陸、附錄

一、全球環境教育夥伴會議手冊

- 二、全球環境教育夥伴會議簡報
- 三、全球環境教育夥伴亞太中心推動介紹簡報
- 四、「全球環境教育夥伴亞太中心強化亞太區域的環境教育連結」專題演講簡報
- 五、強化國家環境教育推動指引
- 六、北美環境教育學會年會暨研討會手冊



Advisory Group Meeting October 10, 2022 Tucson, Arizona

Agenda	2	
Vision, Mission, Goals, Strategy, and Advisors	. 4	
Participant Bios	10	





Advisory Group Meeting

Agenda October 10, 2022

Hotel: Westin La Paloma, Tucson, Arizona

Room: Cottonwood

Meeting Goals:

- 1. Connect as GEEP colleagues
- 2. Review progress toward our goals
- 3. Help imagine actions and ideas for GEEP 2023 2026
- 4. Share new ideas and resources

Sunday, October 9

5:00 – 7:00 PM: Light Reception and registration for GEEP delegates

Monday, October 10

8:30 Breakfast Goodies

9:00 Connect as GEEP Colleagues

- Welcome: NAAEE Judy Braus
- Opening Remarks:
 - Taiwan EPA Shiuan-Wu (Shawn) Chang, Chief Research Fellow/Section Chief, Department of Comprehensive Planning
 - US EPA Kim Noble, Senior Advisor, Environmental Education, Office of Engagement
 - US EPA Ginger Potter, Senior Environmental Education Specialist, Office of Environmental Education
- Meeting Goals and Agenda
- Introductory Activity

9:45 Review Progress and Key Accomplishments

- Brief overview of history, vision, and goals
- Recognize progress toward our five goals:
 - 1. Connect & Build Bridges
 - Asia-Pacific Regional Center and Forum
 - Africa Hub
 - eePRO/GEEP website
 - 2. Demonstrate value of environmental education in addressing the SDGs
 - eBook
 - 3. To support a new generation of environmental education leaders
 - 30 Under 30 and Youth Innovation Challenges
 - 4. To build a global fund to sustain the field and advance our work
 - Fundraising



- 5. To promote innovation
 - Call to Action and the Pledge
- 6. Overarching: Country Profiles, Communications (Newsletter), Webinars
- Brief discussion after each goal

11:15 Break

11:30 Help Imagine Actions and Ideas for GEEP 2023–2026

- Small group discussion by goal
 - 1. Is there anything happening in your networks and home countries that GEEP should consider sharing/scaling or learning from to achieve this goal?
 - 2. Brainstorm ideas that could help GEEP achieve this goal. Ideas can be bold or incremental, long-term or short-term, something GEEP already is doing or something new.

12:30 LUNCH and Group Photo

- **1:30** Imagine Actions and Ideas (continued)
 - Chance to add ideas, and then group informally ranks ideas
 - Next steps (these ideas inform strategy development later this year)
- 2:30 A Taste of Strengthening EE in Your Country—A Discussion Guide
- 3:00 Break
- 3:15 The PISA Connection (Dr. Martha Monroe and Dr. Nicole Ardoin)
- 4:00 Partner Updates
- 5:00 Closing Remarks & Activity (meeting concludes at 5:30pm)

Monday Evening, October 10

7:00 Group Dinner (details to come)

If you need help:

Judy Braus, judybraus@gmail.com; +1-703-346-4741 Anne Umali, anne@naaee.org; +1-703-608-2952 Nina Hamilton, nina@naaee.org, +1-202-766-0203 Ginger Potter, Potter.Ginger@epa.gov, +1-202-738-6834 Daniel Lee, lee.daniel@epa.gov, +1-202-564-7643



Global Environmental Education Partnership (GEEP):

Vision, Mission, Goals, Strategy, and Advisors

I. Introduction

As a global society, we are facing large-scale, and mostly human-caused, environmental and social challenges. The need for environmental education has never been greater, and our opportunity to help leaders more effectively use environmental education as a strategy to improve the environment (or achieve environmental protection goals) is unprecedented. By sharing tools and resources, and by building a vibrant learning network, we can elevate the importance and impact of environmental education to help create a healthier planet and society.

This is the vision of the Global Environmental Education Partnership (or GEEP), which was created with insights from the Environmental Protection Administration of Taiwan (EPA Taiwan), the United States Environmental Protection Agency (US EPA), and the North American Association for Environmental Education (NAAEE). These leaders came together with a shared belief in the importance of effective environmental education for addressing environmental issues globally, as well as the need to better share best practices and resources on a large scale.

II. Background

In 2014, delegates from several countries came together to discuss each country's needs for achieving their environmental protection goals and addressing such issues as climate change through environmental education and citizen engagement. This group, now known as GEEP, developed a list of more than 25 topics in environmental education, with these six rising to the top as the most important globally in environmental education:

- Professional development
- Globalization of environmental education standards guidelines
- Legislation and national-level policies that support EE
- Access to effective and promising practices
- Research and evaluation
- How EE can best address key issues, such as climate change, water shortages, and loss of biodiversity

To help countries improve the use of, access to, and quality of environmental education, the delegates recognized a need for a centralized way to share best practices and resources to help practitioners use environmental education more effectively in their countries. No such platform existed at that time. The GEEP was then envisioned as a global network and platform to share best practices and improve the quality and quantity of EE around the world. In 2014, NAAEE became the Secretariat of this newly formed group and worked with US EPA and Taiwan EPA to manage the GEEP and work with all partners to work toward achieving the goals.



In 2015, GEEP delegates met to establish the purpose and mission of the GEEP, as well as goals and objectives, through a series of in-person meetings that were informed by surveys, research, and interviews. The GEEP is designed to provide a space for collaboration among the member countries including sharing of experiences and promising practices and creative thinking, idea generation and problem solving.

In 2016, the Advisory Group met in Bristol, England, to talk through the strategy, governance, and audience, as well as options for how to sustain the GEEP. Then in April 2018, a sub-group of the Advisory Group met to update the vision, mission, goals, governance, and membership, given our experiences over the past several years. Here's a summary of the discussions and the revised plan:

III. Vision

We seek to use the power of education to create a sustainable and just future where people and nature thrive, and where environmental and social responsibility drive individual, community, and institutional choices.

IV. Mission

The mission of the GEEP is to create a vibrant and inclusive learning network designed to build capacity in countries around the world to strengthen environmental education leading to a more just and sustainable future.

V. Goals and Strategies

The draft goals and strategies outlined below are based on more than five decades of research on what motivates individuals and communities to learn, take action, and create positive societal change. They are also based on researchⁱ about how to structure an international network so that it can best advance a field by sharing promising practices, networking, and learning.

The GEEP also supports Goal 4 of the UN's Sustainable Development Goals to "ensure inclusive and equitable education and promote lifelong learning opportunities for all." In addition, the GEEP supports high quality environmental education as a cross-cutting strategy to address each of the <u>17 Sustainable Development Goals (SDGs)</u>, which include goals for Clean Water and Sanitation, Affordable and Clean Energy, Responsible Consumption and Production, and Climate Action.



GEEP Goals (Revised in 2018)

- 1. To connect and build bridges among practitioners, researchers, policy makers, institutions, providers, and international networks to elevate effective practice, scale impact, share global resources, and catalyze collaboration
- 2. To demonstrate the value and impact of EE as a tool for achieving the SDGs
- 3. To support, mentor, and empower a new generation of innovative and inspirational leaders to shape the future
- 4. To build a global fund to sustain the field and advance our collective work
- 5. To promote Innovation through a Global EE Think Tank

The GEEP has identified a series of strategies to accomplish the goals, described below.

Goals and Selected Strategies

Goal 1: To connect and build bridges among practitioners, researchers, policymakers, institutions, providers, and international networks to elevate effective practice, scale impact, share global resources, and catalyze collaboration

- Provide a <u>platform</u> to share global resources and promote connections through eePRO
- Build capacity for countries to create and implement effective policies that strengthen environmental education; link research and practice
- Convene thought leaders and GEEP advisors and ambassadors to address key issues
- Map networks and make links among network leaders and practitioners; highlight the diversity of EE efforts happening in organizations and countries throughout the world through an interactive online map
- Promote and feature effective practice and promising leaders in the field
- Create a network of global ambassadors who have the skills and tools to promote the value and impact of EE to key audiences
- Complete and post case studies that showcase successful environmental education programming and provide tools and ideas to help educators create effective programming within their own countries. Case studies will meet the criteria established by the GEEP Advisory Group
- Build on the work of NAAEE and eePRO to promote and add to the global EE research library
- Consider hosting summits on various topics and in various regions in partnership with other entities and / or adjacent to existing events as a potential way of bringing in funds for particular strategic projects or actions and coalescing key partners/members/funders around topics.

Goal 2: To demonstrate the value and impact of EE as a tool for achieving the SDGs

- Link <u>case studies and the eBOOK</u> to the SDGs and demonstrate how education is helping to achieve the SDGs
- Help highlight how EE can help support understanding and action focused on key issues, including circular economy, loss of biodiversity, climate change, water



pollution, toxic waste, and other environmental issues; publish white papers on the role of EE in helping to address key environmental issues

- Link GEEP members to eeWORKS and the EE research library
- Explore the connection with global citizenship, environmental education, and the SDGs

Goal 3: To support, mentor, and empower a new generation of innovative and inspirational leaders to shape the future

- Grow <u>NAAEE's EE 30 under 30</u> and connect to other youth leadership programs
- Bring in support from the private sector to support leadership development
- Explore country-level competitions for EE 30 Under 30 (to identify outstanding leaders in each country)
- Create a youth membership component of the GEEP (young environmental envoys); link to UN Young Champions for the Earth, FEE Young Reporters, and other programs); identify key opportunities for building global leadership

Goal 4: To build a global fund to sustain and grow the field and support our collective work

- Conduct research on other global funds and develop a strategy for building a global fund (Global Partnership for Education; Global Fund for Education, etc.); work with expert global fundraisers and others for advice on how to start a global fund
- Link fundraising to specific issues or approaches (from circular economy to leadership)
- Create a plan for sustaining the GEEP beyond 2018 through a diversified funding stream (either through public or private funds, membership, partnerships, or some a combination of strategies)

Goal 5: To promote Innovation through a Global EE Think Tank

- Promote new ideas that advance the field (i.e. <u>Act Now for EE</u>)
- Consider initiatives such as GEEPx talks to promote the power of education in addressing environmental and social issues
- Promote and conduct cutting-edge webinars and other types of professional development for GEEP members, working with partners around the world
- Recognize excellence in global EE (awards)
- Conduct an analysis of EE laws and policies from around the world and share the results via the GEEP.org and eePRO; work to develop innovative strategies for promoting policies that advance EE

VII. Overall Management of the GEEP

The GEEP is managed by a Leadership Team made up of the US EPA, the Environmental Protection Administration of Taiwan, the North American Association for Environmental Education (NAAEE), which is the Secretariat and is responsible for day-to-day operations among all the partners and entities, and the current GEEP Advisory Group. There are multiple levels of



engagement, from individuals accessing the resources on the website and eePRO to the Advisors and the Leadership Team. As new regional and continent-wide hubs are created, the GEEP leadership will evolve to reflect more regional engagement from across the globe. **Advisory Group:** The Advisory Group provides direction for the GEEP leadership team on matters related to its management and operation. Advisory Group members are selected based on their overall experience in EE (whole-country view of EE needs); representatives should represent different regions throughout the world and their connections to national and international networks. (In the future, we will develop a process for adding new advisors and looking to a regional leadership model.)

Advisory Group membership (in 2018) included:

- Bill Scott-UK
- Alan Reid-Australia
- MJ Ketlhoilwe-Botswana
- Kartikeya Sarabhai-India
- Kumi Tashiro Japan
- Paul Ofei-Manu-Japan/UK
- Mahesh Pradhan-Kenya/Japan
- Margie Simon de Ortiz-Mexico
- Ben Reddiex-New Zealand
- Arjen Wals-The Netherlands
- Jan Erikson-Denmark
- Gayatri Raghwa-United Arab Emirates/India
- Tzu Chau (TC) Chang-Taiwan
- Gus Medina-Canada
- Alex Kudryavtsev-Russia/US
- Hannah Seimola-Finland
- Pramod Sharma (Denmark, representing the FEE Network)

General Responsibilities of Advisory Group:

- Provide input into the development of the GEEP, weighing in on key decisions and possible directions for the future, including the creation of a long-term sustainability plan for the network
- Review strategies and policies
- Attend one full steering committee meeting at the annual NAAEE conference in the North America, and other venues, with the possibility of a second meeting for a subset of committee members to work through specific issues as they arise
- Participate in a limited number of scheduled conference calls throughout the year and respond to emails about specific issues
- Promote the GEEP to colleagues through networks, conferences, and outreach activities
- Seek opportunities to present about the GEEP, formally and informally, to professional networks



- Help recruit new virtual members and other to participate and join the GEEP website
- Provide content for the GEEP eePRO web platform
- Take an active role in keeping members informed of progress
- Offer advice, support, and guidance to the GEEP leadership team on goals and plans for the GEEP and provide feedback and new ideas

Levels of Engagement in the GEEP





Advisory Group Meeting

Participant Bios Fall 2022, Tucson, Arizona (Last name in alphabetical order)



NICOLE ARDOIN Associate Professor Stanford University United States

Nicole Ardoin, Emmett Family Faculty Scholar, is an associate professor in the Social Sciences Division of the Stanford Doerr School of Sustainability, senior fellow at Stanford's Woods Institute for the Environment, and Sykes Family Faculty Director of the Emmett Interdisciplinary Program in

Environment and Resources (E-IPER). Her research focuses on the nexus of environmental behavior, environmental learning, and sense of place. Prof. Ardoin's Social Ecology Lab group studies the design, implementation, and effectiveness of conservation practices that motivate individual and collective environmental behaviors in terrestrial and marine environments in the United States and internationally. Her work occurs primarily in informal and community settings including, but not limited to, parks and protected areas, within fishing communities, with participants on nature-based tours, and in farmers' markets, among other everyday-life settings. Prof. Ardoin and her research group frequently pursue their work in collaboration with community partners including nonprofit conservation organizations, national and state parks, philanthropic foundations, and a range of national and international governmental agencies. She has a PhD in Social Ecology from the Yale University School of the Environment. She is a trustee of the California Academy of Sciences and the George B. Storer Foundation and an associate editor of the journal Environmental Education Research.



