SPECIAL ISSUE: THEORY AND PRACTICE IN REMOTE TEACHING, ONLINE LEARNING, AND DISTANCE EDUCATION FOR K-12

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ABSTRACT

There are many situations where digital technology has served as the lifeline or salvation for society. Unexpected and unpredictable situations like catastrophic floods, blizzards, earthquakes, and more recently the Covid-19 pandemic have forced families to stay home, meaning that digital technologies have become important tools for people to work and learn. Other examples are societal and regional challenges such as lack of qualified teachers, diminishing birth rates, and difficulties in filling classrooms that force digital and educational development. The symposium held in May 2021, which resulted in this special issue, was intended to explore possibilities for ensuring equal access to education in rural schools using remote teaching. At the symposium, different strategies to increase access to education in the context of K-12 using digital technologies was presented and discussed. It brought together researchers from Europe and North America, all represented in this issue.

Keywords: Digitalization, Digital technologies; School.

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The digitalization of society is one of the fundamental challenges for the future. The development and broad availability of digital technologies has created new unique challenges, opportunities and pitfalls for rethinking and reinventing learning, education, and collaboration in the digital age. However, the existence of, and access to, new information technologies is necessary but not sufficient (Fisher, Lundin & Lindberg, 2020). Of complementary importance is who will be empowered to participate, design, create, invent, and choose to use technologies to enhance their individual and professional learning (Fransson, et al, 2019).

There are many situations where digital technology has served as the lifeline or salvation for society. Unexpected and unpredictable situations like catastrophic floods, blizzards, earthquakes, and more recently the Covid-19 pandemic have forced families to stay home, meaning that digital technologies have become important tools for people to work, learn and keep contact with the rest of society (Bond, 2021; llomäki & Lakkala, 2020; Yandell, 2020). These situations of immediate character have on one hand forced digital and educational development but have on the other hand required an instant readiness for conversion and adjustment without time for reflection.

Except from these sudden and extraordinary occurrences, there are historical, societal, and regional changes that require innovative and flexible digital solutions (From, Pettersson & Pettersson, 2020; Stenman & Pettersson, 2020). As already expressed by Lindfors and Pettersson (2021), before Covid-19, challenges of urbanization such as a lack of qualified teachers, diminishing birth rates, and difficulties in filling classrooms are such examples that "have forced digital and educational development, often led, innovated, and accelerated in rural areas" (p. 250).

The symposium held in May 2021, *Theory and practice in remote teaching, online learning, and distance education for K-12 schools,* which resulted in this special issue, was intended to explore possibilities for ensuring equal access to education in rural schools using remote teaching. At the symposium, different strategies to systematically and proactively increase access to education in the context of K-12 using digital technologies was presented and discussed. It brought together representatives from European as well as North American universities, complementing the Nordic countries, and initiated a discussion about the conditions for remote teaching that have bearing on education before, during, and beyond the Covid-19 pandemic.

In the first article, "Looking Back to See Ahead: An Analysis of K-12 Distance, Online, and Remote Learning During the Pandemic," Michael K Barbour goes back into the history of online K-12 learning and positions the Covid-19 pandemic in a perspective of previous disruptions on a global scale. He uses this as a backdrop to further our understanding of the current situation, and through this he provides an argument for what the future might hold for education. His

argument can be summarized as that the way in which both practitioners and scholars have made sense of what has occurred over the past 18 months will impact both regular schooling and how we prepare for future crises.

The second contribution stems from Scotland. "Shifting selves and spaces: Conceptualising school emergency remote teaching as a third space" by David H Johnston, Mark Carver, Katrina Foy, Aloyise Mulligan and Rachel Shanks, provides one such account of how teachers have perceived that their work has changed during the pandemic. The pandemic is here viewed as a catalyst, the unprecedented change when school classrooms suddenly moved online is in focus. In the article, the authors use the framework of Bhabha's third space (1994) as a way of re-imagining the new spaces (both physical and virtual) which were created in response to the pandemic. The data reported comes from two research studies in Scotland conducted during the 2020-21 academic year covering both the 2020 and 2021 lockdown (stay at home) periods. Across both studies, digital technology played a key role in how this third space was mediated. Technology facilitated the emergency response, but questions remain as to what the legacy of this forced shift will be.

