

SURF Cultural Advisory Committee
July 21, 2022
FINAL REPORT

Purpose of the Cultural Advisory Committee

The Cultural Advisory Committee (CAC) promotes cultural awareness in all functions at the Sanford Underground Research Facility (SURF). The Committee advises the South Dakota Science and Technology Authority (SDSTA) on such things as diversity in the workforce, outreach to tribal communities and raising cultural awareness about the significance of the Black Hills to regional tribes.

The Committee's recommendations assist the SDSTA Board of Directors and key stakeholders in developing cultural awareness activities, including education and outreach programming and recruitment of underrepresented groups. Roles and responsibilities of the Cultural Advisory Committee include:

- Increase the diversity of the SDSTA workforce.
- Promote science education to South Dakota tribal students and teachers.
- Ensure current operations and future-plans are sensitive to the region's cultural heritage.
- Review Cultural Awareness Programs at SURF and prioritize initiatives.
- Review effectiveness of public and education outreach programs as they pertain to tribal communities.

Background and Overview

The CAC met with SDSTA staff on July 21, 2022 in Lead, South Dakota.

Members in attendance (short bios at end of report):

George Campbell, chairperson (in person)
Lafawn Janis (in person)
Patricia Lebrun (virtual)
Kay Jorgensen (in person)
Kay Schallenkamp (in person)
Shankar Kurra (virtual)
Erin Strauss (in person)
Curtis Peterson (in person)
Eric Zimmer (virtual)

Members not in attendance:

Mato Standing High (absent)

SDSTA staff present during all or part of the meeting:

Mike Headley, Executive Director (virtual)
Deb Wolf, Outreach and Culture Director
Constance Walter, Communications Director
Staci Miller, SURF Foundation Director
Nicol Reiner, Education and Outreach Director
Christine Burger, Human Relations Office Manager

Kristen Riley, Outreach and Culture Administrative Assistant
Liesl Chatman, Equity Consultant (Chatman-Strauss, LLC)

Summary

Education and Outreach (E&O) Update

Nicol Reiner provided an extensive report and discussion on the Education & Outreach activities – many connections have been fostered with an emphasis in diversifying students reached and though there are challenges, the team has clear goals on how to achieve a more varied and meaningful impact in underserved communities. (See attached report).

Communications Update

Constance Walter provided an update on all the successful projects coordinated by the communications team. These included a discussion on Deep Talks, the partnership with the Sanford Lab Homestake Visitor's Center (SLHVC), and Neutrino Day's in-person event and activities, including financially supporting a group from *Ateyapi* (a Native America student mentoring group from Rapid City, SD). A bus was provided, and the students attended Neutrino Day and were given a tour of the future site of *Cangleska Wakan* ethnobotanical garden and medicine wheel by Staci Miller, SURF Foundation Director. All these events were immensely successful and there is clear direction moving forward.

SURF Foundation

From 11:25AM – 12:40PM (MT) a break was taken which included a tour of the *Cangleska Wakan* ethnobotanical garden site followed by lunch. Staci Miller, SURF Foundation Director facilitated the tour of the sacred garden site.

Inclusion, Diversity, Equity and Access (IDEA) Update

Deb Wolf provided an update regarding the IDEA office efforts and the SURF Operations Cooperative Agreement Midterm review. The Cooperative Agreement (CA) provides funding for much of the direct and indirect operations at SURF. Deb updated the CAC on the efforts to hire and backfill the open IDEA position.

SURF Update

Mike Headley provided an update on the successes of the past year and achievements at SURF. There is still a focus on the need for a more diverse staff. He reviewed the progress on LBNF/DUNE and LUX-ZEPLIN. The International Organization for Standardization (ISO) certification has been achieved and approved.

Human Relations Update

Christine Burger gave report regarding the Human Resources (HR) office as well as improvements to staff benefits including FMLA leave, paid parental leave, expanded holiday pay policy. In addition, Chris described the task of auditing policies being used to ensure there is more people-centric language that is welcoming to a diverse array of potential employees. HR is addressing ways to improve the diversity as well as methods for accountability as an organization moving forward.

George Campbell thanked the staff for their presentations and progress before calling for further questions and discussion as well as potential recommendations.