KLIU BASILIUS

Manager Education & Outreach Division for the Environmental Quality Protection Board Republic of Palau

Ms. Kliu Basilius has over twenty years of experience in project management and coordination, working in various sectors of Palau government. She is very active in her role in developing information and educational materials for public awareness as well as implementing comprehensive outreach

campaigns pertaining to environmental protection and climate change.





DR. RAVHEE BHOLAH

Associate Professor Mauritius Institute of Education Republic of Mauritius

A Fulbrighter and Tertiary Education Commission scholar, Ravhee is an Associate Professor in Science Education. He is presently the Head of the School of Science and Mathematics at the Mauritius Institute of Education (MIE)—a tertiary education institution on teacher education, under the aegis of the Ministry of Education, Tertiary Education, Science and Technology in

Mauritius. Ravhee has thus been involved in teacher education, curriculum development, and educational research at the institution. He has been the Coordinator and focal person for Education for Sustainable Development (ESD) at the MIE for more than 12 years. He has been very active in the field of Education for Sustainable Development (ESD) at various levels. He has been coordinating various ESD projects including climate change education (CCE). He has been a consultant for UNESCO, UNDP, and Government of Japan-funded projects related to ESD. He has been engaged in several inter-institutional collaborative research locally, regionally and internationally.

He has published in and reviewed various scientific papers for international peer-reviewed journals and conference proceedings. He has been a member in various national committees (e.g., National Eco-school Committee, National Ramsar Committee) and some international professional bodies related to ESD. For instance, he was an Executive member of the Environmental Education Association of Southern Africa (EEASA) council in the past. He was the Convenor of the 39th EEASA Conference held in Mauritius between 21 and 24 June 2021. He is presently a member of the GEEP Africa Hub planning group and the NAAEE Advisory Council.



JUDY BRAUS

Executive Director North American Association for Environmental Education (NAAEE) United States

Judy Braus brings to her role as NAAEE Executive Director a wealth of experience in the environmental education profession, with a focus on conservation education, diversity and inclusion, and using the power of education to help create healthier communities that empower people to

help restore and protect the environment. She comes to NAAEE from the National Audubon Society, where she was the Senior Vice President of Education and Centers, overseeing an extensive nationwide network of nature centers and educators. Prior to that, she led the education programs at World Wildlife Fund (WWF), the U.S. Peace Corps, and the National Wildlife Federation (NWF). Judy also has extensive experience with NAAEE, having served in a number of capacities in the past two decades, including past president, conference chair, head of the elementary and secondary commission, and editor of a number of NAAEE monographs. Additionally, Judy is a proven fundraiser, working with foundations, corporations, government, and individual donors to raise more than \$35 million for education and conservation. She is committed to strong partnerships and has negotiated and implemented lasting relationships with organizations, including Toyota Motor North America, REI,



National Geographic, the U.S. Fish and Wildlife Service, Disney's Animal Kingdom, Eastman Kodak, and Aardman Animations, among others.



MICHAEL BROOKS

Facilitator United States

Michael Brooks (he, him) helps diverse groups grow new visions and programs, make collective decisions, and learn together. He has designed and facilitated more than 125 such virtual and in-person sessions. Mike draws on his direct experience as a practitioner: Chief Strategy & Digital Officer at ChildFund International, Senior Vice President of Innovation & Strategy at United Way Worldwide, Managing Director at Longpath Labs, and founder of acquired civic engagement startups.

Mike cares deeply about people and our precious world. He earned a Master of Divinity at Yale and a Master of Public Administration at George Washington.



HENG CHENG

Engineer Environmental Science Technology Consultants Corporation Taiwan

Heng Cheng is an environmental engineer of the Water Resources Management Team at ESTC. He has a bachelor's degree in soil and environmental sciences and a master's degree in water science and management. During the past two years as a research assistant, his main research area is nutrient pollution and sustainable water management.

He is currently a newbie in the environmental consulting service and is trying his best to learn about carbon and water footprint management and provide technical services to the government and businesses.



PO-YUAN (PAUL) CHENG

Master's Student National Taiwan Ocean University Taiwan

Paul is a second-year master's student at the Institute of Marine Biology, National Taiwan Ocean University, majoring in marine plastisphere and marine microbiology. He mainly collects marine debris in Taiwan and analyzes the material and the ecology of the plastics. He has been a sports

enthusiast since college, from lifeguard to diver to canoe instructor, and he found that there are a lot of problems in the marine area that need to be solved. These include the excessive amount of marine debris, the lack of nautical knowledge among the general public, and the uniformity of seaside trips. Through his experience in water activities and background in marine science research, he started to create a new product service. He and his friend founded Trashman Travel Company in 2019, providing more knowledgeable and low-carbon eco-tourism options. They treat the natural environment as a museum and implement environmental education in water activities, hoping to raise the public's



awareness of a friendly environment and a better understanding of the ocean. Since its establishment, they have served more than 1,500 guests and hope to continue to exert influence to improve the past tourism market. In addition to serving their guests, Paul also invests a lot of time and resources in environmental monitoring and conducting biodiversity surveys in the surrounding sea areas, which not only deepens his knowledge of the ocean but also allows him to observe ecological changes over time and provide more scientific educational content.



SHIUAN-WU (SHAWN) CHANG

Chief Research Fellow/Section Chief Department of Comprehensive Planning, Taiwan Environmental Protection Administration Taiwan

Shawn Chang joined the Department of Comprehensive Planning in July 2022. In his new position, he continues to work on international cooperation affairs, which has been one of his main duties during his tenure in the Administration.

Though he is new to environmental education, he has been working with his colleagues on International Environmental Partnership (IEP) programs since its inception, including the Global Environmental Education Partnership (GEEP). Shawn joined the Administration in 1993. He was involved in environmental issues regarding the World Trade Organization (WTO) and the Asia Pacific Economic Cooperation (APEC), as well as free trade agreement negotiations. He has managed cooperation programs with the United States, New Zealand, and Vietnam. He has also managed scientific and technological projects. Up to July 2022, he was the Deputy Executive Secretary for the Office of Sustainable Development, where he assisted the Executive Secretary in overseeing work concerning international affairs and sustainable development. Shawn has an engineering background. He received his Doctoral Degree in Agricultural Engineering from the University of Illinois. He earned a Masters of Chemical Engineering from the New Jersey Institute of Technology, after graduating from the National Taipei Institute of Technology (now National Taipei University of Technology) in Taipei.



TZU-CHAU (TC) CHANG

Professor, Graduate Institute of Environmental Education National Taiwan Normal University Taiwan

Professor Chang got his Ph.D. in Science Education from Cornell University, and served as the executive secretary of the Environmental Protection Division of the Ministry of Education of Taiwan to coordinate national environmental education programs in 2008-2012. He is now a professor at Graduate Institute of Environmental Education of National Taiwan

Normal University and is also the coordinator of the GEEP APRC (Asia Pacific Regional Center) for Environmental Education of Taiwan.





VIVIAN CHEN

International Environmental Program Specialist U.S. Environmental Protection Agency's Office of International Affairs United States

Vivian Chen is an International Environmental Program Specialist with the U.S. Environmental Protection Agency's Office of International Affairs appointed via the Presidential Management Fellows Program. She graduated from Case Western Reserve University with a dual B.A. in International Studies and Japanese Studies in 2016 and received her Master of Arts in International

Economy from Johns Hopkins University SAIS in 2022. Before finishing graduate school, Vivian worked as an English teacher in rural Japan through the JET Program and in various non-profit programming roles focused on international education and sustainable development. She has also been a producer and editor for Sustainable Cities, a podcast about how major global cities are making efforts to achieve the UN's Sustainable Development Goals by 2030.



CINDY-LEE CLOETE

Head of WESSA Education and Training, WESSA ExCo Member South Africa

Cindy has over 13 years of experience in creating enabling spaces for Education for Sustainable Development. Growing up on the plains of Namakwaland, Cindy understands the importance of the interconnectedness of humans and nature. Selected as one of the first Mandela-Washington Fellows and an active member of the ESD Expert Net, she gained experience in global North-South and global South-South collaborative approaches to bring about holistic and sustainable solutions to

social and environmental challenges. Cindy grounds her work in social and environmental justice philosophies and prides herself on challenging the current education and youth development status quo. Through her national, continental, and international networks, Cindy wants to contribute to reorienting, rethinking, and decolonizing the way we work to care for the earth. Cindy has a National Diploma in Nature Conservation and a MEd in Environmental Education.



ANDY DAVID

International Programs Consultant North American Association for Environmental Education (NAAEE) United States

Andy David is an International Programs Consultant for NAAEE. He recently completed a Master's in Development Practice (MDP) from Emory University, with concentrations in Environmental Sustainability and Monitoring and Evaluation. Throughout his time at Emory, he completed two practicums: one at

the Georgia Conservancy (2021) and the other at World Agroforestry (CIFOR-ICRAF) (2022). At World Agroforestry, he worked on the Regreening Africa project, which restores degraded land across the Sahel through agroforestry and farmer managed natural regeneration. From 2019-2020 he served as an AmeriCorps VISTA at Glacier National Park in a Tribal Liaison role. There, he worked to build trust



between local Indigenous populations and the Park to collaboratively manage natural and cultural resources and grow economic opportunities.



BILL FINNEGAN

Member Owner, Project Manager, Videographer Tamarack Media United Kingdom/United States

Bill Finnegan co-owns Tamarack Media Cooperative, headquartered in Burlington, Vermont. Tamarack provides communication services to a variety of environmental organizations including government agencies, NGOs, and academic institutions. His work as a filmmaker, and web developer, has been

featured in the public television series Natural Heroes, on BBC Radio 4, and at the International Wildlife Film Festival and Environmental Film Festival in Washington, DC. He also teaches video production at Champlain College and is a 2010 Audubon Toyota TogetherGreen Fellow. Bill spearheaded the revamp and redesign of NAAEE's website, launched at the beginning of 2016, and continues to provide crucial technological input and expertise in the maintenance and enhancement of NAAEE's digital properties. Bill is currently pursuing a doctorate at the Oxford School of Geography and the Environment.



MADELINE HALVEY

International Programs Coordinator North American Association for Environmental Education (NAAEE) United States

Madeline joined NAAEE's Global Environmental Education Partnership (GEEP) team in August 2021. Madeline recently received her Master's degree in Global Environmental Policy from American University in

Washington, D.C. She previously worked as a researcher for the Johns Hopkins Center for a Livable Future. Much of her scholarship has focused on sustainable and equitable policies toward climate change resiliency, including published research on sustainable agriculture, environmental activism, and public-private partnerships. Madeline has a B.A. in Writing and Rhetoric and a B.S. in Interdisciplinary Studies-Social Sciences from the University of Central Florida (UCF).



NINA HAMILTON

Senior Manager, International Programs North American Association for Environmental Education (NAAEE) United States

Nina Hamilton supports coordination of the GEEP and NAAEE's international leadership program, EE 30 Under 30. She joined NAAEE with a background in community-based conservation and social inclusion, from working with mangrove-dependent communities in Madagascar to coordinating a global advisory group to promote women's land rights. She is particularly passionate

about working across cultures and connecting people with the networks and resources they need to



have their greatest impact. Nina has a Master's in Environmental Management from Duke University and received her B.A. in Biology from Kenyon College.



MPHEMELANG KETLHOILWE

Associate Professor of Environmental Education University of Botswana Botswana

Mphemelang Ketlhoilwe holds a PhD in Environmental Education. He has taught Environmental Education since 1993 and has been a Curriculum Development Officer, Coordinator of Environmental Education, Lecturer, Senior Lecturer, and now an Associate Professor in Environmental Education, since 2015. A member of the Environmental Education Association since 1997 and GEEP since 2015, he is now pioneering the establishment of a GEEP Africa

Hub with an Africa based planning group supported by GEEP Secretariat and US EPA (GEEP Leadership Team). Mphemelang has published research based articles, book chapters, monographs, articles, and consultancy reports in Environmental Education and Education for Sustainable Development. His job responsibilities as an environmental educator included teaching/lecturing; coordination of environmental education programs; participation in national, regional and international environmental education activities; research, community mobilization and engagement. Mphemelang retired from formal university employment in March 2021.



ALEX KUDRYAVTSEV

Researcher and Online Course Instructor Cornell University Russia

Alex Kudryavtsev (pen name: Alex Russ) is an environmental education researcher, book editor, and online course instructor in the Cornell University Civic Ecology Lab. He has worked in environmental education since 1996 in Russia and then in the U.S. He completed his MS (2006) and

PhD (2013) degrees in environmental education at Cornell University. His research focused on urban environmental education and sense of place. Alex is the first editor of the "Urban Environmental Education Review" international textbook (Russ and Krasny, 2017) published by Cornell University Press (<u>http://tinyurl.com/UEERbook</u>). Alex has authored articles in top environmental education journals, traveled seven continents to observe environmental education programs, and is interested in advancing environmental education through research and educator training to foster environmental sustainability and human well-being. <u>http://ak383.org</u>





I-HSIN (SHIN) KUO Environmental Coordinator Department of Comprehensive Planning, Taiwan Environmental Protection Administration Taiwan

Shin has over 13 years of experience working in environmental education, including at Taiwan EPA, Environmental Professionals Training Institute (EPTI), and Taijiang National Park. She graduated from the Graduate Institute of Environmental Education, National Taiwan Normal University in 2010. She was the main contact coordinator and environmental educator in Taijiang National

Park from 2012 to 2013. She has profound experience in the training and management of environmental education venues. Since 2020, she has served as the environmental coordinator at the Department of Comprehensive Planning, Taiwan EPA, where she is in charge of the Global Environmental Education Partnership (GEEP) and the GEEP Asia-Pacific Regional Center (APRC). She also manages the US-Taiwan Eco-Campus program, EE cooperation projects with NPOs, and EE activities for the public and students, and reviews grant applications from local governments for the Environmental Education Fund.



