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## CONTEMPORARY DIRECTION OF THE TECHNOLOGY OF EDUCATION

### Introduction

Technology of Education as a borderline scientific field belongs to „new” scientific branches. Its origin and development is simply connected with implementation of new technology into educational process. The factors that contribute to this development aren't only connected with the scientific-technical revolution and the contemporary development of the new technical elements and Technologies that contribute to optimalization of the educational process, but as well the expansion of the cybernetic oriented pedagogical-psychological scientific disciplines which are dated to the first half of the last century. It also was the source for the Technology of Education in that time while building-up its own both theoretical and methodological basis. However, the actual development shows that there is necessity to rethink given theoretical and methodological resources and define the subject and content of searching factually.

### The Technology of Education origin

Technology of Education belongs to the youngest but definitely perspective scientific branches in Slovakia. According to Hašková (2004), it was settled as a scientific branch in 20's in the 20<sup>th</sup> century in the USA and in Europe little bit later – in 50's and 60's in the last century. Technology of Education was officially registered during the conference UNESCO in Paris in 1970 and namely as a branch dealing with education including rational bases of didactic work, searching for conditions, proportional methods and other work alternatives supporting the right goals.

Opinions on this branch are different because Technology of Education was created in different ways in different world parts. It is seen mainly in the questions of defining it, categorizing it into the system of scientific branches, as well as explaining its content. There is one point which accepts all experts dealing with this problem – it is definitely open scientific branch that has been still changing and developing influenced by new technologies in educational process.

Talking about practical need of Technology of Education, Bruce (1999) in the introduction of his studies says: “the number of experts dealing with the questions of Technology of Education is increasing.” He defines these experts as ones with ability for analyzing, design, development, implementation and evaluation of studying program as well as for using the right technology for their work.

The setting of the branch Technology of Education is dated in the end of 80's in the last century in Slovakia. There appeared not only new demands in the area of didactic-methodological preparation of the future teachers, but also effort of experts to apply cybernetic principles and quantitative methods there.

### **Defining the Technology of Education as a scientific branch**

Technology of Education is defining in Promulgation No. 131/1997 Statutes about graduants, Attachment No.1 scientific branches and art branches of graduant studying and their specialization marked as a scientific branch belonging to category 6, 7, 8 Social science, subcategory 75 Pedagogical science, with number 75-56-9. According to this document, Technology of Education is officially declared as a pedagogical scientific branch in Slovakia. The position of Technology of Education is not clear among science workers and it is still the question of discussing, mainly that part which is dealing with the problem whether it is possible to accept the Technology of Education as an independent scientific branch in the level of subcategory 75 Pedagogical science or accept it as a part of this subcategory as defined in Attachment No. 1.

Assumptions to define Technology of Education as a scientific branch were fulfilled, in our opinion, in spite of the fact that not all experts agree with this idea, or they have some exceptions to defining particular assumptions. We consider the following indicators as the basic ones:

1. to class Technology of Education into the system of science;
2. defined the subject of searching;
3. created terminological system;
4. determination of searching methods.

Feclová and her work team (2000) establish another specific signs of this scientific branch; namely:

1. defining of relations to other disciplines (those ones which have direct link but to other ones which have helpful pattern);
2. knowledge of its history;
3. specific searching directions (form its cognitive interests and application possibilities).

### **The Subject of the Technology of Education**

Determinations the subject of Technology of Education are defined in different ways depending on authors access who define this determination.

1. Pedagogical dictionary (Průcha, Mareš, Walterová, 2003, p. 246) define Technology of Education in both wide and narrow meaning:
  - a) in wide one – they understand it as planning such technological methods that make possible to control student's learning optimally in situations which are pedagogical. They are integrated methods of

- controlling (included in special teaching texts, computer programs, trainers, stimulants);
- b) in narrow one – using of technical means (computers, television etc.) in education.

2. Poláková (2001) refers to UNESCO definition where Technology of Education is defined as a scientific branch that determines rational principles of didactic work, optimal conditions of educational process, the most effective methods and means to achieve educational goals, while enforcing economics and creative effort of a student.
3. Association for Educational Communications definition dated to year 1994 (Garrison, Anderson, 2004) determines Technology of Education as a theory and experience of organization, development, using and controlling process and sources for studying.
4. Gašparíková (2001) characterizes Technology of Education on the basis of its contextual analysis of definition that was processed by method of specification of common elements. This specification has been done by more than twenty authors from Slovakia, as well as from abroad. The mentioned team of experts has come to result that Technology of Education is a branch belonging to pedagogical disciplines that is dealing with the optimal using of educational means and methods in educational process in purpose to fulfill educational goal-setting while using mainly knowledge from pedagogy, technical branches, didactic and psychology.

We can consider Technology of Education an open borderline field dealing with, firstly, searching of optimal usage material didactic means, as well as other technologies to fulfill educational goal-setting the most effectively, and secondly building the theory of school management with application of management theories to school field.

One side of Technology of Education contextual area consists of didactic technology dealing with creating issue and ways to enforce material didactic means in educational process. We mean the new forms of education, like e-learning, distance learning, but also Learning Management Systems. Technology of Education considers them an object of searching (method and principle while creating them, typical signs that are essentially connected with these forms and their particular teaching texts). The subject of Technology of Education is becoming searching of educational process optimalization in purpose to decrease educational process effectivity influenced by using these forms.

The effort of didactic technology is teaching text researching in the field of traditional teaching means in near future. Mainly, it is researching of methods while teaching texts compiling, then ways of measuring effectivity and quantification of particular teaching texts to measurable form.

The second side of Technology of Education contextual area forms the school management dealing with adjusting of economical and marketing theories to specific conditions of school organizations and creating the particular practical applications.

The activity of Technology of Education Department placemen is realized in these intentions. It is orientated to solve theoretical and terminological questions of Technology of Education, enforce information and communication technologies in education, formation of educational surroundings and specific electronic educational materials, optimize the schools controlling and their facilities, application of manager and marketing theories for specific school conditions and formation the conception of preparation and further education of management workers in school field.

## Conclusion

Irreplaceable role during preparation of future teachers plays scholarly research and therefore Technology of Education Department, Faculty of Education University Constantine the Philosopher directs to the field that is mentioned above.

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