George Campbell discussed early November 2022 for the next meeting.

With no further business, George Campbell adjourned the meeting.

New Recommendations:

1. Support HR's efforts to increase IDEA representation within the workforce of SURF.
2. Encourage E&O to continue outreach to teacher preparation programs throughout South Dakota.
3. Recommend that the Sanford Lab Homestake Visitor Center (SLHVC) add descriptions and titles for the pictures on the frieze (the banner of pictures that runs along the top of the walls). An example would be to use QR codes or pamphlets.
4. Encourage the staff to consider and articulate the ways in which research undertaken at SURF connects to global and historical attempts to understand the origins of the universe and humanity and then leverage those connections to strengthen relationships with the communities surrounding SURF and to engage visitors and stakeholders in conversation.
5. Encourage the staff to look for ways to emphasize the connectivity between STEM education and the arts and humanities in outreach, programming and SLHVC experiences.
6. Develop a policy or language for Indigenous preference in hiring (or preference for other kinds of diversity) that complies with relevant law and include it in appropriate job postings. The goal of this recommendation is to encourage and facilitate diversity in hiring without being disingenuous or misleading to potential applicants.
7. All things being equal consider giving preference to a Native American for the diversity outreach and culture coordination position.
8. Suggest that E&O work with South Dakota Public Broadcasting in getting information out to the public.
9. Adjust outreach focus to building relationships and trust with underreached and isolated communities in South Dakota. Be explicit both internally and with appropriate stakeholders that this will likely result in a decrease in the total number of students reached each year.
10. In addition to increasing use of technology to enhance individual experiences, develop ways to use the SLHVC exhibits and space to facilitate intergenerational conversation about the intersections of place, history, culture and STEM.
11. Expand internal cross-functional conversations beyond Managers' Trainings to improve understanding and valuing of the contributions of individuals, departments/working groups, and roles throughout the organization.
12. Continue to revise hiring, onboarding, and retention practices to increase the diversity of the staff at SURF, e.g. examine degree or relevant experience requirements in job descriptions to lower barriers for potential applicants who have the skills and aptitudes for positions but may not have the formal training that is often associated with our ideas about "the most qualified" candidates.
13. Continue to facilitate IDEA training for all managers on a monthly basis and develop a strategy for involving more staff in IDEA efforts and training.

Meeting adjourned at 3:33pm.

Additional resources attached below.

Education and Outreach (E&O) Status Report

K-12 Education and Outreach

- Curriculum units

- Curriculum unit usage remains strong. During the 2021-22 school year, 82 curriculum kits have been used in districts in South Dakota, North Dakota, and Wyoming. Curriculum units have impacted 3,718 students this year.

- Field trips (onsite)

- The spring quarter was the first full season of field trips since before the pandemic. The E&O hosted 15 schools for field trips from South Dakota, North Dakota, and Wyoming.
- The E&O team has collaborated with the Sanford Lab Homestake Visitors Center (SLHVC) staff to integrate and utilize the SLHVC and its resources as an integral part of offerings for students who come on-site.

- Classroom presentations (includes virtual field trips)

- In March, April, and May the team visited 41 schools in 26 school districts and interacted with 3,495 students. Most classroom presentations have been face-to-face with a few schools (such as Luverne, MN) electing virtual presentations.
- The E&O team has surpassed the goal of interacting with 12,000 students this year. Since July 1, 2021, the team has interacted with 19,709 students.

- Professional Development (PD)