YAN-NING KUO

PhD student Department of Earth and Atmospheric Sciences, Cornell University Taiwan

Yan-Ning received her B.S. in National Taiwan University in Atmospheric Sciences and has been in the PhD degree program for Earth and Atmospheric Sciences at Cornell University since 2021. Beyond sciences, she has been and is actively involved in public education for climate

sciences. Educational works she has done includes translating a teaching plan for ocean acidification for an international journal, writing outreach articles for a CSR journal and a youth NGO in Taiwan, and having been invited for talks in workshops for educators as well as in high schools. Yan-Ning is a foodie. In her leisure time, she has been trying to host "imperfect products" (e.g., ugly fruits and vegetables) dinner party with people in her networks to raise people's attention about such feasibility by choosing those products to reduce food waste.



DANIEL LEE

Program Manager U.S. Environmental Protection Agency's Office of International and Tribal Affairs United States

Daniel oversees the International Environmental Partnership program. Daniel attended the University of North Carolina at Chapel Hill and received a B.A. in International Relations.





CHIA-WEI (JULIA) LIN Advisor (Former Vice President) / Freshman Unplastify Youth / College of Law, National Taiwan University Taiwan / Australia

Julia Lin (Taipei, Taiwan) graduated from the Humanities and Social Sciences gifted class in Taipei First Girls High School, and is currently studying at the Law Department of National Taiwan University. Julia is a curious, caring, empathetic, and enthusiastic person, she loves to write,

perform, sing, paint, study photography, and learn foreign languages in her spare time. Julia has shown a great interest in social design and sustainable development, and as a victim of climate change, she especially focuses on environmental protection and education. She participated in a marine conservation program back in elementary school, teamed up with her classmates as Unplastify Youth, and started some campus greening campaigns in high school. In the future, Julia looks forward to tackling more challenging problems and impacting more individuals through law-changing and policy-making. Julia has won the "Environmental Leadership Award of the Environmental Protection Administration of the Executive Yuan," the "Silver Medal of the National Geographic Olympiad," and the "Harvard Book Prize."



MENG-HUI LIN PhD student National Taiwan University Taiwan

Meng-Hui Lin is a PhD student in the International Degree Program in Climate Change and Sustainable Development, National Taiwan University (NTU). Her research interests are climate change decisionmaking, low carbon transition, and SDGs, and she has received the Outstanding Doctoral Students Scholarship from the Ministry of

Science and Technology. She also serves as Youth Advisory Committee in Executive Yuan, mainly providing policy advice in issues of climate change, energy transition, and sustainable development. She is an EE actor who never stops promoting the importance of EE, and shared her EE experience at the 2021 GEEP Asia-Pacific Environmental Education Annual Conference. Besides, she is a research assistant in the Climate Change Teaching Alliance, Ministry of Education



SU-TING (TINA) LIN Project Assistant GEEP APRC Taiwan

Tina received her Environmental Education Master's degree from the University of Taipei and worked at the Chinese Society for Environmental Education as an Administrative Secretary for 1 year. During her school time, she used to be a research assistant for Dr. Shih-Tseng Liu, and joined the Association for Ecological Education of Taiwan to hold ecology camps. Also, she went to Australia for an internship when she just got into graduate school.



There were two interns from Taiwan who stayed in Boyne Island Environmental Education Centre for about 1 month to learn how to lead an environmental curriculum. Now, she is a project assistant in GEEP APRC, and through this project she learned so many ideas about environmental education, and made some friends, too. For her, it is a big chance to exchange environmental education with so many countries, not only by joining or holding forums and workshops but by chatting with participants.



WEI-LUN (WILLIAM) LIN

Senior Engineer Environmental Science Technology Consultants Corporation Taiwan

Before joining Environmental Science Technology Consultants Corporation in 2019, William was devoted to environmental and ecological research, such as Changhua Wetland in Taiwan and the Indian River Lagoon in Florida. He also has experience in compiling Taiwan's environmental education training materials for public health prevention and control to promote environmental education. Now he is mainly working on the youth environmental education training program, GEEP, and eco-campus program

to bring more diverse forms and ideas of environmental education into the formal education system.



TUMAU LOKENI Division Head

Public Information & Education Division for the American Samoa Environmental Protection Agency (AS–EPA) American Samoa

Ms. Tumau Lokeni has been with the American Samoa–EPA for more than ten years. She works diligently and it became her passion to coordinate and implement various outreach campaigns to raise public awareness, to increase public understanding of how individual actions multiply to impact

the environment. She developed local messages to change individual behaviors in order to protect the environment and safeguard the quality of natural resources, upon which life on our islands depends.



AUGUSTO (GUS) MEDINA Independent Consultant

Canada

Gus Medina is a former Program Officer for the World Wildlife Fund (WWF-US). In that capacity he worked with government agencies and nongovernmental organizations throughout Latin America and the Caribbean to design conservation initiatives, environmental education programs, and public awareness campaigns, conduct environmental education professional development workshops, and develop educational resources. In collaboration with the U.S. Fish and Wildlife Service, the Smithsonian, the U.S.

Environmental Protection Agency, the North American Association for Environmental Education, and



Environmental Education and Conservation Global, he has presented sessions and facilitated workshops on environmental education and social marketing in China, India, Taiwan, and Thailand.



MARCIA McKENZIE Professor University of Melbourne Australia

Marcia McKenzie is Professor in Global Studies and International Education in the Melbourne Graduate School of Education, and Lead of the Climate Communication and Education Research Cluster at Melbourne Climate Futures, University of Melbourne. She is a member of the *Royal Society of Canada's* College of New Scholars, Artists, and Scientists; and Director of the \$4.5M

SSHRC-funded *Monitoring and Evaluating Climate Communication and Education (MECCE) Project* (www.mecce.ca), and of the *Sustainability and Education Policy Network* (www.sepn.ca). Her research areas include comparative and international education, global education policy research, and climate and sustainability education. She has co-authored a number of books and reports, including the UNESCO report "Learn for our planet: A global review of how environmental issues are integrated in education" and the recent NAAEE/MECCE report, "Mapping the landscape of K-12 climate change education policy in the United States."



MARTHA MONROE

Professor, Associate Director University of Florida United States

Dr. Martha Monroe is a professor and associate director at the School of Forest, Fisheries, and Geomatics Sciences at the University of Florida where she teaches, develops programs, and mentors students in environmental education. Her current activities focus on building civic engagement skills among youth, enhancing adults' capacity for addressing contentious issues through deliberative discussions, supporting educational programs that

address climate change, and empower learners to act.



KIM NOBLE

Senior Advisor for Environmental Education Office of Public Engagement and Environmental Education at the U.S. Environmental Protection Agency United States

Kim Noble currently serves as the Senior Advisor for Environmental Education in the Office of Public Engagement and Environmental Education at the Environmental Protection Agency (EPA). Prior to joining the EPA, Kim

was the Chief Operations Officer for Green The Church (GTC), an initiative that engages Black congregations in the fight against climate change, and for environmental justice. Kim has spent the majority of her career working to improve the social, environmental and public health outcomes for



vulnerable communities. Always mindful of underserved communities, Kim continues to build and manage relationships with community- based organizations, African American faith leaders and grassroot coalitions. Kim attended Fort Valley State University and received her B.A. in Mass Communications. She is passionate about making sure children are in a healthy & safe environment and families have access to available local, state and federal resources. Kim is a self-described foodie, enjoys photography, reading and is an avid walker.



DIVINE NTIOKAM Founder & Managing Director Climate Smart Agriculture Youth Network (CSAYN) Cameroon

Divine Ntiokam recognizes the critical importance of the youth in building a resilient, sustainable and prosperous agricultural sector in Africa. This passion drove Divine to start the Climate Smart Agriculture Youth Network Global (GCSAYN) in May 2014, of which

he is now the Managing Director. Teams in 100+ countries work to raise awareness of Climate Smart Agriculture among young men and women, educating them in the benefits of sustainable approaches to increasing agricultural yields and resilience. Alongside his role in GCSAYN, Divine was elected as the African Continental Vice President of Youth in Livestock, Fisheries and Aquaculture Incubation Network in July 2018. By providing business incubation and powerful networks of support, the Network aims to build an Africa in which youth-owned enterprises in animal resources contribute to poverty reduction and food security. In addition, he was equally nominated as one of the Food and Land Use (FOLU) Coalition International Ambassadors in 2018. Divine's entrepreneurialism and advocacy for greater inclusivity is nothing new. His background includes rich experience in youth mainstreaming, most notably in coordinating and facilitating the translation of the Sustainable Development Goals into over sixty local languages on the African and Asian continent to ensure that "No One Is Left Behind." In addition to this, in 2020 the UN Special Envoy to the Food Systems Summit 2021 appointed Divine as one of the Champions to leverage the SG's vision within this DECADE OF ACTION. In addition to this, he is equally a Core Member for the Strategy Group on Sustainable Agriculture and Food Systems at Africa Europe Foundation. Finally, Divine recently moderated one of the World Food Prize Foundation Global Youth Initiative Roundtable Discussions.



GINGER POTTER

Senior Education Specialist, Office of Environmental Education (OEE) U.S. Environmental Protection Agency United States

Ginger Potter is the Senior Environmental Education Specialist in the Office of Public Engagement and Environmental Education (OPEEE) for the U.S. Environmental Protection Agency. Ms. Potter is responsible for environmental education program design, implementation, and

management as well as research, evaluation, and program assessment and strategic planning in the Office of Environmental Education. She serves as the Project Officer for the National Teacher Training and Professional Development Program (ee360+) and is the Co-Chair of the Global Environmental



Education Partnership (GEEP). Before coming to EPA, Ms. Potter was a research chemist for the U.S. Geological Survey. Ms. Potter has degrees in Chemistry, Business Administration, and Organizational Development/Behavioral Psychology. She has published several articles on environmental education and speaks frequently at national and international conferences on education and sustainable development education issues.



ALAN REID Professor and Dean Monash University Australia

Alan Reid is a Professor of Education at Monash University. He works with a range of environmental and sustainability education (ESE) research networks, locally and internationally. Key activities include editing the research journal, *Environmental Education Research*, and supporting the *Global Environmental Education Partnership*, an international stakeholder network. More at https://research.monash.edu/en/persons/alan-reid.



KARTIKEYA V. SARABHAI

Director, Centre for Environment Education Nehru Foundation for Development India

Kartikeya Vikram Sarabhai, one of the world's leading environmental educators, is the Founder Director of the Centre for Environment Education (CEE). Established in 1984, CEE works across India impacting formal and informal environmental

education and creating public awareness about conservation and sustainable development. In the year 2005, CEE was awarded by NAAEE for its Outstanding Service to Environmental Education. Mr. Sarabhai is the Managing Trustee of the Nehru Foundation for Development (NFD) established by Dr. Vikram Sarabhai, and is closely associated with various institutions connected with NFD namely the Vikram A Sarabhai Community Science Centre, VIKSAT, CHETNA and Khamir, working in the fields of Science, Education, Health, Nutrition, Crafts as well as empowering communities. Mr Sarabhai is a Trustee of the Sabarmati Ashram Preservation and Memorial Trust and the Chair of the Governing Council of the Earth Charter International and is associated with a number of educational and charitable trusts, as well as several committees set up by the Government of India and other national and international organizations in the fields of environment, wildlife protection, culture and education. He served as a member of the UNESCO Reference Group for the UN Decade for Education for Sustainable Development as well as Chair of UNESCO's Global Action Program (GAP) Policy network (PN1). Mr. Sarabhai was educated at Cambridge University, UK and the Massachusetts Institute of Technology (MIT). In 2012, the Government of India conferred the Padma Shri Award upon him for exceptional and distinguished service in the field of Environmental Education. Among his several awards are the Olive Green Crusader Award from the International Advertising Association and the International Brandwein Medal from the Brandwein Institute and the IUCN- CEC.





ANNE UMALI

Director of Professional Development North American Association for Environmental Education (NAAEE) United States

Anne is the Project Manager for NAAEE's ee360 Project, U.S. EPA's most recent National Environmental Education & Training Program. Before NAAEE, she was the Project Manager for EECapacity, the U.S. EPA's National

Environmental Education & Training Program that was housed at Cornell University from 2011–2016. Previously, she worked at the National Audubon Society developing and managing the Conservation Leadership Fellows Program of TogetherGreen, Audubon's 5-year \$20 million innovative conservation program in alliance with Toyota. As the first Fellows Program Manager, she led the program's initial design and implementation, including the program's Leadership Institute. Before Audubon she worked over four years at the Department of Environmental and Conservation Programs at the Field Museum of Chicago as the International Programs Manager for education. She organized EE training and natural resource use workshops for forest communities within a newly established 3.4 million acre protected area in Bolivia's super diverse Amazon region.



ARJEN WALS Professor Wageningen University The Netherlands

Arjen Wals is a Professor of Transformative Learning for Socio-Ecological Sustainability at Wageningen University where he also holds the UNESCO Chair of Social Learning and Sustainable Development. Furthermore, he is a Guest Professor at the Norwegian University for the Life Sciences (NMBU) and the Western Norway University of Applied Sciences. He holds an Honorary Doctorate from Gothenburg University in Sweden. His work focuses on enabling,

supporting, and assessing ecologies of learning that foster sustainable living by inviting more relational, ethical, and critical ways of knowing and being. He writes a regular blog that signals developments in the emerging field of sustainability education: <u>www.transformativelearning.nl</u>.



