June 6, 2022

MEMORANDUM

TO: CSU Presidents

FROM: Sylvia A. Alva, Ph.D.
Executive Vice Chancellor

Attention:
Deans/Directors of Education, Deans of Engineering and Deans of Natural Sciences and Mathematics

SUBJECT: Campus Mathematics and Science Teacher Initiative (MSTI) Funding 2022-23 and MSTI-STEM Challenge Fund Requests for Proposals (RFP)

For the 2022-23 academic year, the California State University (CSU) budget provides support for the Mathematics and Science Teacher Initiative (MSTI). This support enables the CSU to increase the number of teaching credentials and authorizations in mathematics, science and computer science, which is particularly important due to statewide teacher shortages in these disciplines. Further, the 2022-23 MSTI-STEM Challenge Fund is available to eligible CSU campuses for up to $100,000. This additional amount will assist campuses in developing innovative and effective programs to increase and diversify the ranks of teachers in mathematics, science, computer science and other STEM-related fields.

The CSU's commitment to increasing and helping retain qualified teachers in mathematics, science and other related fields requires a strategic and targeted effort by every campus. To be eligible for funding, each campus is required to submit a 2022-23 MSTI plan and budget that also should include Teacher Recruitment Project funds of $75,000. Submission of a proposal for the MSTI-STEM Challenge Fund is optional. All items are to be submitted electronically to the Office of the Chancellor by Monday, September 12, 2022. Funds will be allocated upon approval of plans and budgets.

MSTI and MSTI-STEM Challenge Fund plans, budgets and questions can be directed to Dr. Frederick Uy, director, Educator and Leadership Programs, at fuy@calstate.edu.

SAA/sp

CSU Campuses			
Bakersfield	Fresno	Monterey Bay	San Francisco
Channel Islands	Fullerton	Northridge	San José
Chico	Humboldt	Pomona	San Luis Obispo
Dominguez Hills	Long Beach	Sacramento	San Marcos
East Bay	Los Angeles	San Bernardino	Sonoma
	Maritime Academy	San Diego	Stanislaus

Attachments

c: Dr. Jolene Koester, Interim Chancellor
       Mr. Steve Relyea, Executive Vice Chancellor and Chief Financial Officer
       Dr. Shireen Pavri, Assistant Vice Chancellor, Educator and Leadership Programs
       Dr. Frederick Uy, Director, Educator and Leadership Programs
       CSU Provosts/Vice Presidents for Academic Affairs
       CSU Deans/Directors of Education
       CSU Deans of Natural Sciences and Mathematics
       CSU Deans of Engineering
       CSU Mathematics and Science Teacher Initiative Directors

MATHEMATICS AND SCIENCE TEACHER INITIATIVE (MSTI) FUNDING: 2022-23

The Mathematics and Science Teacher Initiative (MSTI) 2022-23 target funding level is based on the annual production of STEM teachers by each campus based on the California Commission on Teacher Credentialing (CTC) report for 2020-21. The allocation for each campus will be emailed separately to the MSTI director and the rest of the members listed on the personnel form. Please follow the steps below to receive these funds. MSTI funds cover the period through September 30, 2022; carry-forward provisions are applicable. The budget should cover expenses throughout academic year 2022-23 and summer of 2023.

Submission requirements for receipt of 2022-23 MSTI funding includes:

1. A campus plan based on selected activities for improving and expanding mathematics and science teacher preparation, including budget and budget narrative, submitted online using the link: https://calstate.infoready4.com/#manageCompetitionsDetail/1844150.

2. A report describing last year's effective MSTI components and best practices.

3. A comprehensive system to demonstrate growth in both recruitment and production of STEM credentials and authorizations inclusive of full and foundational levels, ITE credential, Subject Matter Authorization and Supplementary Authorization in Mathematics or Science, Supplementary Authorization in Computer Science and/or CTE credentials. Both secondary and elementary pre-service teachers on your campus are eligible to earn Subject Matter and Supplementary Authorizations. Please note that any teacher with a mathematics credential is authorized automatically to teach computer science and does not require the Supplementary Authorization in Computer Science.