- E&O team members facilitated both the third and fourth (final) learning retreats of the SDMath/SDSci Teacher Leadership program in partnership with the SD Department of Education. The program is on its fifth cohort, and the current cohort includes 18 educators from 15 counties in South Dakota.
- In March through May, E&O team members provided professional development to educators and showcased SURF E&O resources through the following: Computational Thinking workshop in collaboration with BHSU, the Technology and Innovation in Education Conference, the SD Early Childhood Educators Conference, the SD Counselors Association Conference, and two hybrid online STEM courses through BHSU: *Powerful and Productive Mathematical Discourse* and *Supporting and Sustaining Three-Dimensional Science Instruction*.
- The summer professional development season started in June, and the E&O team developed and/or facilitated the following: the residential week-long Place-Based Science Workshop, the virtual week-long Implementing 3-Dimensional Teaching workshop, a weeklong Computational Thinking in Elementary STEM workshop, an EPSCoR virtual Foundations of 3-Dimensional Teaching and Biofilms workshop, and an EPSCoR Making Thinking Visible Train the Trainer workshop.
- In July, professional development continues with support and/ or facilitation of the following workshops: three face-to-face SD EPSCoR workshops, 5 virtual SD EPSCoR workshops, a residential week-long Applied Mathematics workshop, and one weeklong Computational Thinking in Elementary STEM workshop.

Undergraduate

- In March, The E&O team hosted the BHSU elementary methods students for a tour, engineering challenge, and discussion about best practices in teaching and learning K-12 science.

Other

- E&O team members interacted with students at career fairs and STEM events in Spearfish, Sturgis, Huron, the Women in Science conference at BHSU, and at the Ellsworth AFB Airshow in the STEAM hangar.
- E&O Director, Nicol Reiner, visited the Exploratorium with the SLHVC Director and the Outreach and Culture Director in April to build capacity in the area of creating informal science learning opportunities in a museum/visitor center setting. Consequently, several collaborative events are planned with the SLHVC and E&O Team to host summer and fall activities to interact with families at the SLHVC.
- Refer to Table 1 below for data related to student interactions for March through June 2022. Table 2 shows the annual numbers from fiscal year 2016 to 2022.

Table 1. Student/Educator Impact – March 2022 – June 2022

Category of Work	# of Programs	# of School Districts	# of Schools	K-12 Students	K-12 Educators	Undergrad Students
Curriculum Units	31	14	20	1101	29	8
Onsite Field Trips	16	11	11	485	41	20
Presentations	118	26	41	3496	182	0
Other	28	6	15	378	17	177
Professional Development	15	N/A	N/A	0	158	2

Table 2. K-12 Students: Fiscal year final numbers (July 1 – June 30)

	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Curriculum Units	934	3504	2286	3598	3236	3384	3718
Presentations	8734	8157	6304	6704	3704	2005	14038
Field trips	595	660	796	1117	254	58	485
Other	10	891	825	1055	918	298	1468
Total	10273	13212	10211	12474	8112	5745	19709

Committee Member Short Bios

George Campbell, MS, MBA is Chairperson of the Cultural Advisory Committee. George helped establish the Cultural Advisory Committee in 2010 when he was the Cultural Coordinator for SURF. George is retired from Lawrence Livermore Laboratory.

Lafawn Janis is a 7th Generation member of the Oglala Lakota tribe, born on the Pine Ridge Reservation and a longtime resident of Rapid City where she lives with her two sons. She is alumni of Black Hills State University, where she graduated with a B.S. in Education. Lafawn is committed to giving her expertise and time to impactful community projects.

Shankar Kurra, MD and MBA is Vice-President of Medical Affairs at Monument Health Hospital in Rapid City, SD, a position he has held since August 2018. As the VPMA, he oversees the Medical Staff of Monument Health Rapid City Hospital.

Patricia Lebrun is president of Lebrun Investment Management, Inc., a post she has held since 1988. Prior to that, she was vice president of Simmons Financial Management, Inc. Other work experience included teaching vocal music in public schools in Northwood, N.D., and Rapid City, S.D., and as serving as Executive Director of the Rapid City Symphony.

Kay Jorgensen has dedicated her life to public service. A former District 26-31 Legislator, Kay served in the South Dakota House from 1978 to 1984 and from 1992 to 1998. She also served a term with Spearfish School Board. For nearly 20 years, Kay worked with Black Hills Corp, where she was the lead Director for two years and 10 years on the board of Wellmark Blue Cross and Blue Shield.

Kay Schallenkamp, PhD, served 41 years in higher education prior to her retirement in 2014. She served as President of Black Hills State University (SD) from 2006-2014 and President of Emporia State University (KS) from 1997-2006. Prior to that she held positions as Provost at the University of Wisconsin-Whitewater and Provost at Chadron State College (NE).

