions. If we do not increase the pipeline of teachers qualified to teach STEM classes we will not meet the demand for jobs in these sectors that are continuously experiencing growth. Creating pathways for professionals, veterans and current teachers to become STEM teachers will build that pipeline."

California's teacher shortage. Multiple reports highlight California's ongoing teacher shortages, which are especially severe in certain subject areas, including special education and STEM subjects.

In a 2016 report, *Addressing California's Emerging Teacher Shortage: An Analysis of Sources and Solutions,* the Learning Policy Institute (LPI) summarizes the problem: "After many years of teacher layoffs in California, school districts around the state are hiring again. With the influx of new K-12 funding, districts are looking to lower student-teacher ratios and reinstate classes and programs that were reduced or eliminated during the Great Recession. However, mounting

evidence indicates that teacher supply has not kept pace with the increased demand." The report includes the following findings:

- Enrollment in educator preparation programs has dropped by more than 70 percent over the last decade.

- In 2014-15, provisional and short-term permits—intended to help districts hire teachers on an emergency basis, when fully-prepared, credentialed candidates are unavailable—nearly tripled relative to the number issued two years previous, growing from about 850 to more than 2,400.

- The number of teachers hired on substandard permits and credentials nearly doubled in the last two years, to more than 7,700, comprising a third of all the new credentials issued in 2014-15.

- Estimated teacher hires for the 2015-16 school year increased by 25 percent from the previous year, while enrollment in teacher education programs at the University of California (UC) and California State University increased by only about 3.8 percent.

Shortages in math, science, and special education most severe, account for half of the state's shortage. According to LPI's 2016 report: "The pipeline of prepared STEM teachers is shrinking. From 2012-16, the proportion of math and science teachers entering the field on substandard credentials or permits doubled, from 20 to 40 percent, while the number of STEM teachers entering with full credentials dropped from 3,200 to 2,200."

The Getting Down to Facts II report, *Teacher Supply Falls Short of Demand in High-Need Fields, Locations*, published by Policy Analysis for California Education in 2018 reports: "In math there are half as many fully prepared teacher candidates with preliminary credentials entering the workforce today as there were six years ago. The drop in science teachers is 40%...The largest number of emergency hires are in special education where two out of three teachers hired in 2016-17 were not fully certified. Large numbers of underprepared teachers were also hired in mathematics and science. Together, these three fields account for half the state's overall shortage."

Shortages are most severe in rural and high-poverty urban areas. According to the Getting Down to Facts II report, "Shortages are not evenly distributed across subjects and schools. About 75% of districts report shortages—but they are most severe in rural and high-poverty urban areas; subject areas including special education, mathematics, science, and bilingual education; and schools serving concentrations of students of color, English learners, and low income students."

Retention problems fuel shortages. The Getting Down to Facts II report also found that teacher turnover accounts for about 88% of the annual demand for new teachers. The report notes:

> Put another way, nearly nine of 10 hires each year are needed to replace teachers who left. Retirement is just a small piece of this loss. Most attrition is caused by teachers changing districts or leaving the profession. In California, about 8.5% of teachers appear to be leaving the profession (or the state) each year, and another 8% leave their current school to move to another. Principals surveyed for the Getting Down to Facts II project reported that teachers in

the shortage areas of special education, mathematics, science, bilingual education, and world languages are most difficult to retain. The highest turnover rates are in districts serving high-poverty students, students of color, and English learners. The main reasons teachers report leaving, according to the 2013 federal Schools and Staffing Survey, are dissatisfaction with testing and accountability pressures, followed by a lack of administrative support; frustration with the teaching career, including lack of opportunities for advancement; and poor working conditions.

Limited access to STEM education negatively impacts students' educational and economic prospects. Multiple organizations, ranging from educational advocacy groups to the National Academies of Sciences (NAS), have voiced concerns regarding the long-term impacts of the STEM teacher shortage on educational and economic outlooks, not only for individual students, but for the nation. In 2007, NAS released a report entitled *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*, in which it states: "Without a flourishing scientific and engineering community, young people…will have no motivation to become the next generation of scientists and engineers who can address persistent national problems, including national and homeland security, healthcare, the provision of energy, the preservation of the environment, and the growth of the economy, including the creation of jobs. Laying a foundation for a scientifically literate workforce begins with developing outstanding K–12 teachers in science and mathematics."