HURNG-JYUHN WANG

Distinguished Professor, PhD Program of Asia Pacific Regional Studies and Dept. of Public Administration, National Dong Hwa University Taiwan

Dr. Hurng Jyuhn Wang is the University Distinguished Professor and Fulbright Scholar (2002–03). He has been joint-appointed as a professor of the Asia Pacific Regional Studies PhD program and the Department of Public Administration. He served as the Dean of College of Humanities and Social Sciences, NDHU (2016–2022). In addition, he was appointed as the Dean of



General Affair, Director of Graduate Institute of Public Administration, Director of Graduate Institute of Environmental Policy of NDHU and Vice-President of East Asia Environmental History Association (EAEH). Dr. Hurng Jyuhn Wang studied environmental economics and policy and completed a PhD degree from the University of Michigan–Ann Arbor, United States. He has several visiting professorships at Yale University (USA), Okayama University (Japan), Majeo University (Thailand), Fujian Agriculture and Forestry University (China), and Academia Sinica (Taiwan). He has extensively published four books and many journal articles on the research fields of collective actions, environmental governance, environmental history, and sustainable development.



CHING-HSIEN (IVY) WENG Project Manager GEEP ARPC Taiwan

Ivy Weng received her Master degree from the Department of Earth and Life Science (Master Program of Environmental Education and Resources), University of Taipei, Taiwan. In her college and master years, Ivy had a wide range of outdoor experience, from geology field trip in Jinguashi, observing sea creatures in Magang, and promoting forest management in natural

centers in Taiwan. Her vision was even expanded during her internship in Australia and engagements at WEEC in Thailand. She is now the project manager of the Asia-Pacific Regional Center of the Global Environmental Education Partnership, and she is dedicated to building and maintaining partnerships among Asia-Pacific countries from the aspect of environmental education. At the same time, she also strives to spread the beauty of Taiwan's environment and innovative ideas in response to climate change to foreigners.





Welcome to the GEEP meeting!

lease use the name cards to find your seat and • Enjoy breakfast • CONNECT with a new colleague

- Visit onlinequestions.org (enter event #10101) and enter one or two words about what GEEP means to you...including "I'm new here."







So Excited You're All Here!



















Opening Remarks

- Taiwan EPA Dr. Shiuan-Wu (Shawn) Chang, Chief Research Fellow/Section Chief, Department of Comprehensive Planning • US EPA - Kim Noble, Senior Advisor,
- Environmental Education and the Office of Engagement • US EPA – Ginger Potter, Senior EE
- Specialist, Office of Environmental Education









Dr. Shiuan-Wu (Shawn) Chang Chief Research Fellow/Section Chie

Department of Comprehensive Planning Taiwan EPA



EDV(ATING // FOR (HANGE

Office of Public Engagement and EE US EPA





Ginger Potter Senior EE Specialist

Office of Environmental Education US EPA

Thank you to everyone who made this meeting possible!

Shin, TC, Will, and the rest of the

- Sinn, FC, Win, and the rest of the Taiwan team
 Kim, Ginger, Daniel, Vivian and the US EPA team
 Anne, Nina, Madeline, and Andy from the NAAEE team
 All of you for being here





Mike Brooks Facilitator





GEEP Interviews

- We want to capture your thinking!
- Great opportunity with so many of you here.
- So lucky to have Bill with us this week to help schedule these short interviews.
- Andy will be helping with the schedule.
- We won't have time for everyone, but will do our best.



Partner Updates:

If you want to give a 5-minute (or shorter [©]) update, please let me and Anne know and give us your slides at lunch.



As a thank you for being part of this, you all will get a t-shirt and a mug!





NOTE

We have a large group with many backgrounds and perspectives Brainstorming ideas that will inform our .

strategy We want to hear from everyone!

Meeting Goals

- Connect as GEEP colleagues
- Review progress toward out goals
- Help imagine actions and bold ideas for GEEP 2023-2026
- Share new ideas and resources



Your Input will feed into the GEEP Strategy



GEEP Strategic Plan: Great Opportunity



Background

- Revised in 2018 (until 2022)
- Mission to create a vibrant learning network designed to build capacity in countries around the world to strengthen environmental education (EE) to create a more equitable and sustainable future.
- Ideas for membership and governance included, with the goal of moving toward regional hubs with global leadership



What's Changed

- Since 2018, new opportunities have emerged
 Regional Centers have become more possible, and
- are developing organically in Asia Pacific and Africa,
- with the possibility of others

 Building leadership has become a stronger, central strategy
- COVID
- Social and environmental issues continue to be complex, interconnected, and more urgent
- The climate emergency has intensified, along with the loss of biodiversity and the need for civic engagement, and the focus on justice, equity, inclusion, and accessibility
- AND MORE



What hasn't changed is the need to collaborate, share effective practice, and work with others to scale our work.





We are committed to strengthening **EE/ESD** around the world and collaborating with global partners to advance our collective work. ©



Agenda: Monday Morning

Breakfast Goodies 8:30

- 9:00
- Connect as GEEP Colleagues

 Welcome & Opening Remarks
 Introductions
 Review of goals and agenda and intro videos
- Review Progress and Key Accomplishments

 Brief overview of history, vision, goals

 Recognize progress toward our five goals

 Discussion/activity: successes and learning
 9.45
- 11:15 Break
- Help Imagine Actions and Bold Ideas for GEEP 2023 2026 Brainstorm by goal Report out from small groups 11:30
- 12-30 IUNCH



Agenda: Monday Afternoon

- Imagine Actions and Bold Ideas (continued)
 Chance to add ideas, and then informally rank bold ideas
 Next steps 1:30
- A Taste of Strengthening EE in Your Country-A Discussion Guide 2:30
- 3:00 Break
- The PISA Connection (Dr. Martha Monroe and Dr. Nicole Ardoin) 3:15
- Partner Updates 4:00
- Closing Remarks & Activity (meeting concludes at 5:30pm) Next Steps 5:00

Monday Evening, October 10

7:00 Group Dinner (details to come)



Guidelines for Working Together

- 1. Soft on the people; hard on the issues
- 2. Fixed on the goals; flexible on the means
- 3. Confirm understanding





Group Dinner: 7-9



Starting Activity: Getting to Know Each Other



Get to Know Your Geep Colleagues Find your partner (who has a similar picture) and introduce

yourself and then discuss the question. It will be 3 minutes each round.

- Round One: What are your two favorite places on the planet and give one reason why.
- Round Two: What is the best piece of advice you've ever been given?
- Round Three: What is something you are looking to at this GEEP meeting and the conference?



The GEEP Is a Learning Network

To create a vibrant and inclusive learning network designed to build capacity in countries around the world to strengthen environmental education leading to a more just and sustainable future.





Partnership Program

Working together to strengthen EE around the world! The leadership team includes US EPA, NAAEE, and Taiwan EPA, and the GEEP Advisors come from around the world. In the future, we hope to include representation from all the regions.





naaee









Backbone & Champion GeeP



GEEP GLOBAL ENVIRONMENTAL PUCCATION PARTNERSHIP Why the GEEP?

- Trying to fill a gap and complement, not duplicate
- Reviewed international efforts, and asked key experts about needs in the field
- Not just government or NGOs
- Less formal, adaptive to needs



Building Global EE/Sustainability Capacity



Key Areas of Interest

- Professional development -
- Guidelines for excellence and sharing
- effective practice Developing stronger networks to create systemic change
- Supporting Policies that advance EE
- Promoting Research and Evaluation
 How EE can help address key issues, including climate change and loss of biodiversity
- Promoting justice, equity, and inclusion throughout the world



A Different Approach

Provide a space for leaders to talk openly, think creatively, and discuss how we can build capacity and have more impact in the field.



thegeep.org

Expert Advisory Group from around the world







Regional Hubs

- Asia Pacific Regional Center
- GEEP Africa
- Latin America and the Caribbean?
- Europe?
- Other?



Goals

- To connect and build bridges among practitioners, researchers, policy makers, institutions, providers, and international networks to elevate effective practice, scale impact, share global resources, and catalyze collaboration
- To demonstrate the value and impact of EE as a tool for achieving the SDGs



Goals (cont.)

- To support, mentor, and empower a new generation of innovative and inspirational leaders to shape the future
- To help build a global fund to sustain the field and advance our collective work
- To promote Innovation through a Global EE Think Tank















Environmental Education











Mahesh Padhan Coordinator of the Coordinatin Body on the Seas of East Asia UNEP GEEP Advisory Group







Review Progress and Key Accomplishments

Connect & Build Bridges

- APRC (TC) Africa Hub (MJ) eePRO/Website/Media (Bill) 0
- Demonstrate the Value of Environmental Education in Addressing the SDGs
- Case Studies and E-Book (Alex)
 Support a New Generation of Environmental Education Leaders o EE 30 Under 30 (Nina)
- Build a Global Fund to Sustain the Field and Advance Our Work
- Funding (JB)
 Promote Innovation
- Call to Action (Alan)



Review Progress and Kay Accomplishments

- Connect & Build Bridges
 ARC (TC)
 Africa Hub (MJ)
 eePRO/Website/Media (Bill) Demonstrate the Value of Environmental Education in
- Addressing the SDGs o Case Studies and E-Book (Alex) Support a New Generation of Environmental
- Education Leaders EE 30 Under 30 (Nina)
- Build a Global Fund to Sustain the Field and Advance Our Work
- Funding (JB)
 Promote Innovation
- Call to Action (Alan)



Asia Pacific Regional Center



TC Chang Professor, Taiwan Normal University APRC Lead







Background

The Asia-Pacific Regional Center (APRC) was launched in Taiwan in 2019. The aims of APRC are to share environmental education ideas, encourage conversation, and promote education for sustainable development (ESD) in Asia-Pacific countries.



What we've achieved....

Form an advisory committee with 11 consultants from 8 countries



With **4** meetings a year, consultants are invited to share the EE action plan and case in their countries. Also, we brainstorm to develop all the possibilities of promoting EE in Asia-Pacific Region.














May/June 2022 Johannesburg, RSA: Strategic mapping workshop(East & North Africa not physically represented). The participants in the image traffed the Vision



GEEP AFRICA VISION AND MISSION

• VISION

A just and sustainable Africa through meaningful thought leadership and lifelong learning to maximise Africa's potential

• MISSION

To enable and strengthen a dynamic regional sustainability movement that is transformational, collaborative, and grassroots oriented, using multi-sectoral networks, social inclusion, and indigenous knowledge to advance Environmental Education for a just and sustainable Africa.

Next steps

• Mapping exercise

- Consult all regions (e.g. North Africa, West Africa, East & Central Africa)
- Get ideas/suggestions to take GEEP Africa Hub forward
- Had already consulted EEASA in August during its annual $30^{\rm th}$ EEASA conference in Namibia
- Preliminary discussion within GEEP Africa Planning group to plan and organise an online consultative meeting (similar to Johannesburg GEEP Africa event)





GEEP Website, eePRO, and Media



Bill Finnegan Tamarack Media Almost Dr. Finnegan





GEEP website / eePRO group Bill Finnegan Tamarack Media Cooperative / University of Oxford



GEEP website / eePRO group

- Map:
 Profiles of EE Policy, Practice and People for 64 countries
 Icons and filters indicating existence of national EE policy, professional association for EE, or participation in the GEEP advisory group
 Connects to related content: case studies, people, organizations



GEEP website / eePRO group

- Case Studies: 23 case studies from around the world with consistent structure: overview, background, approach, evaluation plan, outcomes, lessons learned, resources Tagged to Sustainable Development Goals, which can be used to filter the list



GEEP website / eePRO group

Multilingual Content:

Informational pages offered in both English and Chinese.



GEEP website / eePRO group

 Multimedia Content:

 YouTube channel with a series of promotion videos about the GEEP

 New video project (filming this week)



GEEP website / eePRO group

 Online Community:

 Global EE group on NAAEE's eePRO platform

 4004 members

 Email digests of blog posts, opportunities, resources, discussions, etc.



GEEP website / eePRO group

What Next?
• Website update
• 2022 video
• YOUR IDEAS!

Review Progress and Key Accomplishments

- Connect & Build Bridges
 AFC (TC)
 Africa Hub (MJ)
 eePRO/Website/Media (Bill)
 Demonstrate the Value of Environmental Education
 in Addressing the SDGs
 Case Studies and E-Book (Alex)
 Support a New Generation of Environmental
 Churchica Londors
- Education Leaders EE 30 Under 30 (Nina)
- Build a Global Fund to Sustain the Field and Advance Our Work
- Funding (JB)
 Promote Innovation
- Call to Action (Alan)





GEEP Case Studies and E-Book

Dr. Alex Kudryavtsev GEEP Advisory Group

Professor, Cornell University

Case Studies: Demonstrating value of EE in promoting the SDGs

- . GEEP's growing library of case studies
- . Diverse EE topics and discussion activities
- · Educator professional development

thegeep.org/learn/case-studies/ebook



Case Studies: Demonstrating value of EE in promoting the SDGs . EE contribution to SDGs

. Each case study highlights certain SDGs



Case Studies: Demonstrating value of EE in promoting the SDGs

- . An example of case study from New Zealand
- . Four connections to SDGs





Review Progress and Key Accomplishments

- Connect & Build Bridges
 Africa Hub (MJ)
 Connect & Build Bridges
 Africa Hub (MJ)
 Constraint the Value of Environmental Education in
 Addressing the SDGs
 Case Studies and E-Book (Alex)
 Support a New Generation of Environmental
- Education Leaders EE 30 Under 30 (Nina)
- Build a Global Fund to Sustain the Field and Advance Our Work
- Funding (JB)
 Promote Innovation Call to Action (Alan)



EE 30 Under 30





Nina Hamilton Sr. Manager, International Programs NAAEE



Building Leadership:

Supporting a new generation of environmental education leaders









naaee.org/ee30under30



Connecting young leaders in EE





Many of them will be here in Tucson!





Youth Innovation Challenge



- 84 submissions from 32 countries
- Winners announced November 2022









THANK YOU!

Review Progress and Key Accomplishments

- Connect & Build Bridges
- APRC (TC) Africa Hub (MJ) eePRO/Website/Media (Bill)
- Demonstrate the Value of Environmental Education in Addressing the SDGs
- Case Studies and E-Book (Alex)
 Support a New Generation of Environmental
- Education Leaders EE 30 Under 30 (Nina) Build a Global Fund to Sustain the Field and Advance
- Our Work
- Funding (JB)
 Promote Innovation Call to Action (Alan)







Judy Braus Executive Director, NAAEE

"When I grow up, I want to work with the affluent."

A Global Fund

vears.

