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**Session 4 Deliverable:**

**URGE Policies for Working with Communities of Color for University/Organization**

This is what was found or developed by the South Dakota Mines Pod at South Dakota School of Mines and Technology on Policies for Working with Communities of Color as well as plans for improved processes and/or needed resources.

*Pods may have members from a range of career stages and involvement in the development and execution of research projects, and pod members may have different experiences or different perspectives when responding to these questions. Consider this in the summary document and focus on capturing responses that are representative of the range in your pod.*

€ **Audit of previous interactions with communities of color at our organization:**

€ Regional demographics:

- South Dakota and much of the region is classified by the US Census as Frontier and Remote (FAR) areas and includes 5 Native American reservations. Rapid City has a population of approximately 78,000. About 79% of the population identifies as White, 11% as Native American (largely Lakota), 5.3% Hispanic or Latinx, and 3% as African or Asian American.

€ South Dakota School of Mines and Technology through the Center for Inclusion releases an American Indian Summary Report annually that highlights interactions with American Indian communities in the previous academic year (<https://www.sdsmt.edu/Campus-Life/Center-for-Inclusion/American-Indian-Summary-Report/>). Below are some examples of projects and collaborations from 2019-2020 that involve Geology and Geological Engineering faculty:

- Dr. Sawyer— Served as the Principal Investigator of an NSF program titled Pre-Engineering Educational Collaborative (PEEC) with Oglala Lakota College (OLC), South Dakota School of Mines & Technology (SDSM&T), and South Dakota State University (SDSU). The NSF-funded program has run for approximately 11 years to date (current funding ends September 2021), and Dr. Keena is running the SDSM&T side of the program this summer (2021). Program goals are to mentor Native American students at OLC in experiential learning projects that demonstrate the benefits of science and engineering to Tribal communities on the Pine Ridge Reservation to encourage participation in science and engineering fields. Students start their science and engineering degrees at the Tribal College (OLC) and then transfer or matriculate to non-tribal engineering institutions such as SDSM&T and SDSU. Specific projects completed include: water quality investigations, uranium analyses, sustainable greenhouse, and affordable housing. Projects typically develop through 12-week, summer educational experiences. Some projects were developed in collaboration with EPICS (collaborative with Purdue University) and extended into the academic year.

- Dr. Li—Groundwater and surface water modeling near Oglala, SD: collaboration with OLC and a graduate and an undergraduate student.
- € Other projects from prior, recent academic years:
  - Dr. Sawyer— Served as Principal Investigator of a Department of Energy (DOE) sponsored program to promote Native American participation in energy related research, illustrate career opportunities in the energy arena for Native American students, and to provide clean, efficient sources of energy (natural gas) and economic development in Tribal communities. This program was a collaborative effort between the DOE, SDSM&T, and Sinte Gleska University on the Rosebud Reservation.
- € **What worked well in these interactions?**
  - € Dr. Sawyer:
    - With respect to the PEEC program, incorporating student research projects involving the land, water resources, geology, plants, animals, etc. strongly resonated with Native American students and promoted interest in science and engineering. The collaborative nature of the program also led to a strong relationship between OLC and local non-tribal institutions, particularly SDSM&T.
    - A “Kick-off” event each summer for the PEEC program fostered stronger relationships between Tribal stakeholders and PEEC program participants and allowed the needs of various stakeholders to be expressed and potentially addressed by students in the program.
- € **What did not work well, and how can this be better addressed in future plans?**
  - € Dr. Sawyer:
    - In the PEEC program, the large distances between partners in western and eastern South Dakota was a barrier for frequent participation by SDSU. Native American students from western South Dakota were less interested in attending a non-tribal institution in eastern South Dakota. Funding and time limitations reduced the effectiveness of summer research projects. Retention during each summer as well as between summers was an issue.
    - In the DOE program, public perception of any type of hydrocarbon production was largely negative, which diminished the effectiveness of the program. Also, the lack of science and engineering faculty at Sinte Gleska made meaningful and continuous progress difficult.
- € **Are there ways to improve the outcome of projects already undertaken?**
  - € Securing greater financial and other support from Regental institutions in South Dakota would provide much more consistent and stronger support for the PEEC program in the future. An active



Advisory Board including a majority of tribal and OLC representation to provide guidance and support would better facilitate the overall program.

- € Teaming with other programs such as EPICS, which runs year-round, could allow more year-round participation and greater continuity for student participants.
  
- € **Are there specific resources or guidelines that are needed to improve the process for planning ahead and working with communities of color?**
- € As mentioned above, greater support from Regental institutions and an active Advisory Board could greatly improve the process for planning future goals and activities. For example, if longer term and continuous funding were established, projects could be extended throughout the academic year rather than during the summer.