Designing for Transformational Change in School
Digitalizing the Digitized

av

ANNIKA AGÉLII GENLOTT

Akademisk avhandling

Avhandling filosofie doktorsexamen i Informatik,
som kommer att försvaras offentligt
torsdag den 10 december 2020 kl. 13.00,
Hörsal F, Örebro universitet

Opponent: Professor Ulf Melin
Linköpings universitet
Linköping

Abstract

Annika Agélii Genlott (2020): Designing for Transformational Change in School: Digitalizing the Digitized. Örebro Studies in Informatics 18

Digital technologies have gained a prominent role in education and schools, but research concerning how digital technologies can create better conditions for improved teaching and enhanced learning for students is scarce and inconclusive. Successful use of digital technologies requires a complex combination of interacting factors, including integrating technology and pedagogy as well as organizing and leading a structured transformation process. The capability of school organizations to lead and support the digitalization process is an under-researched field compared to the well-established focus on individual stakeholders.

This thesis examines how experimentation and innovation processes in school can be designed and pursued to support and enhance digitalization across an entire school organization by using a Design Science Research (DSR) approach to answer the question: *How can a school organization at municipal level lead digital transformation through the digitalization of teaching and learning processes in an organized, professional, and, as far as possible, scientifically based way?*

The findings show that the design and use of the Information System Artifact model (ISA) together with a DSR development method can support both improved teaching and enhanced learning *within* and *across* a school organization. Effective use of digital technologies to improve teaching and learning across the school organization requires fundamental changes of ordinary practices and engagement as well as commitment from school authorities and school leaders.

This thesis contributes with empirically and theoretically based insights from leading (digital) transformational change in school through the iterative design of IS artifacts used as a driver and quality control for the shift from digitization towards digitalization aiming at improved teaching and enhanced learning.

Keywords: Design Science Research, Digitalization, Information Systems artifact, School organization, School leadership

Annika Agélii Genlott, Örebro University School of Business
Örebro University, SE-70182 Örebro, Sweden,
annika.ageliigenlott@oru.se