- The good news is that we have raised money for the GEEP over the past 8 years. We've raised funds to support the GEEP and GEEP activities.
- Tunds to support the GEEP and GEEP activities. GEEP has received generous support from Taiwan EPA and US EPA, which has allowed us build this global network. We've also received support for the YIC from the Ocean Affairs Council of Taiwan. .
- Ocean Attairs Council of lawan. We have brought in support for EE 30 Under 30 with a partnership with Wells Fargo and other funders. We've brought in more than \$300,000 to give out small grants and travel support to our young leaders for the past 3 years. We are also

working on additional support for the next three



A Global Fund

- It's been challenging to get a global fund started, but we should not give up going in starteo, but we should not give up going in together for a large grant to support this important work. Staff capacity is the biggest issue. We've also raised money for NAAEE to help support the GEEP and the work of the
- . Secretariat.
- As lan said, he raised money using the EE 30 Under 30 concept and we shared the platform we developed. NAAEE also partnered with Pratt & Whitney .
- and are giving out \$250,000 around the world, including to our partners at the Foundation for Environmental Education (\$40,0000) and support to EE 30 Under 30 awardee, Adedoyin Adeleke (\$10,000).



A Global Fund

- The biggest gap we have to accomplish . our goals is funding! And I look forward to brainstorming specific fundraising strategies and opportunities as we think ahead.
- I always believe that good ideas can get funding and am convinced we can bring in additional support from both the public and private sectors.
- Funders often like to fund projects vs networks or backbone organizations. Let's consider some strategies



Review Progress and Key Accomplishments

- Connect & Build Bridges
 APRC (TC)
 Africa Hub (MJ)
 eePRO/Website/Media (Bill)

- Demonstrate the Value of Environmental Education in Addressing the SDGs
- Case Studies and E-Book (Alex)
 Support a New Generation of Environmental Education Leaders o EE 30 Under 30 (Nina)
- Build a Global Fund to Sustain the Field and Advance Our Work
- Funding (JB)
 Promote Innovation • Call to Action (Alan)





Promote Innovation



Dr. Alan Reid Professor, Monash University GEEP Advisory Group

110



Call for Action

- 5 years on, and
- the next 5 years?

Overview

- 1. Genesis and crystallisation of the project, e.g. 2017 GEEP - discussing Tbilisi +40
- 2. Developing and launching a Call for Action
- 3. Follow-on, lessons learned and where next, e.g. Tbilisi +50



2017 Was the 40th Anniversary of Tbilisi!









@Osaka - Looking Back

What have we accomplished in 40 years? What have we learned?





Looking Forward

What are our priorities in EE for the next decade?

Where will we be by Tbilisi +50?





What could we do, as the GEEP, to help raise the visibility of EE and also advance our overall work?

- In most cases, a "call to action" seeks to persuade large numbers of people to do
 something "intermediate", which will put pressure on leaders to carry out the desired
 "action" (everyone should write to their government representative, so the
 government will change some policy, for example see, eePRO Advocacy actions).
- It's fairly unusual to see the expression "call to action" used in contexts where people at large are being asked to do something that directly resolves some problem (turning down house thermostats to combat global warming, for example).
- Effectively, a "call to action" asks everyone to agree action should be taken, but a "call for action" asks the relevant people to actually do it.



Call for Action

GEEEP GLOBAL EDUCATION PARTNERSHIP

- Provide framework for our field for next 10 years
 10 actions
- Feedback survey

Call for Action





Act Now for El

Map At

Thank you for your interest in participating. The global call for feedback took place from October 2017 to April 2018.

> In October 2017, the Global Environmental Education Partnership (GEEP) unrelied a draft global Call for Action. After collecting input for six months, we are now busy analyzing responses from environmental educators around the world! We will share the end result with anyone interested in October 2018.

Please visit the GEEP contact us page to receive updates (type "Call for Action updates" in the comments section). To learn more about the partnership, visit (hegeep.org.





SPOKANE 2018

GCCCP ВСССТОВАН (1997) В СОВАН (1997) В СОВАН (1997) В СОВАНСКИ В СОВ

Take the **Pledge Video**







- Education's Role in Achieving Conservation Success
- Goals 10. Develop a Global Fund for
 - Environmental Education

Most Important Actions for EE (choose 3): GLOBAL

GEEP



Ten Actions for the Future (ActNowforEE.org) Invest in Research and

Champion Environmental Education

Grow Global

Environmental

Education Leadership

- Build a Bigger and More Inclusive Field Create and Empower
- Global Citizens 4. Grow Global
- Environmental Education Leadership

Evaluation to Improve Practice Connect and Collaborate for Change Expand Environmental

- Achieving Conservation
- 8. Provide Universal Access to Environmental Education and Nature Strengthen Environmental Education's Role in Achieving the Sustainable Developmen
- Goals 10. Develop a Global Fund for Environmental Education
 - Key High Medium Low Lowest

GEEP Goals (revised 2018)

- 1. To connect and build bridges among practitioners, researchers, policy makers, institutions, providers, and international networks to elevate effective practice, scale impact, share global resources, and catalyze collaboration
- 2. To demonstrate the value and impact of EE as a tool for achieving the SDGs
- 3. To support, mentor, and empower a new generation of innovative and inspirational leaders to shape the future
- 4. To build a global fund to sustain the field and advance our collective work
- 5. To promote Innovation through a Global EE Think Tank



We amings and the need to main agine, and matione environm entaleducation a clin, moderable i secure receils

The State of Finance for Nature report (UNEP 2021) includes recommendations to invest 0.1% of global GDP each year to protect and restore ecosystems and avoid the breakdown of ecosystem services. [IMF estimates Global GDP, 2020 = US\$84.71 trillion]

Globally, more than 1 in 3 countries spend less than 4% of GDP and less than 15% of total gvmt expenditure on education

The Future We Choose (2020)



- Big tent approach to Futures 1 and 2 (1 = not meeting Paris targets)
- Invites reflection on 'the world we are creating' and 'the world we must create', plus the role of mindsets (stubborn optimism, endless abundance and radical regeneration) in spurring responsible action "The actions we pursue are largely defined by the mindset we cultivate in advance of the doing"



- Identifies 10 actions for 'stubborn optimists' committed to 'radical regeneration'
- 1. Let go of the old world. 2. Face your grief but hold a vision of the future.
- 3. Defend the truth. 4. See yourself as a citizen not as a consumer.
- Move beyond fossil fuels. 6 Reforest the earth.
 Invest in a clean economy. 8. Use technology responsibly.
- 9. Build gender equality. 10. Engage in politics.
- Key message: imagine, co-create and tell new stories

drawing on commitments to solidarity and reciprocity, science and transformation



What are our priorities in EE for the next decade?

Where will we be by Tbilisi +50?





C. Auf At your table: reaffirm, reorder, renew, reenergise? Champion Invest in Research and Provide Universal Access to 8. Evaluation to Improve ironmental Education and Education Nature Connect and Collaborate for Change Expand Environmental Build a Bigger and 6 Strengthen Environmental Education's Role in Achieving the Sustainable Developmen More Inclusive Field Create and Empowe Global Citizens Education's Role in 10. Develop a Global Fund for 4 Grow Global Achieving Conservation Environmental Environmental Education Education Leadership

Key - High Medium Low Lowest

Sharing Information about Global EE



Country Profiles

Adding all the time!



Communication!

- Over 2,000 subscribers to GEEP News
 eePRO Global has five
- moderators to represent different regions (Africa, Asia Pacific, Latin America, Europe, and North America) Webinars this year to focus on topics building off AP
- Forum suggestions



Great Webinar Last Week







Pratt & Whitney Global E-STEM Awards

Funding opportunities include:

- Global E-STEM Innovation Grants: Funding of up to \$15,000 and professional development to support promising E-STEM programs.
- Global E-STEM Excellence Prize: Awards of up to \$50,000 to support E-STEM programs that have demonstrated excellence.



Announcing the winners on Wednesday. One of our EE 30 Under 30 won and a GEEP and NAAEE partner.





Help imagine actions and ideas for GEEP 2023-2026





Small Groups: IMAGINE actions and ideas for GEEP 2023-2026

There will be one small group for each GEEP goal.

- 1. <u>Discuss (10 minutes)</u>: Is there anything happening in your networks and home countries that GEEP should consider sharing or learning from to achieve this goal?
- Brainstorm ideas that could help GEEP achieve this goal (20 minutes): Ideas can be bold or incremental, long- or short-term, something GEEP is doing or something new. Track your ideas on flip chart paper.

Pick one person to report out for two minutes

After lunch, we will add sticker dots to flip charts to vote for top ideas.



IMAGINE actions and ideas for GEEP 2023-2026

Five small groups / goals of GEEP:

- 1. Connect and build bridges (TC & Alex)
- 2. Demonstrate value of EE for realizing UN SDGs (Nicole & Arjen)
- 3. Support new generation (Anne & Nina)
- 4. Build a global fund (Gus & Judy)
- 5. Promote innovation (Ginger & Alan)

Please move to the table of the goal you wish to join. (We will return to our original tables after this session.)



Report Outs

Five small groups / goals of GEEP:

- 1. Connect and build bridges (TC & Alex)
- 2. Demonstrate value of EE for realizing UN SDGs (Nicole & Arjen)
- 3. Support new generation (Anne & Nina)
- 4. Build a global fund (Gus & Judy)
- 5. Promote innovation (Ginger & Alan)

2 Things Before Lunch!

Please give me or Anne a flash drive with any slides you have for the partner presentations later today

Group Photo! 😊



Partner Update Line-Up

- Marcia
- ArjenAlex
- Alex
 Alan
- Ravhee











Gallery Walk: adding ideas and voting for top ideas

We have five GEEP goals with ideas generated by small groups.

Round One: Add ideas using stickies and ask questions

We will pause to hear from a few people

Round Two: Vote for your top three ideas using sticker dots

We will pause to hear from a few people

Then we will close by summarizing and sharing next steps.



Strengthening EE in Your Country: A Discussion Guide

Goal: to spur discussion with educators to review how to strengthen EE in their countries or regions.

- This is a draft
- Presented the key ideas at the Asia Pacific Regional Forum last year.
 Will be circulated to the Advisors and
- Will be circulated to the Advisors and others and edited (we will incorporate the feedback)
- Hope to have the final version posted on the GEEP Website when it's finished





Components of a Strong National EE Program



At your tables:

Review the components of a strong EE program on page 5. At you tables, think about these questions on your own for a few minutes and then discuss with your group.

1. What's missing?

How is your country doing? Where is there innovation?
 Where is there the most room to grow?

Capture any highlights! ©









Partner Update Line-Up

- Marcia
- Arjen
- Alex
- Ravhee







Global partnership increasing the quality and quantity of climate communication and education (CCE), \$4.5M, 2020-2026+



· Three axes of activity: case studies, indicators impact across 'education, training, public awareness access to information, participation'

Cimete Change UNESCO
assie CEE
withreach
Sulitest
Freie Universität
Stanford University Characterian Sweet State
UNIVERSITY ALLENANY Social of the View CAMBRIDGE

(C) United Nations Fastework Convertion on

Project Team | www.mecce.ca/mecce-team/

- Regional Hub Co-Chairs Africa Ludwig Chanyau, Sidney Muhangi (RhodesU) Americas Oren Pizmony-Levy (Columbia University), Joe Henderson (Paul Smith S College) Australasia Karlikeya Sarabhai (Centre for Environment Education) and Susie Ho (Monash University) Canada Marjorie Shepherd (Environment and Climate Change Canada), Ellen Field (Lakehead University) Europe Pramod Sharma (Foundation for Environment Education), Stefan Bengtsson (Uppsala University)
- Steering Committee Members
 Organizational members Amber Webb (SDSN), Daniel Shaffer (FEE), Dirk Hastedt (IEA)
 Academic members Marcia McKenzie (UMelbourne/USask), Aaron Benavot (UAlbany), Heila Lotz-Sisitka (RhodesU)



CCE Quality | Knowledge Syntheses

- KS1: Psychosocial factors in climate change (in)action led by Nicole Ardoin and team at Stanford University, USA Presentation at NAAEE Research Symposium, submission by end of year
- KS2: Regional and cultural considerations for quality ACE/CCE led by Heila Lotz-Sisitka and team at Rhodes University, South Africa
- Regional reviews and paper drafted, for submission before end of year
- 0 Regional summaries will be shared with the Regional Hub network for input and validation





CCE Quality | Country Profiles

- 50 country profiles of CCE conducted to date in partnership with UNESCO GEM Report
- National CCE strategies are rare, and content in other laws, strategies, and policies is limited
- Country budgets rarely include allocations for CCE/ACE, The largest policy and program gaps are in training & teacher training
- Public engagement-related CCE/ACE tends to be better developed than education in policies; often identify marginalized and vulnerable groups as

priorities





239 90 01

80 8

0

CCE Quality | Case Studies

- Objective is to further understandings of quality CCE policy and/or practice in local, regional, and global contexts
- Learning from holistic and responsive CCE Representing a diversity of CCE elements, regions, sectors, and participant types
- Funding 30 case studies over 3 annual calls for proposals (First cohort funded 2022; next call out late 2022)
- · Previous applicants encouraged to re-apply The knowledge generated by the case studies will be shared with policy makers, practitioners, researchers, and others

CCE Quality | Regional Distribution of Eligible Proposals

	35	Australasia		Europe		Americas	
Cameroon	1	Australia	1	Belgium	1	Canada	23
Ghana	3	Bangladesh	2	France	2	Argentina	1
Kenya	5	Bhutan	1	Germany	2	Bahamas	1
Malawi	1	India	9	Montenegro	1	Bolivia	1
Namibia	1	Indonesia	2	Netherlands	3	Brazil	1
Nigeria	9	Israel	1	Portugal	1	Chile	2
Rwanda	1	Kazakhstan	1	Serbia	2	Colombia	2
Sierra Leone	1	Nepal	2	Slovakia	1	Guatemala	1
South Africa	6	Pakistan	1	Spain	4	Honduras	1
The Gambia	1	Papua New Guinea	1	UK	2	Mexico	2
Tunisia	2	Singapore	1			Peru	1
Uganda	3					USA	6
Zimbabwe	1						

