Social technologies in comprehensive schooling

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Social technologies

In this special issue, we explore a particular feature that characterises late-modern education practices in Denmark, the Nordic countries, and beyond. We call this feature social technologies. It is not new or strange for schools to make use of social technologies. For example, classroom teaching is a social technology that has been used for more than one hundred years. Acknowledged as an effective method of teaching and as a contributor to the creation of classroom communities, it has simultaneously been criticised for having a hidden curriculum (Bauer & Borg, 1976). Classroom research shows that the primary lesson students learn from classroom teaching is not acquisition of the subject matter, but patience and the experience of refusal and interruptions.

A social technology is created from «the use of a technology with a meaning or a purpose» (Foucault; Jensen, 2005, p. 43). A traffic light, for example, is a piece of technology that turns into a social technology when used to adjust the behaviour of road users. Classroom education is a social technology because it regulates the classroom relations and interactions of the teacher, subject matter and students. This regulation has both explicit and implicit purposes; it is argued that a social technology makes teaching and learning possible in the classroom. At
the same time, however, it aims to socialise students so they develop into compliant or critical individuals about the culture and society in which they are raised. The latter purpose is not often discussed; for this reason, it is termed a hidden curriculum.

New social technologies are developed and old social technologies are transformed. These actions have occurred over the course of many years. For example, around the turn of the twentieth century there was a strong movement in Danish schools to abandon the traditional method of teaching students on a turn-based, individual basis. In 1903, Ernst Kaper published a now widely read book that describes effective classroom teaching:

Organised classroom instruction relies on only one artifice. The teacher poses his question, pauses, and allows students who know the answer to raise their hands... The question is addressed to the entire class so that all students, without exception, reflect on the answer ... and so each and every one gets to be the spokesman of the class, as he/she must give an answer. (Kaper, 1903, p. 59)

**Traditional and new social technologies**

By employing the notion of social technologies, we want to show that education is increasingly characterised by the introduction of numerous techniques. These techniques frame procedures for how educational practice can take place through project work, logbooks, student plans, teamwork, individualised testing, procedures for family education, and so forth (Moos, Krejsler & Kofod, 2007). Social technologies have always been an emphatic and inevitable part of basic schooling. What is new, however, is the sheer and overwhelming number of coordinated technologies that have swarmed schools and the educational system in recent years. Also, many of these technologies are working in contradictory directions.

The allusion to mechanics and engineering conjured by the term social technologies is well intended, serving to underline a structural homology between the engineer and the teacher. The engineer relies on a general technology and on a set of basic assumptions that refers to mathematics, physics, and so forth. On the basis of this general technology, a variety of specific technologies are developed to apply the technological knowledge to the building of bridges, skyscrapers, cars, etc.

Similarly, the teacher relies on a general technology of socialisation, individualisation, Bildung, and democracy. This technology refers to the human sciences in general and the educational sciences in particular. From this general technology, a number of particular technologies are extracted and developed. Teachers and learners are required to employ these technologies in order to construe individualities/subjectivities within the appropriate framework of a given society (Deleuze, 1995; Krejsler, 2006; Moos et al. 2007).

This functionality of social technology can be illustrated by employing the concept of formatting, taken from computer language, as a metaphor (Krejsler, 2002). This metaphor underlines the paradox that, in order to structure their surrounding environment as an initiation into a particular form of socialisation, the teacher and the students must allow themselves to be structured, or formatted, by the rules that the dominant social technologies in education put at their disposal. On the one hand, the teacher is constituted as a teacher through the ways the rhetoric and procedures of currently dominant social technologies allow him/her to operate. On the other hand, this rhetoric and these procedures are put at his/her disposal so that teachers, students, and parents
may act autonomously. Because of computers, we see that formatting has its own compelling logic: the floppy disk, or the hard disk, must be supplied with steering data, whereby it is then divided into tracks and sectors. The user cannot write on, to use an outdated technology, the floppy disk until it has been formatted.

Some of these technologies grow or evolve through daily practice, while others are inflicted, imposed upon, or applied from outside the actual practice. Teachers develop methods for issues such as the regulation of social relations in class to properly facilitate teaching and learning. These methods might well change over time, but at any given time, they seem to be the ‘natural way’ that of working. These methods are not discussed, so the power invested in them is concealed. Other social technologies are brought to the field of practice from the field of educational policy and are often described as ‘natural’ or ‘neutral’ tools for practitioners. Again, their power is concealed and not up for discussion (Moos et al. 2007). Social technologies are, under any circumstance, powerful but «silenced forms of power».

Social technologies and democratic Bildung

Social technologies can function as practical methods, tools, and forms of organising teaching and learning that are of great assistance to teachers as well as students. Individual teachers or students have no need to reinvent methods and materials in order to teach or learn effectively. However, the use of (silenced) social technologies without critique or discussion can be problematic; teachers and students are trapped by unknown and possibly unacceptable forms of influence and thus by unknown and unacceptable values and norms.

This entrapment would not be in accordance with the core purpose of schooling in the Nordic countries. In these countries, schools are seen as societal institutions. They were established to assist the family, as well as other cultural institutions, in raising children to become autonomous adults in charge of their competencies who actively and critically participate in the social, cultural, and political spheres of life (Moos, 2007).

These important and difficult visions of a democratic Bildung must guide everyday life in schools. A step in the right direction should involve a discussion of Basil Bernstein’s (1996, p. 6 f.) democratic rights of students:

- **Enhancement**: Students should acquire critical understanding and confidence in action,
- **Inclusion**: Students should be included socially, intellectually, culturally and personally in communities and should simultaneously have the right to be autonomous, and
- **Participation**: Students should have the right to participate in processes where decisions are made.

