

**The Deep Time Walk at higher education institutions: a transformational
experience through the story of the living Earth
Carolina de Mello Silva* and Antje Disterheft**

Center for Environmental and Sustainability Research (CENSE), NOVA School of Science and
Technology, NOVA University Lisbon, Campus de Caparica, 2829-516 Caparica, Portugal

*corresponding author: cme.silva@campus.fct.unl.pt

Transformative learning experiences provide people opportunities for critical reflections that may give support to awareness and inner transformation [1]. Learning in and with nature is a way to change a paradigm about feeling and understanding life [2, 3] and that is why it has so much potential for societal reconstruction towards a more sustainable world [4]. I would like to invite Dr. Stephan Harding, a natural scientist that holds a PhD in behavioral ecology from Oxford University, for a Cozy Conversation. He is one of the founders of Schumacher College, a renowned international center for transdisciplinary studies in the UK, and now resident scientist and senior lecturer there. In 2008, he was the leading scientist in the creation of the Deep Time Walk (DTW) [5, 6], an embodied learning activity in which each meter walked counts as one million years in the history of the planet, passing e.g. through formation of the Moon, dynamics of the ocean and continents, the beginning of life and mass extinction events, until today. Today, there are several tools around the DTW available (a free app and several educational materials), and in the past years, such walks have been organized around the globe, often during particular events, like the COP meetings or Earth Day. Stephan Harding and his work, in particular the DTW, have been a big inspiration for the first author's PhD project on holistic approaches, regenerative campus and sustainable wellbeing. For her participatory action research, she applies that activity in her university and investigates how inclusive, balanced and nature-based learning in HEI can encourage young people to engage with global issues. Together with Stephen Harding, we would like to briefly present this activity [6], and discuss our experience with organizing the walks at NOVA also telling the experience of how the walks have been so far. During our conversation we will explore with the audience a concrete phase of the DTW and reflect together how such an experience can be used in higher education. While discussing DTW as an educational method, we are invited to get inspired for new perspectives on our relationship with the earth and how we could build together a strong sense of collective responsibility in academia as change makers. Through the embodied experience we aim to debate how embodied learning in connection to nature can be transformative.

[1] Mezirow, J. (1997) Transformative Learning: Theory to Practice. *New Directions for Adult and Continuing Education*, 74, 5-12.

[2] Capra, F. (2003). Alfabetização ecológica: o desafio para a educação do século 21. *Meio ambiente no século*, 21 (21), p. 18-33.

[3] Wahl, D. (2018) Ecoliteracy: Learning from living systems - Age of awareness. Available at <https://medium.com/age-of-awareness/ecoliteracy-learning-from-living-systems-e162df608981>

[4] Ives, C.D., Abson, D.J., Wehrden, H.V., Dorninger, C., Klaniecki, K., Fischer, J. (2018). Reconnecting with nature for sustainability. *Sustainability Science*.

[5] Stephan Harding *et al.* (2008) The Deep Time Walk. Schumacher College, Devon, UK. Available at <https://www.deeptimewalk.org/about/>

[6] The Deep Time Walk with Stephan Harding [136]. Guest: Stephan Harding. Hosts: Christiana Figueres, Tom Rivett-Carnac and Paul Dickinson. *Outrage + Optimism*, 01 feb. 2022. Podcast. Available at: <https://www.outrageandoptimism.org/episodes/the-deep-time-walk-stephan-harding?hsLang=en>. Access on 15th February 2022.