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The aesthetic approach to teaching geosciences and sustainable education

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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* (Tomashow, 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).

Ingold T. (2013) - Making: Anthropology, Archaeology, Art and Architecture. Routledge, London.

Sterling S. (2006) - Educazione sostenibile. Anima Mundi Editrice.

Tomashow M. (1996) - Ecological identity. The MIT Press, Cambridge (USA).

Tonon M.D., Perazzone A. & Caretto A. (2017) - Dal golem di argilla agli haiku in natura: alla ricerca di una nuova identità ecologica. In: Kanizsa, Oltre il fare. I laboratori nella formazione degli insegnanti, S.Junior Ed., Reggio Emilia, 107-115.