From the perspective of democratic Bildung and the democratic rights of students, it is important to present the strategic scope of action that emerges as teachers stage interaction with students, colleagues, school leaders and parents through social technologies. The authors of this special issue of Norsk Pedagogik (Nordic Educational Research) will scrutinise and bring up for debate key social technologies that currently trouble as well as benefit Danish and Nordic schools. By doing so, we hope to encourage professionals interested in today’s schools to thoroughly scrutinise what is at stake whenever they meet and make use of such technologies.
Introduction to the articles

In the article «A general context for new social technologies» Lejf Moos analyses new social technologies and the general context of governance, power, and influence in schools and educational systems. Moos claims that globalisation is creating a new framework for life in schools because of a convergence of steering rationales and mechanisms in states, schools, and educational systems. From supra- and trans-national agencies such as the OECD and the EU Commission, a trend of social technologies that build on indicators, comparison, contracts, reflexivity, and soft governance exists that can be seen in national and local systems, schools, and classrooms. Moos constructs and discusses a communicative model of power and influence in order to enable and facilitate vertical analysis.

In the article «The student plan: A social technology balancing reflection and control» John B. Krejsler emphasises the need to reduce the increasing complexity that modern schools must manage amid an environment of increasing student diversity, differentiated teaching, documentation of achievement, etc. The article traces the genealogy of the student plan as a social technology in which powerful stakeholders inside and outside of the school have an interest. Krejsler demonstrates that student plans contain the struggles of these stakeholders. He focuses on different and often conflicting discourses, including individualisation, a neo-liberal discourse of individualisation and freedom, and a neo-conservative discourse of re-traditionalisation through academic disciplines and accountability. Krejsler investigates and analyses the national context for the student plan as it is practiced in different schools.

In the article «Between the small and the big democracy» Klaus Kasper Kofod examines trends in the discussion of democracy in the schooling system. In the last approximately five years, a discussion has taken place in the schooling system about whether or not centralisation with centrally designed tests and the demand for quality reports, in line with general international trends from the OECD, PISA, and others, have undermined democracy in schools. Kofod discusses different types of democracy: the small democracy inside schools, and the large democracy in the municipalities and the parliament that decide the overall framework of the schools.

Both forms of democracy are legitimate, but they function along different lines of logic. It is argued that the principals should be able to cope with these different social technologies using democratic processes, and that they must be strong principals. The point, however, is that these two forms of democracy and the notion of a strong principal need not contradict the democratic processes present in schools. In fact, they are in line with the democratic history of schools. Thus, principals are pulled by both the logic of the small and the big democracy. The school’s leadership must then be able to handle both forms.

In «Collegiality and teamwork: Two logics in educational teamwork» Kirsten Marie Bovbjerg and Marianne Søgaard Sorensen deal with teamwork as one of the social technologies that, also within the teaching sector, currently contributes to changing employees’ understanding of their work life, in this case, that of teachers. Based on empirical studies done on vocational colleges, teamwork is contrasted to what the authors call collegial co-operation, which comprises social and solidarity relations that in a variety of ways and to different degrees have always existed among colleagues. By examining the structure of teamwork and collegial co-operation, their social aspects and values, as well as their approach to knowledge, the authors attempt to discover what factors...
are actually at play when a school introduces teamwork among teachers. The two co-operation logics appear to make use, for example, of two different types of democratic approaches that in turn influence the democratic domain in which students learn.

The article «Who evaluates the evaluation? An analysis of computer-adaptive testing using literacy as an example» by Lars Holm analyses computer-adapted testing as a social technology in Danish schools. In this article, tests are seen as a social technology that aims to transform and standardise institutional practices in the overall schooling system’s standards. Holm identifies three levels of analysis: the test itself and its position on a subject, the assessment, and the knowledge of how the tests are formatted. The second level, the assessment, focuses on institutional use of tests. The third level of analysis, knowledge of how a test is formatted, focuses on the long-term effects of the tests on the students, institutions, schools, and society. In this section of the article, Holm addresses broader ethical and democratic perspectives of the testing. These perspectives point to potential conflict between the ‘experts’ who construct and decide how the tests are implemented, and the ‘users’ who take the tests and apply the results to students and parents – without ever discussing whether or not the tests are appropriate.

In «The betwixt and between family class» Hanne Knudsen introduces and discusses a relatively new social technology: the family class. Aimed at the primary and lower secondary school pupils that schools have difficulties in accommodating, the family class comprises not only one but several technologies simultaneously. Its aim is to bring together a variety of actors with different interests and conceptions so that they communicate on the same level, but this is not always the case because the individual actors use the family class for different purposes, as Knudsen’s analysis demonstrates.

In «Re-installing the state governed adult authority? Home-school cooperation» Niels Kryger and Birthe Ravn’s discuss social technologies designed to enhance home–school cooperation and encourage, or hinder, the development of democratic Bildung in Danish schools. A discussion of the idea of democratic Bildung demonstrates how this concept led to the child perspective of democracy in schools and to the partnered students and teachers’ active influence on the school’s development. The school–home relationship and the individual student plan are regarded, in combination with the law, as a social technology involving increased parental responsibility aimed at restoring the teachers’ authority. Teachers are considered to be the correct interpreters of school matters and thus as instigators of a shift in focus from a child-centred perspective to a teacher-centred perspective.

**Literature**


