

What it takes to go global? Lessons from a study on ocean literacy

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In recent years, ocean literacy has evolved from a local to a global scale movement. The challenge taken by this movement is to connect people to the ocean while, at the same time, being an incentive for positive change in people's behavior. Ocean literacy has first caught the attention of researchers in the USA, expanding then to Canada, Europe and worldwide. Researchers from several disciplines work in a collaborative basis using a broad range of approaches and methods that result in several scientific publications. However, it remains unclear how ocean literacy scaled up and gained acknowledge in the international research community. It is necessary to have an updated outlook to investigate how this research advancements are developing in structure and change the relationship between research communities.

In the present study, we applied a combination of bibliometric analysis and science mapping to a dataset of scientific publications on ocean literacy between 2005 and 2019, obtained from Web of Science and Scopus databases. In order to represent the development of the field and to analyze the level of collaborations, we first used bibliometric analyses to describe the field's main features, including indicators of growth and research collaboration. We then used science mapping techniques to build collaboration networks among institutions and countries and to identify research communities.

Our results suggest that collaboration formed the basis for the evolution of ocean literacy from a USA initiative to a global scale movement. Our data reveal a promising trend for collaboration among authors, countries and institutions. These findings confirm that ocean literacy is gaining more acknowledgment within the scientific community worldwide but still face considerable limitations to its dissemination in Latin America and Africa. Promoting cross-institutional and cross-disciplinary cooperation is critical to support this purposeful movement and represents an urgent challenge.

Keywords: Ocean literacy; Science mapping; Bibliometrics; Collaboration; Sustainable Development Goal