

DEN 16. NORDISKE LÆRERUDDANNELSESKONFERENCE

INNOVATION I UNDERVISNING OG LÆRING

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Jobtitel: Nord University, Campus Nesna

Kvalifikationer

Organisation:

Abstrakt:

Titel på Præsentationen: In depth learning in Natural science. Professionalism or

interdisciplinarity?

Type af præsentation: Oral presentation

Sprog: Scandinavian English

Tema: 5. Nordic contribution to Teacher Education

In the Norwegian school system, the subjects- including natural science, are renewed to give students and apprentices more time for in-depth learning. Deep learning requires, according to Sawyer (2014), that learners relate new ideas and concepts to previous knowledge and experiences, and that they integrate their knowledge into interrelated conceptual systems and look for patterns and underlying principles. In depth learning is also about having the body on the team, getting the body to produce the emotions and feelings that motivate and inspire the student to learn (Dahl & Østern, 2019, p. 51). In this presentation we show examples from our own interdisciplinary teaching projects with natural science and art and crafts in 2 teacher education. The projects include place based learning areas, aesthetic subjects, where knowledge is acquired on through senses and practical approaches with exploring, testing and reflection. We have focused on the participants experiences through observations, blogs and interviews,- also years after the projects. The results indicate that teacherstudents that are not genuinely interested in natural science are engaged in the projects. The students highlight the importance of the bodily experience and seem to remember the projects, including the understanding of complex natural science knowledge in detail years after. Although the professionalism in the different subjects are important, it is equally important for the teacher students to experience the relevance of



the topics interdisciplinary, to be able to engage their own pupils with different motivation for natural science. Keywords: natural science, deep learning, interdisciplinarity, national curricula, Norway. Dahl, T., & Østern, T. P. (2019). Dybde//læring med overflate og dybde. [Depth//learning with surface and depth.] In T. P. Østern, T. Dahl, A. Strømme, J. Aa. Petersen, A.-L. Østern, & S. Selander (Eds.), Dybde//læring-en flerfaglig, relasjonell og skapende tilnærming. [Depth // learning- a multidisciplinary, relational and creative approach.], (p. 39–56). Oslo: Universitetsforlaget. Sawyer, R. K. (2014). The Camebridge handbook of the learning sciences, 2nd Edition. Camebridge: Camebridge University Press.