

Chapter 13

Possibilities and Challenges in a One-to-One Initiative from a School Leader Perspective

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ABSTRACT

The uptake and use of digital technologies from a school leader perspective was studied in Unos Umeå, a One-to-One (1:1) laptop initiative between Umeå University and the municipality of Umeå in Sweden. Through a survey and interviews, school leaders at two schools were closely followed. Possibilities and challenges in school leaders' expected activities and activities during the first two years of the 1:1 initiative were analyzed using the Ecology of Resources Model and the analytical concept of filters (Luckin, 2010). How school leaders prioritize leadership for 1:1, lead to increase subject-specific collaboration for teachers, document best practice, work with administrative systems to structure and follow up teachers', students' and own work are reported. It is concluded that how school leaders lead to support the uptake and use of digital technologies in the classroom will have implications for sustaining school change and the work towards modern digitalized learning environments.

ORGANIZATION BACKGROUND

Access to digital technologies in the form of One-to-One (1:1) initiatives in schools in Europe continues to increase (Bocconi, Kampylis & Punie, 2013) along with efforts to support and sustain the shift toward modern digitalized learning environments. However, the uptake and use of digital technologies in the classroom and the hopes for school change involve challenges in achieving Technology Enhanced Learning

(TEL) in general (Fischer, et al., 2014) and in specific in K-12 practices (Olofsson, Lindberg & Hauge, 2014). The Organisation for Economic Co-operation and Development (OECD) reports that even when the digital resources are accessible, there are difficulties in attaining the promotion of students' development of 21st century skills (OECD, 2012) and furthering teachers' activities for the uptake and use of digital technologies in schools takes time (Ertmer & Ottenbreit-Leftwich, 2013; Richardson et al., 2013; Vrasidas, 2014).

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It may be that school change is often understood as a singular process with a single explanation, rather than multiple, complementary mechanisms (Engeström, 2008). However, for change to take place, schools as cultures need to be receptive to innovation and reform (Fullan, 2007). Here, the role of the school leader appears to have strong impact (Dexter, 2008; Williams, 2008).

Hargreaves and Fullan (2012) see school leaders as empowering educational change by leading the professional capital, with a position to constantly push and therefore move the school system forward. This, perhaps, is even more in focus regarding school leadership for digital technology access where school leadership in the literature is pointed out as a key educational process for supporting teachers' uptake and use of digital technologies (Dexter, 2008; Kirkland & Sutch, 2009; Hauge, Norenes & Vedøy, 2014). Recognizing the challenges for school leaders, OECD (2012) calls for four levels in improving practice: redefining school leadership responsibilities, distributing school leadership, developing skills for effective leading as well as making the profession of school leader attractive.

Educational challenges like these are also echoed in Sweden, where the National Agency for Education (2013) reports that one third of the school leaders have neither sufficient competence to lead schools' strategic work with skills in Information and Communication Technology (ICT), nor to develop the use of ICT in teaching and manage ICT-related legal issues. Acknowledging the importance of knowledgeable and committed school leaders for the uptake and use of digital technologies in schools to be advantageous, national efforts for increasing school leaders' skills in digital technologies are recommended in a recent report from the Swedish Digitalization Committee (SOU 2014:13, 2014). Here, two central research issues arise. First, what possibilities and challenges do the school leaders in this study face in regard to the uptake and use of digital technologies in the day-to-day work in a modern digitalized learning

environment? Second, how do these possibilities and challenges have impact on the conditions for change in school? This chapter aspires to study these school leader related possibilities and challenges over time using the following research questions:

- What expected activities do school leaders report regarding the uptake and use of digital technologies in school?
- What activities do school leaders report after the first and second year in the 1:1 laptop initiative concerning the work with digital technologies in school, and further what transitions in activities can be identified?
- How can these transitions in activities during the first two years, from Phase 1 to Phase 3, be understood as possibilities and challenges for pedagogical change in school?

SETTING THE STAGE

When setting the stage relevant literature for this study is related to school leadership for ICT, the uptake and use of digital technologies and the changes thereof. This section is organized as follows: *preparation and new skills, context and culture, supporting teachers' and students' uptake and use* and, more specifically, *leadership for ICT as leadership for 1:1*.

School Leadership for ICT: Preparation and New Skills

Moving toward a new and modern vision of technology-smart and learner-centered schools reaffirms that the role of the school leader continues to be important and can either facilitate or impede complex change (Sheppard & Brown, 2013). School leaders need to be prepared for the task of leading the uptake and use of digital

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