

The Sea and Me - a collaborative arts/science project exploring marine environmental awareness and communication through photography

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Keywords: Collaborative/interdisciplinary; art/science; sustainability

Aims of project:

- To develop and evaluate a teaching and learning model for interdisciplinary learning between different disciplines in the university.
- To explore how art and science disciplines can work together more productively in a teaching context.
- To offer both cohorts of students an experiential learning opportunity to develop valuable skills for collaborative practice, including the development of communication skills beyond their specialist field.
- In alignment with the goals of the *Teaching and Learning Strategy at Plymouth University (2013- 2020)*, the project aimed to introduce students to the issues and principles of sustainability and encourage them to engage positively with those issues affecting their personal and professional lives.

Background:

'The Sea and Me' was an interdisciplinary, collaborative, and experiential learning project for second and first year students on the BA (Hons) Photography and BSc Marine Conservation/Ocean Exploration programmes respectively. The project entailed the students working in pairs (one art, one science) and experiencing a structured series of three field-trips, where they were tasked to explore their perspectives on human-nature interactions, reflect on their relationships with the marine environment, and communicate this together using a blend of photographs and scientific text. The collaborations ended in a public exhibition at Plymouth Arts Centre in June 2016, where the work was judged by the Director of the Marine Institute and a prize awarded for the best collaboration.

Methods used:

The project took place between April and June 2016 and comprised of a number of elements:

- An application and interview process for students from both programmes – this ensured 'buy-in' and enabled some expectation settings prior to the project beginning.
- An initial three-hour briefing session – this included introductions from each participant, including the team, short presentations on why the sea is important to each participant, overview of the project, aims and objectives, arts and science perspectives on the sea, and an introduction to PebblePad. The afternoon ended with a visit to the Marine Institute to view the Wave Tanks and experience the Ship Navigation Simulator.
- Field-trip #1: the group visited the National Marine Aquarium and were asked to reflect on a number of questions concerning the way in which the 'issues' relating to the sea and its wildlife.
- Field trip #2: the students participated in a three hour boat trip around Plymouth Sound / River Tamar.
- Field trip #3: the final field-trip, where the pairs were finalizing their projects, was across to Mount Batten and a walk around to Jennycliff Beach. Time was spent exploring the rock-pools and working on the projects together.
- A lecture was delivered by Stephen Vaughan from the Photography department.

- The final exhibition of students' work took place at Plymouth Art Centre, where students met on Saturday to hang their work and host the event from 3-5pm. The Director of the Marine Institute, Martin Attrill, presented a prize and gave extensive feedback to each pair of students on their photography and scientific input.
- Students were asked to evaluate their own learning and the experience as a whole.
- A researcher, Wendy Miller, attended all sessions and took fieldnotes. She also arranged a post-project evaluation and focus group.

Results:

Impact on students:

- Students reported that they learnt more about the environment, and about each other's discipline *'Working with the marine students in the environments meant I was able to learn more about each different place and look at things differently'* (eval. form)
- Students had differing experiences of working with other students – for some it worked well, and for a few pairs, conflicts arose that damaged the collaboration. *'As it isn't something I have done before I wouldn't say it was easy but definitely enjoyable and a good experience' 'I think it has been incredibly successful and interesting - it's just sometimes certain people/personality types aren't very good at things like this. I think my pairing wasn't successful - but so many others were.'* (eval. forms).
- *'[...] it was great to see so many students involved and I really think you captured people's imaginations with this PedRIO project. As discussed, I'm very happy to help you develop this into a Plymouth Plus module if you want to try and get the initiative embedded into our curricula...'* (feedback from ADTL, Faculty of Science and Engineering)

Key challenges identified:

- With only one module (Photography) being assessed, the students' relative commitment and input into the project differed and caused problems for some pairs. Despite earlier commitment from marine science, it eventually proved impossible for the project to be carried out within the science module.
- Some students felt the sessions were not structured enough and wanted more input, although most enjoyed the freedom and independence of the looser structure. On the whole, we identified the importance of including more input into the interdisciplinary process and this has become a central element in the later funding proposal to HEFCE.

Dissemination:

- Exhibition of students' work at Plymouth Art Centre, 12th June 2016.
<https://www.plymouth.ac.uk/news/marine-science-meets-photography-at-student-exhibition-in-the-ocean-city> (press release)
- Vice-Chancellor's Conference, Plymouth University, July 2016
- APHE Annual Conference (Association for Photography in Higher Education), Plymouth University, July 2016
- Requested input at Institute of Education teaching and learning away day, Plymouth University, November 2016
- A collaborative paper is planned for a Higher Education teaching journal.
- The project has led directly to a larger bid being submitted to HEFCE, the results of which will be announced in early November 2016.