



Funding Your STEM Programs

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TCUP specific supports tribal colleges and universities, Alaska Native-serving institutions, and Native Hawaiian-serving institutions to promote STEM research and education to increase the number of Native Americans in STEM careers.

<https://www.nsf.gov/funding/opportunities/tcup-tribal-colleges-universities-program>

Instructional Capacity Excellence in TCUP Institutions (ICE-TI)

Targeted STEM Infusion Projects (TSIP)

TCUP for Secondary and Elementary Teachers in STEM (TSETS)

TCU Enterprise Advancement Centers (TEA Centers)
Cyberinfrastructure Health, Assistance, and Improvements (CHAI)

Preparing for TCUP Implementation (Pre-TI)

TCUP Partnerships - Collaborations led by TCUP institutions that involve non-TCUP institutions of higher education are supported through TCUP Partnerships, with the participation of other NSF programs to support the work of non-TCUP institutions

Small Grants for Research (SGR) Research studies that further the scholarly activity of individual faculty members



Dear Colleague Letters

Dear Colleague Letter

Supporting Secondary STEM Educator Preparation at TCUP Institutions

December 31, 2024

Encourages proposals from TCUP-eligible institutions to establish new or enhance existing secondary STEM teacher preparation degrees with up-to-date curricula, faculty resources and technology to advance STEM education for Tribal and Native communities.

Dear Colleagues:

Middle and high schools in the United States continue to experience critical shortages of certified secondary science, technology, engineering and mathematics (STEM) teachers. According to data collected by the United States Department of Education, over half of U.S. states and territories reported unfilled secondary STEM teaching positions for the 2023-24 school year (NCSL, 2024)¹. These shortages particularly impact rural Tribal and Native communities.

Meanwhile, STEM knowledge is rapidly advancing, and sophisticated STEM and STEM education technologies are increasingly becoming an integral part of high-quality instruction. Keeping STEM teacher preparation degrees up to date on these advances is an ongoing and crucial responsibility for the institutions that offer them.

In recognition of the importance of STEM teachers to economic empowerment of rural and remote communities, the Tribal Colleges and Universities Program (TCUP) encourages TCUP-eligible institutions to submit proposals for funding to develop **new or revised** Secondary STEM Education degrees.

In considering project design, proposers should assess whether existing curricula and courses include the discipline content knowledge and skills development opportunities necessary to prepare today's secondary STEM educators, or whether the curriculum should be revised or expanded to ensure successful learning outcomes. Projects supporting the development of **new** teacher preparation degrees must include all elements required for degree accreditation and teacher licensure or certification in the host state including clinical experiences and earned STEM minors, as applicable. Eligible project activities include but are not limited to faculty hires, faculty professional development, equipment and materials purchase, and curriculum development.



National Science Foundation

The Louis Stokes Alliances for Minority Participation (LSAMP)

program invests in the Nation's colleges and universities to aid student success to create a new generation of STEM discoverers for the national STEM enterprise. The program takes a comprehensive approach to the STEM Learning Ecosystem to impact STEM student development and retention.

- LSAMP is an alliance-based program, whereby a group of institutions of higher education (IHEs) work together to diversify the nation's science, technology, engineering, and mathematics (STEM) workforce by increasing the number of STEM baccalaureate and graduate degrees awarded to persons from LSAMP populations. LSAMP populations are defined as persons from groups underrepresented in the STEM enterprise: Blacks and African-Americans, Hispanic and Latino Americans, American Indians, Alaska Natives, **Native Hawaiians, and Pacific Islanders**. The LSAMP program provides funding to alliances that implement comprehensive, evidence-based, innovative, and sustained strategies that ultimately result in the graduation of well-prepared, highly competitive students from LSAMP populations who pursue graduate studies or careers in STEM, while also supporting knowledge generation, knowledge utilization, assessment of program impacts, dissemination activities and dissemination of scholarly research into the field.

National Science Foundation

Advanced Technological Education

- With a focus on two-year Institutions of Higher Education (IHEs), the Advanced Technological Education (ATE) program supports the education of technicians for the high-technology fields that drive our nation's economy. The program involves partnerships between academic institutions (grades 7-12, IHEs), industry, and economic development agencies to promote improvement in the education of science and engineering technicians.
- The ATE program supports curriculum development; professional development of college faculty and secondary school teachers; career pathway development for both students and incumbent workers; and other activities including applied research projects that advance the knowledge base related to technician education.

