

An Analytical View on Teaching Methods in an Educational Process

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Abstract

Schools are public institutions that offer a public service – education. In general, students consider schools to be of a high quality especially in the case of their good adaptation process and when they feel good at particular schools; also when the schools offer friendly environment with correct relationships between students and teachers; knowledge and skills according to students' personal preferences which enable their possible further education. The issue of education quality is very comprehensive and complicated. Quality of a school is first of all understood as meeting the requirements of a customer – a student which the student chooses for his/her further life, study and other spheres of life.

The paper focuses on implementation of selected methods in teaching the areas of quantitative methods, managerial informatics as well as finances and at the same time, the aim of the paper is to point out the e-learning environment and the system of teaching with a closed cycle.

Key words: e-learning, methods, teaching forms, teaching tools

1. INTRODUCTION

An optimal selection of teaching methods is determined by several factors which a teacher has to take into account. Teaching methods fulfil information and formative functions and as immaterial tools, they represent a major factor of teaching tools. The selection of teaching methods depends especially on the aims of a class, the content of curriculum, students' age specifications, technical equipment of a school or on the abilities of an individual teacher. In a pedagogical process, it is possible to meet with different classification of teaching methods. But there is no quantification which would enable clear and undisputed classification of methods.

2. E-LEARNING

E-learning includes not only multimedia teaching courses (which also contain animation and simulation), but also many supporting tools such as e.g. electronic mail, electronic presentation and documents, video, chat, electronic conferences, virtual classes and discussion groups, Turek (2014), Kopecký (2006).

E-learning can be carried out not only via computer (the Internet, intranet, CD ROM, DVD etc.) but also through television (cable TV, satellite broadcast), audio video-records as well as cell phones.

Turek (2014, s. 422) presents:

“According to the PC net connection, we distinguish two kinds of e-learning forms:

1. off-line, when a student is not connected to PC net and he/she gets the study material on USB key, CD or DVD
2. on-line, which requires student's connection to PC net (the Internet or intranet) and the study material is distributed by the means of net communication devices. From the point of view of student's communication with study material and a teacher, there are two kinds of learning in on-line forms:

Synchronous communication (teaching) which means „live“ teaching in a real time. All studying persons are in contact with a teacher (who runs the teaching process) or among themselves in the same, precisely defined time via electronic conferences (videoconferences, teleconferences), interactive communication or chatting. But they can communicate from different places. It also includes one of the most developed e-learning forms at present – a virtual class, a room in virtual environment – on the Internet which enables the studying persons to meet, talk, communicate and co-operate;

Asynchronous form (teaching) includes actually a self-study by the means of ICT. The studying persons do not have to study at the same time but they can choose the time of their study and they study using web pages, CD-ROM, DVD and they communicate via e-mails or web blogs.“

3. THE ANALYSIS OF TEACHING PROCESS METHODS

The term method origins from the Greek word *methodos* (meta hodos) which means a way, a method, a process. A teaching method is a way of teaching, it represents a teacher's activity leading an educatee to reach the goals set in advance with applying didactic principles. According to Maňák (1990) a teaching method is a coordinated system of teaching activities of a teacher and learning activities of students which are focused on reaching the teaching-educational aims. According to Kelčíková (2014), teaching methods in a teaching process are understood as strategies, ways, work procedures of an educator which, by respecting the development of cognitive processes, didactic principles and defined educational aim, enable the educatees to apply the acquired knowledge, skills and habits into practice. Hlasná et al. (2006, p. 311) states that “it is necessary to understand teaching methods as a system element of a teaching process which is dynamic and connected to all other elements (teaching aims, content, organization forms, technical equipment, etc.) and not as its isolated element”.

Blaško (2004) quantifies the traditional teaching forms by methodological forms and he divides the traditional teaching forms into „explanatory, demonstrational, dialogic and the methods of self-

individual work. He divides social teaching forms, where teaching is organized with regard to its subjects, into frontal, individual and group work forms. By organizational teaching forms by which the key factors are outer terms conditioned by a place, he describes teaching, non-teaching and after-school forms.

Mojžišek (1975) presents ten generally accepted criteria of method classification, i.e. according to the number of students, a logical approach of a teacher by explanation of the curriculum, the character of knowledge source, psychic factors of knowledge creation, skills and habits, the level of students' individual approach, the character of teacher's work and students' work, perspectives of teaching, educational aims and tasks, content and methodology regards. Several methods are distinguished according to each criterion and thus we deal with several tens of teaching process methods. Therefore it is sometimes difficult to compare these methods because the criterion of their classification is not clear and the whole issue of teaching process methods is confusing and unclear.