Mato Standing High is an enrolled member of the Rosebud Sioux Tribe and currently lives in Rapid City, South Dakota. A licensed attorney in South Dakota and Colorado, Mato is a founding partner and attorney for Standing High Lochen LLP, a firm specializing in the practice of Indian Law. He has dedicated the bulk of his law career to a practice dedicated to assisting Tribal Nations with strengthening court systems and economic development.

Erin Strauss, MS in Chemistry and Curriculum has spent the past 30 years working in STEM education in the K-12, informal, and higher education sectors. Over the course of her career, Strauss has continually explored the relationships between culture, beliefs about humanity's relationship to nature, learning, and the formation of robust communities that can work and learn effectively together despite the individual differences between their members.

Eric Zimmer is a historian from the Black Hills of South Dakota. He holds a Ph.D. from the University of Iowa and is currently the A.B. Hammond Visiting Assistant Professor of Western United States History at the University of Montana. He has served as the primary grant author or co-PI on several projects, securing funding support from the Andrew W. Mellon Foundation, the Windrose Fund, Monument Lab, and others.

Curtis Petersen is an enrolled member of the Cheyenne River Sioux Tribe. Petersen grew up in Parade, South Dakota. His parent's careers in education influenced his decision to pursue a degree in mathematics education at Black Hills State University. His anticipated graduation date is May 2023. Petersen is also pursuing an Earth science teaching endorsement and a minor in American Indian studies. For Petersen, teaching is far more than a job; teaching is a way to invest in his community.

Previous CAC Recommendations Still Open:

Date	Recommendation	Update
Jun-2018	Communications develop Deep Talks for use at Tribal Colleges	We have had discussions but have not yet moved forward with this recommendation. Working with IDEA team and new cultural coordinator to develop an outreach plan that considers the needs of students, faculty and administration.
Jul-2019	Discuss the medicine wheel and its use for: quiet time, education, celebrations, gatherings and to help remember to show respect for this sacred land.	Sacred Circle Garden design at 100%. Uses, users, and access have been identified, explored and articulated. Fundraising continues. Anticipated completion date is now end of summer 2023.
Jul-2019	Coordinate with the Universities' Centers for American Indian Studies in the initial use of the Ethnobotanical Garden/Medicine Wheel.	Much progress has been made on this. However, further outreach efforts will resume once our new diversity coordinator is hired and onboarded.
Jul-2019	Provide the cultural mix levels of employees from contractors.	Currently working to add language to contracts templates to encourage a diverse contractor workforce. Will be completed by Sept 1, 2022.
Jul-2019	Evaluate the use of cell phone apps or other type of IT equipment to tour the SLHVC.	Visitor Center exhibits are under review. Science panels have been updated and new exhibits, including exhibits with greater focus on cultural awareness and E&O are being considered. The new website will offer opportunities to add new content to displays.
Apr-2019	Visit universities to discuss the types of internships available at SURF with an emphasis on American Indian universities and colleges.	Fall 2022 – Compile a list of names and email for faculty and student groups connected to relevant programs. Create a schedule of regional and state career fair events. Determine needs for updated and/or additional “Careers at SURF” videos.
Apr-2019	Consider adding some type of measurement process to indicate student interest in science because of E&O work at SD schools.	Summer '22 – Continued work with Dan Moulam at USD in collaboration with SD EPSCoR to assess student impact. Fall '22 – E&O will reach out to other informal science education facilities to understand their evaluation practices. Conversation with BHSU education faculty about research opportunities.

Apr-2019	Host a President/Chairman/Elder Leaders' day.	On hold due to COVID.
Dec-2019	Continue efforts to ensure diversity in the contractor workforce.	Currently working to add language to contracts templates to encourage a diverse contractor workforce. Will be completed by Sept 1.
Dec-2019	Provide a copy of what will be on the website and what will be used internally for the strategic plan.	Awaiting feedback from the Cultural Advisory Committee on what information should be included on the CAC website.

Respectfully submitted by,

George Campbell

George Campbell (Aug 31, 2022 12:44 HST)

George Campbell

Cultural Advisory Committee Chair





CAC July2022 (2) Final Report -

Final Audit Report

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