A 2016 review of STEM education studies conducted by the U.S. Department of Education's Institute of Education Sciences shows that access to advanced math and science courses in high school is a strong predictor for success in post-secondary STEM courses. This finding holds true for both male and female students, and across all ethnicities examined. However, certain populations, including Hispanic and African American students, take fewer high-level high school math and science courses, even though their interest levels in STEM subjects match those of their white peers.

A 2017 report by EdTrust West shows that many of California's high school students do not have access to advanced STEM coursework, and that inequities in access are particularly problematic for certain populations of students, including English learners (ELs). The authors state, "In California, only 58 percent of high schools…offer chemistry, 51 percent offer physics, and 7 percent offer math courses title advanced. Only 11 percent of ELs attend schools that offer the "advanced" math courses, and ELs are less likely than their non-EL peers to be enrolled in these courses when available." EdTrust West further states that giving EL students access to high quality STEM coursework is beneficial, not only for advancing their STEM knowledge, but for advancing development of their language skills.

Limited access to STEM education is of concern not only at the high school level, but in elementary grades as well. In 2011, WestEd, the Lawrence Hall of Science at UC Berkeley, and SRI International issued a report on elementary STEM education in California. Among their key findings: 40 percent of K-5 teachers report that their students receive 60 minutes or less of science instruction per week and only a third of elementary school teachers feel very prepared to teach science. In addition, the authors found that racial inequities in STEM knowledge are already apparent in elementary school: in 2009, the state's fourth graders performed at the lowest level nationally on the National Assessment of Educational Progress (NAEP) science test, and fewer than 10 percent of African American and Hispanic fourth graders scored proficient, compared to 41 and 45 percent of their white and Asian peers, respectively. Altogether, these

findings led the authors to conclude that "children rarely encounter high-quality science learning opportunities in California elementary schools because the conditions that would support them are rarely in place."

Altogether, the above reports raise the question of whether today's K-12 students are being adequately and equitably prepared to take full advantage of emerging opportunities in STEM professions. In 2012, the President's Council of Advisors on Science and Technology stated that the United States will need 1 million more STEM professionals than the country will produce at the current rate over the next decade, if the country is to maintain its status as a global leader in science and technology.

The STEM teacher shortage coincides with implementation of new science standards. In 2013, the SBE adopted the Next Generation Science Standards (NGSS). In contrast to California's previous science standards, NGSS shifts focus from having students memorize scientific information to teaching students how to think critically about core scientific ideas, how to connect key concepts across disciplines, and how to implement processes used by practicing scientists. In 2017, CDE, the California Science Teachers Association (CSTA), county offices of education (COEs), and several other organizations began offering multiple two-day symposia to help teachers and administrators understand the new standards and develop plans for implementation in their schools.

Access to computer science education in California schools. Current law requires the convening of a computer science strategic implementation advisory panel to develop recommendations for a computer science strategic implementation plan. In September, 2018, the panel submitted a draft strategic plan to the SBE.

California High Schools Offering CS Courses, 2016-17

Course Name	% of Schools offering course
Exploring Computer Science	12%
Computer Science	12%
AP Computer Science Principles	3%
AP Computer Science A	10%
Robotic Technologies	13%

Source: Draft CS Strategic Implementation Plan, 2018

The draft plan notes that California students face significant problems of access in the study of computer science, noting that at the secondary level, very few high schools offer computer science courses, as shown in the table on this page. The draft plan also identifies significant disparities in course taking by income, race/ethnicity, and gender.

The draft plan makes numerous recommendations regarding teacher credentialing, authorization, and training, noting that K-12 computer science education cannot grow in California without increasing the number of teachers qualified to teach computer science. The plan endorses a multi-pronged approach that addresses to credentialing, the recruitment of new teachers, teacher training, teacher communities, administrator and counselor training, awareness of California's computer science standards and institutional and financial support.

