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Didaktik for distance education in secondary and adult education

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Abstract

This article analyses secondary and adult education teachers from six schools developing distance teaching in Sweden. The teachers participated in a professional development program (2019–2022). A Didaktik theory was used to analyse factors for distance education on a structural (e.g., content, intentions, methods, media, students) and on an organisational (e.g., professional, normative conditions) level. The primary data is interviews with teacher groups during a Design-Based research process. The analysis suggests that the teacher groups developed professionally as distance teachers by reflecting on and testing different ways to communicate with students and structure their courses digitally. The article suggests principles to improve distance education on course level and school level.

Keywords: Distance teaching, Didaktik, Design-Based research, professional development

Introduction

There is a growing interest for developing distance education in adult and secondary education (Corry, Dardick & Stella, 2017; Barbour & Reeves, 2009; de la Varre et al., 2014). In a review of eleven studies, Baran et al. (2011) investigated how to transform the online teacher role. Their results suggest that online teachers should be encouraged to pursue pedagogical inquiry and creative solutions while being introduced to new technologies. Teachers need faculty support to transform their teaching practice by collaboratively reflecting on and questioning their past experiences and beliefs. Baran et al. (2011, p. 435) conclude that:

> *Through this process, teachers need to be provided with a collaborative working environment where their needs are listened to and solutions are suggested according to the variables in their teaching contexts, such as their level of technology use, schedules, student profiles, and their teaching methods in the face-to-face classrooms.*

The review by Baran et al. (2011) confirms that teachers need time to reflect on previous teaching experiences while learning about and testing new teaching methods.

This study aims to develop theoretically and empirically based principles for distance teaching through a theory of Didaktik and Design-Based research as a methodology. The study is a

qualitative inquiry into a research and development program in Sweden that developed distance education in upper secondary schools and adult education during 2019–2022. The aim is informed by the program and the teachers who expressed a lack of frameworks for teaching at a distance. The teachers' raised questions relating to planning distance courses, structuring content online and establishing relationships with distance students, however, the teachers also addressed several organisational issues when developing distance teaching practices. This made us to consider an extensive theory of Didaktik to analyse the interviews with six groups of teachers.

Didaktik is a German and Nordic concept that refers to different theories for teaching and studying (Hopmann, 2007). Didaktik assumes autonomous teachers who reflect on different factors (e.g., aims, content, methods) concerning the students and contextual matters when teaching (Jank & Meyer, 2003). Teaching also takes place within certain organisations, societies and cultures that shape the conditions for teaching therefore Didaktik also addresses normative (e.g., the curriculum) and sociocultural (e.g., the context of the teachers and the school) factors of teaching (Uljens&Ylimaki, 2017). Didaktik provided a structure for analysing the empirical material on two levels: a practical level and an organisational level. The research questions are as follows: *What Didaktik factors are highlighted in the distance teachers' practises? How do the teachers develop their distance teaching?*

The six schools in this study worked with different variations of synchronous (in real-time) and asynchronous (delayed) distance education (Hrastinski, 2008). Three schools offered distance courses that students individually completed asynchronously or synchronously online. Three schools offered synchronous courses to other schools via a video conference system[1]. The teacher was often physically present with one group of students and the rest of the group joined the lesson from their campus. The teachers all taught upper secondary school courses. Three organisations were upper secondary schools. Three schools were adult education providers offering upper secondary courses meaning all six schools followed the same curriculum although their contexts and student population varied. This study may advance distance education as it offers theoretically and empirically based principles that can support and inspire teachers and school leaders in the future.

Analysis

The systematic analysis occurred during the Fall of 2021. The material was transcribed verbatim and read through as a whole. We removed information that could identify the schools or the teachers. All interviews were conducted in Swedish and translated to English by the researchers. After the first reading, the Didaktik theory discussed above was decided upon as it allowed analysis on two interconnected levels, and it followed the overall aim of the program. The *structural analysis* identified practical concerns of teaching in digital learning environments regarding content, intentions, methods, media, participants, and sociocultural contexts when teaching. The *factor analysis* identified possibilities and challenges with

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[1] In Sweden this form of distance education is referred to as remote teaching in legal and policy documents (Lindfors&Pettersson, 2021)

developing distance courses in digital learning environments, the importance of faculty support, and the teachers' workload. Normative and professional factors were curriculum guidelines and previous subjective experiences among the teachers.

Discussion

This study explored how distance teachers in six schools developed their teaching practices and presents issues they identified in their teaching practices. The teachers moved between reflections on practical and organisational levels. These movements proved to be fruitful ways to focus and inspire the development work. This study confirms that distance teachers require professional competence development that allows them to test different online teaching strategies and reflect didactically on possibilities and challenges with the digital platform, which is in line with previous research (cf. Baran et al., 2011). The digital platforms (itslearning, Microsoft 365, Google Classroom) for teaching were identified as organisational and professional factors. How the platforms were implemented within the faculty had implications for teachers' professional development and competence to teach online. In this study, faculty discussions were fruitful ways to learn more about recent updates or new features of the digital platforms while teaching strategies and course structures could be discussed. The curriculum was identified as a normative factor through the nationally stipulated assessment criteria. The teachers deemed these criteria challenging to assess online. The analysis suggests that distance teachers may need a curriculum that acknowledges onsite and online knowledge assessment.

Before the covid-19 pandemic, teachers often included onsite meetings to support distance students' study strategies and digital competence. During covid-19, onsite meetings were impossible, which prompted the teacher groups to question other ways to support students. In many cases, synchronous online meetings or introductory asynchronous assignments worked well. This study confirms that relevant and flexible use of synchronous and asynchronous communication can support teachers and students' studies in distance courses (cf. Hrastinski, 2008; Watts, 2016).

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