

## SEFI 2023 Plenary Panel Event 03

Plenary 3

### INTERDISCIPLINARY PROJECTS – MOVING FROM TRANSFER TO TRANSFORMATION IN LEARNING

13/Sept/2023 (Wed)  
9:00am - 10:00am

A Keynote Delivered by **Professor Anette Kolmos**

Summary

In the PBL communities, we have always argued that the deep learning in the projects would compensate for the lack of knowledge from taught courses by the students' ability to transfer knowledge to new areas. Within the disciplinary discourses, this has proved to be valid as the transfer of learning works within the same language and disciplinary thinking and the projects share similarities. However, we have learned that in an interdisciplinary context, where students are to transform their experiences from a disciplinary to an interdisciplinary context, the students do experience difficulties in leading and managing their projects.

This keynote will be based on results from the research project funded by Poul Due Jensen Foundation on interdisciplinarity and problem- and project-based learning (PBL). Key concepts in interdisciplinary types of projects will be presented together with research findings on students learning experiences. These findings are leading to a discussion on transfer and transformation in engineering learning – both in terms of scientific knowledge and generic competencies. The main message is that in order to facilitate interdisciplinary and flexible learning, the engineering curricula needs to be built on a higher degree of transformation and variation.

Professor Anette Kolmos



**Anette Kolmos** is Professor in Engineering Education and PBL, Founding Director (Director 2014-2023) for the UNESCO category 2 Centre: Aalborg Centre for Problem Based Learning in Engineering Science and Sustainability. She was Chair holder for UNESCO in Problem Based Learning in Engineering Education, Aalborg University, Denmark, 2007-2014. Guest professor at KTH Royal Institute of Technology 2012-2017. President of SEFI 2009–2011 (European Society for Engineering Education). Founding Chair of the SEFI-working group on Engineering Education Research. Was awarded the IFEEES Global Award for Excellence in Engineering Education, 2013 and the SEFI fellowship in 2015.

During the last 20 years, Dr. Kolmos has researched the following areas, primarily within Engineering Education: gender and technology, project based and problem- based curriculum (PBL), change from traditional to project organized and problem-based curriculum, development of transferable skills in PBL and project work, and methods for staff development. She is Associate Editor for the European Journal of Engineering Education. She has been supervising more than 20 PhD students and has more than 310 publications. She has been member of several organizations and committees within EER, national government bodies, and committees in the EU.