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E-LEARNING

Writings analyzing the social effects of information technologies usually begin by making reference to "changes". We might as well have formulated the first lines of this Introduction in the following way: "the spread of information and communication technologies provokes radical *changes* in many aspects of our social and individual lives." Apparently, postulating change as a basic symptom is inevitable when we study sectors that are influenced or controlled by modern technologies. In processes usually defined as technological competition, certain "products" or working practices can be dated in a few months – sometimes together with the human knowledge that have created them.

E-learning is a form of learning linked to technology and certain products. Statistical data and indicators point out that change in education – or using a term connected to e-learning: the learning process – accelerates due to technological innovations of our days. As the technological change – the transformation of "content carrier and mediating systems" – accelerates, the number of objects of change, and "updatings" will grow, including human resources and individual competencies. The spread of terms like "knowledge-based society", "lifelong learning", "information society" - at least on the ideological, theoretical level – indicate the trends of change. In discourses about e-learning change is present as a basic endowment: the question refers to the direction, depth, pace, and effect, or its judgment in each case. Some researchers even put the question in the following way: does transformation contribute to the formation of the best possible kind of world?

The current issue of Educatio is focusing on transformations connectable to e-learning. The term characterized by a high level of complexity on technological, sectorial and regional levels, and a some-what paradoxical roughness – had been defined in its broadest understanding when we asked our authors to write their article for this issue. We considered that precisely this broad understanding of e-learning will make the processes and conditions in our country visible. Because of this broad definition, the topic of now already traditional applications of electronic resources in education has been mentioned in the articles in the same way as for instance the new generation of LCMS systems.

We have tried to serve the readers' interest when we acted in conformity with the principle "Varietas delectat!". However, it was not only this principle that drove us to choose articles having reflexive, even ironic or critical attitude. Experiencing the complexity of e-learning and the controversial attitudes towards transformations taking place in our country, moreover, trying to mirror these attitudes, it would have been unreasonable to abandon articles with inspiringly skeptical overtones, or to give up upon thoughts that are professing the "salvation" brought about by e-learning, or - in a more materialistic line of thought – those thoughts which believe that the power of technological development will transform society through an "information revolution". Most articles are, naturally, to be placed between these two extremes, being objective, professionally well grounded, and thus studies usable in the interpretation of the world of e-learning and its possible developments.

In her article "Education – learning – network" *Éva Tóth*'s aim is to review some characteristics and new possibilities of network-based learning. By considering the roles of electronic networks related to school-based education and outside formal education, she argues that e-learning plays an important part in shaping the up-to-date learning environment, and thus in stimulating learning by suggesting an active life-course. The important element of the approach is the emphasis laid on networks as an element through which the traditional understanding of learning becomes broader,

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in the situation where next to different formal education, sharing of individual knowledge through networks becomes part of the learning process.

The spread of services built on information technologies, and especially e-learning can be a target of a multidisciplinary analysis from economic point of view. *György Bőgel* illustrates through examples from the USA the diffusion of e-learning and the managerial processes in education connected to it. The most interesting parts of the study are those where the author analyses the managerial processes through the lenses of the model elaborated by Clayton Christensen. The model has been elaborated for differentiating "strategic alternatives", and our author adapts this model to e-learning. The basic e-learning strategies differentiated according to Christensen - (1) better products for the traditional market, (2) cheaper, simpler products for more consumers, (3) inclusion of new consumers – provide a good framework of interpretation for leaders of higher education institutions, even in cases when some sort of reorganization of the institutions might occur.

The article of Balázs Török represents a different context in the interpretation of e-learning. In the context of globalization, e-learning can be seen as a separate territory in economic competition, one in which the American continent plays a leading role. Europe, due to its fragmented character, joins up slowly. Northern countries have an important role, considering their accomplishments and strategic e-learning policies. The article proves that through its social context, e-learning plays as important part in the reproduction of social inequalities as it promises to reduce them through widening access. Although European policy exercises important impulses on Hungary, the real aim of the EU is to enforce the policy of Lisbon. Thus it is to be feared that the legitimizing principles of resource management lead towards "better performances" instead of "equity". Moreover, it is being unfavorable that creating the proper condition for e-learning builds on material and mental resources of individuals, which increases human loading. In connection with the pedagogic context we can read that despite the technological context, underestimation or long term ignoration can seriously endanger the efficiency of e-learning. Nevertheless, application of e-learning seems to have positive perspectives if it is based on constructivist pedagogic models. The article mentions the risks of exaggerating economic contexts, and provides many examples for this situation (see for instance the fiasco of UkeU in the article). Through the analysis of symbolic contextuality of e-learning, the author is calling our attention to the now developing tematization of ICT resource management, which perceives differences between individuals not only on the level of lifestyles, but also on the level of life order, depending on the way and degree of ICT usage. It is possible, thus, that the ICT is capable of increasing social division not just on the level of possessions, usage, but also on a more abstract- almost ideological - level.

