Erstad, Ola; Zounek, Jiří

Editorial : Digital youth and their ways of learning

EDITORIAL

DIGITAL YOUTH AND THEIR WAYS OF LEARNING

This monothematic issue of *Studia paedagogica* is focused on the opportunities and challenges of digital technologies and youth learning in various contexts and learning environments. The topic of this issue was inspired by the fact that young people today have grown up in an environment in which digital technology is commonly accessible and practically all-pervasive.

The results of extensive international studies (ICILS, EU Kids Online, etc.) show that school plays a significant role in the acquisition of knowledge and skills relevant to the use of digital technology. They also clearly posit that family environments and informal learning play a similarly irreplaceable role. This observation is also relevant for peer and other social groups.

It is therefore fitting to consider the importance of digital technology for young people today both inside and outside of school as well as the way young people inhabit both the physical and virtual worlds.

It is not an orientation towards the learner per se that represents something new and challenges established educational conceptions, but rather the way time and space relationships are brought into the picture. As such, the research agenda is moving away from studies of the individual learner in a cognitive sense and shifting focus towards interactions within and across different contexts, and the socio-materiality of human interaction. Technological developments over the past 20 years have created whole new ways of conceptualizing learning spaces (Bekerman, Burbules, & Silberman-Keller, 2006; Ito et al., 2013). There are also many online spaces developed for learning, either as e-learning courses or as a combination of face-to-face and online learning activities. However, it is necessary to be critical of over-optimistic beliefs in these alternative learning spaces and what they can accomplish concerning learning. As Mark Nunes (2006) did in his book *Cyberspaces of Everyday Life*, we need to study how online spaces used by young people function as continuations of their physical activities and doings in everyday life.

More recently, Leander, Phillips, and Taylor (2010), based on cultural developments, argued for radically different ways of considering spaces for learning than has been the norm in educational research, referring to the works of Henri Lefebvre and Edward Soja. The aim is to challenge the classroom-as-container metaphor. This opens up ways of studying spatial relations in community settings, in the way that people engage with different resources. Space and place are then understood much more as embedded in, and part of, the activities and practices of people in their everyday trajectories of participation, both face-to-face and online–offline (Leander & McKim, 2003).

Traditional learning environments often focus more on mapping what students do not know at different age levels and then providing them with the proper information and less on creating learning environments that might challenge students in their knowledge building (Scardamalia & Bereiter, 2006) and engage them on a personal level. Jonassen and Land (2000, p. viii) discussed a transition from "instruction" to a "student-centered learning environment": an environment that is designed to support individual efforts to negotiate multiple points of view while engaging in authentic activities (McFarlane, 1997). Important assumptions for such environments include that the learner defines how to proceed based on individual needs and that learning is highly tuned to the situation in which it takes place. Another important aspect is that understanding is deepened through exploration, interpretation, and negotiation. Learning is also knowledge-dependent in the sense that people use current knowledge to construct new knowledge (Land & Hannafin, 2000). In this conception of learning, technology might be used as a tool to support and enhance learning environments.

Leander et al. (2010) pointed out that "following" learners across and between sites is complex. Within "multisite ethnography"', researchers such as Marcus (1995) and Falzon (2012) have argued that the study of social phenomena cannot be accounted for by focusing on one particular site. However, the ways that different settings and contexts are interrelated as experienced by young people themselves, as the unit of analysis, have not been present in many educational studies (Leander et al., 2010).

The biggest task today and in the years to come is to reassess what education is really about and how we organize learning activities and knowledge building, both within and across different contexts and locations. Even though some variation is evident, it seems strange that the way education systems are set up for providing learning for the young generation follows more or less the same model all over the world: a teacher, a group of students at the same age level following certain time schedules with domain content and a curriculum, and certain standards for assessment of the progress of learning for the individual.

We believe in a public system of education, first of all because it is an important social mechanism for integration and collective engagement in learning. Still, there is a clear need for reimagination and reorientation in the ways we engage and challenge students in their learning and education that are not limited to the social institution we call school, with all its norms, regulations, and divisions of labor.

One important issue deals with changing student positions in schools as time–space relationships and the role of digital media in developing these positions. It might be said that students become empowered by getting increased access to computers and the internet in the sense that they depend less on teachers' lecturing. Another issue deals with linking the school setting with young peoples' experiences with using media and technology outside of schools. These developments have pushed us towards seeking out new models, understandings, and practices in a still unclear landscape and the interface between formal, semi-formal, and informal ways of learning.

