THE ROLE OF A COMPUTER AND INTERNET IN EDUCATION

By

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Abstract: 21st century brought changes and new technologies. The era of computers and internet forces everyone to use information technology in everyday life situations. People find themselves before a choice of absorbing new skills in IT or staying behind the new culture. To assist with the progress, schools entertain programmes including new technologies as tools for transferring knowledge. Computers and Internet are used during lessons as well as students are encouraged to use such tools in completing their homework. This article explains benefits and dangers of it.

Key words: Information technology, computer in education, Internet in education

INTRODUCTION

Philosophers, sociologists and economists compare the past twentieth century to the third industrial revolution, which is the most important driver of information technology and telecommunications. Both enter the human life widely and fast, and their use is beginning to be decisive for the success of an increasing number of areas of human activity. The amount of information is difficult to comprehend by the human mind are pose for a remarkable civilizational challenge. This new phenomenon can be admired and glorified or it can be condemned. We must first of all understand that the process is obvious and inevitable. In a few years, one who is not capable to use the information and technology, will not be able to function in society. It can be said that such slogans as "information society" and "knowledge economy" today no longer raise anyone's surprise (Prokopowicz, 2001).

Dissemination of information and computer technology in learning and teaching are accompanied by increased social expectations. In order to the use the information technology appropriately and to bring positive results, many conditions should be met. First of all, the computer cannot be the only addition to the traditional teaching methods, involving mainly the teacher lectures and exercises. For instance, limited use of the computer does not give the expected positive results. Where the computer replaces the lecture, it does not have any influence on higher mental skills like analysis and creative problem solving, critical thinking, and so on.

BENEFITS

Of key importance in this regard is the training of teachers. It is not possible to include all the teachers in training system to prepare for the use of computers in education. It is, however, essential to provide them with adequate assistance in school and to create conditions for improvement in this area. Teachers' skills and abilities have significant impact on the correct use of information technology resources available throughout the educational process of young people (Gregorczyk, 2001). In the design of educational reform program emphasis was placed on educating students in skills of independent search, filtering and practical use of this information.

The aim of the educational institutions is to prepare young people for life in society, which according to the experts UNESCO, is entering the era of information. Therefore, one of the main tasks is to enable all students to familiarize themselves with the basics of information technology and its inclusion in various fields of education programs. Without adequate preparation, young people will not be a full and active participant in the changes in all areas of life.

Students using the rich resources of the Internet should not only possess the proper skills to obtain information from the network, but also to learn in-depth analysis of the content. The internet is an endless wealth of information gathered by societies. It significantly enhances school subjects, enriches educational content, forms and methods of work of the teacher. The overriding goal of using the Internet at school should, however, be exploring the mechanisms of learning from the media, as well as preparation for the use of media as tools of intellectual work.

In carrying out the educational process one must not forget that actions should be used to build a critical role for the reception of media messages on the Internet, indicating the commercialized culture of universal values, such as goodness, beauty, love, tolerance and so on.It has become necessary also to acquaint students with social, ethical and legal aspects of access to information. Youngsters should be sensitized on the possible dangers of electronic data processing and the need to protect data (Majewska, 2002).

Ministry of Education undertook a number of initiatives taken in various areas of computer science education. One of the biggest was the "Internet classroom in each municipality." It benefits not only students but teachers too, giving satisfaction fromskilful use of the laboratory in the learning process.Powerful computer means for them the necessity of continuous training in the search for the software and become familiar with it.

Programs that use information technologies allow to:

• Learning by assimilation,

• Learning by discovery through animations,

• Learning by solving exercises, selecting screens and options of the program,

• Learning by experiencing, which facilitates numerous films and illustrations (Hatalska, 2001).

Use of information technology should have a flexible pattern. Students do not have to constantly sit in front of computers and isolate themselves from the class to gain knowledge in the "modern way". Such structured process of education would be unforgivable extreme remaining far beyond common sense. A situation should not be allowed, in which the computer is seen as a way of life, learning and leisure activities, but, on the other hand, it should also not be underestimated as a tool for work. Shall the teacher use a computer to pass knowledge or rather use standard ways of teaching, would depend on their skills and students abilities to absorb knowledge via different learning styles. The attractiveness of classes with use of information technology do not exclude, therefore, a live relationship with other young people, exchange opinions, share their reflections and discussions. It is also a good opportunity for young people to notice that no program will replace a teacher who skilfully adapts the form, manner of communication to the needs of students.

It is important to particularly highlight the role and importance of simulations, which support teaching professional vocations. This remarkable form of training, using the latest technology is an interesting way to get closer to the labour market. Organizational structure of the simulation does not differ from the actual organizational structure of the economic entity.

Simulation uses integration of theory, practice and cross-correlation.Each student works on a designated computer workstation based on the teacher prepared worksheets that contain tasks and activities to be performed by the student on a given day. The teacher can also vary the degree of difficulty of the tasks, depending on the student's perceptual capabilities.Such training provides opportunities for practical use of acquired knowledge and gives young people the opportunity for self-training, self-improvement and self-employment after finishing school.

DANGERS

The Internet, as a new medium of the twenty-first century, also carries dangers. The most common health risks include: eye strain, scoliosis, central nervous system disorders, emotional andinterpersonaldisorders (Zawislak, 2003).Internet addiction is a new kind of addiction that was brought by 21st century. One of the causes of addiction is the rapid development of information technology. A person who wants to keep up with developments, must follow, discover and study these developments, which means spending continuous hours at a computer. Very important element of this addiction is through psychological dimension: many young people with impaired self-image, the undervalued self-esteem, feel safer in the virtual world (Tadeusiewicz, 2002). Creating new personalities, living imaginary lives that are detached from the reality, became very common in today's world. One should not forget about Internet contains a lot of harmful content: porn sites,sects, pro-addiction groups that when viewed and visited by minors, imprint on their mental health and may have fatal results in adult life. Risks of the Internet and computer games lies also in vulgarity, brutality and aggression. In such cases, particularly parents as educators should be ready to take action to raise awareness of young people about the dangers, which they do not realize.

PERSONAL EXPERIENCE AND CONCLUSION

In my direct contacts with teachers, I obtained a variety of opinions on the use of computers and the Internet in educational activities.Those, who regularly use the computer software purchased by the school education, believe that during these lessons, pupils' mental activityand interest in exploring are increased. Multimedia techniques stimulate young people to creatively solve problems, develop their imagination and see the practical examples of the implementation of different issues. Some of teachers will be happy to profit from the exciting educational programs, but do not have direct access to the computers.

With the above considerations on the use of the computer in the education system,it is clear that the new model of education requires far-reaching changes in the functioning of the school. The effects are not determined by a number of infested information, but their selection and arrangement as to achieve the main goals of education. The traditional way of education based on providing students with a lot of information is gradually evolving towards education with emphasis on thinking and how to use these information. Achieving this goal, however, requires support of learning tools. In today's world of thinking a computer and Internet have become essential in the design, in economic activity and wherever we are entering a new area. In the emerging information society there is now a demand for people with ability to act in changing conditions. Shaping thinking in action is an indicator of the modern school evaluation (Siemieniecki, 1999).

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About the Author

Ms Kowalska completed Master degree in Communications in 2001. She engaged as a primary school teacher of Information Technology in 2004. Since then also she has been involved in promoting the use of computer and internet in other subjects. She is currently working on rolling out a new programme "Information Technology in Science". In 2011 Ms Kowalska became a head of Small Schools Teachers Association.