In an effort to bridge policy and practice in diverse populations, this presentation focuses on research conducted at U.S. higher educational institutions (Harvard University, UCLA, and the University of Hawaii) in the field of ethnomathematics. Ethnomathematics is the study of the relationship between mathematics and culture, including ethnicity, socioeconomic class, special needs, and English language learners. As an example of ethnomathematics, the University of Hawaii – West Oahu opened its first Mathematics Center with a National Science Foundation grant last year. The Hokule’a, “star of gladness,” is a double-hulled Hawaiian voyaging canoe that is an integral part of the center and connects students to cultural and historical traditions. The Hokule’a is internationally renowned for the role it has played in rekindling the Polynesian tradition of non-instrument way-finding techniques that include celestial navigation to locations such as Tahiti, Rapa Nui, Marquesas, Samoa, Micronesia, Japan, and the U.S. mainland, and is preparing for a voyage around the world in 2012. It is a vehicle to explore real-world applications of mathematics in global communities, and represents resourcefulness, inventiveness, wisdom grounded in the past, and hope for the future. (Received July 07, 2009)