A number of EU enlargement projects targeting human resource development will make its effects felt in distance education and e-learning. The article of *András Szűcs* reviews in a retrospective mode the EU initiatives regarding e-learning policy and their consequences, while it also presents in detail the present-day developments in this sector, influenced by both the free market and public policies. The peculiarity of the study is, that it gives an idea about the differences between developments in the USA and Europe, while it also describes the East-European particularities inside the European Union. When he discusses the future trends of transformations, the author prognosticates the spread of the so-called blended learning. E-learning will infiltrate in traditional education, complementing, but not replacing the traditional teaching methods. The author's statement, that further and postgraduate education will be the major sectors where electronic distance learning methods will gain most ground in the education sector as a whole, is a normative statement worth considering.

The human conditions for application of ICT in education can be assured through teacher training. The article referring to this is written by *Andrea Kárpáti*, who clearly outlines the critical points: our institutions providing teacher training offer 90 minutes basic training in information science per week in only one semester, which in fact duplicates the curriculum of secondary school informatics topics. Field methodology trainings and handbooks adjusted to the basic references of education and broken down according to age-groups and disciplines are rarely used in public education. The author's remarks coincide perfectly with the national diagnosis on the dissemination of ICT in

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education, which says that "computerization in our country began in large waves, in large masses, with minimal preparations. Due to the campaign-like dissemination, the education market was also formed quickly, spasmodically, and consequently - in contrast to the training markets of most EU or OECD countries - it does not have links to higher education supported by the state. Therefore, it doesn't have permanent institutional control, nor a quality assurance system, nor relationships with teacher-training". The article is as accurate in formulating possibilities for solutions as it is in making diagnoses. Its suggestion regarding methodology regards the introduction and consolidation of constructive pedagogy in teacher training. The author proposes the reconsideration of teacher training as a whole, according to ability-structure of teachers already worked out through international cooperation. She also makes a reference to the "Teachers' ICT License" successfully introduced in Denmark. Instead of basic training provided for pedagogy students the author lays more emphasis on skills and experiences needed in informational applications for the chosen discipline. Because e-learning is resource-based, she also considers opportune the establishment of computerized cabinets for role modeling in teacher training. A special merit of the article lies in the fact that is able to assess properly the situation in Hungary, in spite of the restrictions of researches about ICT, and it also makes reference to international surveys, evaluations and trends. Thus, the article could become in many ways an inspiration for our strategy building.

The study of *András Buda* tries to interpret e-learning according to the questions "Who? What? How?" should teach. He reviews different aspects of teacher roles in curriculum development, tutoring, and evaluation. He points to the pitfalls of curriculum preparation, to the restrictions caused by bandwidth, the risks of digitalization in "facsimile" mode, as well as to the possible contrasts between practical teaching and e-learning. Discussing the answer to the How? question, he discusses the advantages and disadvantages of synchronous and asynchronous education, and makes judgments about the role of animations, hypertexts and modular curriculum buildings. In his last sentences he expresses his opinion, saying that teachers feel reluctant about e-learning because they are afraid that it would decline their positions, and they fear the depersonalization of their everyday work.

The article of *Zoltán Czeizel* scrutinizes the connections between the traditional school-based education and e-learning from a theoretical approach. According to him, there is a war going on in the world of the Internet between the multinational companies representing global interests, and rebellious groups organized according to local interests. He states that the spread of concepts like "information highway" and "cyberspace" is also pointing to this transformation. Czeizel suggests that a compromise between schools and e-learning is necessary, through which the more flexible and open learning possibilities provided by e-learning can have a maintaining force for those who have left the world of formal education filled with constrains.

István Polónyi intended his writing "The answer is e-learning – but what was the question?" to be an essay with a skeptical overtone, in which he dissects the actual role of e-learning in education. Reviewing the long-term development of education the author finds that sooner or later certain innovations have been built among the teaching resources, however, this did not change the essence of education. According to Polónyi, the larger part of input information acquired through the learning process is "forgotten", and only the "structures", connections brought by these information will remain. The role of the teacher is precisely to demonstrate the connections, and make them being understood, while supporting the motivation of students. The author acknowledges that computers have become an important tool in illustration, administration and information transfer, nevertheless, he thinks that it is not so in the narrowly defined education. He also thinks that the point of view according to which the "brave, new and efficient education" will mean that students are sitting all day in front of their computers and learn by clicking lonely on their mouse is not tenable. Of course, we need computers and the Internet, as a resource helping and supporting illustration, education in general. The authors finishes his essay by saying: "It seems that e-learning will conquer a number of small education sectors - like training and further education of highly educated -, but its myth will burst out like the dot.com balloon. The perspective of e-learning is as bright as good the business is that it offers. And it seems, that is not too bright any more."

(Text of Balázs Török – translated by Ágota Szentannai)