

SYMPAB - (16492) - CONNECTING CREATIVE PEDAGOGIES WITH AR/VR TECHNOLOGIES FOR OCEAN LEARNING: POTENTIAL AND PITFALLS

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Short Abstract

The EU-Erasmus project 'Ocean Connections' aims to develop approaches to teaching Ocean Literacy through combining key ideas and practices from research streams in creative pedagogies and in the use of digital technologies, namely Augmented and Virtual Realities (AR and VR). The selection of these two strands of work to support the teaching of Ocean Literacy is based on the need for Ocean Literacy teaching to find ways of engaging pupils with both the size, scale and complexity of the Ocean, and an ethical, activist stance aiming to result in developing pupils' responsibility for and with the environment. Six pilot studies were conducted exploring these ideas in action, two each in Denmark, Spain and England. This paper reports on findings with respect to our research question regarding participants' perceptions of the effectiveness, affordances and barriers to using the combination of creative pedagogies with VR and AR technologies. A mixed methods research design was used across the project as a whole, drawing on pre-post questionnaires, focus group interviews with pupils, interviews with the educators involved in the project, field observations by researchers during the pilots, and photographs of the pilots in action. Here, we draw on interview and observation data, analysed using a coding process combining theoretically driven and emergent coding. Findings from the first round of three pilots, analysed so far, indicate that although there were barriers to using the VR tool developed for the project effectively due to bandwidth and accessibility of technical equipment, pupils (mostly) found the use of VR and creative approaches engaging and impactful. However, there was a tendency amongst both pupils and educators to discuss the creative pedagogies and digital tools separately. In Pilot 1, there is insufficient evidence to suggest that deliberately connecting these two approaches adds further value to teaching Ocean Literacy.