Stračár (1979) understands teaching process methods as ways of intentional arrangement of curriculum, a teacher's and students' activities which are focused on achieving goals of a teaching process by respecting didactical principles.

In pedagogical literature, the most frequent criterion of teaching methods division is the source of knowledge. "According to the knowledge source, we can distinguish verbal, visual and practical methods which are further divided into other subgroups:

Verbal methods: The source of knowledge (information) is spoken, printed or written speech. In this meaning, they include:

- *monologic methods*, which are called also explanation or interpretation methods. They include speaking, explaining, description and lecture. These methods differ from each other according to the level of rationality and emotionality.
- *dialogic methods*: discussion, dialogue and talk;
- *the method of working with a book*, where the main source of knowledge is a printed word.

Visual methods: demonstration, observation and excursion. In this case a teacher demonstrates (shows, presents) a certain object, phenomenon or a process by the means of models, pictures, movies, television etc. and students observe this object, phenomenon or process.

Practical methods. The source of knowledge is not only passive perception but also active activity.

The most important methods from the point of view of logic are:

- *analytical-syntactic methods* – important relationships are examined based on the division of a whole so that they can be included into a general notion, principle, law, method of work etc.;
- *inductive methods* – they come from particular single items and by the analysis of identical characteristics, general terms, principles, laws and methods of work are formulated etc.;
- *deductive methods* – they come from general term, from a principle, from law, from the method of work etc. from which individual particular cases are derived;
- *comparing methods* – based on using analogical relationships among various objects, phenomena, processes" (Turek 2014, p. 246-247).

In her work, Kelčíková (2014) presents the classification of methods into motivation teaching methods (agreement with a teacher or commitment, impulse, risk, brainstorming, case study, motivational interview, opinion exchange, TV commercial), *exposition* methods (interpretation, explanation, interactive lecture, discussion, listening teams, synectics, set questions), fixation teaching methods (teaching web, morphology part, discussion, three-phase aquarium discussion, chain reaction, cross-word), diagnostic methods (quick diagnosis, the method of black box, an output test).

Blaško (2012) emphasizes that the system of the classification of methods and forms in didactics should differentiate between internal and external part of a teaching process so that a teacher can put emphasis especially on the variety of cognitive methods not only the variety of forms. According to Obržálek (2000), didactic researches and results of teachers' practice show that we cannot differentiate between

good and bad methods a priori. Each creatively applied method brings its results in current conditions. It is proved that using the system of method is more efficient than using one isolated method.

Determination of optimal teaching methods selection:

1. Aims and tasks of a teaching process.
2. The rules of a teaching-educational process and teaching principles resulting from them
3. Content and methods of a given science (branch) itself and a given studied subject (topic) individually.
4. Students' learning abilities and their possibilities: age (physical and psychic possibilities) the level of their readiness, the uniqueness of a class collective.
5. Outer conditions' specifications (geographic, working environment etc.
6. Teacher's abilities: experience, the level of theoretic and practical preparation, the capability to cope with a certain methods and means, the level of methodological approach, personality features.

4. THE SYSTEM OF TEACHING WITH A CLOSED CYCLE

The system of teaching with a closed cycle is included into alternative school systems or in other words into the systems with modern perception of a teaching process. It respects humanization and democratic aspects by self-creating of a student's personality with the development of cognitive and non-cognitive functions. Contrary to a classic teaching form, its nature is based on student's personality and his/her individuality, Jenčová, Litavcová (2013b).

By didactic organization of a teaching class, a student is led to a motivational-regulative activity and to his/her individual self-work and creativity. There are three cycles involved directly in the class which are mutually arranged in individual didactic situations so that they create a closed system. Elementary management definition talks about management system with a focus on achieving required output state. Management as a device for teaching can be divided into seven levels – diagnosis of a teaching process – decision making – class organization – class management – class controlling – diagnosis of a teaching process – teaching process evaluation.

Individual levels are hidden in a Map of personality development in a class with a closed cycle as a tool of development conception, evaluation and self-regulation of a personality. In self-regulation, self-evaluation plays an important role – coming back again to a human being – a student, Jenčová (2013).

