

Nr: 38

Engaging socioscientific issues to promote multidisciplinary ESD in higher education

Shu-Nu Chang Rundgren, Department of Education

Workshop

Abstract

Working at university today, we all have heard about sustainability and education for sustainable development (ESD). Research have indicated that school teachers and university teachers with different discipline backgrounds have different ideas about ESD and also found ESD difficult to implement in teaching practices. ESD is multi-disciplinary and controversial sociocentric issues (SSI) (ex. using nuclear power as an energy resource) are found as good contexts for teachers to engage ESD and for students to develop responsible citizenship competences for sustainability. In the workshop, we will discuss what ESD and SSI are and participants will experience a didactic model based on SSI and inquiry-based learning.

- The design of the 90-minutes workshop include:
- Getting to know ESD and SSI (15 minutes)
- Experiencing a didactic model (inquiry- and context-based three-step model) (60 minutes)
- Reflecting on ESD, SSI and the didactic model, and looking for opportunities of ESD (15 minutes)

Selected literature

Chang Rundgren, S. N. (2023). Demonstrating didactic models for ESD and Bildung in school education. *Multidisciplinary Journal of School Education*, 12(2(24), 15-31.

<https://doi.org/10.35765/mjse.2023.1224.01>

Chang Rundgren, S. N. (2011). Post it! - A cross-disciplinary approach to teach socioscientific issues. *Teaching Science*, 5(3), 25-28.

Chang Rundgren, S. N.* & Rundgren, C.-J. (2010). SEE-SEP: From a separate to a holistic view of socioscientific issues. *Asia-Pacific Forum on Science Learning and Teaching*, 11(1), Article 2. https://www.eduhk.hk/apfslt/download/v11_issue1_files/changsn.pdf

UNESCO (2020). *Education for sustainable development: A roadmap*. Paris: UNESCO.

UNESCO ESD Website <https://www.unesco.org/en/sustainable-development/education/need-know>