The aesthetic approach to teaching geosciences and sustainable education

This is the author's manuscript

Original Citation:

Availability:

This version is available http://hdl.handle.net/2318/1716825 since 2020-02-21T11:39:09Z

Publisher:
Società Geologica Italiana

Published version:
DOI:10.3301/ABSGI.2019.05

Terms of use:
Open Access
Anyone can freely access the full text of works made available as "Open Access". Works made available under a Creative Commons license can be used according to the terms and conditions of said license. Use of all other works requires consent of the right holder (author or publisher) if not exempted from copyright protection by the applicable law.
The aesthetic approach to teaching geosciences and sustainable education

Tonon M.D.* & Caretto A.

Dipartimento di Scienze della Terra, Università di Torino.

Corresponding email: marco.tonon@unito.it

Keywords: sustainable education, primary teachers, georesources.

Since the last century, loss of natural areas, growing process of urbanization and environmental degradation have distanced us from ecological systems on which, however, we continue to depend, though less awareness. Although our lifestyle makes it increasingly difficult to perceive the indissoluble links with resources of a finite planet and material processing time and recycling. These processes are often not compatible with the frenetic extraction and use of raw materials, the socio-environmental crisis is more than obvious, so as to represent for some of us an urgency that requires new educational aims and a radical renewal of all education system (Sterling, 2006). For over 16 years, our work within the Degree Course of Primary Sciences Education of Turin University provides teachings and workshops dealing with fundamental Geosciences concepts that we lead with the belief that initial training of Primary teachers must take responsibility for promoting a socio-cultural model based on the values of sustainability contributing to developing a strong and awareness ecological identity (Thomashow, 1996). Cognitive and emotional spheres must be integrated in order to achieve a science education that leads at environment respect, through a sense of interdependent relationship that is essential to develop environmental behaviours, sense of responsibility and awareness. The emotions experienced in engaging activities are correlated with significant learning of scientific concepts. Our research focuses on the testing of learning models to develop a deep awareness of the relationships that connect humans to the environment. The failure to perceive the indissoluble connections with nature convinced us to develop transdisciplinary proposals for to life some esthetical experiences in contact with the environment. In some innovative workshops, we privilege introspective aspect and autobiographical storytelling, suggesting theatrical activities whose stage is natural environment. Other our proposals favouring instead manual activities, to complete works of artistic expression or to create some artefacts made with collected raw materials (Ingold, 2013). In our activities the integration between cognitive, perceptual-motor and emotional-relational spheres produces significant effects on multiple levels (Tonon M.D., Perazzone A. e Caretto A., 2017).