Partners well with TCUP

Supports partnerships between two-year institutions of higher education, other academic institutions, industry and other entities to improve the education of technicians in science and engineering. The ATE program encourages proposals from Minority Serving Institutions as well as other institutions that support the recruitment, retention, and completion (certificate, degree, program) of the full spectrum of diverse talent that society has to offer, which includes underrepresented and underserved communities, in STEM technician education programs that award associate degrees.

US. Department of Education

- The purpose of the Native Hawaiian Education program is to develop innovative education programs to assist Native Hawaiians and to supplement and expand programs and authorities in the area of education.
- Authorized activities include, among others: early education and care programs; family-based education centers; beginning reading and literacy programs; activities to address the needs of gifted and talented Native Hawaiian students; special education programs; professional development for educators; and activities to enable Native Hawaiian students to enter and complete postsecondary education programs.



US. Department of Agriculture

Community Facilities Grant Funding

- Eligible Projects and Services
- Construct, enlarge, extend, or otherwise improve essential community facilities providing essential service primarily to rural residents and rural businesses.
- Rural businesses include facilities such as educational and other publicly owned facilities
- Healthcare Facilities: Hospitals, medical/dental clinics, nursing homes, and assisted living.
- Public Safety Services: Fire departments, police stations, jails, fire trucks, and ambulances.
- Community Support Services: Community centers, libraries, childcare centers, town halls, courthouses, and museums.
- Infrastructure & Utility Services: Water systems (such as reservoirs or dams), street improvements, and telemedicine/distance learning equipment.
- Local Food Systems: Community gardens, food banks, food hubs, and greenhouses.

Contact information

- US Dept of Agriculture: Hawaii and Western Pacific Rural Development State Office
- USDA Rural Development
- 154 Waianuenue Ave. Suite 311
- Hilo, HI 96720
- Phone: (808) 933-8380
- State Director: (808) 291-2058

US Dept of Health & Human Services - Administration for Native Americans

Who can apply

- Public and non-profit private agencies serving **Native Hawaiians**; National or regional incorporated non-profit Native American organizations with Native American community-specific objectives; Public and non-profit private agencies serving Native peoples from Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands; Tribal Colleges and Universities, and **colleges and universities located in Hawaii**, Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands that serve Native American Pacific Islanders

What can be supported

- **Initially called SEDS will now be called EAGLE**
- EAGLE will embrace thoughtful human capital development, strategic infrastructure reform, family stability efforts, and innovative business creation.
- EAGLE will include greenhouses to promote healthy diets.
- It will focus on welding skills to boost employability and reduce high unemployment.
- It will help native communities adopt microgrids to boost energy reliability and help underpin socioeconomic development.
- It will embrace tribal elder mentorship of youth to promote success in education, strengthen the future workforce, and boost cultural rootedness.
- EAGLE will further self-determination by accepting project proposals conceptualized by native communities.

USDA – National Institute of Food and Agriculture

Alaska Native-Serving and Native Hawaiian-Serving Institutions Education Competitive Grants Program

- The purpose of this program, under Assistance Listing Number 10.228, is to promote and strengthen the ability of Alaska Native-serving Institutions and Native Hawaiian-serving Institutions to carry out education, applied research, and related community development programs. NIFA intends this program to address educational needs, as determined by each institution, within a broadly defined area of food, agricultural, natural resources, and human sciences (FANH).

<https://www.nifa.usda.gov/grants/funding-opportunities/alaska-native-serving-native-hawaiian-serving-institutions-education>

Federal set-aside funding

Hawaii Grant-in-aid funding

- <https://www.capitol.hawaii.gov/session/gia.aspx>
- Brian Schatz - Democratic Senator serving since 2012.
- Mazie Hirono - Democratic Senator serving since 2013.
- Josh Green - Governor and former Lieutenant Governor, not a senator but influential in state politics.
- **Find your representative here:**
- <https://www.capitol.hawaii.gov/legislature/legislators.aspx?chamber=H>

To secure congressional earmark funding for Hawaii, consider these steps:

- Identify specific projects or needs that require funding, such as infrastructure or education.
- Collaborate with local government and community organizations to gather support.
- Research current congressional priorities and align your project with them.
- Prepare a detailed proposal outlining the project's benefits and costs.
- Engage with Hawaii's congressional representatives to advocate for your project.
- Monitor the earmark process and be ready to provide additional information if requested.