

Recent Investments and Programs Strengthening the STEM Teacher Pipeline

In the last few decades, state leaders have made investments in the teacher workforce in recognition of the role teachers play in setting students on the path to enter STEM fields. The timeline below outlines recent efforts to support STEM educators and educators of color.

2020

● **The Golden State Teacher Grant Program¹**

The 2019-20 state budget allocated approximately \$89 million to award scholarships of up to \$20,000 to teacher candidates who commit to teaching in a high-need field (including STEM), in a priority school, for four years. However, in light of the pandemic, this grant has been reduced to \$15 million for special education teacher candidates.²

2019

● **California Teacher Residency Lab³**

The Lab is a community of practice, supported by philanthropy, for 18 participating teacher residency partnerships that received grants to share learnings and engage in additional supports and technical assistance.

● **“CSU Toolkit for Activating, Encouraging, and Inspiring Teachers for Equity and Inclusion (AIETEI)”⁴**

The California State University system is committed to eliminating the state’s teacher shortage so that all students in public schools have access to well-prepared teachers, and have developed this toolkit to help narrow the diversity gap between the state’s teachers and students.

2018

● **California Community College Teacher Credentialing Partnership Pilot Program Grant⁵**

In 2018, Senate Bill 577 established this grant to award up to three community colleges to offer remote teacher credentialing coursework in areas with low rates of K-12 credentialed public school teachers. The awardees are Feather River College, Monterey Peninsula College, and Yuba College.

● **Teacher Residency Grant Programs⁶**

The 2018-19 state budget allocated \$75 million in competitive grants for LEAs to partner with institutions of higher education to develop new teacher residencies for credentials in special education, STEM, or bilingual education.

2017

● **CalEd Grant Program⁷**

The California Center on Teach Careers awarded \$9.2 million in CalEd grant funds to LEAs to promote school leader preparation and professional development, as well as teacher recruitment, support, and professional development.

2017

- **California Partnership for Mathematics and Science Education⁸**

The Partnership leverages the “communities of practice” model — engaging teachers, administrators, county office specialists, institutions of higher education, advocacy groups, research and professional learning organizations, and philanthropy — to build teachers’ capacity to provide meaningful teaching and learning in mathematics and science statewide.

2016

- **The Integrated Undergraduate Teacher Preparation Program⁹**

The California legislature authorized \$10 million in grants to institutions of higher education to develop or expand integrated undergraduate teacher preparation program for students to earn both a bachelor’s degree and a teaching credential in four years.

- **California STEM Network¹⁰**

A project of Children Now, the California STEM Network leverages cross-sector collaboration to elevate innovation and effective STEM teaching and learning.

- **Trellis Education¹¹**

Trellis Education provides a six-year model for preparation and support for mathematics and science teachers, which includes affinity-based mentoring to empower and support new teachers to stay in the profession through a community of learning, from pre-service through the fifth year of teaching.

- **EduCorps¹²**

EduCorps, run by the California State University system, is a member network of individuals intending to significantly increase the number and diversity of students entering CSU’s teacher preparation programs — especially in high-need areas such as mathematics, science, special education, and bilingual education — and to provide ongoing, high-quality support to members on their path to earning their teaching credentials.

- **The California Classified School Employees Teacher Credentialing Program¹³**

This \$45 million scholarship program provides up to \$4,000 per classified employee, per year, for up to five years, to complete their undergraduate and/or teacher preparation program to become a credentialed California teacher in mathematics, science, special education, or bilingual education.

- **The California Center on Teaching Careers¹⁴**

The Center received \$5 million to establish a recruitment and resource center for teacher candidates and others interested in pursuing a teaching career. This effort is led by the Tulare County Office of Education, in partnership with seven regional satellite centers in the county offices of education from Riverside, San Diego, Los Angeles, Sonoma, Ventura, and Shasta.

2012

- **CSU Mathematics Teacher Education Partnership¹⁵**

Established by the Association of Public & Land-Grant Universities, CSU’s mathematics education faculty and K-12 partners participate in the Partnership with colleagues nationally to explore strategies for recruiting, preparing, and retaining teacher candidates in mathematics.

2011

- **100Kin10¹⁶**

Based on a call to action by President Obama, 100Kin10 is a national network of partner organizations committed to adding 100,000 excellent STEM teachers to America’s classrooms by 2021.

2007

EnCorps STEM Teachers Program¹⁷

EnCorps recruits, selects, develops, and supports STEM professionals to become STEM teachers in high-need schools.

Science Teacher and Researcher (STAR) Program¹⁸

Launched in 2007, STAR is a nine-week paid summer research program for future K-12 STEM teachers (undergraduates and credential candidates) enrolled in a CSU campus or who are Noyce scholars. STAR pairs fellows with mentor teachers and researchers in STEM fields.

2004

California State University Mathematics and Science Teacher Initiative¹⁹

The Initiative provides discretionary funds to teacher preparation programs in the CSU system to help recruit mathematics and science teacher candidates.

