Crossing Boundaries in ESD: Critical Perspectives on Virtual Reality Apps

Keywords

immersive virtual reality, critical literacy, education for sustainable development

Biographical Note

Theresa Summer is Associate Professor of English Language Education at the University of Bamberg. Her research interests encompass learner perspectives, global citizenship education, pop culture, and grammar. As part of the competence network lernen:digital (DiSo-SGW), her project is developing and evaluating VR training modules for English teachers.

Claudia Schnellbögl is a research assistant in English Language Education and Psychology in School and Teaching at the University of Bamberg. Her research focuses on teacher education, teaching and learning with digital media, and immersive virtual reality. She is part of the evaluation team in the lernen:digital project DiSo-SGW.

Michelle Zirkel is a research assistant and PhD candidate at the University of Bamberg's Department of English Language Education. Her doctoral research focuses on developing and evaluating English teacher training modules on immersive virtual reality for language education for sustainable development, as part of the lernen:digital project DiSo-SGW.

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Abstract (500 words)

Abstract (300 words)

Virtual reality (VR) apps offer immersive experiences that allow users to explore underwater worlds, adopt pro-environmental lifestyles, and communicate about sustainability issues with avatars. These features present valuable opportunities for language education and for engaging with the social, cultural, political, economic, and ecological dimensions of sustainability. This presentation explores the integration of VR apps for language education for sustainable development (Römhild et al., 2023), suggesting that language educators should cross

boundaries in two ways: 1) by using VR headsets to enter virtual worlds that offer immersive learning opportunities (Parmaxi, 2023), and 2) by critically examining the content of VR apps. Drawing on the Education for Sustainable Development (ESD) framework (KMK, 2017), which includes the three dimensions of discovering, evaluating, and acting, we highlight the importance of critical literacy. This also plays a central role in our research project (DiSo-SGW), part of the competence network lernen:digital (BMBF), which aims to foster teachers' digital sovereignty (Zirkel & Summer, 2024). For this project, we developed VR-based tasks for teacher training modules in the context of ESD and evaluated them through workshops with adolescent learners of English (N=41). Semi-structured qualitative observations (Cohen et al., 2018) were used to investigate four aspects: language use, content focus, learner attitudes, and the use of technology. Our findings show that while initial language use focused on technological challenges (e.g., "How can I move on?"), many learners found VR devices highly motivating, especially in the context of ESD, which became evident in their verbal reactions. Moreover, some learners engaged critically with the app content, both through the provided tasks and independently. The findings thus underscore the potential of VR to enhance motivation and enrich language education for sustainable development while facilitating critical engagement. The presentation concludes with insights into the development and evaluation of the VR teacher training modules.

Hauptautor: Prof. SUMMER, Theresa (Universität Bamberg)

Co-Autoren: ZIRKEL, Michelle (Universität Bamberg); SCHNELLBÖGL, Claudia (Universität Bamberg)

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