# DEVELOPMENT OF AN EDUCATION METHODOLOGY IN THE SOCIETY OF KNOWLEDGE AND COMPUTERIZATION

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### Abstract:

Social changes of recent years have changed people's thinking and behavior, drawing a new generation. In this context contemporary society was launched in search of new solutions for understanding and constructing reality, approaching education for socio-economic problems. Modernization of education became a necessity and a solution in future perspective. In informatization era the psychosocial transformations of our civilization require new forms of educational organization, based on practical, strategic and divergence thinking.

Keywords: knowledge society; education; methodology; modernization; university.

## Introduction

The world experience has shown the importance of investing in education. For this reason we decided to follow the changes occurring in education from social, scientific and economic progress. The analysis of the evolution in higher education will allow us to deduct its modernization routes. In this way we will outline the methodology necessary to connect higher education to the society of knowledge and computerization.

Studying the effects of scientific progress over society and analyzing the specifics of youth from the society of knowledge and computerization allows us to trace the directions for effective teaching interaction. Given the characteristics of the modern student we will outline the specific methodology of present university education.

The importance of the study consists in the fact that, by recognizing the need for change, it will be possible to draw the direction lines of the subsequent amendments of the education methodology.

In order to achieve the study objectives, in the survey we used the method of observation, analysis and documentation, and the education phenomena were approached through the prism of psychosocial changes.

In recent years, specialty literature resorts even more frequently to interdisciplinary approaches. Simultaneously it comes to modernizing the education system. In the specialty literature the importance of education in socioeconomic development is mentioned more often.

It is important that modernization of education addresses not only the information content, but also the teaching methodology. Therefore science education professionals have looked towards the study of youth psychology in order to develop the methodology adapted to the society of knowledge and computerization.

#### Development and modernization of the universities

Lately we are witnessing the process of computerization and globalization of society, following the development of new information and communication technologies. Innovation in the scope of these technologies has contributed to an evolution in the true sense of the word, that included all branches of science, and educational system. Social progress propelled education towards a natural and necessary development.

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Let's follow the change which included the educational domain, making a foray into the phenomenon of development and modernization of the universities. These institutions, born in Italy, France and England at the beginning of the thirteenth century, are spread now to all continents. Universities over the centuries have been radically transformed. Each period had to solve the dilemma that aroused from keeping the old knowledge and introducing of innovations, from the traditional system of knowledge evaluation and from the change of the assessment criteria for appreciation.

Medieval universities were institutions that spread ideas and doctrines. During this period the vast majority of teachers and students were limited to the reproduction of a science without seeking to renew or enrich it.

Even if the fields of study taught in the universities seem today purely theoretical, medieval academics were convinced that the studies were not an end in itself, but they must allow those who have had access to science to have a personal profit and to put their competence in the service of legitimate purposes from a social point of view.

The cultural contribution of the medieval universities was not limited only to the innovative doctrines of several great personalities. All those who have persistently attended them, were offered a very solid cultural base, a rigorous way of thinking, an ability to analyze and this formed for them the necessary notions in order to shape a coherent vision of the world.

The pedagogy of the Middle Age promoted mainly oral methods and was based on two exercises: reading and discussion. Reading presented an interpretation of the program texts by teachers or advanced students. The second method took the form of public discussions between students led by the teacher, who was leading and concluding the debate. Discussions stimulated competition energized the atmosphere and constituted a tool for discovering the truth. During this period, books were expensive, however teachers were forbidden to dictate, and students were forced to follow the teachers' explanations without taking notes.

In modern times (XVI-XVIII centuries), a major feature of the institutional evolution was the control of universities by political powers, because the state was responsible for teachers' salaries and for building constructions. Therefore in modern times in some countries the universities offered an insufficient and outdated education, and in others they provided a solid cultural base and were forming the original spirits. During this period, the development of education methodology was facilitated by the spreading of printed books.

In modern times, in academic education there have been a series of reforms. In the sixteenth and seventeenth centuries they were primarily aimed at strengthening the state control at the expense of the old privileges of autonomy over the universities. And later in the eighteenth century, the reforms reflected an explicable desire to modernization by a better adaptation to social needs.

It followed a period of diversification, expansion and professionalization of higher education. Performing higher studies had become an important condition for promoting individual social status, for the national affirmation, for elite formation, for scientific and economic progress at a national and international level.

During this period it appears the American university system in which education is considered the basic value of society. American billionaires want to offer to their country institutions in order to form the new elites, to affirm international power, operating by the German model, that is linking education to research. In the American universities the beauty of the premises, the luxury of the research laboratories and the abundance of auxiliary aids (libraries, sports halls, housing for teachers etc.) is combined with the opening of higher education to the masses and provided the people with the chance of getting higher education.

# Development of an education methodology in the society of knowledge and computerization

Today education has gained new dimensions. As the result of a long historical development, it included the entire world and is strengthening its importance.

