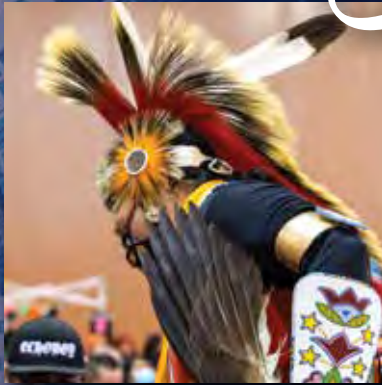


AISES 45 Years

ADVANCING INDIGENOUS PEOPLE IN STEM

2022 Programming Priorities





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AISES Mission

Founded in 1977, AISES is focused on substantially increasing the representation of Indigenous peoples of North America and the Pacific Islands in science, technology, engineering, and math (STEM) studies and careers. Through chartered college and university chapters, professional chapters, tribal chapters, and affiliated PK-12 schools, members benefit from diverse STEM-focused programming that supports careers and promotes student success and workforce development in multiple crucial areas. To learn more, visit aises.org.

2022 Programming Priorities

AISES Approach to Native American STEM Workforce Development

- **Build Awareness and Retention for Native PK-12 Students, Partners and Educators**
Start the pathway by providing Native PK-12 students, parents, and educators exposure to quality curriculum programs, and opportunities to interest and engage these audiences in STEM.
- **Increase Access to and Success in STEM Higher Education**
Continue the pathway through higher education by providing financial and academic support and opportunities to Native college students to increase the number of successful Native STEM majors.
- **Provide Leadership and Promote Change to Improve Professional Opportunities in STEM**
Support the pathway to keep Natives in STEM careers through support of professional Native STEM network and career development resources.
- **Identify and Leverage Strategic Partnerships and Conduct Research in STEM**
Illuminate the path by identifying the challenges and successes in Native STEM Workforce Development through research, data collection, and partnerships with other key STEM stakeholders.

Annual Events

(Serving high school students, college students, and professionals)

AISES Collegiate Regional Conferences

AISES college and professional chapters hold Regional Conferences in the U.S. and Canada to champion each other and expand their knowledge and skills through a wide variety of workshops and sessions. The regional conferences generate enthusiasm for STEM education and careers via conference features like mini-career fairs, poster presentations, and engineering competitions. Regional conferences are typically held at college campuses hosted by the schools' AISES Chapter. Many professional members participate as mentors and speakers, sharing their expertise and facilitating discussions that might follow an established theme or focus in areas like engineering, environmental science, or crossover between traditional ecological knowledge and western science. The regional conference program illustrates how AISES is actively meeting the critical demand for STEM workforce development. These conferences help individuals to explore new challenges in STEM disciplines and careers, where AISES graduates and professionals are in high demand.



AISES Leadership Summit

Establishing a leadership pipeline is fundamental to developing today's best science, technology, engineering, and math talent. Students from high school through postdoctoral studies, as well as emerging and mature professionals, value the AISES Leadership Summit as an opportunity to acquire the skills they need to be confident leaders. Through workshops and sessions — along with built-in time to relax, socialize, and have fun — the AISES Leadership Summit delivers on strategies that enable STEM professionals, and Indigenous students and leaders to learn from each other, network, and find support.

AISES National Conference

The AISES National Conference has been held annually since 1978 and is an unparalleled opportunity to connect companies with over 2,500 Indigenous high school juniors and seniors, college and graduate students, educators, workforce professionals and our corporate, government, private foundation, nonprofit, and tribal partners for professional development, networking opportunities, research presentations, workshops, awards, and traditional Indigenous cultural events. The National Conference hosts the largest college and career fair in Indian Country with many companies also hosting hiring events by conducting onsite interviews. Job seekers are provided interview coaching, and resume development, as well as career planning and other skills necessary to be successful in today's job

market. For students considering college or graduate school, resources are provided to assist in financial planning, applying to college or graduate school, and information on the many STEM majors and careers available. AISES members and attendees from the U.S. and Canada, and as far away as Alaska and Hawai'i make connections and they find the resources and services to advise and advance their academic studies and careers.

