Traditional Navigation, Seafaring and Fishing Teachers Resource Guide

A. Lesson Plan

Traditional navigation by Pacific islanders involves no compasses or charts. Instead, navigators rely on the stars; on their reading of winds, waves and clouds; on their knowledge of sailing directions and seamarks; and on their ability to determine currents and predict weather. Utilizing these methods, ancient Polynesians and Micronesians traveled from Samoa to Hawaii and from Satawal to Saipan. Today the traditional arts of navigation, seafaring and fishing are being revived, and traditional Pacific sailing canoes are circumnavigating the globe.

- 1. Encourage students to hypothesize about the following regarding traditional navigation, seafaring and fishing:
 - a. How does one become a traditional navigator?
 - b. How does one prepare for a voyage?
 - c. What is the experience of open ocean navigation like?
 - d. Is fishing important to the voyage? If so, why?
 - e. Is learning this practice important today and why?
- 2. Then have the students to watch the videotaped interviews of traditional navigators and seafarers available on YouTube at https://www.youtube.com/watch?v=Dkct6nGMuOE, on Vimeo at https://www.wpcouncil.org/education-and-outreach/educational-videos-4/.

They can also watch the complete interviews of each navigator.

- Wally Thomson at https://www.youtube.com/watch?v=jr2zOUio2Z8
- Cecilio Raiukiulipiy at https://youtu.be/u6-8DadLSYg
- Manny Sikau at https://youtu.be/KMh2at7oQyU
- Chadd Paishon at https://youtu.be/D8LAu6wADXO
- 3. Afterwards, have the students put pen, pencil, paint, crayon or other appropriate medium to paper as they prepare their entry for the "Traditional Navigation, Seafaring and Fishing" poster competition.
- 4. Then have the students show their artwork and explain it to the class or in writing.
- **B.** Biographies of the Traditional Navigators, Seafarers and Fishermen (in order of appearance)

Wallace "Wally" Thompson grew up on Swains Island, American Samoa. He is one of the first Samoans to hold a US Coast Guard All Ocean/International Master Mariner Captain's License in the Merchant Marine. For the past 40 years, he has engaged in vessel deliveries around the world using modern navigation and Polynesian navigation methods. He learned the old Polynesian methods from his ancestors from Manua and Swains Island. Today, Captain Wally teaches the younger generation what was passed down to him on how the Polynesians navigated by the stars, sun, ocean current, etc. "My ancestor once told me that a compass can go wrong but never the stars," Captain Wally recalls. When the Hokulea sailed to Pago Pago in 2014, Wally spoke with Nainoa Thompson about Polynesian navigation, and

they sailed to Swains Island where they stayed for a couple of days. Wally is a former Swains Island represented to the American Samoa Fono (Legislature) and currently works on Tutuila in the boating industry.

Cecilio Raiukiulipiy is from the island of Satawal, the eastern most island of the State of Yap, Federated States of Micronesia. He comes from a long line of master navigators. He loves to sail and fish and enjoys spending time with his two children. He is the Treasurer of the Mariana Islands Water Operator Association and an active member of the Marianas Sailing Club and Over the Reef Yacht Club. He is the president of Marianas Waterworks and vice president of Culligan Pacific CNMI, a small business specializing in the operation of water treatment systems. Previously, he spent 12 years with Japan Water Systems as a water operator and sales manager. Cecilio is a graduate of the Pohnpei Agriculture and Trade School in 1993. He attended Northern Marianas College on Saipan studying electrical trades from 1997 to 1999. He is a certified water operator in the CNMI and has taught basic electricity at the Northern Marianas Trades Institute.

Manny Ikea Sikau is a seventh generation navigator from Polowat atoll in the Federated State of Micronesia. He has participated in proa voyages since his birth and began formal training in navigation in 1962, learning the stars from his grandfather and Master Navigator Ikuliman. He began his formal training in canoe building in 1966, learning from his father, Master Canoe Builder Orhailam Sikau. Manny came to Guam for the first time in 1972 on a proa voyage from Polowat as a sailor and apprentice navigator aboard the Santiago, with his grandfather, Captain and Navigator Ikuliman. Manny was ordained a Master Navigator in 1997 in a pwo performed in Polowat by renowned Grand Master Navigator Hipour Eweluh (Edward), who reopened the sea lane between the Mariana and the Caroline Islands after about one hundred years of closing. Manny is from the Faanurh School of Navigation but was "Pwo" in the Wariang School by Hipour because there were no more surviving pairourou in the Faanurh School. Manny was a co-founder of the University of Guam Traditional Seafaring Society in 1999 and served as a Master Navigator and instructor from 1999 to 2007. He was also a member of the Traditions About Seafaring Islands (TASI) group and served as its Master Navigator, teaching navigation, canoe building and canoe-house building to its members and other interested community members. He was the Master Builder in the construction of the canoe house Sahyan Tasi Fache Mwan at the Paseo de Susana, Guam, in 2001 and for its reconstruction in 2006. He was Master Navigator for a non-instrument navigation and instructional voyage from Guam to Saipan to Pagan and back aboard the cutter-rigged sloops Fair Rover and Vatna in 2002. He was the Master Carver of the 15-foot Geftao, a traditional Chamorro proa, in 2006 and of the voyaging canoe Saina in 2008, the first traditional Chamorro sakman to be built in over 200 years, which set sail to Rota in 2009. In 2002 the Guam Humanities Council awarded him the Traditional Teacher of the Year award and in 2010 a new program at the University of Guam awarded him a Master's Degree in Micronesian Traditional Knowledge. Manny passed away in 2013.