"Education is the key to a better future," said Androulla Vassiliou, European Commissioner for Education, Culture, Multilingualism and youth education, and investing in it "speeds up the process of recovery and equip people and countries with the competences to prosper in the post-crisis world"<sup>2</sup>.

It is natural to ask ourselves the question "What is the current mission of universities and how should they interact with society?"

Currently it is outlining some perspective of the mission of universities. Thus, we can distinguish universities that can be considered regional, economic, social, ecological, cultural, etc. development centers. Another type of universities is the institutions with innovative specific and "business". Those are often in partnership with enterprises and play an important role in designing new technologies, achieving social orders through scientific research. And a third type of university serves society to "lifelong learning" and "life wide learning". These universities have the mission to contribute to adult education.

Current education seeks to join the current needs of the society and to create favorable conditions for the development of every personality. It is characterized by diversity and creativity, a mixture of styles and ambiguity tolerance, acceptance of innovation and change, challenge of lateral thinking and search for truth, creating reality through the exchange of experience. The society wants that modern methodologies will open possibilities for people with different types of intelligence, to seek alternative sources of information, allowing individualization of the learning process.

Modern education calls to establish individual routes for development for each person. This means that each person will determine his objectives, goals, ideals to achieve personal development, different from other people. These routes can be achieved through self-discovery and self-education provided through individual hard work based upon additional sources pre-established by the student.

At present education sciences deal with the development of educational standards, enriched with new scientific content. Experts indicate that the information provided for studies is not interiorized by the youth to the required extent and its assimilation is complicated and totally unfeasible. This phenomenon can be explained by the discrepancy occurred between the methodologies applied in the educational process and the psychological characteristics of the new generation, the expectations and even the needs of informational society.

Teachers today are against informative booming of students and pupils with answers, in order to prepare them for exams. The educational process must be different from a simple information delivery in which "our head is a perforated bucket through which holes the surrounding information flows within."<sup>3</sup> Teachers should understand that their role consists not only in efficiently storing information, but also in forming the students' ability to solve various professional and vital situations in order to achieve them in life.

Since sterile information flow is not received by youth, teachers are required to address the real problems of the new generation and to offer youth a framework to help them solve those. The information provided must be "dressed" in situations and contexts to help each person develop customized strategies of thinking to guide youth towards knowledge performances by the individual feeling of information.

<sup>&</sup>lt;sup>2</sup>\*\*\* (2010), Focus on Higher Education in Europe 2010: The Impact of the Bologna Process,

http://eacea.ec.europa.eu/education/eurydice/documents/thematic\_reports/122EN.pdf

<sup>&</sup>lt;sup>3</sup> Karl Popper și Konrad Lorenz (1997), Viitorul este deschis, Editura Trei, București.

We must keep in mind that the computerization process of society emphasizes the reporting information towards existence. This aspect of modern society can be applied when we appropriate information by feelings. In other words, true knowledge can not be transmitted; they can be acquired and constructed by each person through his own efforts to understand, through experience and personal perception.

Because today's youth has primarily a visual-spatial and emotional thinking, he assimilates knowledge with emotional value, which is in conflict with the tradition of the teachers to transmit knowledge mainly through verbal channels, appealing to rational thinking. The present teacher's task is to help them discover and decipher the reality through different experiences in which reality takes different forms depending on the particularities of each person.

Education has become an attempt to influence, without guaranteeing the final result. The teacher became a mentor and a model of the experience of success or failure, of ideals approach and confrontation with non-values, of thinking and feeling mode.

In such a perspective is necessary to analyze the phenomenon of the computer revolution impact on education. We must recognize the contribution of new informational technologies in the formation of the society of knowledge and computerization.

Introducing new informational technologies imposed on society's informational globalization. Today, young people obtain information from various domains thanks to the Internet. The impact of new technologies upon education has changed the route of traditional communication and information; it imposes modernizing technologies in academic education and the modification of educational methods.

Current youth learns about the world around him on the Internet. It is obvious that the new type of knowledge is characterized by informational diversity and heterogeneity, by way of individual perception and lack of assessing information by eclecticism and originality. Current education will have to give up the system of systematical knowledge, organized and rigid, in favor of a huge field of information which offers the freedom to choose. The new generation of students is opting for the opportunity to personally decide how to achieve its development activities.

The new educational paradigm cultivates positive thinking (mental attitude with whom you manage to overcome obstacles and fulfill your dreams) and humanism (which places man and human values above all, cultivating the taste of meditating on the human condition in the world). Today's youth, willing to communicate, seeks to make friends through the Internet. The development of the computerized revolution conditioned youth employment to various social networks. These allow users to shape a personality many times different from the real one or to be anonymous. Knowing this aspect, the teacher needs to condition a good behavior, developing favorable interpersonal relationships and a positive socio-emotional climate, to promote students' qualities and abilities.

