

IPMEN 2023 Conference AbstractsThursday July 20th – Morning Session

Strand 4 Exemplary programs that link TEK to Ocean Literacy - Facilitator: Natalie Davey

Diana Payne (Connecticut Sea Grant, USA)

Keynote Presentation: Ocean Literacy – now and then

Presenter Bio: Diana Payne is an ecologist, educator, photographer, and writer, currently serving as an Associate Professor and the Education Coordinator with Connecticut Sea Grant based at the University of Connecticut's Avery Point campus. She is Chair of the NMEA Ocean Literacy Committee, Chair of the NMEA Ocean Decade working group, a past President of NMEA, a past Chair of the Sea Grant Education Network (SGEN), a past Chair of the New England Ocean Science Education Collaborative (NEOSEC), and served as international expert in Ocean Literacy with the Fulbright Specialist Program. She currently serves as a member of the steering committee of the UN-endorsed program Ocean Literacy With All (OLWA) and Vice Chair of the IOC UNESCO Ocean Literacy Group of Experts.

Ode Dixon (Deep Rhythm Inc., Nigeria)
Presentation Title: "Healing Waters"

Presentation Description: This dance presentation focuses on the ways in which ocean literacy and traditional ecological knowledge can be used to promote healing and reconciliation in the aftermath of the transatlantic slave trade. The dance will incorporate movements and gestures inspired by West African healing traditions, as well as contemporary dance forms, to create a sense of connection and unity across time and space.

Presenter Bio: Ode Dixon is a dancer and educator dedicated to exploring the waters off and on the Atlantic coast of West Africa in search of answers to the wrongfulness of the transatlantic slave trade. She seeks to promote healing and reconciliation in the aftermath of this traumatic chapter in history, and to honor the wisdom and resilience of the ancestors who were impacted by this global injustice. As a dancer, Ode draws on a range of movement traditions, including West African dance, contemporary dance, and improvisation, to create performances that explore the themes of memory, identity, and healing.

Warren Sevaaetasi (American Samoa Department of Marine and Wildlife Resources) **Presentation Title:** Fili Fa'atasi

Presentation Description: Talofa! The American Samoa Department of Marine and Wildlife Resources introduces "Fili Fa'atasi." This program interprets and offers scientific information and utilizes Traditional Ecological Knowledge to execute and promote Ocean Literacy to our Samoan people. Our video will showcase how our Community-based Fisheries Management Program applies Samoan traditional knowledge and protocols to manage their ocean resources. It will also show the importance of education and outreach to the young future scientists of American Samoa.

Presenter Bio: My name is Warren Sevaaetasi, I recently earned my Associates of Science degree in Marine Science from the American Samoa Community College and am currently pursuing my Bachelor of Science in Environment Studies from the Wayland Baptist University. I joined the American Samoa Government under the Department of Marine and Wildlife Resources in 2021. I started in DMWR as a Field Technician and Education Officer

for the Community-based Fisheries Management Program and the Marine Protected Areas Division.

Other Presenter Names: Naomi Galea'i & Christina Mataafa-Samau

Yen Chia-Dai (Ray) (National Academy of Marine Research, Taiwan) **Presentation Title:** Marine Culture and Education Policy in Taiwan

Presentation Description: Taiwan established the Ocean Affairs Council (OAC) in 2018 and the National Academy of Marine Research in 2019 to integrate marine-related affairs. The Ocean Affairs Council includes Department of Science, Technology, Culture & Education, which are responsible for the highest policy-making authority for national marine culture and education. The National Academy of Marine Research (NAMR) includes Marine Policy and Cultural Research Center, Planning and Training Center which are responsible for marine education and marine culture research. In this session, OAC Miss Lee and NAMR Ray will introduce Taiwan's marine culture and education-related policies and hope to connect with international marine culture and education communities and resources to build up sustainable development for marine culture education.

Presenter Bio: Dr. Yen graduated from the doctoral program of the Institute of Human Resource Management of the National Central University (2008-2013) and the Tourism Institute/Department of the Chinese Culture University (1999-2005). Currently serving as Director of the Planning and Training Center of the National Academy of Marine Research (2022-present), Associate Professor, Graduate Institute of Education /Teacher Education Center, National Taiwan Ocean University (2015-present), Chair of Talent Training Committee of the Taiwan International Cruise Association (2020-present), Secretary General of Asia Marine Educators Association (AMEA) (2017-present), Executive Director of Keelung Zhengbin Heping Island Business District Development Association (2022present), Director of Taiwan Sustainable Development Exchange Association (2021present). Former visiting scholar at the University of California, Berkeley (2019), postdoctoral researcher (2013-2015) and policy development leader (2015-2017) of the Taiwan Marine Education Center, responsible for the cultivation of marine professionals, including the development of the cruise industry talent cultivation policy. Participated in the first and second phase of National Energy Projects, responsible for wind power talent training and energy science popularization projects (2009-2013). He mainly teaches courses such as marine education, human resource management, marine tourism education seminar, marine professional talent cultivation and learning organization. Guiding students to invest in local creation and innovation and entrepreneurship, and obtained excellent results in many national competitions.

