Role of ICT in education of the developing countries

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Education holds one of the main places in development of the society in our modern world. The idea of "From the primary school to the uninterrupted education" is considered to be the key of the global economy in the world community. Social progress and human freedom are grounded on this idea. At present professional level defines a position of human being in the society, affects the quality enhancement of the living conditions and is accepted as a means of self-affirmation.

The experience of the developed countries shows that informatization of the education system directed to the growing up the new generation that meets requirements of the information society depending on its level of development and living conditions is the main perspective issue for transition to information society.

The old methods used for the receipt and analysis and of information are unavailing and there is a need for their replacement with new ones. If a young man wants to study a new technology in the atmosphere of market economy, he would probably encounter with several objective problems that are typical for the country which undergoes transition economy: the difficulty in finding the right professional specialist, financial straits, lack of information, means of modern training, language problems, lack of time, etc. However, if he has an opportunity to use a computer, his problems could be minimized. If he has an opportunity to use the services of Internet, then a world of affluent knowledge will lay before him.

Use of new technologies for the transfer of knowledge and information was defined in the Millennium Development Goals as a means towards equality and development at national and global levels. If we look over the recent past of Azerbaijan, we can find that the unrenewed natural resource of "black gold" is an unparallelled means for inexhaustible capital of "human gold" and for the development of the country economy.

Today there is much need for the specialists with computer skills in the labour market. Though majority of high education institutions of the country prepare corresponding qualified staff, the content and type of this issue needs to be re-considered. It is necessary to raise percentage of the professions connected with information technologies for different fields in the student's admission plans. Firstly, IT specialists

should be prepared covering areas of the economy and production. Preparation of specialists on the basis of training programs for the priority fields, such as banking services, medicine, information security, e-commerce, network administration, information economy, applied informatics that meet the international requirements are one of the main demands of the information society.

Therefore, it is important to improve provision of educational institutions with technical facilities, give preference to highly-qualified experts that have practical skills. It is also necessary to organize ongoing education on the basis of single conception from the secondary school till master's training without repetition of information technologies. Only in this case we can speak about quality and real results.

The other important issue is the selection of the platform for use of program modules and technical facilities. The problem is mainly arisen in use of technical facilities. Thus, most of them are considered for Windows operation system. In recent times, there was a confrontation between Windows and Unix (Linux) systems and the number of supporters of open code production for both general and special software is gradually increasing. The problem of Open Source is considered the actual one throughout the world and is going to be the subject of the disputes in the high level ICT events. Specialists have already come to the conclusion that implementation of long-term projects is not useful for creation of closed software.

There are many identical programs used in the field of training and research, but selection of which one for the utilization always raised disputes.There is no single conception in this direction. Majority of companies simply sell their own computers and program modules and consider their work to be completed, as well as undertake no constructive measures for full transparent utilization of information technologies in the atmosphere of mutual integration. This causes many problems for ordinary users in the global network system.

Distance education is another issue which is applied in the developed countries for decades. This education form was created on the eve of the information century of the information society. Thus, the role of the teacher began to slowly change. Education system of the middle ages was already left in the past. With creation of universities people sitting in front of computers continue their education without leaving houses. When we have a look at the development tendency, we can assure that training process in the education institution of the developed country will soon be organized on the basis of the telecommunication system and computer technology.

I would like to point out some drawbacks of the distance education for the developing countries.

1. Probability of loss of the student contingent. Thus, young generation prefers western education system and inclines to more cheaper sources;
2. Probability of loss of the real job places in the labour market. Faculty staff of the education institutions in the developed countries fights for the student team that desires to get paid study via electronic facilities;
3. Dependence on western education system. Developing countries are not competitive compared to these countries.

Moreover, expedient use of electronic facilities provides the following priorities:

1. Possibility of favorable utilization of the western training sources;
2. Suitable environment for the exchange of technology and training methods;
3. Opportunity for purposely involvement of the teachers and scientists of the western countries to the education process of the developing countries.

Application of the distance education form will also necessitate changing structures and methods of the training process:

1. Transition from the traditional education buildings to the cyber space;
2. Transition from the classic lecture halls and classes to the computer classes, electronic games and virtual lectures;
3. Transition from the teacher's control to the self-control;
4. Transition from the classical libraries to the general or shared e-libraries;
5. Transition from the ordinary laboratories to the virtual research groups;
6. Transition from the ordinary meetings to the video and tele-conferences.

Realities of our present life – education principle for everybody, integration into European education space, conditions of the Declaration of global education, ongoing education for the perfect development, competition for the criteria of "grade/quality", realization of the knowledge economy and other factors made application of the distance education to be inevitable. Thanks to this, it is possible to assist solution of the following problems:

1. Cease "the brain drain", strengthening intelectual potential, involvement of young generation to the national education system and research institutions, improvement of social-economic conditions for people engaged in intellectual labour;

2. Involvement of investments to the innovations in the field of information-communication technologies, enabling evebody to get information, learning of ICT technologies by everybody;
3. Supporting national education market and international programs in the state legislation policy.

In general, effectiveness of the education system is estimated through unity of three parameters: quality-expense-coverage. From this viewpoint, distance education is considered the most suitable education form in the developed countries.

Formation of a new environment in the field of science and education, especially in the first stage, demands wide public support, comprehensive recognition of priorities of the distance education, educated propaganda of education and quality study via modern information technologies. Therefore it is necessary to undertake the following complex measures connected with scientific, educational, training problems at the state level:

- Improvement of staff training in the country, implementation of distance education and ongoing study;
- Preparation of knowledge standards for the information-communication technologies at all levels of education;
- Education of people through application of modern information-communication technologies facilities.