CCE Quality | Funded Case Studies



CCE Quantity | Dataset and Indicator Development

More than 150 data sources and datasets have been reviewed
 About 45 datasets refer to two or more CCE/ACE elements

ACE Element	No. of datasets Reviewed	Prioritised datasets (short & medium term)	Prioritised datasets for COP27	
Primary and Secondary Education	28	4	2	
Higher Education	18	4	2	
Training	34	4	2	
Public Awareness	46	2	1	
Public Participation	49	6	1	
Public Access to Information	19	2	1	

CCE Quantity | Gaps in Data Availability

- Gaps in existing data, especially in Sub-Saharan Africa, Latin America and the Caribbean, and Oceania
- Data availability across ACE elements is uneven. Of all the ACE Elements, Training and Public Access to Information have the fewest existing datasets
- Expanding **data diversity** will enable CCE activity to be identified and counted, and data types to be applicable, in all regions



CCE Quantity | In Progress Datasets & Indicators

•



- Extent of integration of CC in National Curricular Frameworks and Education Sector Plans (158 Countries, MECCE Project database)
- Secondary students' self-declared CC knowledge (66 countries/territories, PISA 2018)

National aggregate measures of CC-related courses, research funds, research; CC integration across HEI (80+ countries, IAU HESD 2022)

ACE/CCE-related publishing (articles/year, number/ locations of researchers) (e.g., countries TBD, Web of Science)



Extent of inclusion of CC Training in national documents TVET laws and policies, NCFs, ESPs, NAPs, (countries TBC, MECCE Project database)

CCE Quantity | In Progress Datasets & Indicators

8

ର୍ଡ-ର



 Perception of climate change as a serious threat (139 countries, Lloyd's Register Foundation (LRF) World Risk Poll)



PUBLIC PARTICIPATION

CC engagement in active Facebook users (107 countries, International Public Opinion Survey on Climate Change)



Frequency of exposure to CC information (107 countries, International Public Opinion Survey on Climate Change)

Impact | Interactive Platform

- The MECCE Project's interactive data analytics and visualization platform for use by stakeholders, regular data releases
- Iterative development occurring through a formal collaboration with the University of Melbourne Data Analytics Platform Data and functions
- Country profiles, case studies, indicator data, non-CCE data
 Map and graph views
- Information on methods
 Country, multi-country, country/region views





Impact | Regional Hubs

- The Regional Hubs are a networking forum to mobilize project results and outputs through activities such as conferences, learning institutes, and . outputs
- There are five Regional Hubs in Africa, Australasia, Canada, Europe, and the Americas, with distinct North and South/Central American Hubs being developed.

Member activities include:

- · Attending 1-2 meetings/year, and an additional 2-4 electronic requests per

- Autenting 1-2 meetingsiyear, and an additional 2-4 electronic requests per year Providing input on MECCE Project processes and outputs Some participate on the Case Studies Review Sub-committees Opportunity to develop regional workshops, webinars, conferences, learning institutes, reports Strategize on appropriate regional activities and link with other regional groups with shared focus on CCE as appropriate .

Marcia McKenzie

marcia.mckenzie@unimelb.edu.au Nicola Chopin Project Manager nicola.chopin@usask.ca

www.mecce.ca | @SEPNetwork | #MECCE





Next Steps



Next Steps from This Meeting

- Synthesize the ideas and feedback from this Meeting.
- Create a small group that wants to help finalize the Discussion Guide. Planning an Advisory Group meeting to talk
- Would love to hear any additional thoughts you have as your take part in the conference.
- Will be working on a new proposal for funding support for next year.







Research Symposium: Tues/Wed



Dr. Alberto Arenas Tuesday, October 11, 9:00 AM MST



Dr. Viniece Jennings Tuesday, October 11, 12:00 PM MST

Closing Plenary Wednesday, October 12, 5:00 PM MST





Opening Night: Wed







Administrator Michael Regan







Alison Hawthorne Deming Poet, Essayist







POC Reception at 4:15-5:00 Opening Reception from 5-6:30

Robin Wall Kimmerer Author of Braiding Sweetgrass







Leander Lacy Social Scientist and JEDIA Expert



Explore Downtown Tucson



Friday PM: Chillin' at the Chul





Awards Luncheon and Closing Plenary

Closing Panel: Educating for Change



Gerry Ellis





Sheila Williams

Scott Samps

Jack Baker

Renata Koch Alvarenga

Nick Okafor



Gerry Ellis

- Part of the closing plenary
- Leading bird walks
- Helping with photos





🖌 naa<mark>ee</mark>





C-Vent: MAKE YOUR OWN SCHEDULE AND FIND PEOPLE AND SESSIONS



Download the App: It's Really Easy!



Connect with Others



We encourage to find time to connect with GEEP delegates throughout the conference. Everyone has different experiences and perspetcives!

If you need help, just let us know!





Thanks to all who helped present and lead sessions!



Special Thanks to Our Colleagues from Taiwan EPA and US EPA









Director of Professional

Development







EDV(ATING P For (HANGE

Madeline Halvey Manager International Programs Education Coordinator

Andy David Consultant

Thanks again for your enthusiasm!



And great ideas!!

Enjoy the Conference!





October 10



Background

The Asia-Pacific Regional Center (APRC) was launched in Taiwan in 2019. The aims of APRC are to share environmental education ideas, encourage conversation, and promote education for sustainable development (ESD) in Asia-Pacific countries.



What we've achieved....

Form an advisory committee with 11 consultants from 8 countries



With **4** meetings a year, consultants are invited to share the EE action plan and case in their countries. Also, we brainstorm to develop all the possibilities of promoting EE in Asia-Pacific Region.

What we've achieved....

Asia-Pacific Forum

virtual forum for participants will have a chance to hear from leading environmental education experts and network with others from the region who are advancing key environmental and social issues.



What we've achieved....

4 classes of International Environmental Issues and Education Workshop for Youth

30 Youths from Asia-Pacific countries are encouraged to explore the experience and strategy of environmental education in Taiwan every year!



What we've achieved....

2 International Workshop

Explore environmental issues with experts, practitioners, and academics from Asia-Pacific region.

2021 24 Let's Learn from Each Other for a Sustainable World E









Strengthening environmental education connections in the Asia-Pacific region through GEEP-APRC

Hsiu-Hui Weng¹, I-Hsin Kuo⁵, Tzu-Chau Chang², Hurng-Jyuhn Wang^c, Shih-Tsen Liu^F, Ching-Hsien Weng^H, Su-Ting Lin^N



!"#\$%&'()*%)"*!+,-.'-)\$-

! ! "#%#&' (\$) *+, *(-.#/012.#34\$54% ! 6 "#%#78(-9,(:#64%4'-; -%,.#/32.#34\$54% ! 6&#%#<)8%8; \$)9.#2%=- (%,:#8+6\$)?\$' 4%,#2"& ! @?NBM%#/4,*(4#C-98*)-94%DH<%=\$(8%; -%,#@84):# 2%=-(9%; #8+5\$)?\$' 4%,#2"& ! <%=\$(8%; -%,4#<D*)4,\$8%#08; ; \$,,--.#<@&.#34\$54% ! <<#@(8>-99\$8%4#0-(,\$\$)4,\$8%#08; ; \$,,--.#<@&.#34\$54% ! <<#@(8>-99\$8%4#0-(,\$\$)4,\$8%#08; ; \$,,--.#<@&.#34\$54% ! <<#@(8>-99\$8%4#0-(,\$\$)4,\$8%#08; ; \$,,--.#<@&.#34\$54% ! <<#@(8>-99\$8%4#0-(,\$\$)4,\$8%#08; ; \$,,--.#<@&.#34\$54%







Tł	e Mission, Vision, and Goal of APRC
Mission	Promote successful experience of environmental education in Asia- Pacific region, and achieve environmental sustainable development.
Vision	 Network: Constructing an international EE platform in the Asia-Pacific region. 1-1. Establish a regional partnership network. 1-2. Promote international and interdisciplinary exchanges and cooperation. Research: Acting as an EE think tank and inheriting both knowledge and experience 2-1. Maintain up-to-date information on environmental issues and policies in the Asia-Pacific region and develop action plans. 2-2. Establish an EE teaching material database. Service: Promoting environmental learning and action. 3-1. Providing professional training for environmental education. 3-2. Developing teaching materials.

Goal 1: Network - Partnerships

- We (GEEP and Taiwan EPA) invited 11 consultants of governmental administrators, professors and NGO chief members from 8 Asia Pacific countries. We exchanged idea and discussed the Asia Pacific regional issues and environmental education needs in the "Advisory Committee" meeting.
- We have conducted 4 times consulting meeting in each year since 2021.
- Website of APRC



Goal 2: Research – Think Tank

- Submit EE <u>case study</u> of Taiwan to GEEP (GEEP website) 2019: Environmental Education Act of Taiwan 2011
 - 2020: Framework of environmental education adapted to a new 12-years compulsory education curriculum in Taiwan
 - compulsory education curriculum in Taiwan • 2021: Building sustainable communities through US-Taiwan Eco-Campus partnership program
- Submit annual report and propose next year project to Taiwan EPA

Goal 3: Service – EE Training

- Have Hosted APRC International Environmental Issues and Education Workshop (IEIE) for youth each year since 2020
- Have hosted APRC International Workshops in the year of 2021 and 2022
- Conducted a new program of IEIE participants reunion in 2022

International & Asia-Pacific **EE** Actions

Distinguished Professor National Dong Hwa University APRC International Environmental Issues and Education Workshop 2020, Tainan

Contents

- The Roots of Environmental Education
 - Western Environmental Ethics
 Eastern Environmental Ethics
- Global Environmental Education Partnership Taiwan's Role and Participation at GEEP
 GEEP News

• Asia and South Asia EE

- ASEAN Working Group on Environmental Education, AWGEE
 South Asia Youth Environment Network (SAYEN)
 Tripartite Environmental Education Network (TEEN)
- 2019 Taiwan-Vietnam Environmental Education Networking Program







2023 projects of APRC

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Advis	Advisory Committee Meeting									
∆ 1st	-		∆ 2nd	-		∆ 3rd			∆ 4th	
Interr	International Workshop									
		invite				rson works	shop			
IEIE for Youth										
		register				∆ Workshop				
Internship preparation										
		develop	detailed te	rms		∆ Interr	ı			
Case Study of EE in Taiwan										
									nit to GEEP	







22

Geep Aprc

 $\ensuremath{\mathsf{Establish}}$ partnership with different organization and institute, such as enterprises, communities, schools and more

Connecting regional environmental issues with SDGs and developing possibilities to solve problems together with all kinds of partners



Without your help we could not accomplish so powerful objects and actions for environmental education

- Taiwan EPA
- GEEP/NAAEE
- National Taichung Education University, Taichung
- National Taiwan Normal University, Taipei
- National Dong Hwa University, Hualien
- National Taipei University of Education, Taipei
- Environmental Ethics Foundation of Taiwan, I-Lan
- Environmental Science Technology Consultants Corporation





Strengthening EE In Your Country A Discussion Guide











Table of Contents

I. Introduction

How to Use the Discussion Guide

II. What Makes a Strong National Environmental Education Program?

Components of a Vibrant National EE Program About Environmental Education The UN Sustainable Development Goals National Issues and Priorities Equity, Diversity, Inclusion, and Justice

III. Structure: How Is EE Organized in Your Country?

National Governments National Government Laws, Mandates, and/or Policies Intergovernmental Organizations Non-Governmental Organizations Networks and Collaboration Questions to Consider

III. Programs: How Is EE Delivered in Your Country?

Program Types Curriculum Development and Instructional Materials Professional Development and Training Questions to Consider

IV. Quality Assurance: How Is High-Quality EE Cultivated in Your Country?

Guidelines for Promising and Effective Practices Accreditation and Certification Evaluation and Research Questions to Consider

V. Funding: How Is EE Funded in Your Country?

Government Intergovernmental Organizations and Non-governmental Orgainzations Foundations Corporations and Businesses Individual Donors Questions to Consider

V. Action Planning

Guidance for Next Steps Planning Prompts

I. Introduction

How to Use the Discussion Guide



What does a strong environmental education (EE) program in a country or region look like?

What needs to be in place to ensure that people of all ages have opportunities to develop the awareness, knowledge, skills, and dispositions to tackle the environmental and social issues we face as a global society? What is the status of environmental education in your country or region?

This discussion guide is designed to help you and your colleagues answer these questions and others. It will help you assess EE efforts in your country or region. Use it to discuss where your strengths are, what gaps might exist, and how to make improvements.

If you're working in EE and sustainability, whether it's in government, nonprofits, academia, corporations, or other settings, this discussion guide is for you. While it identifies essential components of EE at the country and regional level, it can also be applied to local and state or provincial work.

Whatever your position–if you want to strengthen EE in your country–this discussion guide is for you!

Are you working in environmental education or sustainability as a...

- Government official
- Nonprofit leader
- Education program manager
- Higher education faculty
- College student
- Environmental educator
- Classroom teacher
- School administrator
- Nature center educator
- EE network coordinator
- Youth group leader
- Corporate sustainability manager
- Zoo or aquarium educator

If so, this discussion guide is for you!

A hallmark of a strong national EE program is inclusivity for all audiences. This same quality can and should be applied to the process of using this guide. As you scroll through the pages and envision the many ways that EE can do more to improve education and to tackle complex and important issues in your country, you are encouraged to engage with people from multiple disciplines and sectors to benefit from one another's knowledge in your respective areas of expertise. And to involve a broad spectrum of people in your country, bringing diverse lived experiences to the conversation of what is working well for whom, and where improvements can be made. While it is possible to use this discussion guide individually, collaborating with others broadens the base of knowledge about what exists in your country, focuses the range of possible actions, and builds commitment and capacity to implement solutions.