What has California already done to address the teacher shortage? To help address the state's current teacher shortage, the Legislature has appropriated $190 million over the last three years, as shown below:

- *Classified School Employees Credentialing Program*: The 2016-17 and the 2017-18 budgets provided a total of $45 million in one-time Proposition 98 General Fund for grants to local educational agencies to provide opportunities for classified school employees to pursue a teaching credential.

- *Integrated Teacher Preparation Grant Program*: The 2016-17 budget provided $10 million in one-time non-Proposition 98 General Fund for grants to post-secondary institutions for the creation or expansion of four-year integrated teacher preparation programs. The funding is designed to increase the number of students who receive their bachelor's degree and teaching credential concurrently within a four-year program.

- *Cal-Teach*: The 2016-17 budget provided $5 million in one-time Proposition 98 General Fund for the CTC to contract with an LEA to recruit additional teachers into the profession, including new teachers, former teachers, and teachers from out of state. The recruitment efforts will particularly focus on recruiting individuals in shortage areas of math, science, special education, and bilingual education.

- *Bilingual Teacher Professional Development Program.* The 2017-18 budget included $5 million in one-time Proposition 98 General Fund to provide professional development services aimed at increasing the number of bilingual authorized teachers and the number of currently bilingual authorized teachers who are prepared to teach in a bilingual or dual immersion program.

- *Local Solutions Grant Program*: The 2018-19 budget included $50 million in funding to support the recruitment, preparation, and support of new special education teachers. The CTC has indicated it plans to fund 41 LEAs with grant funding of up to $20,000 per teacher to fund recruitment and retention efforts for up to five years, from 2018-19 through June 30, 2023. The grant funds may be used in a variety of ways that meet local LEA special education staffing needs.

- *Teacher Residency Programs*. The 2018-19 budget provided $75 million in grants was provided to support the startup costs and teacher residency programs to prepare new special education, science, mathematics, and bilingual teachers.

What are evidence-based strategies to deal with the teacher shortage? The Getting Down to Facts II report identifies some evidence-based incentives:

- Using economic incentives, such as higher salaries, loan repayment, hiring or retention bonuses, to target high-need teachers.

- Loan forgiveness programs and service scholarships can recruit and retain high-quality teachers into the fields and schools where they are most needed.

- Teacher residencies—which offer one-year intensive apprenticeships modeled on medical residencies—have consistently shown higher retention rates, attract more diverse candidates, and target high-need subjects and locations.

- Other Grow Your Own programs to recruit, train, and support paraprofessionals, after-school program staff, and other local community members to become teachers in their own communities.

- Support and mentoring for novice teachers such as seminars, coaching and mentoring, reduced work-loads, collaborative planning time, extra classroom assistance, and a variety of other activities.

- Easing requirements for highly qualified out-of-state teachers to come to California.

As part of the Proposition 98 Education Analysis for the 2016-17 Governor's Budget released in February 2016, the Legislative Analyst's Office included a section on teacher workforce trends in which it examined evidence for teacher shortages in specific areas, identified and assessed past policy responses to these shortages, and raised issues for the Legislature to consider in developing policy proposals.

In the report, the LAO indicated that the statewide teacher market will help alleviate existing shortages over time and that the shortages may decrease without direct state action. However, the LAO noted there are perennial staffing difficulties in specific areas, such as special education, math, and science, for which they encouraged the Legislature to address with narrowly tailored policies rather than with broad statewide policies. Specifically, they recommended the Legislature "consider outreach to re-engage former teachers or recruit out-of-state teachers. Both of these strategies are among the most cost-effective for increasing the supply of teachers within California in the short-term. If the state were to spend one-time funds on outreach, we encourage it to focus specifically on recruiting individuals who are trained to teach in perennial shortage areas. Outreach can attract viable teachers much faster and at a lower cost than many other shortage policies."

Intended uses of funding appropriated by this bill. This bill proposes to fund the following activities through the California STEM Teaching Pathway Act: teacher residency programs, teacher recruitment stipends, teacher retention stipends, teacher mentor stipends, and co-teaching programs.

- *Teacher residency programs.* As noted above, the state recently provided $75 million in grant funding, to be allocated by the CTC, to support teacher residency programs to prepare new special education, science, mathematics, or bilingual teachers. It is unclear whether this bill would fund the additional establishment of these programs, or if the intent is to provide funding to teacher credential candidates.