AISES in Canada National Gathering

The AISES in Canada National Gathering is focused on two goals: building Indigenous Canadian leadership in STEM and expanding equitable and representative opportunities in all STEM fields. With 45 years of experience building leadership and community for Indigenous peoples in STEM, AISES works to increase representation through scholarships, trainings, networking, peer support, and mentorship at all levels of educational and professional experience. This three-day event includes activities for PK-12 students, university students, as well as professionals. Attendees enjoy several keynote speakers, various sessions, research posters, as well as morning blessings and traditional local food. The annual AISES in Canada National Gathering grows each year, with more interest from partners as well as attendees.

Student Success: PK-12

Energy Challenge Competition

The AISES Energy Challenge is a two-phase energy-specific engineering fair designed to engage and encourage high school and middle school students to participate in the engineering process through creative, hands on problem solving. Middle and high school students may compete as individuals or as teams consisting of up to four students. The students/teams are evaluated using a rigorous scoring system and compete against a multitude of other teams. All students/teams must have an adult sponsor. The sponsor can be either a parent, teacher, or mentor. The top two middle school and top four high school projects will present their final projects and compete at the AISES National Conference.



Seeding Innovation: Expanding Computer Science for Native Students

In computer science education and degree completion, Native American students are significantly underrepresented in taking Advanced Placement Computer Science (AP CS) exams and completing computing degrees, which are critical precursors to entering the rapidly growing and high-paying computing occupations. To address educational and economic disparities among Native American communities and youth, AISES and the Kapor Center will build upon existing culturally relevant project-based CS courses, while also adding new partner schools each year for the next four years. Together, we work collaboratively with our partner school sites to create an engaging computer science curriculum, while also working with teachers and when possible, community members to integrate cultural traditions, language, stories, art, and more. It is a tribally-specific computer science curriculum that is built with and for the partner communities. This upcoming school year (2022-2023), we will be adding Artificial Intelligence and Machine Learning curriculum options to our partnering schools.



Learning Center

In 2022, AISES will develop and launch the AISES Learning Center, a comprehensive online website and resource directory for Indigenous K-12 students, educators, and families that will help to advance equity and opportunity, specifically in science, technology, engineering, and mathematics (STEM) education. This resource includes the development and sourcing of culturally relevant curriculum that will further advance the education and resources readily available to Indigenous PK-12 students, educators, and their families. The primary goal of the project is to increase the future success of Indigenous students, by providing them, their educators, and families, with lesson plans and educational resources needed to improve their STEM competencies early on, positively changing the trajectory of Indigenous PK-12 students.



National American Indian Science and Engineering Fair

The National American Indian Science and Engineering Fair (NAISEF) is a Society for Science and the Public (SSP) affiliated science fair and as such is part of the larger SSP fair network. The NAISEF differs from other SSP-affiliated fairs in that it is an in-person and virtual science fair which

allows access for students who might not otherwise be able to participate. Unlike live fairs, virtual fairs do not require travel as the fair and judging are conducted online and via phone or videoconference. Participants submit their projects as videos and slideshows online. Students from grades 5-12 can participate in the NAISEF. There are two categories for entrants, Senior Division (grades 9-12) and Junior Division (grades 5-8). AISES awards cash prizes to the winners of each division and winners are provided support to travel to and compete in the Regeneron International Science and Engineering Fair that is the world's largest international PK-12 science competition held in a major U.S. city.

National Conference STEM Day

Supported by the Boeing Company, this fun, interactive day of activities includes hands on STEM activities for high school students and educators provided by AISES High Tech Partners. STEM Activity Day also features a Marketplace where PK-12 students can visit a variety of booths to learn more about AISES PK-12 opportunities and gain valuable professional development skills such as resume building, college application tips, AISES opportunities, and more!

Native Financial Cents: Curriculum and Experience

With funding from the Wells Fargo Foundation, AISES created the "Native Financial Cents: Supporting Financial Capability for Native Americans" (NFC) program; culturally contextualizing through supplementation of the Wells Fargo Hands on Banking curriculum to build the financial capability of Native youth and young adults. AISES developed the NFC curriculum to be used with students from primary school through college. The curriculum is deployed by AISES college students, professionals, educators, and others who provide train-the-trainer trainings or direct training to students within their communities. AISES is developing the NFC "Experience," where students will have a hands-on opportunity to move through stations and see how financial literacy applies to their future and their communities. As students travel through different pathways, they will use critical thinking to help evaluate their financial health and prepare for expected and unexpected financial events.

