## TECHNOLOGY OF EDUCATION

## René Szotkowski

HAŠKOVÁ, A. *Technology of education*. First published in Nitra: Constantine Philosopher University in Nitra, 2004. 176 p. ISBN 80-8050-648-5 HAŠKOVÁ, A. *Technológia vzdelávania*. 1. vyd. Nitra: Univerzita Konštantína Filozofa v Nitre, 2004. 176 s. ISBN 80-8050-648-5.

Reviewed publication "Technology of education" represents the technology of education as a new scientific discipline in the system of scientific educational disciplines. The work introduces the author's insight into the issue and the development of technology of education and on the ground of historical resources it describes the development of content orientation and the subject of scientific treatment of the technology of education.

The publication is divided into twelve chapters, some of which are further subdivided into respective parts. The important notions or passages of the text are highlighted in the publication with the different type of letters.

In the first chapter *Disputes over the understanding of Technology of education* there are listed the contradictions of the technology of education as a scientific discipline. Further in this chapter the understanding of technology of education is introduced; it is field of study addressing training and education. The technology of education is based on the rational principles of teaching performance; examining conditions, appropriate methods and further means of work, which supports meeting the targets.

In the second chapter *Historical resources of the technology of education* there are listed the earliest ways of the technology of education; these include different pictographs, hieroglyphs, apostolic epistles. Their authors are placed into the perspective of contemporary means of informational transmission i. e. email, computer supported transmissions or teleconferences. The ancient computer "Abakus" is mentioned as the first precursor of present computer science. In this chapter the author further specifies the meaning of the notion "the technology of education". She mentions for example that the subject of the technology of education is not only the usage of equipments but she also incorporates here practical skills, which are being developed on the basis of scientific knowledge. This identification is confronted in the text in the historical perspective connected with the formation of educational technologies and

new effective studying materials in the time of Ancient Greece, Middle Ages or Renaissance.

In the third chapter *Modern bases of particular conceptions of technology of education* is focused on reformatory tendencies in the school system, which firstly appeared after the First World War in the USA. These tendencies are grounded on two ideas. The first movement was an illustrative teaching based on technical development of audiovisual media and the second one was behaviourism and pragmatism.

The fourth chapter *Development of concepts of the technology of education* is divided into three subheads. In the first subhead *Technocratic concept of the technology of education* one of the forming conceptions of technology of education that can be called "technocratic" is described. Technology of education in this technocratic approach was represented with physical technical means being used in the school practice and for educational goals. In the second subhead *Behaviouristic conception of the technology of education* the second concept of the technology of education is described. Behaviourism had a key role in its formation. This conception shifted the centre of attention – technical equipments of schools with audiovisual means and their incorporation into teaching on the process of teaching and learning itself. In the third subhead "Cognitive-cybernetic conception of technologies of education" this conception is viewed as an attempt of harmonization of the results of humanistic, natural and social fields of study for their usage in forming suitable teaching programmes.

The fifth chapter *Question of definition of the technology of education* is divided into five subheads. The author deals with the different understanding of notions "practice and technology". The problem if the technology of education is the scientific study discipline or the application of the results of different study disciplines, or historically conditioned the sense of notion – the technology of education. There are the comparison of hardware approach with the software approach and finally also possible identification of technology of education with didactics.

In the sixth chapter *Specifying of the content of technology of education as a filed of study* the essence of the technology of education is defined and there are three dominant specifications of this field of study listed, which are further described in the details. There is a remark of an attempt of the improvement of the whole efficiency of teaching and learning process involved through the aids of technology of education and there are also main tasks of the technology of education mentioned.

The seventh chapter – *Theoretical resources of the technology of education* is divided into four subheads. In these subheads four basic fields of study are included among the theoretical standpoints of the technology of education according to (E. Polakova). These are treated in details in four subheads: *Cybernetic pedagogy, Educational computer science, Systemic didactics* and *Informational psychology*.

The eighth chapter – *Technical resources of the technology of education* is focused on the teaching tools necessary for the complementation of the verbal expression of the teacher and for the explanation of the world around us. The author claims here that the technical tools represent the essential conditions for the educational process implementation. This whole chapter is written from the historical perspective of the emerging teaching tools starting in the 30s and lasting up to now.

The ninth chapter - New media in the context of the technology of education contains five subheads. The first subhead - Information perception treats the difference of individual students in their perception of information or stimuli. In the second subhead - Material didactical tools there is a subhead called teaching tools included and these are further classified and sub-classified. In the third subhead - Function of teaching tools and didactic applied science the author describes the most important functions of didactic tools and the areas of the usage of the teaching aids in the teaching. The subhead four - The usage of media, multimedia and hypermedia includes tow parts, where the concepts of media, multimedia and hypermedia are defined in details. The last fifth subhead - The use of computers for teaching reasons the author describes a computer as the most effective and the most universal tool for information processing, which is able to communicate with the close and distant surrounding.

In the ninth chapter - Selection of the optimal media there is a fact mentioned that the results of educational process are possible to be influenced by means of suitably selected media integrated into the traditional teaching process and that with the use of these media it is possible to achieve the same results in teaching in the shorter time. The author also mentions the conclusions of the research in the use of media in the teaching.

The eleventh chapter – *Impact of the new media on teacher work* speaks about the problems of media implementation in teaching in the interaction with the teacher and the impact of changed conditions in educational situations on the role and personality of the teacher.

The last twelfth chapter – *Index of bibliography references* is the extensive list of Czech, Slovak and foreign bibliography.

The reviewed publication by A. Haskova is mainly intended for the students of the pedagogical faculties, scholars of pedagogy but also for larger community of those who are interested in pedagogy. Its main attempt is to bring them nearer to these problems and to individual steps of development of the technology of education. It was published at the Constantine Philosopher University in Nitra in 180 numbers of copies and you can purchase it in the local textbook shop.

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