PLAY – Playing for Learning in the Museum: A Case for Understanding Human-Nature relationship through Game-Based Learning

Oliveira G^{1,2}, Kramar N1

¹Musée De La Nature Du Valais, Sion, Switzerland, 2University of Fribourg, Fribourg, Switzerland

Here we present "PLAY – Playing for Learning in the Museum", a project conducted in Switzerland by the CERF's Laboratory for Pedagogical Innovation (LIP) at the University of Fribourg, jointly with the Valais Nature Museum, in partnership with the Teacher Training College of Valais (HEP Valais). The project involves a digital game given to school children during a visit to the museum, designed to help them to inform their relationships with nature with the concept of the Anthropocene.

The Valais Nature Museum has devoted its permanent exhibition to the evolution of the relationship between humans and the environment with a narrative thread essentially based on an anthropological perspective. Its last room, opened in 2014, concludes the exhibition by presenting the Anthropocene, conceptualized as a new proposed epoch of Earth history signaling the profound and pervasive impacts of human activities on the Earth System. By highlighting humans' role in modifying planetary processes and conditions, the Anthropocene disrupts the binary between 'Nature' and 'Society'. The Valais Nature Museum is seeking innovative and experimental approaches to educate visitors about this topic and to reflect on the modern conception of nature as an external world separate from human life. In this context. the PLAY project is dedicated to offer students from 12 to 15 years old an engaging experience to address the consequences of their relationships with the environment. It is a digital game-based learning activity fully integrated with the museum's exhibition and collections. By converting the museum's visit into a gameful experience, it aims to understand how the playfulness of a museum's visit allows students to engage with ill-structured problems, and in so doing to develop their relationship to knowledge. Learners' engagement is seen as one of the key elements of learning. Educators and researchers are studying how new media practices relate with visitors' learning in a museum, by changing visitors' experience in order to foster interactions with the museography, their peers and the mediators. This active collaboration with university-based learning science researchers highlights the importance of authentic natural history collections for engaging the public and teaching about complex environmental issues.