4. A complete plan to increase in-service teacher candidates to earn Subject Matter Authorization or Supplementary Authorization in mathematics or science, Supplementary Authorization in Computer Science or added content area in mathematics or science. The California Commission on Teacher Credentialing (CTC) website at www.ctc.ca.gov lists the explicit requirements needed by specific in-service teachers.

5. A clear plan on how the campus will support partner Local Education Agencies (LEAs) in helping retain their STEM teachers.

6. A proposed evaluation plan that is clear and that combines project goals with a description of how the activities will aid in increasing the number of mathematics and science, and computer science teachers. It should also include how evaluation results will be disseminated so others may directly benefit.

7. Identification of MSTI project contact persons in each of the relevant academic units with signatures of contacts on the form.

The application must be submitted no later than Monday, September 12, 2022. Please direct any questions or inquiries to Dr. Fred Uy at fuy@calstate.edu. *Every effort will be made to process allocations as soon as these materials are received and approved.*

GUIDELINES FOR CAMPUS PLANS 2022-23

Overall, MSTI's aim is to grow both the number and the diversity of STEM teachers. An additional aim starting this cycle is to assist LEAs in retaining their STEM teachers in the workforce. Submission of application by a campus must adhere to the following conditions:

a) Each campus should have a designated MSTI director (not limited to faculty) and a chosen faculty liaison for each of the following branches: mathematics, science, computer science and education. The MSTI director may also act as a faculty liaison.

b) Each campus must have a designated recruitment coordinator year-round. This individual communicates with various campus units, community college partners and PK-12 school districts.

c) Any faculty who will be teaching content courses, review courses or preparation courses for California Educator Credential Examinations (CSET) and/or for authorizations may be included as personnel.

d) All faculty involved will be replaced at the state rate of $2,183 per semester unit ($1,455 per quarter unit). Fringe benefits are not allowed for faculty.

e) Non-faculty personnel should be calculated at a rate equivalent to that of a faculty; fringe benefits are allowed.

f) Support staff must be no more than 20% of the budget. Any amount beyond this necessitates a prior approval from the Office of the Chancellor.

g) Each campus is required to continue the implementation, preferably online delivery, of its program on Supplementary Authorization in Computer Science. If a campus has yet to develop a program, it should be completed and ready to implement at the end of this funding cycle.

h) Campuses may hold face-to-face and/or virtual meetings. Kindly note that any face-to-face meeting should also have accommodations in place for virtual participation. Travel will be allowed for fiscal year 2022-23.

i) For this cycle, the forms of financial support are limited to the following: (a) Scholarships for candidates in mathematics credential, science credential and/or Supplementary Authorization in Computer Science programs; (b) Reimbursement of registration fees for courses leading to authorizations in the content areas above, testing fees for CSET, and/or application fees to CTC; and (c) Stipends and honoraria for students/consultants/teachers working as assistants, tutors and the like on a particular project or early field experience.

j) MSTI funds for the following are allowed but should be no more than 5% of the budget: memberships to professional organizations and programs, conferences fees and journal and magazine subscriptions.

Note: Please include in your budget travel to the following annual meetings sponsored by the Office of the Chancellor: CSU MTEP Meeting (Chancellor's Office, February 2023), CSU Science Educators Meeting (Northern California, January 2023), and CSU Computer Science Educators Meeting (Northern California, March 2023), and MSTI Directors' Meeting (Chancellor's Office, June 2023).

2021-22 MATHEMATICS AND SCIENCE TEACHER INITIATIVE REPORT

This report will serve as the campus MSTI accountability report for 2021-22. The report is intended to address the following overall topic, which CSU system reports on annually: ***The effectiveness of the initiative's different components and activities, including identification of best practices.*** To respond to these issues, each campus is asked to submit a report answering the following questions with proper support. These three questions are included in the online submission of the application.

1. Which MSTI components and activities at the campus have been especially effective to date and why?

2. What best practices in mathematics, science and computer science teacher recruitment and preparation has the campus implemented? Which of these have potential for replication and is scalable?

3. How have the MSTI project and activities contributed to addressing state teacher shortage in mathematics and science and to campus efforts overall? Kindly include and itemize here the <u>total number of added credentials, subject matter authorizations and supplementary authorizations in STEM fields</u> the campus has contributed.