Other Presenter Names: LEE, Shan-Ying, Senior Executive Officer, Department of Science, Technology, Culture & Education, Ocean Affairs Council.

Carrie Anne Vanderhoop (Haida Gwaii Institute, Canada)

Presentation Title: Transformative Land and Community Based Learning on Haida Gwaii **Presentation Description:** Sharing how HGI develops and delivers programs and courses that are community driven and centre Haida and Indigenous voices and knowledge in the areas of ocean sciences, fisheries, culture and history. Undergraduate courses: Ocean People, Culture and Tradition, Indigenous Fisheries Science, HGI Semester in Marine Conservation (5 courses), and Co-Creating Aquatic Science graduate course (offered in partnership with UBC Center for Indigenous Fisheries).

Presenter Bio: Carrie Anne is the daughter of Evelyn Vanderhoop and granddaughter of Delores Churchill of the Gawa Git'ans Massett Inlet Eagle Clan of Old Massett. Carrie Anne's father is David Vanderhoop, Aquinnah Wampanoag from the island of Neope, commonly known as Martha's Vineyard, Massachusetts. Carrie Anne holds an Ed.M. from Harvard University Graduate School of Education and a B.A. in Comparative Literature and Sociology from the University of Massachusetts, Amherst. Carrie Anne comes from a long line of Haida weavers and carries on the tradition as a weaver of the prestigious Raven's Tail and Naaxiin (commonly referred to as Chilkat) textile garments.

Name: Prue Francis (Deakin University, Australia)

Presentation Title: Improving ocean literacy along the Great Southern Reef

Presentation Description: Australia's coastal and marine habitats are threatened by climate change and rapid and unsustainable development. The temperate Australian coastline, the Great Southern Reef, is no exception to these threats. This 8000km stretch of coastline is considered a biodiversity hotspot, yet the broader community has little awareness of the importance and value of this system. One step to ensure we are sustaining healthy marine systems, is to raise awareness of the ocean and create an ocean literate society. Given children are our future ocean custodians, schools are ideally placed to begin this endeavour. However, the Australian Curriculum offers minimal opportunity to learn about the ocean. We evaluated current Australian trends in ocean literacy by surveying primary school teachers and informal education providers. Results show that whilst informal education programs are implementing ocean literacy principles in their programs, primary school educators are rarely incorporating marine science. If schools are not engaging with marine education programs, ocean literacy is likely to be limited in schools. An overcrowded curriculum and lack of knowledge and resources were the top identified barriers for not incorporating ocean literacy. We seek to improve these barriers by evaluating whether a familiar resource, such as picture books, could be a viable solution. We found that oceanthemed picture books linked 91% of the time with the Australian Curriculum but local, temperate stories were lacking. This led to the production of our own picture book which is being used as a case study to evaluate the effectiveness of learning about the ocean.

Presenter Bio: Prue's marine education background and expertise translates into her research interest that focuses on the extent to which ocean literacy is being taught in schools across Australia and exploring innovative methods to promote ocean literacy through research, education and engagement. Prue actively promotes ocean literacy through regular appearances on radio and has recently co-authored a children's book called The Great Southern Reef.

Other Presenter Names: Catia Freitas, Paul Venzo, Alecia Bellgrove, Madi O'Brien

Tsuyoshi Sasaki (Tokyo University of Marine Science and Technology, Japan) **Presentation Title:** Evaluation of eating cultured fish education program to promote circular economy

Presentation Description: An education program focused on eating cultured fish was implemented at a junior high school in Tokyo with the aim of establishing a sustainable circular economy that promotes cooperation between producers and consumers. We conducted a study to determine the change in relational values between the group that watched the producer's narrative video and the group that did not. As a result of the survey, we found that the former group had a significantly higher average score for relational values. **Presenter Bio:** Fish ecological research in Hei River, Fisheries education for high school student, Community education and community development in Sanriku coast, Integrated coastal management, Collaborative learning with junior high school and university student, Tokyo Bay clean up campaign in Minato-ward (2019 International Featured Member from National Marine Educators Association)

Other Presenter Names: Taro Oishi, Wakamatsu, Sachiko Harada, Rintaro Takayama