1999

California Teaching Fellows Foundation²⁰

Launched in 1999, the Foundation partners with 20 universities and 26 districts to staff afterschool and expanded learning programs at more than 200 K-12 school sites in Fresno, King, Madera, Merced, and Tulare counties. Employing undergraduates as teaching fellows, the program focuses on fellows who reflect the neighborhoods, cultures, and backgrounds of the students they serve. It provides an enriched cohort experience for fellows and includes financial support, mentoring, and professional development. Many fellows end up pursuing careers in teaching.

1988

California Subject Matter Project²¹

First launched in 1988, the California Subject Matter Project launched as a network of nine projects to enhance teachers' content and instructional knowledge through collaboration, learning, and research. Supported by a combination of state, federal, and private grant funding, the California Mathematics Project and the California Science Project are two of the nine projects.

1 "The Golden State Teacher Grant Program," (California Student Aid Commission, 2020), <https://www.csac.ca.gov/golden-state-teacher-grant-program>.

2 California State Budget 2020–21, page 50, available at: <http://www.ebudget.ca.gov/2020-21/pdf/Revised/BudgetSummary/FullBudgetSummary.pdf> (Accessed August 2020).

3 "California Teacher Residency Lab," (Redwood City, C.A.: Californians Dedicated to Education Foundation, 2020), https://cdefoundation.org/cde_programs/california-teacher-residency-lab/.

4 "CSU Toolkit for Activating, Encouraging, and Instigating Teachers for Equity and Inclusion (AEITEI)," (Long Beach, CA: California State University, 2019), [2019diversitytools.csu-eppsp.org](https://www.csu-eppsp.org).

5 California Community College Teacher Credentialing Partnership Pilot Program Grant Award Announcement (Sacramento, C.A.: California Commission on Teacher Credentialing, Aug. 2020), https://www.ctc.ca.gov/docs/default-source/educator-prep/grants/award-announcement-ccc-tcPPP.pdf?sfvrsn=fb642eb1_2.

6 "Agenda Item 4E, Information, Educator Preparation Committee: Update on State-Funded Grant Programs," (Sacramento, C.A.: California Commission on Teacher Credentialing, April 2019), https://www.ctc.ca.gov/docs/default-source/commission/agendas/2019-04/2019-04-4e.pdf?sfvrsn=4b6f53b1_2.

7 "Agenda Item 3B, Educator Preparation Committee, Update on State-Funded Grant Programs," (Sacramento, CA.: California Commission on Teacher Credentialing, November 2018), <https://www.ctc.ca.gov/docs/default-source/commission/agendas/2018-11/2018-11-3b.pdf?sfvrsn=6>.

8 California Partnership for Mathematics and Science Education, <https://capmse.org/home>.

9 "Agenda Item 3B, Educator Preparation Committee, Update on State-Funded Grant Programs," (Sacramento, CA.: California Commission on Teacher Credentialing, November 2018), <https://www.ctc.ca.gov/docs/default-source/commission/agendas/2018-11/2018-11-3b.pdf?sfvrsn=6>.

10 California STEM Network, <https://www.childrennow.org/castemnetwork/>.

11 Trellis Education, <http://www.trelliseducation.org/>.

12 CSU EduCorps (Long Beach, CA: California State University, 2016), <https://www2.calstate.edu/educorps>.

13 "Agenda Item 3B, Educator Preparation Committee, Update on State-Funded Grant Programs," (Sacramento, CA.: California Commission on Teacher Credentialing, November 2018), <https://www.ctc.ca.gov/docs/default-source/commission/agendas/2018-11/2018-11-3b.pdf?sfvrsn=6>.

14 California Center on Teaching Careers, <https://californiateach.org/>; "Agenda Item 3B, Educator Preparation Committee, Update on State-Funded Grant Programs," (Sacramento, CA.: California Commission on Teacher Credentialing, November 2018), <https://www.ctc.ca.gov/docs/default-source/commission/agendas/2018-11/2018-11-3b.pdf?sfvrsn=6>.

15 Association of Public & Land-Grant Universities, The Mathematics Teacher Education Partnership, <https://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/about-us/>.

16 100Kin10, <https://100kin10.org/>.

17 EnCorps STEM Teachers Program, <https://www.encorps.org/>.

18 STAR, about us, (San Luis Obispo, C.A.: StarTeacher and Researcher Program), <https://star-web.csm.calpoly.edu/about/>.

19 Mathematics and Science Teacher Initiative (Long Beach, C.A.: The California State University Office of the Chancellor), <https://www2.calstate.edu/impact-of-the-csu/teacher-education/Pages/math-science-teacher-initiative.aspx>.

20 California Teaching Fellows Foundation (Fresno, C.A.: California Teaching Fellows Foundation), <http://www.ctff.us/>.

21 California Subject Matter Project (The Regents of the University of California), https://csmpp.ucop.edu/home/about_funding/.