

# Becoming Technologist; Shaping Digital- Inclusive Learning Spaces

Anne B. Reinertsen\*

Department of Avdelning for lärarutdanning, Østfold University College, Halden, Norway

## Description

I wrote the article about fuzzytechie languaging with a wish to transcend a potential deadlock in digitalization and digital pedagogies, uncovering the lived experience of bias and procedural inequity. However, inequity, inequality and discrimination buried in institutional policies and procedures, technologies, or rules and regulations, are difficult to uncover in any direct manner. They are often unconscious and/or hidden in what we take for granted. Furthermore, the collection of information or data regarding minority progress in schools with respect to grades or other aspects of performance, or even micro-aggressions, is customarily done quantitatively, hence with methods that might obscure or even shield privilege embodied in majority-constructed policies. Digitalization and the algorithms we build from might also amplify such conditions and cement a deadlock even further. I indirectly therefore ask, how can we think adequately about the relation between knowledge, learning and ethics in educational systems and societies that are governed by algorithmic digital systems and objects endowed with agency? Further, how can we think adequately about the relation between ontology and language in educational systems and societies that are governed by such algorithmic systems and objects?

There are at least two main reasons for asking such questions: 1) the technological speed, progress and digitalization of society in general, of education in particular. Material consequences of harm done by Artificial Intelligence (AI) and algorithms. And again, I here think of algorithms of oppression, reproduction of misrepresentations. However, unbiased algorithms of any kind are not possible. They are part of constructs we live by. I am afraid therefore of losing education as a Public Good to big tech. I am afraid technology is not sustaining democracy and democratisation of knowledge and knowledge creation. Intra- and interrelated, 2) the urgent need for natural and social sustainability. The one cannot be separated from the other. Technology optimism and circular economies and thinking might however turn out to become part of a cruel optimism leading to yet more blind spots of understanding. Relations of cruel optimism exist when something you desire is actually an obstacle to your flourishing. Arguing that the historical (digital) present is perceived affectively before it is understood in any other way, I try to trace my auto ethnographic affective and aesthetic responses to the dramas of adjustment that unfold amid talk of digitalization, innovation, learning, precarity,

contingency, and even crisis. I am trying to understand the effects of digitalization through the sciences and humanities both.

Presenting a variety of examples of different digital practices for example is in itself not sufficient to illustrate and maintain the complexities of digitalization and inclusive digital pedagogies. For this to truly occur, I claim that digital practices need to be understood as existing in tensions with one another, as potentially contestable within and across contents and subject matters, and open to exploration, adaptation, and even rejection. Further that unless there are built in modalities in the concepts/ language ultimately the algorithms we use, digitalization will polarize, hierarchize, instrumentalize, reduce- and in the long run create new divisions and discriminating practices, blind spots of understanding. My focus in the article is therefore on concepts as always performative and methodological, and the engagement with nature culture and theory-practice complexities and openness. Every word, algorithm hence dichotomy has to be "conquered" and materialized through experience. Elsewhere I refer to this as a breaking up with language. It is as impossible as being algorithmically unbiased.

To elaborate, between- and within concepts or words, there are articulations and distinctions occurring simultaneously. As a consequence, I want to avoid a view of digital pedagogies seen as being produced in technological isolation or in advance, but always as a result of multiplicities and/or bodies (read concepts) coming together in assemblages. I argue for a strong theoretical foundation and thoroughness, a constant thinking with theory. These are processes of affective computing and/of algorithmic nonlife, processes of becoming technologist with the aim of shaping digital-inclusive learning spaces. I think this is urgent and fitting for the contemporary interdisciplinary and collaborative digital and pedagogical education and research culture of a new generation of thinkers and makers. It ultimately represents a reorientation of digitalization through asking if the abstractions one attempts to move from imitation to imagination are abstract enough in order to think more and other?

Working with students digitally, lines, arrows, circles and points pop up everywhere. They add fugitive inscriptions on screens, papers, books, drawings-surfaces that act as canvasses for imagery and writing even with ephemeral materials like affects, words,

\*Address to correspondence: Anne B. Reinertsen, Department of Avdelning for lærarutdanning, Østfold University College, Halden, Norway; E-mail: anne.b.reinertsen@hiof.no

thoughts, dreams and wishes. It takes shape at home, on the school grounds, as well as behind our desks and computers in the processes of grasping for knowledge and learning trying to make sense of what we witness both in our educational institutions, our local communities and close surroundings. We live in a time of radical transformations, experimental solutions and continuous contestations.

I hope this fuzzytechie mess that I write contributes to such reorientations of digitalization and digitalized education systems, programs and pedagogies to a novel and continuous process of variation and diffusion. It implies a move from a mechanistic and technological approach to digitalization and digital pedagogies to a more open, flexible and inclusive one. Ultimately, the article is a call for exploration and experimentation constructing a continuum of variation around digitalization and thus disrupting processes of reterritorialization. Research wise the article represents a stepping beyond the endeavors of traditional quantitative and qualitative research efforts to achieve validity. Rather evaluative categories like care, strength, joy, extraordinary, interesting and meaningful become important. Thereby they also dissolve the binary (read algorithmic

again) division of trustworthy research/non-trustworthy research to recognize the self-organizing properties of data itself and open up all kinds of possibilities for becoming, including possible digital assemblages, phenomena of interest, (non) knowledge and/within knowledge productions. Through this, the intimate and the political are rethought together and actionalized. This is what I refer to as data philosophy.

I suggest that digitalization and research on digitalization and digital pedagogies be designed along the features of minor science offering new possibilities to discover and explore the between, as well as the flows of affects that produce a desire to learn and a force for justice. Digitalization and studies of digitalization in/and pedagogy in which affective forces are actionalized and the effects of affect have become possible to evaluate.

**How to cite this article:** Reinertsen, Anne B. "Becoming Technologist; Shaping Digital- Inclusive Learning Spaces." *J Sens Netw Data Commun*11 (2022) : 137.