The third paper in this issue "In Need of Development, Learning, and Research? On the Possibilities of a Common Point of Departure for Digital and Educational Development" by From and Pettersson, explores issues related to the need for development that might come into question once a municipality decides to work towards an increasingly digital education. In this paper, the specific context for development lies within the area of remote teaching, and the changes implied are formulated as needs on a strategic level. These findings are in line with the need to be prepared in a future perspective on the now later stages of the current pandemic and other occasions that might call for similar reactions in the schools (such as partial or total lockdowns). In the paper, the development of a specific quantitative instrument is discussed as a way to generate findings and development needs relevant to both research and school development.

The fourth paper in this issue, "Through the lens of situated learning and levels of scale – theorizing development of remote teaching and the role of on-site facilitators" by Siljebo and Pettersson, provides an example and an argument for a specific theoretical understanding of the practice of remote teaching as it has emerged in a Swedish context. The aim of the paper is to contribute to much-needed theoretical development within this field, a field otherwise mostly characterized by empirical contributions. The paper has a primary focus on the practice and perspectives of the on-site facilitators working in remote teaching, and through the empirical example a theoretically informed understanding of the development and use of remote teaching in a Swedish context is provided. The interactions between systems of human activity in education and the relationships enacted in practice through their interaction is highlighted through the use of the concept levels of scale in situated learning. Levels of scale provide a means to conceptualize the historical development of remote teaching as the large scale, and

the remote learning environment as the small scale. Integrating the levels of scale and tracing the historical development of remote teaching in Sweden into the enactments taking place in a classroom of modern language teaching, a concrete theoretically informed understanding can be provided.

In the fifth paper, "A Theoretical Framework for Synchronous Remote Teaching? Reshaping the Pedagogical Triangle" by Skog, the theoretical understanding of the remote teaching context in Sweden is further conceptualised and developed through the use of educational theories from the research field of distance education. Skog explores how synchronous remote teaching can be understood as a pedagogical practice and elaborates upon a possible framework with which to understand the practice theoretically with a potential to guide a future analysis of this specific practice. This particular Swedish policy-driven practice is implemented via digital technology, and the teacher and the student are accompanied by an onsite facilitator who is present with the students. In the paper, the traditional pedagogical triangle as a model of teaching and learning is revisited, examined, and explored in relation to remote teaching as a new pedagogical practice where additional relations are added to the model in accordance with the new practice. The pedagogical triangle is therefore reshaped into a pyramid, making a place in the model for the onsite facilitator's participation in remote teaching. Skog considers this elaboration to be a first step toward establishing a theoretical understanding of remote teaching practice on its own terms.

In the final paper in this issue "A review of Indigenous Efflorescence. Beyond revitalisation in Sápmi and Ainu Mosir" by Parfa Koskinen, a further theoretical contribution for understanding a specific remote teaching practice in Sweden is presented and elaborated upon. Parfa Koskinen departs in the review from the editors' claims that it is misguiding to think that indigenous languages have vanished or disappeared. Instead, they mention that successful efforts are made all over the globe within various indigenous communities to revive, revitalise, reclaim, and engage in other re-workings of cultures and languages. In the review, Parfa Koskinen refers to the main argument for the concept of indigenous efflorescence being that it exceeds re-workings by focusing on processes and opening up different futures. To be indigenous is not to reproduce precolonial ways of being, but to translate them into the present, to draw on them as inspiration and authority for generating indigenous ways of living in the twenty-first century. Throughout the review, Parfa Koskinen provides a context for the review in her own ongoing thesis work on remote Sami education. She concludes from reading the book that enabling and that efflorescence is an interesting theoretical concept to investigate, also outside of the indigenous research community. But in the context of this special issue in particular, questions that arise are for instance how relationships to other people, the past, land or other aspects are promoted and supported in remote teaching, online learning and distance education.

In addition to the empirical knowledge contributions in this issue, the articles provide valuable knowledge in terms of methodological and theoretical

development. As K-12 schools around the world now are entering what Barbour in his article calls Phase 4 (Emerging New Normal, with unknown levels of online learning adoption), such knowledge is very much needed (see also Barbour, 2019). This may involve studies of new forms of education and pedagogy that emerge when digital technologies are used for both unpredictable and historical reasons. One such example is immersive learning technologies and hybrid learning classrooms with a cohesive class but with students enrolled in learning both from different physical locations ("roomis" and "zoomis" [see Barbour's article in this issue]). Predicting the future is an impossible task, but a reasonable conclusion, based on this special issue, when it comes to K-12 schools, seems to be that parts of the teaching will go back to pre-pandemic business as usual, some practices developed during the pandemic will survive, and new post-pandemic practices will be developed. The question is what those might be.

FUNDING STATEMENT AND ACKNOWLEDGMENTS

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