

EOC Annual Committee Report (May 2023-May 2024)

1. **Date of report:** 05/03/2023
2. **Name of Committee:** LTER Education and Outreach Committee
3. **Name and site affiliation of the Committee Chair (or co-chairs or Executive Board):** Alexandra Rose, Niwot Ridge and McMurdo Dry Valley (NWT, MCM), Scott E. Simon, Santa Barbara Coastal (SBC)
4. **List of current members:**

Bailey, Amey	HBR
Baird, Cora	VCR
Baldwin, Kara	CDR
Barale Potter, Caitlin	CDR
Bestelmeyer, Stephanie	JRN
Brickley, Annette	NES
Báez Rodríguez, Noelia	LUQ
Davis, Samantha	MCR
Eichhorst, Kim	SEV
Franco, Monique	CAP
Gavenus, Katie	BLE,NGA
Haas, Kara	KBS
Haukos, Jill	KNZ
Heil, Austin	GCE
Hinkle, Katharine	HFR
Hinterthuer, Adam	NTL
McDonnell, Janice	PAL
McGee, Steven	LUQ
Menninger, Holly	MSP
Moon, David	PIE
Morrison, Amanda	ARC
O'Connell, Kari	AND
Oehm, Nicholas	FCE
Paulenich, Cari	CCE
Rose, Alex	MCM,NWT
Schultheis, Elizabeth	KBS
Simon, Scott	SBC
Sparrow, Elena	BNZ
5. **How membership is determined (identified by sites, voluntary, appointed by the Executive Board, etc)**

Membership includes an education contact at each site (SiteEdRep) and a representative from the graduate student committee. Additional members may be identified by individual sites and by the LTER Communications Office (LNO) from among site personnel who are involved with education.

6. **Meeting frequency:** once/month (1st Thursday)

7. **Major activities or accomplishments for the year:**

- a. This committee continues to be active with high engagement. Many sites have been very active in education, outreach and broader impacts in both P-20 and community outreach in the areas from data literacy to teacher professional development.
- b. Several sites have new EOC Reps which we on-boarded this year, including Austin Heil-GEC LTER.
- c. **A Sampling of Site Updates:**
 - i. JRN completed their 11th Desert Data Jam! With 54 projects in the final competition, the open house and award ceremony was in person for the first time since 2019.
 - ii. NES completed their 5th Data Jam. From 30 full Data Jam projects (116 students) and 6 Mini Jam projects (23 students), 3 high schools, 2 middle schools.
 - iii. HFR has many cool things going on (including giving out teacher awards for 15 years of field data contributions in a workshop).
 - iv. SEV/LUQ had their 9th Luquillo-Sevilleta Virtual Webinar (Spanish Symposium) with middle and high school students presenting to each other on the long-term data collections in the forests of El Yunque and the Middle Rio Grande Bosque + Data Jam Symposium (50 projects and 175 students @ El Portal in the El Yunque rainforest)
 - v. BEMP/SEV had their BEMP Crawford Symposium where K-12 and university students presented their work in BEMP and SEV alongside community speakers.
 - vi. Site-wide RET Share June 21
 - vii. Coastal Ecosystems BIORETS site at FCE offered PDs and welcomed other LTER RETs to join by Zoom.
 - viii. DataNuggets workshops with KBS

- ix. Luquillo Data Jam Workshop(25 teachers)
 - x. Climate Data Artworks created by 8th graders with NWT personnel featured in a juried Climate Change Art Exhibit at National Center for Atmospheric Research.
 - xi. Discussion of Resources for disseminating and publishing our science education products.
 - xii. 3 RETs and 3 REUs are finishing up at VCR next week; we are preparing for our turn as a case study on the AISL stakeholder engagement grant (the one Sarah Garlick helped bring to fruition).
 - xiii. CDR/MSP conducted two teacher professional development workshops in July and August connected to science practices of modeling and data analysis.
 - xiv. HF received funding for an in person data jam in the spring. They'll be supporting four classrooms throughout the year (range of elementary-high school).
- d. **Conferences**-A number of sites EOCs presented at conferences in 2023-2024,
- i. Steven McGee (LUQ)- National Science Teachers Association
 - ii. Kara Haas (KBS) SEEDS is attending and presenting about teachers' creative insubordination to overcome barriers to teaching outdoors in urban schools
 - iii. Amanda Morrison + 5 RETs from ARC, AND, FCE and KBS sites submitted abstracts(ARC)-American Geophysical Union
 - iv. Luquillo is presenting their NARST paper at National Science Teachers Association
 - v. Alex (NWT/MCM) also presented on Data Art initiatives at the NSTA
- e. **Leveraging expertise and opportunity:**
 The EOC continues to expand successful Research Experiences for Teachers (RET) programs. Collaboration around RETs-Cross-site collaboration continued between Andrews Forest (AND), Arctic (ARC) and Santa Barbara Coastal (SBC) successful submission of NSF Award # 2147138 Research Experiences for Teachers Sites in Biological Sciences (BIORETS) proposal: [Authentic Research Experience for Teachers at LTERs \(ARET@LTER\)](#). After the successful completion of year 1 research experiences with Cohort #1 for the project, lessons were developed based on the RET and piloted in the participants' classrooms.

