



# Whitaker Institute Policy Brief Series

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**Cluster:** Social Innovation, Participation and Processes (SIPPs)

**Theme:** Public-Sector Innovation and Reform

**Further Reading:**

McHugh, P., Domegan, C., Gotensparre, S., Fauville, S., Copejans, E., Friis Møller, L., Paphanassiou, M., Batista, V., Chicote, C., & Lincoln, S. (2016). *Our European Ocean Conversations: A Summary Report of the European Sea Change Conversations*, EU Sea Change Project, Whitaker Institute, NUI Galway, Ireland.

Gotensparre, S.M., Fauville, G., McHugh, P., Domegan, C., Mäkitalo, Å., & Crouch, F. (2017). *Meta-Analysis of the Consultation Reports*, EU Sea Change Project, University of Gothenburg, Sweden.

McHugh, P., Domegan, C., Gotensparre, S., Fauville, S., Copejans, E., Friis Møller, L., Paphanassiou, M., Batista, V., Chicote, C., & Lincoln, S. (2016). *D3.2 - National Reports on the Consultation Protocol*, EU Sea Change Project, Whitaker Institute, NUI Galway, Ireland.

**Contact:** Patricia McHugh ([patricia.mchugh@nuigalway.ie](mailto:patricia.mchugh@nuigalway.ie)); Christine Domegan ([christine.domegan@nuigalway.ie](mailto:christine.domegan@nuigalway.ie))

**Read More About:** SIPPs research cluster within the Whitaker Institute for Innovation and Societal Change

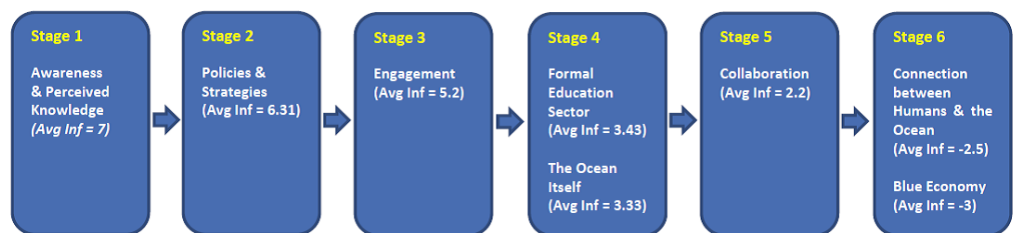
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## Mobilising a European Sea Change in Teaching 12–19 Year Olds about the Ocean

The Galway Statement on Atlantic Ocean Cooperation (2013) reinforces a need for Ocean Literacy across Europe, the United States, and Canada. In Galway in 2013, top marine scientists concluded that together we have the capacity to understand and predict major Atlantic and Arctic processes, as well as the changes and risks they carry in relation to human activities and climate change. One of the priority areas identified for policy dialogue was Ocean Literacy. Sea Change, a Horizon 2020 project, uses the concept of Ocean Literacy to empower European citizens to make informed and responsible decisions regarding the ocean and its resources; to take direct and sustainable action towards healthy seas and ocean, healthy communities and, ultimately, a healthy planet. In 2016, eight European countries (Belgium, Denmark, Greece, Ireland, Portugal, Spain, Sweden, and the U.K.) held Ocean Literacy dialogue forums to discuss the barriers to teaching 12–19 year olds about the ocean.

### Research Findings

At a European level, participants generated 657 barriers and 316 options to teaching 12–19 year olds about the ocean. In Ireland, the top most voted barrier was ‘lack of school programmes on marine subjects’ while in Spain, it was an ‘inability to convey the importance of the oceans for life on the planet, in an attractive way and adapted for young people’ and in Greece it was ‘the strict schedule of students both in and out of school does not allow them time for informal education activities’. Taking all 657 barriers together, a European influence map of the barriers to teaching 12-19 year olds was produced.



The influence map shows the structural, behavioural, and societal forces at work, together with their interacting dynamics. Reading from left to right, “Awareness & Perceived Knowledge” (Stage 1) exercises the highest level of overall influence in teaching 12–19 year olds about the ocean. “Engagement” (Stage 3) is influenced by “Awareness & Perceived Knowledge” (Stage 1) and “Policies & Strategies” (Stage 2) forces and it, in turn, influences “Formal Education Sector”, “The Ocean Itself” (Stage 4), “Collaboration” (Stage 5), “Connections between Humans & the Ocean”, and “Blue Economy” (Stage 6) forces.

### Policy Implications

Research shows that European citizens lack an understanding of the ocean’s influence on us and, in turn, our influence on the ocean. For European and national policymakers and educators to address this societal challenge, they first need an understanding of the dynamic complexities surrounding marine education. Collective Intelligence is a creative dialogue forum methodology that can deliver local, national, and pan-European views of complex policy issues. It also provides impactful options, strategies, and priorities to support future policy decisions and governance.