Next Generation of Native Coders

The Intel funded Next Generation of Native American Coders initiative developed the Applied Computer Science Principles and Career Readiness course in 2018, first implementing the course at two schools

on the Navajo Nation during the 2018-2019 academic year. The course is a Computer Science Career and Technical Education curriculum that engages students and prepares them for computer science degrees and careers through hands on independent projects, technical education integrating Native culture, interactive CS skill-building activities, professional and peer mentorship, and college, career, and leadership development. With Intel's support, this AISES developed course has since been implemented at four additional high schools that service Indigenous students located within CA, OR, and AZ.

***Paths to Opportunities* Newsletter – Student Edition**

The *Paths to Opportunities* newsletter is distributed monthly to more than 15,000 AISES members, subscribers, and supporters. This must-read digital newsletter is for PK-12, college, and graduate students. It contains news of student opportunities along with editorial content targeted to the unique student demographic of Indigenous North Americans in STEM disciplines. Each issue has news from the AISES family on timely topics and upcoming events. The student edition includes news of scholarships, fellowships, and internships, plus articles filled with tips and advice to help students determine a major or ultimate career path in a STEM-related field.

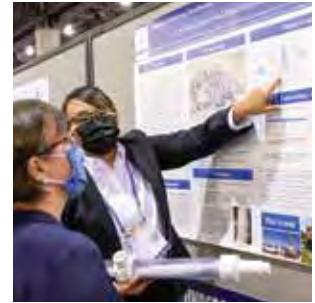
SPRK-ing Interest in STEM and Computer Science

This AISES program combines robotics and computer programming to increase awareness and interest in STEM and Computer Science (STEM+C) among Native American students. The program engages students in hands on STEM+C activities powered by Sphero technology, created by AISES and tailored to Native students. AISES has partnered with the toy company Sphero to bring their educational spherical robot to Native American serving PK-12 schools across the country. Sphero is easily integrated into STEM curricula, allowing even the youngest students to learn programming, engage in hands on STEM+C activities, bridge technology and the arts, and enjoy creative discovery with their classmates. The goal of this STEM+C program is to inspire young Native minds to pursue and excel in their STEM and CS education. Additionally, AISES hopes to build the capacity of educators and schools to provide cutting-edge technological STEM+C experiences for its students by providing teacher trainings, lesson plans, and all the equipment necessary to incorporate Sphero technology in the classroom.

STEM College and Career Readiness Programs

AISES is developing a College and Career Readiness (CCR) Guidebook specifically addressing STEM education and careers and the unique needs, values, and workforces of Native students and tribal communities. The CCR guidebook and programming aims to better prepare Native students to attend college and major in STEM, thereby helping address the significant underrepresentation of Native people in STEM studies and careers. The CCR resources will

provide students and educators with STEM college and career assessments, an overview of STEM careers, STEM careers pertinent to tribal communities, a college assessment tool, college application guide, scholarships for Native students, resume and interview training, and basic financial literacy. AISES will also develop tools for implementing the CCR Guidebook both in and out of the classroom. AISES STEM CCR programs are funded by the Northwest Area Foundation, Meyer Memorial Trust, The Helen Powers Fund, Cherokee Preservation Foundation, 3M, and ANA SEDS



Student Success: College

College Chapters

There are AISES College Chapters across the United States and Canada. The primary objectives of the College Chapters are to enrich the educational, service, and social needs of the chapter's membership. College Chapters emphasize education as a tool that will facilitate personal and professional growth opportunities for students through mentor programs, leadership training, conference participation, and other activities.

College and Career Fair

An important part of every National Conference, the College and Career Fair is the largest event of its kind in Indian Country. Hundreds of corporations, government agencies, academic institutions, tribal industries, and nonprofits participate to share information about the many opportunities available for students and professionals.

College and University Tours

AISES National Conference participants can take part in events like college/university tours and industry tours. Students receive presentations on admissions, financial aid, and curriculum as well as campus tours with current students who talk about student life, classroom resources, and technology. The behind the scenes look at leading colleges/universities generates wonder and inspiration to students who are transitioning from high school in preparation for college.

Full-Circle Mentorship

AISES Full-Circle Mentorship program, supported by the Jack Kent Cooke Foundation, program matches college student and professional AISES members in traditional and peer-to-peer academic and career mentoring. The mentorship program is open to college students and professionals at all stages of their career. Mentees will gain practical advice, encouragement, and support, learn from the experiences of others, increase their social and academic confidence, develop skills and strategies for academic and career issues, identify goals and establish a sense of direction, and gain valuable insight into the next stage of their education and career. Mentors will improve communication and interpersonal skills, develop leadership and management qualities, increase their confidence and motivation, engage in a volunteer opportunity valued by employers, enhance one's resume/CV, reinforce and gain recognition for their skills and experience, and feel an improved sense of fulfillment and personal growth.