Cohort #2 teachers were selected and coordination has begun for Summer 2024 field work. In addition, Cohort #1 teachers will be attending “Datapalooza!” in Santa Barbara in collaboration with the LNO. KBS will be leading Data Nuggets workshops to develop ARETs data into “nuggets.”

JRN, BLE/NGA, VCR, NWT, HFR piloted a new initiative to leverage Schoolyard Books and promote ecological observation and literacy. The “Eco PenPals” project invited 5th grade classrooms near their 5 LTER sites to make observations about their schoolyard habitats and write postcards to each other. We plan to expand the project next academic year to include more students and other LTERs.

f. Diversity, Equity and Inclusion

Responding to the 5 questions that NSF posed to LTER PIs, coming out of the decadal review, EOCs shared how their sites have addressed DEI through education and outreach

- i. KNZ received a DEI supplement grant from NSF - with focus on connecting their education and outreach with indigenous groups who historically inhabited the grasslands of Kansas.
- ii. .In response to input from both SBC-, and MCR-, LTERs the Marine Science Institute at UCSB created the The DIVERsity in Diving Program at MSI is designed to eliminate barriers for students interested in marine field work by providing financial support, mentorship, and guidance for those looking to become scientific divers.
- iii. Four LTER sites, the Florida Coastal Everglades, Plum Island Ecosystems, Virginia Coast Reserve, and Georgia Coastal Ecosystem LTER’s, teamed up to design a cross-site post baccalaureate program to train marginalized students through a cross-site research project lasting a full year. In addition to research, the program also helps postbac interns apply to graduate school and explore careers that don’t require an advanced degree.

8. Currently active subcommittees or working groups:

After the committee decided, last year, to revise our working groups to make them more useful as a source of information and expertise within the EOC, meetings have regularly included “Theme Teams” presentations, which are comprised of representatives from multiple sites with expertise in a given area.

Theme Teams:

- Art and Data Visualization
- Teacher PD/SciCom Training
- REU Community Development
- Literature/Schoolyard Books
- Marketing/Social Media
- Collaboration w/Offsite Groups

9. **Priorities for the coming year:**

- a. The revisions in the LTER RFP around Broader Impacts activities and the expectations for how funding will be distributed for Broader Impacts and Schoolyard activities present sites with opportunities for re-working the structure of their outreach and education programs in order to better address broadening participation. This also presents opportunities for the EOC to revise the Committee's mission and priorities. The EOC has started a discussion about changing the Committee name in order to reflect the new emphases outlined in the RFP. We plan to continue this discussion and decide on a new committee name in the coming year.
- b. Every All-Scientists Meeting provides renewed energy for cross-site collaboration as we come together to discover synergies in our work and opportunities for supporting each other. The Theme Teams that we've developed within the EOC will continue to grow these opportunities in the areas of engagement of Art and Artists; Professional Development around Science Communication; REU community development; Schoolyard Books; Engagement with Offsite Stakeholders; Marketing/social media; and Evaluating the impact of our work. We will continue support of theme teams by devoting meeting time to presentations by team members.
- c. We also plan to continue to discuss and support the dissemination of digital products and virtual workshops to more participants.

10. **Any recent or upcoming changes in leadership, purpose, or process:**

Yes. Scott Simon's term, which was scheduled to end in fall 2023, was extended until the next ASM. After serving as the EB Rep for 5 years! [Annette Brickley](#) will be replaced by [Katharine Hinkle](#). We cannot say how grateful we are for Annette's great support!

11. **Do you see specific opportunities for improving network coordination (or coordination with other networks) that are of interest to your committee?**

- a. Alternating with Theme Team presentations we will have site presentations in our monthly meetings. These give EOC members the chance to share the work

they're doing at sites, solicit feedback from other members, and present opportunities for cross-site collaboration.

- b.** We are excited for the culmination of the NSF-Funded Advancing Public Engagement Across LTER Network (APEAL) project, which will realize a network goal of providing a standardized database (Public Engagement with Science) for tracking the impact of our outreach efforts.