An inevitable consequence of changing the perception of the academic studies' mission treats learning activity as a process to knowledge production. In this context we can speak of a culture that cultivates tolerance regarding different points of view, trains creative thinking and promotes talent.

As we noted earlier, the society was exposed in a relatively short period of time to significant changes. Let's not forget the influence of media on our conscious and subconscious. Messages with a strong emotional intensity are transmitted more frequently in a short period of time. Acceleration of the rhythm of life, speed of information transmission has led humanity to the need of applying simplified thinking schemes, operational and intuitive. Consequently, the new methodology of education must keep the perspective of the overall changes that occurred at the conscious and subconscious level.

Education sciences, in the period of the society of knowledge, must resort to the media means and use the Internet to interact with the younger generation "in his language". It is recommended that teachers provide students with films and educational programs, games and interactive sites with educational character. Education must have sufficient sources to guide youth education through the Internet and to hold control of the information field.

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During the current period, superior education students are taught to solve various problems related to professional activity. To facilitate this, teachers must provide students with creative thinking patterns of the great personalities. It is important to display in university education recordings with valuable national and international personalities.

Current education requires a change in the way of thinking and training to develop personal thinking. This means that at the current level of superior education the present methodology must involve interaction and cooperation of the young, take into account the over sizing information and active communication through the Internet, address the optimization of personal awareness through discussions and desynchronize of the educational process, to apply individualization of learning and motivation for personal development.

As mentioned in previous analysis, current technologies must develop creative and strategic thinking. This type of thinking works with information in the form of images and needs to accumulate logical alternatives related to an informative segment. The perspective of development of these intellectual skills are related to practical thinking and is structured through applicative exercises and solving problems.

Besides, we must take responsibility for the formation of student's moral character. Thus we will invest in the future of society and will contribute to it, so that the youth will be empathetic, optimistic, courageous, helpful, friendly and happy.

Finally it must be said that although at the foundation of the society of knowledge stands information and communications mediated by the computer, the place of the teacher is and will remain important.

## **Conclusions:**

Following our study we found that, over the years, universities as a result of social progress have changed their mission, which determined the modification of contents and teaching methods. Education today must develop practical and creative thinking; allow differentiation of personal development and self-directed learning through modern information sources.

Analysis of changes in higher education from their apparition to date, allows us to say that it is natural and necessary to introduce changes in teaching methodology.

We found that, at this stage, is inevitable the change of educational interaction towards humanism, acceptance of divergent ideas and diversity in perception, the approach of connecting at the conscious and subconscious level.

The study results show that together with social progress it is necessary to improve academics, to modernize education methodology and the interaction strategies between teachers and students.

Following the study, we can conclude that the society of knowledge and computerization needs new educational methodology that will allow efficiency of the learning process. At present it is recommended that experts in education sciences approach the development of new methods, by doing a psychological analysis on thinking, perception and motivation of the persons from the society of knowledge and computerization.

### **References:**

- \*\*\* (2010), Focus on Higher Education in Europe 2010: The Impact of the Bologna Process,
- http://eacea.ec.europa.eu/education/eurydice/documents/thematic\_reports/122EN.pdf.
- Bauman Yzgmunt, (2001). Globalizarea. Consecințele umane, București: Ed.Humanitas.
- Burke, P., (2004). O istorie socială a cunoașterii, Iași, Institutul European.

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- Charle, Christophe; Verger, Jacques (2001). Istoria universitatilor, Iași, Ed. Institutul European.
- Costea Ş., (2008). Educația, învățarea și dezvoltarea umană în societățile cunoașterii și informatizării, Societate. Cultură. Educație, Pitești: Rottarzmond & Rotarexim, pp.115-119.
- Drâmba, O., (2003.) Istoria culturii si civilizatiei, vol. VI, Ed. Saeculum si Vestala, Bucuresti.
- Freeman, Ch. (1997). Tehnology, Globalisation and Economic Performance, Ed. By D.Archibugi and J.Michie, Cambridge.
- Galbraith, John Kenneth, (1997). Societatea perfectă, București, Editura Eurosong & Book.
- Lech Biegalski, (2007). Analiză: Noua Ordine Mondială și Educația, http://ro.altermedia.info/noua-ordinemondiala/analiz-noua-ordine-mondial-i-educaia\_7980.html.
- Lukatskii, M.A., Kondratenko, E.B., (2010). Metodologia cercetării educației sociale: direcțiile actuale, Pedagogika, nr. 9, Moskva: Pedagogika.
- Metcalfe, S. (1994). The Economic Fondation of Technology Policy: Ecvilibrium and Evolutionary Perspective, Handbook of the Economics of Innovation and Technical Change, Cambridge, Blackwell Publishers.
- Neculau, A., (1997). Câmpul universitar și actorii săi, Iași, Polirom.
- Popper, K., Lorenz K., (1997). Viitorul este deschis, București: Editura Trei.
- Stan, E., (2004), Pedagogie postmodernă, Iași, Institutul European.