- *Teacher recruitment stipends.* As noted above, there are not enough teachers in California who are credentialed in the target subjects who are willing to teach in these fields. Recruitment stipends, like signing bonuses, are likely to be used to enable districts to "steal" teachers in these fields from other school districts, and would not have the effect of increasing the overall supply of qualified teachers in these fields. Many districts

already offer signing bonuses, so this might simply pay for an activity already being conducted.

- *Teacher retention stipends.* Providing retention stipends for participants in this program has the potential to result in these teachers receiving stipends, while current teachers who have taught and remained in teaching receiving no stipend.

- *Co-teaching stipends.* Co-teaching generally means a model of instruction in which general education and special education teachers plan and deliver instruction in an integrated setting. It is unclear how this is related to the recruitment, preparation, and support of teachers of math, science, and special education.

Staff recommends that the bill be amended to delete the current list of eligible expenditures under the program, and replace it with the following:

- Financial support to teacher credential candidates, such as loan repayment, loan forgiveness programs, service scholarships, or other costs associated with the credentialing process, provided that these initiatives include a service commitment and ability to recoup funds should the commitment not be met.

- Evidence-based strategies to retain novice teachers, through support such as mentoring, coaching, reduced workloads, collaborative planning time, and extra classroom assistance.

Computer science authorization. This bill proposes to create a program to increase the number of teachers credentialed to teach math, science, and computer science.

California has three single subject teaching credentials (mathematics, business, and industrial technology education) that authorize teachers to provide instruction in computer science. Teachers who hold other credentials may also earn a supplementary authorization to teach computer science. ***Staff recommends that this bill be amended*** to authorize the grant program to support STEM professionals seeking a credential *or an authorization* to teach computer science.

What about engineering? This bill proposes to create pathways for STEM teachers, and appropriates funding for pathways in mathematics, science, and computer science.

STEM stands for science, technology, engineering, and mathematics. Engineering teachers hold Designated Subjects Career Technical Education credentials, which are distinct from the credentials and authorization held by computer science teachers. Like computer science, there is clearly workforce demand for engineers in California, and computer science courses are offered at twice the rate of engineering courses, as shown below:

Subject	Number of Schools	Courses Taught	Total Course Enrollment	Estimated Full-Time Equivalencies (FTE)
Computer Education	1,797	7,080	157,591	1,069.70
Engineering and Architecture	753	3,256	72,666	499.9

Source: CDE, 2018-19 school year

Recommended amendments. Staff recommends that this bill be amended as follows:

1) Remove proposed competency requirements for teachers served by the program, as these are set by the CTC.
2) Remove references to preparing STEM professionals to serve as tutors and supporting educators, as these positions do not require a credential or supplementary authorization, and because increasing the supply of individuals serving in these roles does not meet the stated priority of reducing shortages in the STEM teacher workforce.
3) Delete the requirement that the program place teachers in "high needs" schools and replace with a priority in the awarding of grants to regions of the state with persistent shortages of credentialed teachers in mathematics, science, computer science, and engineering.
4) Clarify that teachers served by the program are to either be credentialed or authorized to teach computer science.
5) Make charter schools eligible to participate in the program in the same manner as school districts and clarify that the program is to be funded with one time funds.
6) Include engineering as a pathway, and include it in the appropriation for a computer science pathway.
7) Clarify that the goal of the program is to increase the number of single subject credential holders in math and science, designated subjects credential holders in engineering, and single subject credential or supplementary authorization holders in computer science.
8) As discussed above, delete the current list of eligible grant activities under the program, and replace it with the following:
    - Financial support to teacher credential candidates, such as loan repayment, loan forgiveness programs, service scholarships, or other costs associated with the credentialing process, provided that these initiatives include a service commitment and ability to recoup funds should the commitment not be met.
    - Evidence-based strategies to retain novice teachers, through support such as mentoring, coaching, reduced workloads, collaborative planning time, and extra classroom assistance.
9) Require that the report be provided to the appropriate policy and fiscal Committees of the Legislature.
10) Other technical and conforming changes.