Internships

The AISES Summer Internship program provides students with a 10-week applied summer work experience at a business or government agency and an opportunity to explore career options and to develop professional level skills. Interns gain resume-building skills and develop professional networks. In some cases, students create their own professional internship program within their discipline of study and within the parameters of the host agency. Some of our current and past internship partners include 3M, Aristocrat, Intel, Oracle Corporation, BMM Testlabs, USDA Forest Service Forest Products Laboratory Internship, ASRC Federal Holding Company, USDA Food Safety and Inspection Service, Bonneville Power Administration, Centers for Disease Control and Prevention, U.S. Bureau of Land Management, U.S. Census, U.S. Environmental Protection Agency, and the U.S. Department of Veteran Affairs.

Lighting the Pathway to Faculty Careers for Natives in STEM

In 2014, AISES was awarded over \$1.5 million dollar grant from the National Science Foundation (NSF) to create the "Lighting the Pathway to Faculty Careers for Natives in STEM" program. The goal of the LTP

program is to increase the representation of Native Americans in STEM faculty positions at colleges and universities across the country. The program has created an intergenerational community of undergraduates and graduate students, postdoctoral scholars, and junior and senior faculty members. In addition to mentorship, the program strives to provide students with valuable academic and professional support, travel funds, and educational, research, fellowship, and internship opportunities. In 2019, AISES was awarded another five-year grant from the NSF to continue the LTP program increasing the number of scholars by 72 over five years, totaling 172 Native STEM LTP scholars participating in this AISES signature project.

Scholarships

AISES helps students move forward in their educational journeys by providing a broad range of scholarship opportunities. Scholarships help students acquire skills and training that will help them meet the unique STEM needs of our communities. Our scholarship process is enhanced by our partnership with Indigenous Education Inc. (Cobell Scholarship Fund). This partnership provides a one-stop shop for students to complete information that aligns their goals with scholarships from other potential organizations that streamlines scholarship access. Some of our current scholarship program partners include 3M, BNSF Railway, Chevron, Intel, Aristocrat, Phillips 66, San Manuel Band of Mission Indians, The Boeing Company, ExxonMobil, Lockheed Martin, Northrop Grumman, Splunk, Environmental Science Associates (ESA), GeoComply, and Society of Professional Engineering Employees in Aerospace.

USAA Veterans

Partnering with USAA, AISES is developing and supporting a cohort of veteran Native undergraduate students pursuing STEM degrees. This year-round program provides academic scholarships, academic and professional development opportunities, as well as social and cultural support and resources. Additionally, AISES provides its veteran scholars with connections to STEM employers for mentorship, internship, and career opportunities to mitigate their attrition from STEM academics into STEM focused careers. Workforce preparedness in the fields of STEM will prepare veteran Native leaders to positively impact their communities.

Career Support

AISES is dedicated to supporting its professional members in STEM. We support early, mid, and executive professionals in STEM fields through professional development, career opportunities, networking, research support, and opportunities to mentor and support Native students in STEM. AISES support does not end once a student graduates from college and enters a STEM career but rather provides ongoing career and professional development programming to help Native STEM professionals grow and succeed in their chosen career fields. Additionally, AISES offers a multitude of opportunities for professionals to “give back” through mentoring and supporting Native STEM students. Programming for professionals includes mentoring of students, scholarship review, research and science fair judging, serving as speakers and trainers at AISES events, advisory council service, professional development programming, career fair, professional awards, or engage in a growing professional chapter network across the U.S. and Canada.

Advancing Agricultural Science Opportunities for Native Americans (AASONA)

With funding from the Native American Agriculture Fast Track Fund (NAAFTF), AISES developed the AASONA program to support agricultural science scholarships and education for Native Americans in farming and ranching professions. Through this project, AISES will provide comprehensive support to current and potential Native American farmers and ranchers. Thirty college students will participate in a cohort and receive scholarships and research awards as well as travel support to attend AISES national events. The cohort also includes ten professionals in agricultural fields to mentor cohort college students.

