

## **E-LEARNING – ONE OF THE FORMS OF LEARNING IN MODERN SOCIETY (SUMMARY)**

Our time is one of rapid change in all spheres of social life. One of the causes for the ongoing radical change has been the unprecedented scientific and technological progress in the second half of the 20th century, especially in information and communication technologies (ICT), which have started to affect education to a significant degree. E-learning, i.e. use of all kinds of ICT tools in education and learning, is therefore receiving a lot of attention.

The approach adopted in the book is theoretical and can be characterized as summing up the author's reflection of and research in e-learning. The book is based on a number of research projects, by the author himself as well as other Czech and foreign scholars researching e-learning.

The first chapter presents key metamorphoses of social life in connection with the upsurge of modern technologies in the recent decades through the prism of three most important concepts of current society (information society, knowledge society, network society). Although the review is a relatively brief one, it is illustrative in showing the dynamics of technological but also social development. These trends provide a broad framework for understanding the change and expectations in connection with education and educational uses of ICT. The very expectations with respect to e-learning are habitually regarded as a positive factor in the process of education and learning. They may however also have a negative impact as they often refer to advertising slogans and reality as presented in the media rather than real knowledge of the potential of ICT and the needs of the educational reality.

The chapter on history of integration of technologies into education illustrates these general developmental trends, using several key tendencies to show the milestones in theory and practice of implementation of computer technologies into education. Studied in this way, history is not an "obligatory" list of dates and facts one has to be made aware of; the chapter shows that history contains both origins and principles valid till the present day.

The next chapter defines e-learning. The author's approach integrates new features which have been mentioned in individual studies of discussions until now, or have not been remarked upon in this context at all. They are mainly ethical issues connected with the use of modern technologies in education or the need for empirical research and theoretical study of e-learning. One key part of the

concept of e-learning is blended learning, a strong concept which has the potential to accommodate the needs of all participants of education and learning without being perceived as “external” or technocratic. Hardly any discussion of e-learning can leave out distance learning. Both concepts have much in common and can mutually serve as a source of inspiration or information, both on the theoretical level and in practice.

Thinking about e-learning involves focusing on the process of learning and education as such as a categorical imperative. Although this approach may seem inevitable, it is far from common in the Czech Republic to integrate pedagogical, psychological, sociological and technological issues into a single whole when discussing e-learning. The comprehensiveness of the subject as well as its substance tend to get sidetracked. Nevertheless, not only the process of learning but also teaching and especially those who teach while drawing on modern technologies must be regarded as a component constitutive of e-learning. This is the author’s conviction despite the fact that technologies themselves and the current accessibility of knowledge provide for forms of learning not necessarily requiring the presence of a teacher. Teachers, on the other hand, play a crucial role in whether informal learning drawing on the internet takes place or not because it is teachers who assist individuals in acquiring learning skills, during their whole lives. As surveys among users in the era of digital technologies show, after all, it is the teacher who is one of the key factors leading to knowledge and success in life.

The discussion of e-learning and educational paradigms is another innovative element the book provides. (The recent paradigm has been based mainly on constructivism, with connectivism and communal constructivism as the most recent approaches.) It is not quite common to perceive the traditional educational paradigm (based in behaviourism) as a productive theoretical framework in connection with e-learning. The author however shows that up-to-date e-learning courses drawing on state-of-the-art technologies can be based on some principles of the traditional paradigm just as well. The author shares the opinion that no paradigm or theory should be framed as good or bad, but the use of ICT in education and learning should be based on knowledge of the curricula, students and possibilities of technologies. If the teacher finds out that methods falling under the traditional paradigm will accommodate the needs of his or her students best, they should feel free to use them. E-learning may draw on all paradigms mentioned above, which, the author believes, is the only valid starting point for its further development on the level of theory as well as practice.

The chapter on modern technologies in current e-learning presents a seemingly traditional topic. What makes it different is how it is embedded in the context of the whole book. In the beginning of the chapter, metamorphoses of the internet having to do with the theoretical concepts of present-day society are described. The chapter focuses mainly on such modern technologies which have, in fact, shaped contemporary internet and its use while drawing on the networking environment. The analysis of the individual technologies has a pedagogical focus – the technologies are examined with a view to their teaching and learning applications. Not only their possibilities but also their potential weaknesses are described. All depends on the ways in which they are used, both on the part of the teacher and on the part of the students, not only in formal education. There is no ideal mode of use: objectives, content, possibilities, thinking and/or working/learning styles of the individual participants always play a role. The book also presents modern technological tools which have not found their firm position in education yet and it remains a question whether they will find their way into teaching and learning and which position they will take. (Example: social network services.) The current extreme popularity of these services does not necessarily have to imply they will be a success in teaching and learning. The author also covers technologies with a huge educational potential on the theoretical level whose real-life application is a great challenge both technology- and education-wise. These include for instance 3-D multi-user virtual environments or some types of games which can serve as a highly innovative educational tool, but this innovation is really demanding in terms of preparation and the question whether implementation of these technologies will be efficient at all remains to be answered. Both these examples can be regarded as examples of big questions to which e-learning is still to find answers. One potential starting point for a search for these answers and also a way to deal with the generally rather chaotic and turbulent development in modern technologies is letting go of the need to keep abreast with this progress. People are not computers and education is not software. What should be of primary importance are efforts to find an answer to the question whether a particular ICT tool can really improve teaching and learning and how or under which circumstances this can be achieved. Closer collaboration between technology people, software development engineers, teachers, students, politicians, and researchers can be of great help. It is after all technologies themselves which can facilitate the collaboration among experts, including even the broader public. It is primarily all participants of the process of education, the curriculum, and learning and teaching

processes rather than numbers of computers or software functions that should be at the heart of attention.

The focus of the book is somewhat untraditional. The author's discussion of e-learning is generally focused on tertiary education, with which e-learning tends to be typically associated. Despite this, both the approach the book takes and its content go beyond tertiary education as traditionally understood and the book offers a wealth of inspiration for secondary education on the one hand and all kinds of forms of out-of-school education on the other. These are the ways in which the idea of lifelong learning or e-learning as a thread winding through and guiding one through their life acquires flesh. This is thanks to the fact that the current demands placed on lifelong learning as well as teaching and learning in tertiary education are getting closer and closer to the possibilities and real-life use of modern technologies in everyday life. The mode of use of ICT in a specific form of education is often impossible to pin down. This can be viewed as a very positive thing and one of significant moves towards implementing the idea of lifelong learning with the support of e-learning. The transformation is not an abrupt one but a process rooted in the past and promising an intriguing future.

In the conclusion to the book, the author points out an important trend within the context of the discussion of the future of e-learning – he refers to it as “the disappearance of the e”. Technologies have been integrated into education and more and more emphasis is put on their efficient use while purely technological considerations are viewed as secondary. The era of enchantment by technologies and their possibilities seems to approach its end. As some authors claim, the battle has been fought, e-learning has won and it is not necessary to differentiate between learning and e-learning. We are entering an era in which pedagogy in the broad sense of the word will be the main factor of educational success and technologies will be one of its important components.