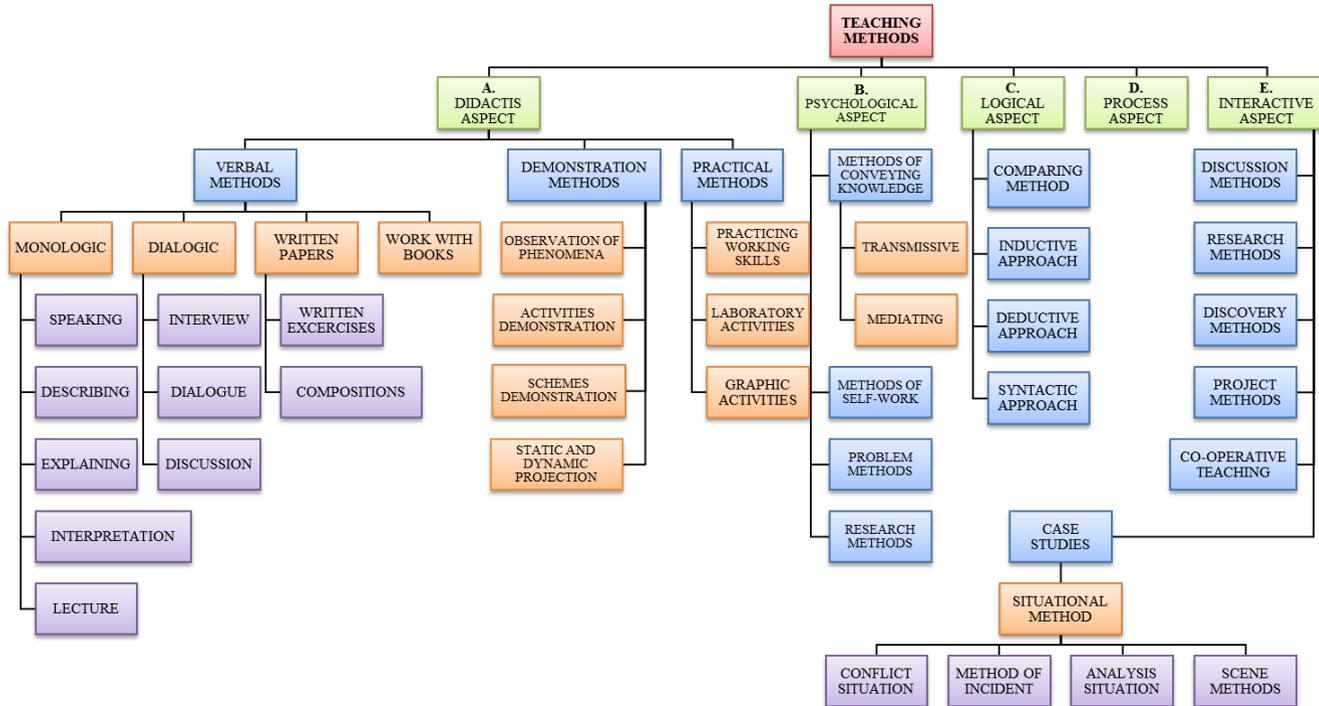


Fig. 1 Teaching methods
(Source: Own processing)

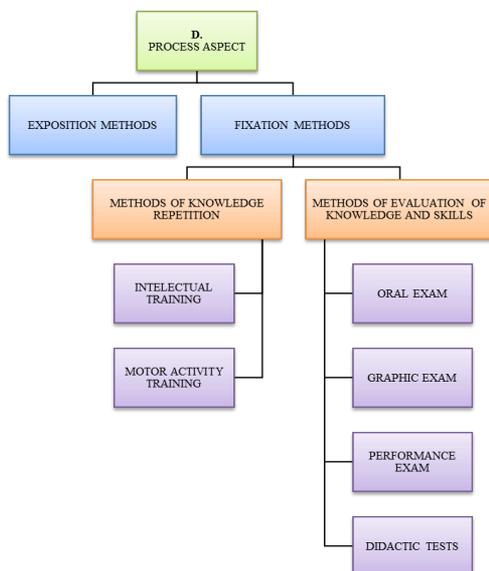


Fig. 2 Process aspect
(Source: Own processing)

CONCLUSION

Implementation of teaching methods is very important not only in pedagogical communication between teachers and students but also by the development of students' key competences such as e.g. the ability to solve problems, the ability to work in a team, the ability to analyse, the ability to communicate and other, Weiszerovej (2013). Teaching aids and didactic technique enable to understand abstract elements of a curriculum, they contribute not only to the development of thinking but also to all cognitive processes. They have an irreplaceable position in all stages of a teaching process. They make the curriculum understandable which the students would not be able to comprehend. They enable to increase the effectivity of a teaching process to a great extent. Teachers must be led to their basic duty of preparing individual teaching items and to run a class without any external disturbing influences.

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