INTELLECTUAL DEVELOPMENT OF PUPILS' PERSONALITIES IN THE CONDITIONS OF EDUCATION INFORMATION

Andasbaev Y., Yessengabylov I.Z., Aldabergenova A.O., Zhiyembayev Z.T.
Zhetysu State University named after I. Zhansugurov, Taldykorgan, e-mail: Ilias_E@mail.ru

In the article necessity of intellectual development of pupils' personalities in the conditions of society information has been substantiated, didactic potential of information-communication technologies in development of intellectual abilities of schoolchildren has been discovered. On the basis of the analysis of the relevant information the conclusion was that intellectual skills are determined by the following components: ability to analyze, ability to select the main thing and the second, ability to systematize and classify, associativity of thinking, ability to generate ideas and to suggest hypotheses, criticality of thinking, development of reflexion, stability of attention, ability to use attention, developed imagination. In the course of the work we have made the analysis of didactic potential of information-communication technologies and have been determined the main blocks of the above- mentioned technologies, which use in pedagogical process is the purpose of increase of intellectual development of pupils' personalities.

Keywords: information, information-communication technologies, intellectual development, computer graphics and animation

Information of the society is reflected as the most important mechanism of forming competitiveness of national economy in the Message of the President of the Republic of Kazakhstan N.A. Nazarbayev «The Kazakhstan strategy of entering the list of 50 most competitive countries of the world. Kazakhstan on the threshold of a new breakthrough in its development».

Information of the society is realized in the framework of the concept of the National Information Infrastructure directed to creation of E-Government; making open information-communication systems; standardization and certification of information means and systems; providing access to the resources of local and global networks; expansion of application sphere of the state language in a digital field; maintenance of safety and protection of the state resources.

In an information society as opposed to the industrial one knowledge and intellect are produced and consumed. The main type of created products is an information product; erudition and intelligence are included into national riches. Naturally life in an information society demands from the members of society high intellectual level, information culture of a person and creative activity of rising generation. Its solution means working out efficient technologies of intellectual development based on modern theoretical approaches to the questions of intellect and creative work.

On the basis of analysis of corresponding literature we have come to the conclusion that intellectual abilities are determined by the following components: ability to analyze, ability to sort out the main thing and the secondary one, ability to systematize and classify, associativity of thinking, ability to generate ideas and to put forward hypotheses, criticality of thinking, development of reflexion, stability of attention, ability to distribute it, developed imagination.

Nowadays in order to realize successfully intellectual development of pupils' personalities in their educational activity it is necessary to look for modern teaching means and methods. As the experience of educational institutions of Kazakhstan shows it is use of information-communication technologies with their huge universal possibilities that will be one of these means. Besides, with development of modern information-communication technologies the system «a person and a computer» has quickly turned into a problem which concerns all the members of the society, but not just specialists, therefore communication of a person with a computer should be provided by school education. The earlier we will begin it, the faster our society will be developed because a modern information society demands work with computers. In this connection in Kazakhstan the beginning of studying computer science is transferred from the 10^{th} form to the 7^{th} form, and pupils of primary forms have a propaedeutic course, it is connected with the fact that information-communication technologies have a huge pedagogical and didactic potential. At the traditional organisation of the process of training with use of the newest technical means a pupil «keeps a position of listening explanation», and with using a computer in the training course «studying becomes active and is ruled by the child himself» [1]. Thus in the training course personal significant purposes are achieved, and the received knowledge assist in development of pupils' intellect as the work experience of Kazakhstan teachers shows.

According to the results of our experimental research development of intellectual abilities of schoolchildren by the means of information-communication technologies is a personal education expressed in a complex of knowledge, abilities, personal characteristics providing such interaction of the pupils at which optimal conditions for development

of a creative personality are created, that determines the level of intellectual development which is characterized not only by quality of learning the set content, but also by consideration it in different aspects, as well as provides putting forward hypotheses during the search of solution of theoretical and practical problems, as criticality to them, analysis and development of hypotheses of other participants is a necessary quality of a modern person.

D. Dewey whose works many psychologists and teachers who are supporters of humanistic pedagogics used, paying special attention to importance of development of intellectual abilities of schoolchildren and forming independence of thinking, at the same time emphasized that the point is not only necessity of mastering knowledge, by the approach itself to organisation of activity in mastering this knowledge [2, c. 52].

At present time information flows in different spheres of knowledge are so huge and grow so rapidly, that a modern educated person cannot keep all necessary facts in his memory. Besides fundamental knowledge within the limits of his speciality he should be able to work constantly with information not only in the particular field of activity, but also in adjacent spheres as the solution of the majority of the problems is at the joint of subject fields. In this connection ability to work with information actually becomes the key intellectual ability which is the basis of any professional and cultural competence. Therefore the key task of the modern education system must be the task of forming this ability. In many kinds of professional work visual information necessary for decision-making is if not unique but the basic one.

Information-communication technologies which are an objective reality of modern educational process can not only fit in organically with studying-research activity of pupils, but also be used at organization of problem training and studying specific ways of creative activity that in the final analysis will assist in intellectual development of pupils' personalities. For example, using of computer graphics and animation will allow pupils to do educational experimental-research activity and to carry out independent scientific research of different phenomena and processes. Realization of possibilities of artificial intellect systems in software products for education will enable to improve testing, diagnosing techniques of control and estimating the level of intellectual development due to the possibilities of self-checking, individual, differentiated approach to each trainee.

The content of technology which was developed in the Kazakhstan National Information Centre is modeling on the basis of «horizontal enrichment» which essence is in adding to the traditional curriculum special courses which qualitatively differ from the traditional content of school education and are directed straight to intellectual development of pupils.

It represents entirely intellect and integrates in itself some aspects of intellect development: cognitive, information and creative and accordinly has three basic directions (lines):

- Cognitive line provides enrichment of cognitive experience of a child as the basis of intellect.
- Information line is focused on forming conceptions about the information picture of the world and acquaintance to information processes, mastering cognition methods and provides first of all development of metacognitive experience.
- Creative line or development of creativity, ability to make up creates conditions for stimulation of intellect displays in a non-standard situation or an uncertain situation.

It is necessary to note that the developed program material is successfully interfaced with the general education content, not duplicating it, and can be used together with any programs of school education.

In conclusion we should note that on the basis of the analysis of didactic potential of information-communication technologies we have sorted out the main blocks of these technologies which use in pedagogical process is aimed at intellectual development of pupils' personalities:

– studying and use of general methods of efficient processing of information;

– use of programs of general purpose (text and graphic editors, tabular processors, control systems of databases);

– use of telecommunication software;

– use of special programs (tool environments, multimedia products used at studying of some subjects) for making subjectively new rational ways of information processing. From our point of view optimal combination of information-communication technologies will be joint use of special programs (studying and application of programming technologies) and studying and use of general methods of efficient processing of information, including the ways of solving heuristic problems.

References

1. Peipers S. Revolution in mind: children, computers and fruitful ideas. – M.: Pedagogics, 1989. – 221 p.

2. Dewey D. Psychology and pedagogy of thinking. – M., 1909. – 217 p.