## Japanese Activity in collaboration with the international ocean literacy survey

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The ocean plays important roles not only in the global climate system but also in the global material cycling through biogeochemical processes, and has close relationships with the daily lives of people through fisheries, marine energy and resources, ocean transportation, marine sports, ocean relaxation activities, and others. The Ocean Literacy movement began in the U.S. in the early 2000s, and has recently become international as shown by the Ocean Literacy Portal website operated by IOC/UNESCO. In Japan, the present national standard course of study at elementary school has not given any room for ocean education while the Oceanographic Society of Japan (JOS) and 34 other academic societies/committees gave a proposal entitled, "On the Setting up of a class named, 'the role of Ocean' in the national standard course of study for the 4th grade students in the elementary science education" to the Ministry of Education, Culture, Sports, Science and Technology (MEXT) in April 2016. In the U.S., aiming to serve as a community-based measurement tool that allows the comparison of levels of ocean knowledge across time and location, the International Ocean Literacy Survey (IOLS) project has been started since 2015. Fauville et al. (2018, https://doi.org/10.1080/13504622.2018.1440381) published the results from IOLS Version 2, and the English version IOLS Version 4 was finalized after reviewing the English IOLS Version 3 by IOLS Advisory Board consisting of international marine researchers, communicators, teachers, and psychometricians. The English version of the IOLS Version 4 was translated into 14 languages (Catalan, Chilean, Dutch, Greek, Italian, Japanese, Korean, Polish, Portuguese, Simplified Chinese, Spanish, Tagalog, Thai, and Traditional Chinese) and its field testing was conducted during February and March 2019 with nominal 6945 participants worldwide including nominal 567 participants from Japan. In collaboration with IOLS Version 4 field testing, JOS and the Marine Learning Center took part in correcting the original Japanese draft of IOLS Version 4, sponsored IOLS Version 4 field testing, and made a wide campaign to high-school teachers through sending recommendation letters to academic societies and other ocean-related organizations.

Keywords: Ocean literacy, ocean sciences education, community-based development, measure development