V. Koshkalda, Master student
O. Misechko, Doctor of Education, Prof., research advisor
O. Bashmanivskiy, PhD in Education, As. Prof., language advisor
Ivan Franko Zhytomyr State University

EDUCATIONAL POTENTIAL OF MODERN INFORMATION AND COMMUNICATION TECHNOLOGIES

The emergence and development of information society led to widespread usage of information and communication technologies (ICT) in education, that is determined by many factors. Thus, introduction of ICT in modern education significantly accelerates the transfer of knowledge and accumulated human experience (technological and social).Modern ICT provide opportunities for successful and quick adaptation to the environment and to social changes. Active and effective implementation of these technologies in education is an important factor of a creating a new education system, that meets the requirements of the information-abundant society and of the modernization of the traditional education system. The aim of this study is to stress a powerful educational potential of modern ICT.

Modern information and communication technologies as a teaching tool allow to fulfill a number of didactics, pedagogical, methodical and psychological principles. They make learning more interesting and creative because of its complexity, interactivity and versatility. From the point of its didactic value, ICT help to make studies more intensive, effective, independent and creative; provide feedback in this process; design the probed processes or phenomena; organize collective and group work. The use of ICT may be appropriate at all stages of the lesson both in natural and mathematical disciplines and in humanities.

The most widespread ways to use ICT at school according to I.Stavitska are:

- use of electronic lecturers, trainers, textbooks, encyclopedias;
- design of processes and phenomena;
- providing the distance education;
- organizing interactive educational teleconferences;
- construction of the system for controlling or checking students' skills and knowledge (usage of the controlling software tests);
- creation and support of schools websites;
- support of students' research activity;
- creating presentations of educational material, etc[2].

Information and communication technologies are a powerful tool for the reception of various information by students and an effective teaching tool that increases interest and allows to implement the principle of clarity.

Unfortunately, today the provision of secondary schools with computers and programs in Ukraine is unsatisfactory and the teachers' level of computer literacy is mostly not equal the technological achievements of our time. Ukraine takes one of the last places as for the amount of computers in secondary schools - 1.3computers per 100students. For comparison: in Japan there are 82computers per 100 students, in the

USA – 76, in Germany – 52, in France – 38, in Poland – 14.6, in Russia – 10.4.Over 1 million students (about 20 percent) study in schools without modern computers at all. Today, according to the index of «readiness of informative infrastructure» Ukraine occupies a 82nd place among 104 countries of the world, next to Zambia and Tanzania. Rural schools in Ukraine have 9 computers per institution, on the average, by comparison to 22 computers per one school in middle-sized town and 28 in large cities. There are less than 2% of such schools in large cities[1].

Development of the information-abundant society determines priority routes of education. They are:

- to improve the content and form of the educational process according to the possibilities of modern ICT;
- to provide ICT in the sphere of education;
- to create and implement a new computer methods of training and testing;
- to prepare professionals and teachers to use a variety of ICT;
- teach students to use information and communication technologies correctly;
- to create conditions for a stage-by-stage transition to a new level of education based on these technologies;
- to form and develop intellectual potential of the nation.

Educational reforms are impossible without regulative changes in this sphere . The Ukrainian legislation has already created a number of programs and concepts aimed at informatization of education. For example:

- 1998 - "The concept of the National Informatization Program" which started regulatory and regulatory logistics in the sphere of informatization of Ukraine;
- 2005 - Program "Information and communication technologies in education and science";
- 2007 - Law of Ukraine "On the Fundamentals of Information Society Development in Ukraine for the period of 2007-2015";
- 2010 - The concept of the state target program "One hundred percent" for the period until 2015 (2010) (the order approving the concept was invalidated prematurely (05/03/2014) because of budgetary savings).

After analyzing educational processes in Ukraine, we can conclude that a period of decisive changes of traditional views on education has come. Computerization has strengthened its position of an important component and tool of reforming education, as far as without this process the level of education cannot be upgraded. The introduction of ICT in the learning process is a stable and very important trend of modern education, it aims to prepare the individual for life in the information-abundant society (development of communication skills, research skills, skills to work with information). The use of ICT on lessons opens the great opportunities before a teacher in the formation of the subject competence, interest and stable cognitive activity of students .Computers must be present in all educational class-rooms, not only at the lessons of informatics, because the computer has already been used not only as an object of study but also as a means of helping to organize the learning process.

REFERENCES

1. Самохін І. Проблеми шкільної освіти мовою цифр [Електронний ресурс]. Режим доступу до статті: http: //osvita.ua/school/49694/

2. Ставицька І. В. Інформаційно-комунікаційні технології в освіті [Електронний ресурс]. Режим доступу до статті: http://confesp.fl.kpi.ua/node/1103