Advisory Councils

AISES currently has a total of seven advisory councils: Academic Advisory Council, Canadian Indigenous Advisory Council, Corporate Advisory Council, Council of Elders, Government Relations Council, Professional Chapter Council, and Tribal Nations Advisory Council. Each Council plays an important role in advising AISES in its work for their respective sectors; with the Council of Elders advising the board and organization on traditional and cultural matters.

AISES Energy Workforce Development (AEWD)

AISES received a U.S. Department of Energy (DOE) Minority, Education, Workforce, and Training Program project to develop and implement the AISES Energy Workforce Development (AEWD) Cohort program for 24 Native two-year college students majoring in energy, energy conservation, business, or environmental fields and attending Minority Serving Institutions (MSIs) nationwide to

assist with transitioning the students into four-year degree programs in STEM. To achieve the goal of increasing the number of Native students who earn four-year degrees and enter the energy workforce, AISES has established a cohort of 24 Native two-year students, created a mentorship network of students and professionals in the Energy workforce and related fields sector, provided scholarships to Native students to increase retention in undergraduate studies, educational support services to ensure two-year students transfer to four-year institutions, and professional development to increase persistence in Energy studies and careers.

Career Hub

The AISES Career Hub is the premier way to connect with organizations who are hiring Native STEM professionals. Visitors can search opportunities in academia, government, nonprofit, and other STEM industries. Employers can post their job openings to attract qualified Native STEM professionals through multiple channels and access to a resume database to find the right candidate for the job.

Grow with Google

AISES is a recipient of 250 scholarships for the Grow with Google Career Certificate Program to distribute to its community members. The Google Career Certificates are a suite of flexible online training programs available on Coursera.org. These certificates, built and taught by Google, are designed to provide learners from all backgrounds with job-ready skills within six months (can be completed quicker if learning full-time). There are four specializations designed for anyone with no relevant experience - data analytics, user experience (UX) design, project management, and IT support.

Mentorship Opportunities

Many AISES programs aimed at supporting Indigenous college students also provide professionals with opportunities to serve as mentors, including AASONA, AWED, LTP, USAA, and Next50 Initiative. AISES professionals are also able to participate in the Full-Circle mentorship program to receive professional development from peers or later-career professionals.

Native Financial Cents: Financial Counseling Certification with AFCPE

AISES in partnership with the Association for Financial Counseling & Planning Education (AFCPE) and Wells Fargo aims to improve Native communities' access to an array of resources supporting youth, adults, and whole families in their efforts to reach and maintain financial security. Fifteen Native professionals have been selected to participate in the AFCPE's self-guided financial counseling certification program. The selected cohort will convene virtually to receive culturally contextualized components of the curriculum and support in their preparation for the certification exam. Upon certification, the FCCP cohort will be equipped to assist community members in the following areas: developing and utilizing household budget planning tool Setting personal financial goals, building credit, reducing debt, instituting retirement plan and/or college planning, and easing financial stress.

Next50 Initiative

Committed to improving the lives of older adults and specifically addressing the unique needs of Indigenous people over the age of 50, AISES is creating a cohort of 10 Colorado residents to receive in-person and online professional and social support. AISES is providing professional development sessions aimed to increase the cohort's understanding of contemporary technical skills necessary to enter and thrive in today's technology-driven workforce. To ensure the program improves their quality of life while increasing the financial earning potential of cohort participants during the program and beyond the grant cycle, AISES provides the following to each member: mentorship, skill building professional development, connection to AISES partners (i.e. leaders in industry, academia, philanthropy, and tribal governments and enterprises), and professional networking. The Next50 program focuses on providing economic mobility through entry, re-entry, or advancement in all types of careers for professionals over age 50; a population severely underrepresented and underserved.





Opportunities Board

The AISES Opportunities Board connects talent with online resources through the AISES website. It is where opportunity seekers can find scholarships, internships, trainings, conferences, and other opportunities targeting Native STEM students and professionals. Recruiters can reach our talented pool of members and post events, fellowships, or interesting project - at no cost - to attract qualified Native STEM students and professionals. For a minimal fee, recruiters can upgrade their opportunity for additional outreach to engage candidates through multiple channels.

Partner Service Awards

Each year, AISES honors a select group of partners who have demonstrated outstanding collaboration and who help tell the AISES story. The AISES Partner Service Award winners are selected by the AISES staff in seven categories: Advocacy Partner, Corporate Partner, Educator Partner, Foundation Partner, Government Partner, Nonprofit Partner, and Tribal Partner.