There is no one way to organize EE in a country. The possibilities are as multiple and varied as the nations on our planet. For ease of review, this guide groups the components of a strong national environmental education program into four main categories: structure, programs, quality assurance, and funding. Each section describes the related components, highlights examples, and poses questions about the status of EE in your country. A final section provides guidance and prompts for crafting a plan to strengthen EE in your country. Your plan may address just one component that is an area of greatest need or impact, or it may address multiple areas.

It is possible to have a strong EE program without all the components of each category, depending on your country's unique context. But the more that are present, the better the chances for all people and places to benefit from the transformative power of EE.



4 Strengthening EE In Your Country: A Discussion Guide

Component of a Strong National EE Program



Collectively, the components of a strong environmental education program help to create global citizens who are motivated to tackle the environmental, social, and economic issues facing our world, including the US Sustainable Development Goals.

- All Audiences: A national EE program is inclusive, reaching all ages, backgrounds, and sectors, including formal and nonformal education, government ministries and agencies, NGOs, corporations, and other community organizations that focus on education and the environment.
- Policy: Government legislation or policies advance EE through mandates, funding, and programs.
- Frameworks: Standards of excellence demonstrate what high-quality EE looks like and provide guidance for how to improve the quality of EE.
- Networks: A professional association or network provides opportunities for EE practitioners and leaders in the field to share, learn, and grow.
- Formal Education: EE is integrated into formal education—from early childhood to higher education.
- Nonformal EE: EE is a part of nonformal organizations, including zoos, aquariums, museums, community centers, and more.

- Curriculum and Instructional Materials: High-quality teaching materials are accessible to educators of all ages in both formal and nonformal settings.
- Professional Development and Training: EE professionals, including formal and nonformal educators, have access to and receive high-quality professional development.
- Higher Education: Higher education institutions offer degrees in EE and sustainability, and incorporate EE into the preparation of teachers, business leaders, health experts, and other key professions.
- Accreditation: Third-party, standards-based recognition programs ensure that higher education programs equip students with the knowledge and abilities to provide high-quality EE.
- Certification: EE institutions and environmental educators are recognized through certification for meeting stringent professional competencies.
- Evaluation: The impact of EE is measured at the program level, as well as rolled up to demonstrate the difference it is making for people and the planet.

Planning Prompts

The prompts below are designed to help you generate strategies and actions in response to what you and others identified as strengths and gaps in the Questions to Consider of each discussion guide section. Armed with a list of potential strategies and actions, a next step is to prioritize them based on importance, urgency, or other factors relevant to your country. In tandem to prioritization, you may also want to identify what people and organizations would affect or be affected by the strategy or action, and who is best suited to play a role in its implementation.

Structure

Government Mandates or Policies

- What are the strengths and gaps in your government's mandates and policies?
- If you seek to introduce mandates or policies, what are effective approaches to enacting legislation? Who should be involved? What information is needed to make the case for policies that support EE?
- If you seek to strengthen implementation of existing mandates or policies, how can you work with the agency or ministry responsible to leverage greater action? How can you promote the impact and importance of EE legislation?

Networks and Collaboration

- What are the strengths and gaps in collaboration for EE?
- If a strong network or alliance does not already exist, how might you build one or strengthen what already exists?

Programs

Program Types

- What are the strengths and gaps in the types of EE programs delivered in your country?
- What are strategies to build on your strengths and fill your gaps?

Curriculum Development and Instructional Materials

What are the strengths and gaps in the availability of high quality EE materials for formal and nonformal educators in your country?

- What are strategies to build on your strengths and fill your gaps?
- What are strategies to align or correlate EE programs and materials to academic standards?

Professional Development and Training

- What are the strengths and gaps in the availability of high quality professional development and staff training for governments, NGOs, corporations and businesses, formal and nonformal educators, and others?
- What are strategies to build on your strengths and fill your gaps?

Quality Assurance

Guidelines for Promising and Effective Practices

- What are the strengths and gaps in existing guidelines?
- How can creating new guidelines or strengthening existing ones help to advance EE in your country?

Accreditation and Certification

- What are the strengths and gaps in the availability of accreditation and certification programs in your country?
- What are the strategies to build or strengthen an accreditation program for higher education?
- What are the strategies to build or strengthen a certification program for professional environmental educators?

Evaluation and Research

- What are the strengths and gaps in EE evaluation and research in your country?
- What are strategies to build on your strengths and fill your gaps?

Funding

North American Association for Environmental Education

- What are the strengths and gaps in funding EE in your country?
- What are strategies to optimize and diversify funding for EE?





6 Strengthening EE In Your Country: A Discussion Guide

Registration Information







51st Annual Conference OCT. 12–15 **19th Annual Research Symposium** OCT. 11–12

TUCSON**2022**

IN-PERSON WITH VIRTUAL OPTIONS

EDU(ATING P FOR (HANGE

Education We Need for the World We Want

Join us for our return to an in-person gathering in beautiful Tucson or participate online with our virtual program. NAAEE's 2022 conference will focus on the powerful role education can play in creating healthier communities and tackling today's complex environmental and social issues. We'll dig into vital topics in our field, such as climate change education and climate justice, the benefits of connecting to nature, building a green workforce, protecting biodiversity, and centering equity in our work. We'll explore creative new approaches that have emerged from the pandemic and delve into ways in which current research can increase our effectiveness as we work to transform communities so they are more just and sustainable.

The Annual Conference and Research Symposium will offer inspiring and thoughtful keynotes, a rich variety of workshops, symposia, traditional sessions, research panels, roundtable discussions, bright spots, and posters, along with great opportunities for networking, growth, and change.

PAGE 2

FOR (HANGE



Arizona does not observe Daylight Saving Time and will be on **Mountain Standard Time (equivalent to Pacific Daylight Time)** during the Annual Conference and Research Symposium.

Schedule at a Glance

In-Person Program in Tucson

Annual Conference and Research Symposium

Monday, October 10

- Research Symposium Field Trip*
- Research Networking Dinner*

Tuesday, October 11

- Research Symposium*
- Symposium Opening Plenary: Dr. Alberto Arenas
- Symposium Keynote: Dr. Viniece Jennings
- Symposium recruitment fair and reception

Wednesday, October 12

- Research Symposium continues
- Symposium grad student mentoring breakfast
- Pre-conference workshops* (full-day and half-day)
- Pre-conference field trips*
- Opening reception, including Share Fair, Authors' Corner, and Exhibit Fair (starts at 5:00 PM)
- Conference opening, featuring Lifetime Achievement Award recipient Julie Packard

Thursday, October 13

- Concurrent sessions
- Keynote: Dr. Robin Wall Kimmerer
- Exhibit Fair luncheon
- Poster Session
- Evaluation Clinic
- Free night: Enjoy Tucson

Friday, October 14

- Concurrent sessions
- Keynote: Leander Lacy
- eePRO Groups brown bag lunch meetings
- Closing night celebration at Tohono Chul Gardens and Galleries

Saturday, October 15

- Concurrent sessions
- Awards luncheon
- Closing plenary: Flash Talks! Educating for Change

*Requires separate registration fee



EDV(ATING A

In-Person Registration

In-person Annual Conference registration includes:

- All conference plenary and concurrent sessions
- Access to all on-demand and live virtual sessions
- Wednesday opening reception, Thursday exhibit luncheon, Friday Chillin' at the Chul, Saturday awards luncheon
- Exhibit Hall entry and access to all virtual exhibits

In-person Research Symposium

registration includes:

- All symposium plenary and concurrent sessions
- Access to all on-demand and live virtual sessions
- Tuesday and Wednesday luncheons, Tuesday reception and recruitment fair, Wednesday grad student and mentoring breakfast

Virtual Registration

Virtual registration for either event includes:

- Live stream of all plenary sessions
- Access to all on-demand virtual sessions
- Access to a limited program of live virtual sessions (offered concurrently with the in-person programs

All virtual session recordings will be available through April 15, 2023.

Choose from a wide variety of concurrent sessions in six strands:

- Advancing Civic Engagement and Sustainable Communities
- Building Leadership for Environmental Literacy
- Connecting with Nature
- Conservation and Environmental Education
- Green Schools, Universities, and Vocational Institutions
- Linking Research and Practice to Increase Impact

FOR (HANGE



ARIZONA ASSOCIATION FOR ENVIRONMENTAL

In partnership with

DUCATION

51st Annual Conference



Featured Speakers

All featured speakers will be live-streamed and accessible to both in-person and virtual conference participants. Plenary sessions will be recorded and available for on-demand viewing for two weeks after the presentation.

Watch our website for additional plenary speakers.

Wednesday, October 12, 6:30 PM MST



Julie Packard

Monterey Bay Aquarium 2022 NAAEE Lifetime Achievement Award Recipient

Julie Packard is executive director of the acclaimed Monterey Bay Aquarium, which she helped found in the late 1970s as the

nation's first major public aquarium dedicated to interpreting marine life of a single region. Under her leadership, the aquarium has pioneered innovative exhibits and education initiatives, and has evolved into one of the nation's leading ocean conservation organizations. Julie is an international leader in the field of ocean conservation and a leading voice for science-based policy reform in support of healthy oceans. She is equally a strong advocate for advancing equity and diversity in the sciences, including endowment of scholarships that support individuals from historically marginalized communities and aquarium programs that help young women develop confidence and identity in the sciences. She has won numerous national and international awards and is a trustee of the David and Lucile Packard Foundation and chairs the board of the independent Monterey Bay Aquarium Research Institute.

Julie Packard's remarks will be presented virtually during the in-person opening ceremony.



Mayor Regina Romero (invited)

EDV(ATING

Raised by immigrant farm-workers in Somerton, Arizona, Regina is the youngest of six children and began breaking barriers early on as the first member of her family to vote and the first to graduate from college. She is a proud graduate of the University of Arizona

and holds a post-graduate certificate from the Harvard Kennedy School of Government.

In 2007, Regina became the first woman to represent Tucson's Ward 1 on the Tucson City Council. She has proven herself to be a champion for issues such as acting boldly on climate change, affordable housing, infrastructure investment, immigrant and workers' rights, and access to a high-quality education. In November, 2019 Regina was elected Tucson mayor, becoming the first woman and first Latina mayor of Tucson, as well as the only Latina mayor in the 50 largest U.S. cities.

WE'RE BACK! IN PERSONN IN TUCSO

Just a few of our outstanding plenary speakers!







Dr. Robin Wall Kimmerer



Julie Packard

Leander Lacy





Dr. Alberto Arenas



PAGE 4

50th Annual Conference | October 12–15, 2022

Thursday, October 13, 11:30 AM MST



Dr. Robin Wall Kimmerer

State University of New York College of Environmental Science and Forestry

Robin Wall Kimmerer is a mother, scientist, decorated professor, and enrolled member of the Citizen Potawatomi Nation. She is the author of *Braiding Sweetgrass: Indigenous*

Wisdom, Scientific Knowledge and the Teachings of Plants, which has earned Kimmerer wide acclaim. Her first book, *Gathering Moss: A Natural and Cultural History of Mosses*, was awarded the John Burroughs Medal for outstanding nature writing, and her other work has appeared in *Orion, Whole Terrain*, and numerous scientific journals. She tours widely and has been featured on NPR's *On Being* with Krista Tippett and, in 2015, addressed the general assembly of the United Nations on the topic of "Healing Our Relationship with Nature." Kimmerer lives in Syracuse, New York, where she is a SUNY Distinguished Teaching Professor of Environmental Biology and the founder and director of the Center for Native Peoples and the Environment. The center's mission is to create programs that draw on the wisdom of both indigenous and scientific knowledge for our shared goals of sustainability.

As a writer and a scientist, her interests include not only restoration of ecological communities, but restoration of our relationships to land. She holds a BS in botany from SUNY ESF, and an MS and PhD in botany from the University of Wisconsin. Kimmerer is the author of numerous scientific papers on plant ecology, bryophyte ecology, traditional knowledge, and restoration ecology. She lives on an old farm in upstate New York, tending gardens both cultivated and wild.

This keynote will be presented virtually.

Friday, October 14, 11:30 AM MST



Leander Lacy

Lacy Consulting Services, LLC, Denver, Colorado; Rowan University, Glassboro, New Jersey Leander Lacy is the founder and owner of Lacy Consulting Services. His company focuses on helping environmental

organizations and sustainability-minded businesses meet their goals of improving human and community well-being through conservation action. Leander has worked on projects such as dam removal; deer management; building trust between fishers and conservation groups; a five-state collaborative to protect the U.S. shortgrass prairie; assessing discrimination in U.S. farming and ranching; and assisting the states of Kansas and Maryland in their efforts to ensure that justice, equity, diversity, and inclusion (JEDI) are core to their strategy for statewide environmental education. Leander is trained traditionally as a wildlife ecologist and received his MS in human dimensions of natural resources with thesis work on how to improve the quality of life of the urban poor through environmental action. Before starting his company, he worked on global teams with The Nature Conservancy, and he has been an advocate for increased social science and JEDI in conservation projects.

Saturday, October 15, 12:00 PM MST

Closing Plenary



The conference culminates with our annual awards luncheon and a closing plenary offering multiple perspectives on the conference theme: *Educating for Change*. The plenary will feature a series of thought-provoking flash talks, including a number of our EE 30 Under 30 inspirational young leaders at the forefront of positive change worldwide.



Everyone Is Welcome!

NAAEE is committed to advancing equity and inclusion in the field of environmental education. Throughout the conference, we will be focusing on justice, equity, inclusion, and sustainability in our plenary sessions and several workshops. In addition, at least 15 percent of our concurrent sessions will explore strategies and programs that help diversify our audiences as well as our workforce, build cultural competence, support environmental justice, engage with new audiences, forge new and lasting partnerships, honor traditional knowledge, and increase our reach and relevance throughout society. Affinity groups including the Environmental Professionals of Color (EPOC) and the Queer Environmental Educators Network (QEEN) will also be meeting.



PAGE 5

FOR (HANGE



In partnership with
ARIZONA
ASSOCIATION FOR

ENVIRONMENTAL EDUCATION

19th Annual Research Symposium OCT, 11–12

NAAEE's annual Research Symposium brings together new and experienced researchers from around the globe to explore the current state and future directions of environmental education research and advance the use of practices proven to be effective. The symposium fosters discussion and collaboration among members of the EE research field, including researchers, policymakers, and practitioners at all stages of their careers. Participants can meet with colleagues and mentors to discuss publishing and career advice, and issues and concerns in the world of research.