MSTI-STEM CHALLENGE FUNDING: 2022-23

The MSTI-STEM Challenge Fund was allocated to the CSU campuses by the CSU Office of the Chancellor (CSUCO) for a period of four years, ending in 2023. Each campus that has an educator preparation program is eligible to submit an application. The distribution of funds to the campuses for academic year 2022-23 will be through a MSTI-STEM Challenge Fund proposal submitted together with an MSTI application. The maximum amount allowed for each application for this cycle is $100,000. Please follow the steps below to apply for this award. MSTI-STEM Challenge funds for 2022-23 cover expenses starting from receipt of funds to September 30, 2023. For this grant, carry-forward provisions are allowed.

Outcomes for MSTI-STEM Challenge Fund grants:

- Increase in the number of mathematics teachers qualified to teach mathematics courses beyond Algebra II (from Foundational Level Mathematics (FLM) to full mathematics credential)
- Increase in the number of teachers qualified to teach specific science courses
- Increase in the number of holders of Supplementary Authorization in Computer Science
- Growth in the number of offerings of non-mathematics STEM courses like computer science, data science and other fields
- Clear plans indicating sustainable supports to Local Education Agencies (Ls) in helping retain STEM teachers in the workforce
- Improved knowledge and pedagogy of teachers in STEM content areas, including data science
- Enhanced academic preparation of PK-12 students in mathematics, science, technology, engineering, computer science and/or data science

For each MSTI-STEM Challenge Fund application, campus activities are limited to the following best practices:

- Development and/or expansion of Supplementary Authorization programs in computer science and Supplementary Authorization and/or Subject Matter Authorization programs in mathematics or science
- Access to California Educator Credential Examinations (CSET) review courses, classes or materials including payment to faculty teaching the courses
- Reimbursement of registration fees for courses leading to authorizations in the content areas above, testing fees for CSET and application fees to the California Commission on Teacher Credentialing
- Providing professional development/learning to in-service and/or pre-service teachers in STEM areas including data science

The following are requirements for the submission of MSTI-STEM Challenge application:

1. A campus plan for improving and expanding teacher preparation in mathematics, science, computer science and other STEM-related areas. The plan should include a budget and budget narrative and be submitted online using the following link: *https://calstate.infoready4.com/#manageCompetitionsDetail/1844152*.

2. A report describing the effective and best practices of last year's MSTI-STEM Challenge.

3. A detailed plan to continue the expansion and/or development of program(s) for teachers to earn Subject Matter Authorization or Supplementary Authorization in mathematics or science, or Supplementary Authorization Computer Science or an added content area in mathematics or science. The California Commission on Teacher Credentialing website (www.ctc.ca.gov) lists the explicit requirements to earn these authorizations.

4. A clear method of disbursing reimbursements of fees to candidates in encouraging them to earn their STEM credentials or supplementary authorizations.

5. A clear strategy on how to avail of face-to-face or online CSET review courses, classes, materials and other resources.

6. A detailed and viable evaluation plan that lists the project goals and describes how the activities will increase and retain the number of mathematics, science, computer science and other STEM-related teachers and how to disseminate the results so other stakeholders may directly benefit.

7. Campuses may hold face-to-face and/or virtual meetings. Kindly note that any face-to-face meeting should also have accommodations in place for virtual participation. Travel will be allowed for fiscal year 2022-23.

2021-22 MSTI-STEM Challenge Fund Report

The report will serve as the campus MSTI-STEM Challenge Fund project report for 2021-22. The report is intended to address how the additional funds were used to further the project of each campus. Overall, each campus is asked to report on: *a) the benefit of the added funds to the projects, b) the effectiveness of the different components and activities, and c) including identification of best practices.* To fulfill this requirement, each campus will be required to respond to the following questions upon submission of the application. These three questions are included in the online submission of the application.

1. *What added benefit(s) did the additional funds contribute to the project?*

2. *What new, if any, best practices in mathematics, science and computer science teacher recruitment and preparation did the campus implement additionally? Which of these were replicated and/or scaled-up as a result of the additional funds?*

3. *Have the additional funds assisted in addressing state teacher shortage and diversity in mathematics, science and computer science? If so, please explain and give examples.*

The application must be submitted no later than Monday, September 12, 2022. Please direct any questions or inquiries to Dr. Fred Uy at fuy@calstate.edu. *Every effort will be made to process allocations as soon as these materials are received and approved.*