Paths to Opportunities Newsletter – Professional Edition

The *Paths to Opportunities* newsletter is for STEM professionals and educators. It includes news of career development, internships, and current employment opportunities with outstanding organizations, agencies, universities, and corporations in multiple STEM fields, as well as articles and tips on building a flourishing career.



Professional Awards

Each year AISES recognizes outstanding individual achievement through the Professional Awards Program. Winners are selected by a committee of distinguished leaders from organizations that partner with AISES. That group has the difficult task of giving full consideration to the many excellent nominations that come in from across our membership. The winner of the Professional of the Year Award is selected based on overall leadership and technical achievement, and the remaining awards are made based on achievements in specific categories.

Professional Chapters

AISES has Professional Chapters across the United States and Canada. Professional Chapters give a community to Indigenous STEM professionals who then work together to create and support community event and activities. Professional Chapters often work with area schools to mentor students, speak to classes, and participate in their activities. They often also fund raise to support local students and other members to travel to conferences. Professional Chapters provide a network of professionals in a region so that they can have the connection of other Indigenous STEM professionals working together to advance the AISES mission.



STEM & Business Initiatives

Building upon the Growing Native STEM Businesses in the West (GNSBW) cohort-model program, funded by the Minority Business Development Agency (MBDA), AISES will further develop its programming to increase the number of STEM businesses owned by American Indian, Alaska Native, and/or Native Hawaiian professionals or college students. Within funding from the Johnson Scholarship Foundation, AISES will recruit a new cohort of Indigenous entrepreneurs to support their business development. AISES continues to highlight STEM and Business sessions at the AISES National Conference. AISES is also adapting its STEM & Business workshop series developed for the GNSBW program to meet the needs of Southwestern Oklahoma tribal communities as part of the newly awarded ANA SEDS grant.

Workforce Development

Women of Color in Engineering Collaborative

AISES has been a collaborator in the Women of Color in Engineering Collaborative, a partnership network of professional engineering associations and STEM-based companies dedicated to addressing systemic barriers that prohibit equitable work environments for women engineers of color. This network aims to create a shared vision focused on dismantling systemic barriers that impede the retention and advancement of women engineers of color and develop a strategic plan to guide collaborative activities that connect and energize people, cross divides and drive systemic change toward equity are needed.

50K Coalition – 50,000 Diverse Engineers by 2025

AISES, along with the Society of Women Engineers, National Society of Black Engineers, and the Society of Professional Hispanic Engineers, comprise the Leadership Circle of the 50K Coalition whose mission is to increase the number of diverse engineering degree recipients to 50,000 by 2025. The Coalition received support from the National Science Foundation (NSF) INCLUDES Initiative to bring together universities, industry partners, and other professional societies working toward diversity and inclusion within engineering to join forces and pursue areas of synergy, explore lessons learned, and significantly increase the number of diverse engineering graduates. In addition to the 50K Coalition, AISES has partnered with other minority serving engineering professional societies on another NSF INCLUDES-funded project to increase the diversity of the engineering professoriate by providing professional development to graduate students, postdoctoral fellows, and early-career faculty in all engineering fields.

NSF INCLUDES Planning Grant

The INCLUDES Planning Grant addresses the challenge of underrepresentation of Native Americans with four-year STEM degrees. The mission of the planning grant is to solidify the shared vision and necessary partnership strategy to successfully develop a transfer pathway model for Native students in STEM. The proposed planning grant will bring together Tribal College, Community College, and four-year institutional representatives from across the country to tackle the issue of successfully transferring more Native American students in STEM to four-year institutions.

Rematriation: Indigenous Womxn in STEM - Henry Luce Foundation

AISES received a planning grant from the Henry Luce Foundation to support increasing representation of Indigenous womxn in STEM leadership positions. Rematriation: Indigenous Womxn in STEM Leadership project builds on current efforts to empower Indigenous people, promote Indigenous knowledge, and reestablish Indigenous stewardship of the land. AISES believes Indigenous womxn who should be supported to reclaim leadership as most Indigenous cultures are matriarchs and womxn who traditionally held decision-making roles. Delving deeply into understanding the supports, institutional changes, cultural understanding, training, policies, and processes necessary to allow Indigenous womxn to reclaim leadership roles in STEM, AISES intends to move beyond the common understanding of womxn's needs in the workplace and focus more specifically on ensuring STEM workplaces understand

and embrace the cultural significance of womxn in leadership as this understanding and acceptance is foundational to the persistence of womxn in STEM leadership positions. The final product of the planning grant will be an action plan for the Rematriation project and conducting outreach with partners to gauge commitment and participation in implementation.

