Revised Plan for BECG Catalyst Activities

From the SZ4D BECG Integrative Group

Engagement of Minority Serving Institutions (MSIs)

In consideration of the NSF reviewer comments and input from geoscience researchers doing BAJEDI work, we propose to focus first on connecting MSIs with researchers already involved in SZ4D:

- Hispanic Serving Institutions (HSI)
  - Arizona State University
  - Northern Arizona University
  - University of Arizona
  - University of New Mexico
  - University of Texas El Paso

- Asian American and Native American Pacific Islander Serving Institutions (AANAPISI)
  - University of California, Davis
  - University of California, San Diego
  - University of Hawaii Manoa
  - University of Minnesota
  - University of Washington (Tacoma)

- HSI and AANAPISI
  - University of California, Santa Barbara
  - University of California, Santa Cruz
  - University of Houston
  - University of Texas, Austin

In addition, we seek to connect these institutions to some natural MSI partners that have been identified in Cascadia and Alaska:

- Smaller Institutions
  - Eric Baer (BECG) at Highline College, Des Moines, WA, AANAPISI
  - Katharine Solada (MDE) at Yakima Valley College, Yakima, WA, HSI
  - Amanda King (MDE) at Alaska Pacific University, Anchorage, AK, NASNTI
  - Mariah Tilman (BECG) at Chemeketa Community College, Salem, OR, 2YC, HSI
**Larger Institutions**
- Multiple scientists at Humboldt State University (HSI)
- Multiple scientists at Portland State University (AANAPISI)
- Multiple scientists at University of Alaska Fairbanks (AANH)

We propose forming a year-long Community of Practice among individuals at these institutions, particularly those with BAJEDI expertise, to establish how SZ4D can best serve specific needs of these MSIs including the development of an implementation plan. Participant support would incentivize commitment to the extended activities. An in-person workshop at the end of the Community of Practice would serve as an opportunity for participating individuals to come together to develop future plans and to invite and connect with other interested institutions to grow the community.

**Engaging Geoscience Education Researchers and Social Scientists**

In consultation with geoscience education and social science researchers, it was recommended that we do some additional engagement activities before seeking to launch a Community of Practice focused on developing capacity building strategies for SZ4D. We see two strategies for this engagement: 1) SZ4D geoscientists should seek to identify education researchers at their own institutions that may incentivize a collaboration, and 2) a half day workshop or town hall in conjunction with existing conferences like GSA, Earth Educator Rendezvous, and the Natural Hazards Center Workshop, would help to better engage geoscience education and social science researchers. We recommend planning these activities as soon as possible to enable a Community of Practice to launch in 2024 with participant support to incentivize commitment to extended follow up activities. The goals of the multidisciplinary Community of Practice would be to co-create funding strategies for cross-disciplinary work and a detailed implementation plan on how to meaningfully incorporate geoscience education and social science research in SZ4D capacity building. It will be essential to discuss the potential funding strategies with NSF to learn how NSF can best support this cross-disciplinary work and ensure the recommendations are viable.

**Jump-Starting Opportunities for Matchmaking between PIs and BECG Efforts**

The acceleration in creation of SZ4D-related proposals in the past 6 months has highlighted the need for immediate development of capabilities for PIs to contact SZ4D in the proposal planning stage to ask for assistance in developing broader impact
strategies that align with and leverage existing BECG efforts and resources. We seek to form a Community of Practice as soon as possible to begin identifying potential collaborations with external organizations and working groups, collecting summaries of existing activities aligned with SZ4D goals, sharing points of contact, and developing a strategy for facilitating dialog with prospective PIs. Participant support would incentivize commitment to the year-long effort that will be necessary to jump start a set of opportunities available that leverage existing activities aligned with SZ4D goals. However, it is relatively clear that a staffed position as part of a SZ4D center will be necessary to create a support service for SZ4D PIs as opposed to a list of potential activities.

Collecting Best Practices for how SZ4D Should Operate Internally

While much of the BECG vision has been to focus on providing professional development for the broader geoscience community, it has become increasingly clear that BECG should initially focus efforts on providing support for those within the SZ4D governance structures. Identifying and implementing strategies for successful interdisciplinary collaboration and integrating BAJEDI perspectives on SZ4D committees would be an important step towards transforming the mindset of the broader community. The BECG integrative group would make this a focus of their efforts over the next year, inviting external experts to share their knowledge and perspectives. As actionable and realistic strategies for SZ4D are developed, BECG would seek to meet with SZ4D committees to share and discuss implementation. As an illustration, a Code of Conduct has been developed for SZ4D, but a document describing best practices for equitable, inclusive SZ4D research does not yet exist.

Supporting the Development of SZ4Grads

SZ4Grads is a collaborative, interdisciplinary, and intercultural network for graduate students and recent graduates studying subduction zone processes. It was a student initiated organizational effort that came under the umbrella of SZ4D and became part of BECG in 2022. SZ4Grads has been working towards three main goals: coordinating collaboration, improving the accessibility in getting involved in SZ4D, and forging mentorship and skill development opportunities. In working towards these goals, SZ4Grads aims to increase the visibility of the diverse early-career subduction zone scientists and their research, and to open opportunities for a more equitable and inclusive community. They have successfully started a webinar series aiming to highlight SZ4Grads’ work and facilitate DEI discussions, and are currently organizing
mentorship programs and skill development opportunities, working on guaranteeing and supporting SZ4Grads representation in SZ4D committees, and developing online platforms for community building and networking. BECG will continue to partner with SZ4Grads in developing these activities and is collaborating on efforts to seek funding that would increase their impact.