This monothematic issue cannot, understandably, cover all of the aforementioned topics and challenges that pedagogical research, pedagogical theory, and educational policy face. However, we provide the readers with several insights into the world of current education, which is seriously affected by digital technologies.

As mentioned previously, schools and formal education play an important role in the acquisition of knowledge and skills related to the use of digital technologies. Therefore, it is important to pay attention to educational policy in the field of digital technologies. This field has undergone interesting development and has significant influence upon the understanding of education in the digital technology era. That is why it is interesting and beneficial to monitor how various European countries perceive the role of technologies in their educational policies. This very topic is at the centre of attention of the comparative study by Jiří Zounek, Klára Záleská, Libor Juhaňák, Ondřej Bárta, and Kristýna Vlčková, who focused on the history and transformations of educational policy in two European countries – Norway and the Czech Republic. The authors investigated the approaches used by the countries to formulate concepts and priorities in the researched field. The conclusion of the study then contains the current state of the incorporation of digital technologies into education in four specific areas.

Another study focused on the topic of students' knowledge creation, which seems to lack the appropriate attention even during times of continuously increasing use of digital technologies/environments supporting learning through "making" and collaborative and youth-centered learning. The authors, Anu Kajamaa, Kristiina Kumpulainen, and Antti Rajala, performed an empirical case study in which they collected more than 100 video recordings of teaching with FUSE Studio (an innovative making and design environment).

They asked two fundamental questions in their research: 1. How are the students' funds of knowledge manifested in FUSE Studio? 2. How do the students' funds of knowledge mediate their knowledge creation activity? Within these questions, "funds of knowledge" are perceived as students' multiple cultural resources that stem from their life worlds in and out of school. The study itself brings quite an interesting insight into relatively lesser-known problems. The authors themselves (2018, in this issue) state the following in the conclusion: "Our findings highlight the importance of not only the students bringing their personal out-of-school funds of knowledge into the school context, but also the crucial importance of the students' collective knowledge expansion via the resolving of tensions which emerge when the school-based learning actions and a student's personal funds of knowledge meet."

The following study focused on another untraditional topic, which is the use of one of the most popular digital games of the present times (Minecraft) in teaching mathematics at primary schools. To be more specific, the author, Agnieszka B. Jarvoll, focused on the manner of use of Minecraft in motivating students to learn mathematics. This research is yet another example of the use of a case study in educational research. The results show quite clearly what a popular game from youth culture can bring into teaching, and at the same time that its effect may not always be positive. Among other findings, the study provides teachers with impulses for thinking about the manner of selection, introduction, and use of digital games with regards to not only the specifics of the subject but also the game itself.

Nowadays, it is absolutely clear that various forms of online learning will continue to spread at universities as well. Simultaneously, the topic of study success rate and the ways of its prediction is becoming more and more important. It appears that self-regulated learning may also have a positive influence upon study success rate. That is why the study by Jitka Vaculíková examines whether the combination of self-reported data that measure students' self-regulated learning and computer-assisted data that capture students' engagement with an online learning environment could be related to their ability to predict students' academic achievement. In her research, the author mostly used data extracted from the online learning environment. The study is therefore interesting from a methodological point of view because the author uses and analyses data on the interaction of students with the online environment which follow the given learning management system (Moodle). The study thus partially belongs to the relatively new and very dynamically developing field named data mining or learning analytics.

Unfortunately, digital technologies do not only introduce positive elements into the lives of young people but can also be a tool for many negative phenomena. Cyberbullying is among such problematic phenomena. The

international author collective of Kristian Daneback, Ylva Bjereld, Hana Macháčková, Anna Ševčíková, and Lenka Dědková focused on one subtopic within the undoubtedly very extensive and complex topic of cyberbullying. The authors tried to discover what reasons cyberbullying victims have for not talking about being bullied in this manner. The results show that boys tend to talk about this experience less often than girls do and that the reasons for not confiding in anyone differed, for example, with regard to the perceived harm. The paper therefore presents many incentives to think about the role technologies play in the lives of young people, and also about intergenerational relationships and the options for cooperation between the family and school in dealing with these dangerous phenomena.

Together we hope this special issue will provide some insight into some key issues at stake for educational research, policy, and practices in the 21st century and the role of digital media as part of these issues.

Ola Erstad and Jiří Zounek
Editors

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