Prior and related legislation. AB 1623 (Robert Rivas) of this Session would establish the Golden State Teacher Grant Program to provide one-time grant funds of $20,000 to each student enrolled on or after January 1, 2020, in a professional preparation program leading to a preliminary teaching credential, if the student commits to working in a high-need field for four years after he or she receives a teaching credential.

AB 182 (Luz Rivas) of this Session would require the CTC, contingent on an appropriation, to convene a working group to determine whether developing a single subject computer science credential is warranted and, if so, the requirements of the credential. The working group would be comprised of a minimum of seven individuals, each representing various stakeholder groups. The bill requires the CTC to provide a report of the workgroup's findings to the Legislature, Governor, and the state Superintendent of Public Instruction (SPI) by January 31, 2021.

AB 1410 (Quirk-Silva) of this Session would establish the Computer Science Access Initiative, to provide grants to LEAs for the purpose of increasing the number of teachers authorized and trained to instruct pupils in computer science.

AB 1012 (Reyes) of this Session would require, upon appropriations for this purpose, the CDE to provide grants to LEAs for, among other purposes, support of professional development for teachers seeking bilingual authorizations.

AB 169 (O'Donnell) of the 2017-18 Session would have established the Golden State Teacher Grant Program to provide one-time grant funds of twenty thousand dollars ($20,000) to each student enrolled on or after January 1, 2018, in a professional preparation program leading to a preliminary teaching credential, if the student commits to working in a high-need field for four years after he or she receives a teaching credential. The bill targets teacher shortages in the following areas: bilingual education, mathematics, science, STEM, and special education. This bill was held by the author in the Senate Education Committee.

SB 436 (Allen) of the 2017-18 Session was substantially similar to this measure, and would have established the California STEM Professional Teaching Pathway to recruit, train, support, and retain qualified science, technology, engineering and mathematics (STEM) professionals, including military veterans, as mathematics and science teachers in California. This bill was held by the author in this Committee.

AB 2609 (O'Donnell) of the 2017-18 Session would have established the California Scientist-to-Teacher Pathway Program for the purposes of recruiting, training, supporting, and retaining qualified STEM scientists as STEM teachers in kindergarten through grade 12 (K-12); required the CDE to administer the program and to submit a report that assesses the impacts of the program to the Department of Finance, relevant policy and fiscal committees, and the LAO by January 31, 2025. This bill was held in the Assembly Appropriations Committee.

AB 2186 (Thurmond) of the 2017-18 Session would have appropriated $202 million to provide LEAs with one-time grants that would fund the following initiatives: professional learning opportunities in STEM subjects for transitional kindergarten through 8th grade (TK-8) teachers, principals, and school leaders; the development of new, or expansion of existing, locally-devised solutions to STEM teacher shortages; the development of high-quality STEM teaching and learning opportunities for pupils living in rural areas; the integration of rigorous computer science education into the academic program for students in kindergarten through 12th grade (K-12); a study of the feasibility of assessing students in science prior to 5th grade; and a survey of a subset of LEAs that would examine the amount of instructional time that all students receive in math and science. This bill was held in the Senate Appropriations Committee.

AB 2547 (McCarty) of the 2017-18 Session, as passed by this Committee, would have established the California Teacher Corps program, subject to funding in the budget, to provide matching grants to local school districts to create or expand teacher residency programs in which the funds can be used to pay for master teacher stipends, stipends for residents, tuition assistance, and the costs of mentoring and induction. This bill was later amended to require an evaluation of the Teacher Residency Grant Program and Local Solutions Grant Program, and was vetoed by Governor Brown, who stated:

The Commission is already required to conduct an evaluation of both programs and provide a report to the state Legislature and Department of Finance by December 1, 2023. I am confident that successful practices will be shared within the education community.

SB 436 (Allen) of the 2017-18 Session would have established the California STEM Professional Teaching Pathway to recruit, train, support, and retain qualified STEM professionals, including military veterans, as mathematics and science teachers in California. The bill also included an unspecified and ongoing appropriation, beginning in 2017-18, for allocation to the California Center on Teaching Careers (Cal-Teach) to support the purposes of the bill. This bill was held by the author prior to hearing by this Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

EdVoice

Opposition

None on file

Analysis Prepared by: Tanya Lieberman / ED. / (916) 319-2087