

## Teaching Experience Design (TXD) Research: a case-study of the development of a classroom interaction environment in nursing education

Wolf, Karsten D. / Küster, Jan / Meyer, Imke / del Ponte, Alexander  
(University of Bremen, ZeMKI Lab „Media & Education“)

Modern research in educational technology development or learning and instructional design has shifted towards a more holistic Learning Experience (LX) approach (Jahnke et al., 2022), integrating user-centred design (UCD), usability research, user experience design (UXD), software development and learning research. So far, the focus of this approach has been on the learner, mostly ignoring the teacher perspective, although in teacher- or instructor-led online courses, but especially in face-to-face teaching, there is a high technical and cognitive demand on teachers to orchestrate teaching-learning arrangements. Surprisingly, there is a lack of research on the design of educational technology from the teachers' perspective. To address this problem, we propose a complementary Teaching Experience Design (TXD) research framework and demonstrate it in a case study situated in nursing education.

After a brief introduction to the nature, quality and motivation of active learning in the classroom, we systematise teaching approaches to support active learning. We then identify a lack of technology enhanced live teaching support (TELTS) and analyse current approaches such as classroom management apps and audience response systems.

Based on a case study of the development and evaluation of a classroom interaction environment (CLAIRE) for two projects in nursing education (CARO; caro+onko), we then analyse the specific requirements of teaching to formulate goals and methods for teacher-centred design and evaluation.

We then present an example of a TXD study in the CARO projects to support teachers in teaching relatively unfamiliar subjects with a focus on stimulating student activation, flexible classroom management and group interaction.