



Learning in the Digitalised Society

Albrecht Metzler¹

Abstract

As an almost digital native (born in 1984) I wonder about how schooling will be in the near future. The designs and developments of the last years bring further pressure on societies and their education systems, caused by a rising influence of visual content, social media and digital based knowledge on one hand and by products for learners and teachers newly developed by relevant internet-companies or schoolbook publishers on the other hand. Software for integrated learning like Google Classroom, hard- and software solutions like iPad-classes or highly differentiated learning platforms such as itslearning (not yet available in Italy) are more than only sharing documents but allow all involved parties to integrate (learners, teachers, parents and senior leaders). For example, it's also possible for teachers to download from the platform a learners final report card, already implemented with its school grades – they only add and change a few sentences/things to finalise the report card. Is software killing jobs or do teachers spend less time with management and get more time for teaching, educating and relationships in class? Is software offering a more inclusive schooling or does it lead to lonely screen staring individuals? One thing is clear: nothing could replace the aim of school that consists in intended learning and interacting in a real group with professionalized teachers in a well-equipped building or suitable place for doing sports, arts, practice foreign languages and be creative in things and respectful in interpersonal relationships. School politics have to do both – innovate schools and prevent them from getting machines. Old teachers should not be obligated to use newer technologies but let us consider that young teachers want to use them. Pupils want to be challenged and supported as persons and in their real world as in their digital one.

I'm going to mention two learning platforms (a commercial one, itslearning, and another one, that has been created by a certain school) and discuss more benefits than problems for the different roles involved.

1. Dead wood

In a conversation a few years ago, in which I did not participate, I heard a teenager say something strange - meaning to write on paper, he used the phrase: 'totes Holz' - dead wood. The slightly derogatory tone, the connotation with deforestation and especially the implied accusation of a certain backwardness of those who still use paper, let me keep this phrase in mind. Dear reader, how do you feel about the expression dead wood?

2. Life-world

2.1 Four arguments: efficiency, learning, future (employability), life-world

Martin Lindner cites the four arguments [1] summarized by Beat Döbeli Honegger in 2016 [2], "which are put forward for digitizing school education: the efficiency argument, the learning argument, the argument for the future, and the life-world argument. School and teaching can be handled more efficiently, with digital media we learn more/better, digital skills play a key role in 21st century society", and last but not least, "children and young people use digital media every day." (All translations by the author.) [1] The only argument that can be vulnerable, in my view, is that of more and/or better learning, where it is hard to think that less is learned. I do not want to trace the discourse for and against the digitization of teaching and learning here, because, as Lindner writes, "[i]t is perfectly clear that in the year 2025 [...] the [...] schools will not only be connected to the internet but will be on the net. The question is simply how, in what way, with what obstacles and to achieve which goals." [3] A school without digital education and digital media would be a bit lonely, lifeless and, just to keep track of it, a deforested island where teachers and students would have to leave all their power-hungry culture access devices on the ferry every day.

Students have long been exchanging ideas about teachers in their social media groups, about classmates, about social problems, but also about homework and links to learning videos, etc. The former carries the risk of cyberbullying etc., the latter the possibility of learning instead of computer gamble. This learning should not remain unintended.

2.2 Permanent beta strategy

¹ Philipps-Universität Marburg, Germany



If the digital learning platforms and their contents are visually and acoustically as well as substantively appealing, provided that they are as safe as possible under data protection law, if the potentially harmful electromagnetic radiation is restricted as far as possible and digital is used not only for its own sake but purposefully, there is no objection, digitization is even necessary. But that does not mean that everything has to be prepared perfectly before taking that step. On the contrary, in order not to be consumed in endless debates for and against time and resources, the permanent beta strategy should be applied [3]: that is, start with at least the part of the college that participates and develop, hands on, that is, recognize teachers and also the school children (at the latest from the age of 16) as independent entities that bring together diverse things from the connected world. Just as in upcoming renovations and while projecting new school buildings, care is taken to renovate, remodel or build these public buildings equally accessible for people with disabilities, learning in large learning landscapes should be considered and implemented right away. Sure, sport needs adequate sports halls, sports fields and sports equipment, other subjects, such as art, music and chemistry as well. Foreign languages require spaces in which one speaks in a loud voice, and further subjects connected with understanding-oriented and content-producing teaching settings do not necessarily require a special space each. So, the school of the future could be made of transparent but soundproofed small to medium-sized meeting rooms, internet research areas with large screens, open media libraries, showrooms, green islands, couch-lounges, of course also pencil-writing desks, books and much more. Of course, the acquisition of knowledge and competence also happens in extracurricular learning places, which are also often multimedia and interactive, such as museums. After all, educational trips can not only be made on class trips, but also online: the Sistine Chapel can also be experienced in high resolution, 365 degrees and in 3D.