Chadd 'Onohi Paishon joined the Polynesian Voyaging Society in the apprentice navigator program in 1990. He participated in the repair and maintenance work on Hokule'a and crewed on its 1992 voyage from Hawai'i to Tahiti. Chadd assisted with lashing the newly constructed double-hulled voyaging canoe Hawai'i Loa, which was completed in 1994. He then moved to Moku o Keawe (the Big Island of Hawai'i) to assist Na Kalai Wa'a Moku o

Hawai'i and brothers Clay and Shorty Bertelmann with the construction of the 54-foot voyaging canoe Makali'i. Na Kalai Wa'a is a non-profit voyaging and education organization established on the west Side of Hawai'i island by Clay and members of the community of Moku o Keawe in 1993 to preserve, protect and perpetuate Hawaiian culture and contribute to a safe and health future for Hawai'i. Chadd served as assistant navigator on the inaugural voyage of Makali'i from Hawai'i to Tahiti and back in 1995. In 1999, Chadd voyaged to Satawal on Makali'i, assisting with navigation and serving as captain. Na Kalai Wa'a also assisted in the building the 57-foot double-hulled Hawaiian voyaging canoe, Iosepa, for the Hawai'i campus of Brigham Young University. Chadd served as captain on Iosepa's maiden voyage in 2004 from La'ie, O'ahu, to Kawaihae, Moku o Keawe, and continues today to serve as its captain. From 2001 to 2004, Chadd assisted Na Kalai Wa'a Moku o Hawai'i with the construction of Alingano Maisu, a new 57-foot double-hulled voyaging canoe as a gift for Mau Piailug and the people of Micronesia. Maisu left with Hokule'a for Satawal on January 23, 2007, and arrived there on March 15 via Majuro in the Marshall Islands, Pohnpei and Chuuk. Chadd served as navigator for the length of the voyage with Shorty as captain of Maisu. At Satawal, Maisu was gifted to Mau, who inducted Hawaiian navigators Chadd, Shorty, Nainoa Thompson, Bruce Blankenfeld and Kalepa Baybayan into the school of Pwo. Chadd currently serves as the executive director of Na Kalai Wa'a, which is helping to guide the longevity of the Makali'i education programs conducted throughout Hawai'i and abroad.

C. Additional online resource materials on traditional navigation, seafaring and fishing:

- Ames T. Maritime Culture in the Western Pacific: A Touch of Tradition. http://www.uog.edu/sites/default/files/ames_maritime-culture.pdf
- Amesbury J. Pelagic Fishing in the Mariana Archipelago: From the Prehistoric Period to the Present.

 http://www.soest.hawaii.edu/PFRP/reprints/Amesbury_Terra_Australis39_2013.pdf
- The CHamoru Seafaring Lexicon Workshop was held over two days in July 2014. The workshop was a follow up to an earlier 2009 meeting among the Chamorro seafaring community to create a lexicon of terms for various aspects of traditional canoe-building, seafaring and navigation. Presentations include an historical overview of the seafaring tradition in the Marianas and revitalization efforts, and discussions of on-going and new projects among the various Chamorro seafaring organizations. http://www.guampedia.com/chamoru-seafaring-lexicon-workshop/
- Cunningham L, W Kranz, and M Sikau. (November 2006). Restoring Traditional Seafaring and Navigation in Guam. Micronesian Journal of the Humanities and Social Sciences. Vol. 5(1 and 2). University of Guam Traditional Seafaring Society, Guam. http://marshall.csu.edu.au/MJHSS/Issue2006/MJHSS2006_119.pdf
- Feinberg R. Review of Polynesian Seafaring and Navigation: Ocean Travel in Anutan Culture and Society. Kent, Ohio: Kent State University Press, 1988. https://ojs.lib.byu.edu/spc/index.php/PacificStudies/article/viewFile/9600/9249

The Hokulea is voyaging around the world using traditional navigation and seamanship.

Track the progress of the crew at this website. http://www.hokulea.com/.

- Samoana T. Samoan History (The Ways of Our Ancestors) Part 1. This blog summarizes the history and culture of Samoa and includes a description of various canoe types and famous canoes. http://village.1samoana.com/profiles/blogs/samoan-history-the-ways-of-our-ancestors
- Traditional Navigation in the Western Pacific explores the question whether primitive mentality is essentially different from a civilized one and provides good visuals on lessons learned by Micronesian navigators, including using fish imagery to remember and visualize maps. http://www.penn.museum/sites/navigation/intro.html
- Wayfinders: A Pacific Odyssey is a website companion to the PBS film by the same name and is a resource to learn more about Pacific Island geography, culture, history, archaeology, linguistics and celestial navigation.

 http://www.pbs.org/wayfinders/polynesian.html