LEAPS

The LEAPS project aims to test approaches to achieving culture change with respect to inclusion of Indigenous representation, from membership to Indigenous knowledge. This project builds off the successful, NSF funded "Lighting the Pathway to Faculty Careers for Natives in STEM" project (LTP). AISES has developed an evidence base for maintaining persistence in STEM among Native scholars through culturally connected mentorship, community building, and professional development centering Indigenous values based on the LTP project. LEAPS seeks to expand the application of these findings outside of AISES, supporting the diversity and inclusion efforts of the Botanical Society of America, Entomological Society of America, and Ecological Society of America, to facilitate a cultural shift in these organizations to re-imagine how they work with Indigenous scholars and communities to promote and advance Indigenous voices and knowledge within their respective fields. In partnership with other biology professional societies, the project will form a peer network group to address inclusion of Indigenous voices across biology disciplines.



Research

Poster and Oral Research Presentations & Competitions

Middle and high school, undergraduate, and graduate students and professionals showcase their STEM research through oral and poster presentation sessions during the AISES national conference. AISES research poster presentations and competitions are the highlight and representation of months of hard work where individuals present their findings to an audience of STEM students and professionals. These presentations give students and professionals the opportunity to share their research and receive valuable feedback on their work. Awards are given for exceptional research presentations.

American Indian/Alaska Native College Affordability and TCU Sustainability

In collaboration with the other national Native scholarship providers, AISES is engaged in a research project designed to better understand two critical areas in relation to American Indian and Alaska Native (AIAN) Native access to and success in higher education. The project explores college affordability among current and former AIAN college students, graduates, and non-completers attending both Tribal Colleges and Universities (TCU) and non-Tribal Colleges and Universities and TCU sustainability, which includes the development of high-quality credentials at Tribal Colleges and Universities, funding and student access and completion.

STEM Portraits

Native STEM Portraits identifies and aggregates what is known of the challenges and supports specific to Native participation in STEM careers, conducting research across the spectrum from undergraduates to professionals (using surveys, photo elicitation, focus groups, and interviews), and broadly and imaginatively disseminates the information. Activities include a literature scoping review, a longitudinal study, and extensive dissemination into a broad base of constituencies. Based on the advice of partner AISES the project organized its focus in three areas: computer sciences and engineering; biological sciences; and mathematics, physics, and earth sciences.

Gifts of Knowledge Study

The Gifts of Knowledge study builds on the research objectives of the Lighting the Pathway (LTP) project to test the efficacy of an interventions that “scale up” key aspects of the LTP project, an intensive professional development intervention relative to a control group, to understand the mechanisms that explain the intervention effects. The project assesses the degree to which key psycho-social factors mediate the relationship between the group differences and long-term integration into the professional community, greater career persistence and higher rates of mentorship of future Native scholars.



Tribal Nations

Tribal Nations Advisory Council

The Tribal Nations Advisory Council (TNAC) at AISES consists of representatives from Tribal Nations in the U.S. and Canada. The primary role of the TNAC is to advise AISES on issues of relevance and importance to Tribal Nations. In addition, the TNAC works to assist AISES in creating opportunities for Tribal Nations and their citizens, and to support the AISES mission of substantially increasing the representation of Indigenous peoples of North America and the Pacific Islands in STEM.

Cheyenne River Sioux Tribe - Native Youth Community Project (NYCP)

In collaboration with the Cheyenne River Sioux Tribe, AISES seeks to increase interest and engagement in STEM subjects among students of all ages, build educators' capacity to support students in STEM, and generate Cheyenne River Sioux Tribe parent and community support of and engagement in STEM studies and careers. AISES provides a wide variety of events and activities such as AISES led in-class lessons, professional development trips for educators, STEM summer enrichment camps for kids, community STEM nights, college preparation workshops, career-readiness webinar series, STEM field trips, and support for after-school AISES Affiliate Club activities.

Eastern Band of Cherokee Indians

With generous funding from the Cherokee Preservation Foundation of the Eastern Band of Cherokee Indians (EBCI), AISES hosted its Leadership Summit in Cherokee, North Carolina, and continues to build upon two years of programming implementing the SPRK-ing Interest in Computer Science program at Cherokee Central Schools (CCS). Most recently, AISES is working to develop curriculum and collaborate with teachers to ensure computer science and 21st century skills are integrated and used at CCS to further the economic development of EBCI by creating a future-ready workforce.