2.3 Learning management

The sofatur learning platform, for example, like Khan Academy offers video-based content with which the subject matter can be repeated and practiced on the respective curricula of the 16 states in the German federal system as well as on the various types of schools. The comprehensive learning management system itslearning is already implemented by some cities and counties and allows for different roles, from school management to parents, some simplification: for example, the teacher sees at the beginning of the lesson who is excused as absent, and, for example, who tasks well at which levels. Parents may confirm on-line in their calendars when the dental health service will be at school, and less information for signing will need to be brought home by the schoolchildren and then list-kept by the teacher to be checked for complete return. However, while these commercial products are available they are also being produced by a few schools of progressive teaching colleges. So, either shop or do it yourself. Instead a web-based and cloud-based education network could be formed, hosted in the country and supported by educational scientists, social and rehabilitation educators, educators, mathematicians, artists, computer scientists, privacy experts, labor market experts, etc. as well as the relevant authorities in the school ministries.

2.4 Educational justice

The fact that all children have Internet-enabled devices does not mean they spend their time learning or using the information superhighway in an effective way. Equal opportunities and educational justice mean equipping those with media literacy who do not learn enough about this through their peer-group or their parents or who simply have outdated software and hardware at their disposal. If a student writes his/her autobiography in a foreign language and puts his/her sensitive life events into a possibly dubious online translator, would you not wish there was a translator accessible to students which did not save that data? Why buy computers or tablets for every student and leave the school alone with it, when everyone just has their own device? Let's buy screens, beamer and maybe also software from schoolbook publishers. Let's use also Open Educational Resources (OER). Teachers, especially those who have not grown up with digital media and are already retiring, should not be forced to make this educational network part of their profession. But it's far too late to wait until the teachers' colleagues are all digital natives.

Imagine being able to transform a barely understandable legal text into a language that is easier to understand with just one click. What do you think about it? To attend classes, even if a pupil cannot go to school for a long time because of illness is also greatly facilitated by these electronic aids – inclusive education and differentiated teaching as well. Or: What would you do if you want to learn something? If you want to help your child do the math homework, how do you get the long-forgotten Binomial Formulas? I think video tutorials are a good idea in this case. Translating written and spoken



content, self-created and also cross-border co-authored content [4], graphical, auditory or audiovisual content, that would be multichannel, democratic and cosmopolitan learning in a digitalised society.

3. Invention

So, as could be popularized with the invention of printing knowledge, it will also be with the invention of the Internet. If today almost every profession and also the production of knowledge is accompanied by computer technology, this will be part of education at the latest today.

References

- [1] Lindner, M. "Die Bildung und das Netz. Wie leben und lernen wir im digitalen Klimawandel?", Piding, wissmuth press, 2017, 301 („Unter anderem bezeichnet das Buch kurz und knapp die vier Argumente, die für die Digitalisierung des Schulunterrichtes vorgebracht werden: das *Effizienzargument* (Schule und Unterricht können effizienter abgewickelt werden), das *Lernargument* (mit digitalen Medien wird mehr/besser gelernt), das *Zukunftsargument* (in der Gesellschaft des 21. Jahrhunderts spielen digitale Kompetenzen eine Schlüsselrolle) und das *Lebensweltargument* (Kinder und Jugendliche gehen täglich mit digitalen Medien und Geräten um).“)
- [2] Döbeli Honegger, B. "Mehr als 0 und 1. Schule in einer digitalisierten Welt", Bern, hep der bildungsverlag, 2016, 64-73
- [3] Lindner, M. "Die Bildung und das Netz. Wie leben und lernen wir im digitalen Klimawandel?", Piding, wissmuth press, 2017, 303 („Es ist vollkommen klar, dass im Jahr 2025 auch die deutschen Schulen nicht nur am Netz sein werden, sondern wirklich *im* Netz. Die Frage ist eben nur, wie: auf welchem Weg, mit welchen Hindernissen und mit welchen Zielen.“)
- [4] Zierer, K. "Lernen 4.0. Pädagogik vor Technik. Möglichkeiten und Grenzen einer Digitalisierung im Bildungsbereich", Baltmannsweiler, Schneider Verlag Hohengehren, 2017, 35