Reflecting the general theme—educating for change, sessions will promote dialogue as we confront myriad challenges ranging from climate change to environmental, economic, and racial injustices. Panels, roundtable discussions, workshops, and posters reflect both methods and theory, and pedagogy and programming.

Featured Speakers

All featured speakers will be live-streamed and accessible by both in-person and virtual conference participants. Plenary sessions will be recorded and available for on-demand viewing for two weeks after the presentation.

Arizona does not observe Daylight Saving Time and will be on Mountain Standard Time during the conference.

Tuesday, October 11, 9:00 AM MST



Dr. Alberto Arenas

University of Arizona College of Education

Alberto Arenas is a professor of environmental and sustainability education in the Department of Teaching, Learning, and Sociocultural Studies in the College of Education at the University of Arizona.

He specializes in the connections between pedagogy and environmental sustainability; experiential education, with an emphasis on vocational education; and the decolonization of education with a focus on restoring culturally-rich, noncommodified knowledge and skills. Dr. Arenas is editor-in-chief of the *Journal of Environmental Education*, a premier educational journal and the oldest journal on environmental education worldwide in continuous operation. His publications have appeared in leading educational journals, including *Phi Delta Kappan, Teachers College Record, Compare,* the *International Review of Education,* and the *Journal of Environmental Education.* He received his PhD in sociocultural studies in education from the University of California, Berkeley and joined the University of Arizona College of Education faculty in 2002.

EDV(ATING)

From 2009–2019, he was co-director of the Study of the United States Institute, which invited Indigenous Latin American college students to the University of Arizona to explore sustainability issues. He has also served as a member of the Scientific Committees of the World Environmental Education Congresses in Morocco and Sweden and was a Fulbright Scholar researching Mexico's environmental education programs.

Tuesday, October 11, 12:00 PM MST



Dr. Viniece Jennings

Agnes Scott College, Decatur, Georgia

Dr. Viniece Jennings is a purpose-driven scholar, educator, and environmental professional. Her research often explores urban green spaces and health in the context of ecosystem services,

environmental justice, and social cohesion. She led research on green space, health disparities, and social determinants of health across the U.S. that was recognized as top research for practice by the National Recreation and Parks Association. Her publications appear in journals such as *Nature* Communications, the American Journal of Preventive Medicine, PLOS One. Environmental Justice. and the International Journal of Environmental Research and Public Health. Her expertise is featured in outlets such as Atlanta Magazine, Live Happy Magazine, Georgia Public Broadcasting, and Shondaland Digital Media. She serves as an assistant professor in the Department of Public Health at Agnes Scott College. Dr. Jennings is a JPB Environmental Health Fellow at the T.H. Chan School of Public Health at Harvard University. She has over a decade of experience serving as a research scientist with the federal government. Prior to her role at USDA, Jennings interned at the White House Council on Environmental Quality for the Obama Administration. She holds a doctorate in environmental science from Florida A&M University and a BS from Delaware State University.



PAGE 6

19th Annual Research Symposium | Tuesday, October 11 and Wednesday, October 12

Closing Plenary

Wednesday, October 12, 5:00 PM MST

The Research Symposium will close with reflections from the 2022 Research Award recipient and the symposium co-chairs.

Note: The Research Symposium requires a separate registration fee.

Arizona does not observe Daylight Saving Time and will be on Mountain Standard Time during the conference. Session times are subject to change.



Special Events



Research Symposium Awards Reception and Recruitment Fair

New this year, we will hold a recruitment fair concurrent with the annual awards reception. Graduate programs and employers will share recruitment materials, and prospective graduate students and job seekers can learn about opportunities and bring their CVs. (This event is included with in-person Research Symposium registration.)

Pre-Research Symposium Networking Opportunities

For more information and pricing, visit conference.naaee.org.

Sabino Canyon Field Trip Monday, October 10, 1:00 PM-4:30 PM MST



Catch up with colleagues and meet new ones during this visit to Coronado National Forest's Sabino Canyon Recreation Area, one of Southern Arizona's premier natural areas, located at the base of the Santa Catalina Mountains. After an introduction by a Pima County Master Naturalist, participants can either join a two-hour guided hike through the canyon or explore the visitor center and take short walks nearby. There is also an option to take a one-hour interpretive tram ride to the top of the mountain. Transportation to Sabino Canyon and entry fees are included; the optional tram is not included and is an additional \$15.

Research Networking Dinner Monday, October 10, 6:30–8:30 PM MST

Join other research symposium attendees for food, fun, and conversation at Azul Restaurant and Lounge at the Westin La Paloma. Co-chairs Kathryn Stevenson and Scott Morrison will be there to welcome everyone and kick off two days of learning, sharing, and community-building. Diners will choose from a special limited menu that includes vegetarian and vegan entrees. The price includes dinner, tax, and gratuity. Alcoholic beverages are not included.

PAGE 7



About NAAEE

For five decades, NAAEE has served as the professional association, champion, and backbone organization for the field of environmental education. Dedicated to strengthening the field, we bring people together to accelerate environmental literacy and civic engagement through the power of education to create a more just, equitable, and sustainable future for all.

NAAEE's influence stretches across North America and around the world, with members in more than 30 countries. NAAEE and its 54 state, provincial, and regional Affiliate organizations in the United States, Canada, and Mexico have more than 20,000 members. Our members are professionals working across business, government, higher education, formal (K-12) education, nonformal education, early childhood education, science and STEM education, philanthropy, and other sectors of society.

NAAEE also oversees the Natural Start Alliance, focused on early childhood environmental education; serves as the Secretariat of the Global Environmental Education Partnership (GEEP), in partnership with U.S. EPA and EPA Taiwan; leads the ee360+ initiative to strengthen the EE field and support professional development through a cooperative agreement with U.S. EPA; and, in partnership with NOAA, leads the eeBLUE program to build capacity for environmental literacy.

NAAEE

1250 24th Street NW, Suite 801, Washington, DC 20037 naaee.org

Join us in thanking our incredible Conference and Research Symposium Chairs!



Kathryn Stevenson North Carolina State University Research Symposium Co-Chair



EDV(ATING P FOR (HANGE

LoriAnne Barnett Warren Arizona Department of Forestry and Fire Management Arizona Association for Environmental Education *Conference Chair*



Scott Morrison Elon University Research Symposium Co-Chair



Want to Volunteer?

Attendees can save \$200 off full in-person conference registration by volunteering for eight hours over the course of the conference. Interested? Contact us at conference@naaee.org. Volunteer registration opens in late July; watch our website and social media for an announcement.

Scholarship Opportunities

NAAEE will announce several scholarship opportunities in late July; watch our website and social media for more information.



PAGE 8

FOR (HANGE

Pre-Conference Field Trips

Visit conference.naaee.org for detailed field trip descriptions and prices. All trips depart from the lobby entrance to the Westin La Paloma.

Wednesday, October 12



Arizona-Sonora Desert Museum 8:00 AM-3:30 PM MST

The Arizona-Sonora Desert Museum has been rated as one of the country's top 10 zoos, botanical gardens, and museums in visitor polls over the last decade! You'll have a personalized experience at the museum, including a greeting and introduction, with time to tour on your own, visit the Packrat Playhouse (play and learning space), touch a stingray (extra \$3 fee), and chat with museum docents. We'll break up the morning with a custom animal presentation that includes an overview of museum education programs and Q&A with museum education staff. Transportation, entry fees, and lunch are included.



Saguaro National Park 8:00 AM-2:30 PM MST

Join the National Park Service and some of its community partners for a morning of learning and exploration at Saguaro National Park's Tucson Mountain (West) District. Learn about the park's natural and cultural resources—including breathtaking views of the Tucson Mountains and impressive displays of the iconic giant saguaro—as well as some of the work NPS and others are doing to equitably engage Tucson's underrepresented community. This trip will entail moderate walking. Wear close-toed shoes and bring water and appropriate sun protection. Transportation to the park, entry fees, and lunch are included.



EDV(ATING A

Sky Islands Exploration 8:00 AM-4:00 PM MST

The Santa Catalina Mountains, part of the Madrean Sky Islands, offer a unique opportunity to experience one of the world's most biodiverse regions. Along a 25-mile stretch of road climbing over 6,500 feet in elevation, you'll travel through life zones like that of Mexico to Canada. You'll participate in activities used regularly with K-12 students to learn about and engage in a variety of environments within this section of the Coronado National Forest. Transportation and lunch are included.



Chuk-Son Trail 1:00 PM-4:30 PM MST

The Chuk-son Trail is an urban, guided, interpretive walk perfect for exploring Tucson's rich culture, ecology, and communities of the past and present. It highlights all that makes Sonoran Desert living so fascinating! Learn about Tucson's wildlife, plants, architecture, murals, traditional foods, shrines, and local characters and stories on this 2.6-mile exploratory walk. Youth Ambassadors from the Ironwood Tree Experience will lead the walk and share place-based stories of the culture and ecology of downtown Tucson's historical barrios, arroyos, and alleyways. Transportation is included.



PAGE 9

Pre-Conference Workshops

Visit conference@naaee.org for workshop descriptions and prices for in-person and virtual workshops.



In-Person Workshops

Wednesday, October 12

Full-Day Workshops

8:30 AM-4:30 PM MST

- NAAEE Affiliates Workshop
- Community-Centered EE: NAAEE *Community Engagement Guidelines* Leaders' Workshop

Morning Workshops

8:30 AM-12:00 PM MST

- Engaging Classrooms in Environmental Data and Community Science with FieldScope
- Advancing Civics in Environmental Education

Afternoon Workshops 1:00 PM-4:30 PM MST

- Nurturing, Educating, Connecting: A Tour of Manzo Elementary's School Gardens
- The Road to NAAEE Higher Education Accreditation: A Map for Success
- Engaging Youth Groups in Community Action Projects for the Environment



Virtual Workshops

Thursday, October 6 9:30 AM-1:00 PM MST

- Building Capacity for Justice-Centered Climate Change Education
- Nature-Based Charter Schools to Increase the Accessibility of Environmental Education
- Ocean Literacy and E-STEM to Empower Youth in Climate Action

Friday, October 7 9:30 AM-1:00 PM MST

- How to Teach Climate Change Effectively
- Re-Storying, Gamifying, and Reconciling Environmental Education for a Regenerative Future

Monday, October 10 9:30 AM-1:00 PM MST

- Know Your Audience: Empowering Effective Climate Change Communicators
- Thrive Naturally

PAGE 10

FOR (HANGE

For details and registration information: conference.naaee.org

Conference Opportunities

Wednesday, October 12 5:00 PM-6:00 PM MST

To participate as an exhibitor, purchase your table through conference registration. Attendees do not need to register for these events, which are included with registration.

Share Fair

At the Share Fair, nonprofit organizations can highlight their successful programs and inspiring ideas through tabletop displays and engaging conversations. This event will be held during the opening reception on Wednesday evening from 5:00 PM to 6:00 PM. Purchase your table through the conference registration system by the September 1 early bird deadline to be listed in the conference program.

Authors' Corner

Would you like to share your latest works with conference participants? Authors can interact with conference attendees and promote, sign, and sell their publications in the Authors' Corner. This event will be held during the opening reception on Wednesday evening from 5:00 PM to 6:00 PM. Purchase your table through the conference registration system by the September 1 early bird deadline to be listed in the conference program.



Featured Activities

- Exhibit Festival
- Evaluation Clinic
- Fundraising Roundtables (virtual)
- Skill-building sessions for young professionals

Networking Events

Thursday, October 13 5:00 PM-6:00 PM MST

Enjoy Tucson

NAAEE will run free continuous shuttle buses between the Westin La Paloma and the Historic Mercado San Augustin district in downtown Tucson from 6:30 PM-10:30 PM so that attendees can enjoy downtown Tucson during this open evening. The Mercado and the MSA Annex offer an array of shops, food, and beverages to enjoy; the conference program will list restaurants offering discounts to conference attendees. You can easily ride the Tucson Street Car from the Mercado along Congress Avenue and 4th Avenue to visit popular restaurants, breweries, ice cream shops, and the Historic Congress Hotel.

EDV(ATING)



Friday, October 14 7:00 PM-9:30 PM MST

Chillin' at the Chul

Get into the Southwestern spirit and celebrate the closing evening of the conference as we "Chill at the Chul." Deemed one of the world's ten best botanical gardens, Tohono Chul is Tucson's charming crossroads of nature, art, and culture. Set on 49 acres of lush desert, Tohono Chul's winding pathways, art, and garden exhibits reveal the unique qualities of the Sonoran region. Join with colleagues to enjoy Peruvian and Latin American music by Tucson-based band "Tradiciones," the flavors of regionally inspired hors d'oeuvres and beverages, amazing views of the Santa Catalina mountains, and chance encounters with resident hummingbirds.





PAGE 11

FOR (HANGE

Conference Venue



Westin La Paloma Resort

3800 E. Sunrise Drive Tucson, AZ 85718 Reservations: bit.ly/NAAEE2022Hotel (520) 577-5854

Housing

NAAEE holds a room block at the **Westin La Paloma at a special group rate**. Please help us meet our commitment by reserving your room at the Westin.

The hotel is a beautiful walking campus, with outward facing rooms. Check our website for information on sustainability practices. All sessions will be held at the venue.

For special conference pricing, you must **book by September 15**, **2022.** The Westin strongly recommends making your reservation online, but you can also call their group reservation coordinator. There is more information on the conference website.

Room blocks are limited; we recommend booking early.

Covid Protocols

We care deeply about the safety of our attendees, and we are committed to taking appropriate precautions designed to promote the health and wellness of conference attendees. Attendees must agree to follow any COVID-related or other health and safety protocols at our events.

Our COVID-19 policy is posted on the conference website. We will implement the specific health and safety protocols appropriate to the public health circumstances at the time of the conference.

THANK YOU TO OUR 2022 SPONSORS

EDV(ATING)







ee360+









Western National Parks Association