Southwestern Oklahoma Tribes

AISES in partnership with Comanche Nation, Kiowa Tribe, and Wichita and Affiliated Tribes were awarded an Administration of Native Americans Social and Economic Development Strategies (ANA SEDS) grant. AISES and the Coalition of Southwestern Oklahoma Tribes Economic Development Partnership project is a multi-tiered Economic Development project focused on Asset Building, Career Pathways, and Entrepreneurship. AISES and its tribal partners will collaborate on the development and implementation of programs in three focus areas—Asset Building, Career Pathways, and Entrepreneurship—to meet the economic development needs of the tribal communities of southwestern Oklahoma. The partnership identified these three economic development programmatic components based on the current community condition including disparities in income, employment, educational attainment, money management, and businesses owned and operated by tribal citizens.

Other Initiatives

Capacity Building for AISES

In 2018, AISES received a two-year \$250,000 grant from the Wells Fargo Foundation to help ensure AISES has the capacity to continue to grow and support long-term sustainability. AISES is using the funding to: 1) address immediate staffing needs, 2) develop a five-year Strategic Plan/Business Plan, 3) create a succession plan, and 4) provide critical business training to support its chief executive officer, management team, staff, and the board of directors.

Comcast/NBC Universal Public Service Announcements

Since 2017, the Comcast Foundation has provided valuable in airtime to broadcast two Public Service Announcements (PSAs) about AISES. The PSAs are designed to convey how, through our work at AISES, intergenerational traditional Native American cultural knowledge is woven together with new ideas to generate innovative technology and promote ideas and people that create a better world for everyone. In 2020, the PSAs ran in multiple markets on multiple channels and was valued at close to \$2 million. The PSA videos can be viewed on the AISES Youtube channel along with numerous other videos drawing attention to our work.

Planned Giving Services

Each year, AISES embarks on direct mail campaigns to increase our reach to new and existing donors. In its 45 year history, AISES has relied on individual donations from the public and it has developed an individual giving program, in addition to implementation in 2022 of major donor and planned giving programs. AISES currently sustains itself through individual giving, grants (corporate, foundation, and federal), and its oldest membership program – the Sequoyah Fellows Lifetime members program. With the hiring of a dedicated Director of Individual Giving in 2022, AISES hopes to embark on a capital campaign in the near future!

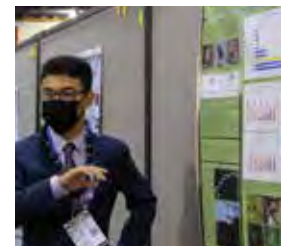
Sequoyah Fellows Lifetime Members Program

The AISES Sequoyah Fellows Lifetime Member program was named in memory of Sequoyah, the great Cherokee innovator who perfected the Cherokee syllabary in 1821. Sequoyah's syllabary built strong literacy skills among the Cherokee people and it had a profound impact on the Cherokee tribe's history that is visible today. Sequoyah Fellows are a growing family of members now at close to 1,600 individuals who are invested in and sustain the AISES organization. Members generate economic growth and support a variety of activities and programs that moves AISES forward and expands members' access to, and understanding of, AISES through its programs and partnerships with organizations and industries that advance STEM education and careers.

Winds of Change Magazine

The award winning *Winds of Change* magazine is the only choice to reach Indigenous people in STEM. Distributed across the U.S. and Canada, *Winds of Change* is a multifaceted resource that is designed to engage every part of the growing AISES family. Each issue includes timely feature articles along with a welcome letter from the CEO, news of AISES members and chapters, and opportunities for readers - from PK-12 through mature professionals - to gain knowledge and experience in their chosen field. It is produced five time a year and distributed to AISES members, sponsors, and friends, with an average circulation per print issue of 8,000. All are promoted on social media and available digitally in a format optimized for mobile devices. Visit woc.aises.org to access past and current issues.

To learn more about the range of initiatives administered by AISES, visit www.aises.org.







AISES

The word "AISES" is rendered in large, bold, white, sans-serif capital letters with a slight gradient. The letter 'I' contains a white mouse icon. The letter 'S' contains a white icon of two overlapping speech bubbles. The letter 'E' contains a white lightbulb icon. The background is a dark blue gradient with faint, glowing geometric patterns, including gears and circuit-like lines.

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