

EDUCATION AND THE INFORMATIONAL SOCIETY

Magdalena Zhelyazkova

Angel Kanchev Ruse University

Studentska Street No 8, Ruse, Bulgaria

Abstract

It is commonly assumed that in an attempt to unite the conceptions 'informational society' and 'education', the first is based on the second. And the training of specialists, who will develop the society towards improvement of communications, is viewed as the connection between these two conceptions. We assume that the connection of the said conceptions is two-directional, because the existing model of education, the educational system, is in need of a serious renovation. The blackboard and the chalk, though in the form of an interactive board, have long become anachronistic. The textbooks in their paper outlook, too, even their electronic variety, likewise. Modern education gains its power not only through obtaining ready-to-use knowledge, but through rationalising and reproducing it with creativity. Everyone can learn by heart and recite the Avadakedavra, but very few are those who can compose something new based on it, even on a student's level. How can we help most of the students to reach that level?

Key words: *informational society, informational technologies, globalisation, education amidst informational society, informatics, information, informational systems, virtual reality*

Information, computer, megabyte, file, processor, server, scanner and printer - all these conceptions are used quite frequently in people's everyday vocabulary and in the process of communication between people of different age and profession as a whole. The fact that these conceptions originated and are used is obviously a proof that something has suffered a serious change around humankind and they have entered a new world of some type, where the common conceptions and words, opinions and values, are no longer in the position of reflecting the magnificent variability of this new reality.

1. ABOUT THE INFORMATIONAL SOCIETY, THE GLOBALISATION AND SOMETHING ELSE

Human society has realised huge scientific and technical progress during the last three centuries, a fact which on its turn determines an increase of the power of man over the natural and the social environment, unheard of during the whole predeceasing period of the history of human civilisation.

Historically, human society has undergone different stages of development. Sociologists differ in their opinions about how to name these stages; nevertheless, they share the opinion that the different stages are characterised with different forms of economical, political and religious organisation and character.

But during the recent few decades it has become clear that the stage of the development of the present human society is characterised with symptoms unknown in history so far. In place of economical characteristics, peculiarities which break into pieces people's traditional views about society organisation come forward. Unlike the industrial society, where there exists capital (free money) and production of goods is organised on this basis, in modern society, knowledge comes first - and information is created upon this basis. This difference leads to considerable differences in the lives, the well-being and the jobs of people. So, it is only natural under the new circumstances many of the basic conceptions of the new society: informatics, information, informational systems, to be studied under another angle and to acquire new meanings.

The increasing symbiosis between science and technology, the overpowering of nature's resources and strength, push society into a new quality status. This status is characterised by a fast increase of the

role and the importance of information, which gradually replaces natural substances and energy, that were crucially definitive for the development rate of the world civilisation only until recently. This new society is preferably named 'informational society', because in it, information becomes the main article and product, readily accessible for everyone, and priority is given to information as a basis for seeking personal creative solutions, not to the unbreakable rules for certain social activities.

For the first time, the conception 'informational society' comes into existence in Japan, where it is used as a basic conception in the report of a special group for scientific, technical and economical studies, founded by the Japanese government with the purpose of planning the perspectives of the economical development of the country. The following characteristics of the new society are present in the report. High quality information abounds in it; the necessary means of conservation, distribution and utilisation of the information exist, while the information itself is easily and quickly spread on request to the people and organisations, who have interest in it, and is presented in the habitual form, to which they are used, the value of the delivered informational services being accessible to the public.

There are three driving forces of the informational society: the digital revolution, that is, the transition of analogue to digital technical instruments for presenting the information; globalisation, that is, the transformation of the world into one unified entity; the informational superhighway, that is, the merging of communication and computer infrastructure.

The common person found themselves submerged into the 'informational flood' as a result of the large-scale popularisation of the information and the accessibility of technologies easing the access to information. The human abilities and skills for handling and use of such almost unlimited resources turned to be limited quite unexpectedly. The ready access to too much information, which man is incapable of realising and taking the useful knowledge in the psychologically real part of time, has practically the same effect as total lack of information.

In this way, the essence of the new stage in the development of society, on the one hand, underlines its complexity as an entirely new variant, not simply of organisation, but as an entirely new structure, as well. On the other hand, here comes another factor which cannot be underestimated: globalisation.

Unfortunately, a universally acknowledged definition for this phenomenon does not exist, that is the reason why it happening in any part of the Earth can be determined as universal planetary character of some or other processes. Globalisation of the vital activity of the human society means that the whole humanity is included in a unified system of economical, social, political and cultural mutual relationships today. The informatisation of the society, the development of the modern technologies favours the uniting of mankind into a unified socio-cultural entity and creates principally new basis for globalisation. In the process of its foundation and development, the means of the modern informational technologies take a great part, making every citizen on the planet aware of anything

However, globalisation does not happen smoothly, it is running at the background of the formation of a sequence of problems, which are global in nature themselves. Such a problem is, for instance, the one about the global diminishing of resources on earth and its pollution, taking place simultaneously. These are problems of concern to the benefit and fate of the whole humanity and the joined efforts of at least the majority of the population on the planet are necessary.

A new scientific discipline is being created gradually: globalistics, which studies mankind as an interplanetary formation. Globalistics is a particular field of scientific, philosophical and culturological studies, by means of which people try to solve the different aspects of the global problems in their systematical interrelation.

Systematology and cybernetics can be pointed as scientific basis of globalistics, as well as the theory of information and semiotics, the conceptions of evolutionism, synergy. And the informational technologies are the material basis of all branches of globalistics.

They are largely used in the process of modelling of the various global situations; they make it possible a multiple quantity of 'language barriers' to be overcome in the informational space with the help of creating automatic translations of different texts and using national and international informational systems.

The technical tools of informatics comprise the powerful material basis of the globalisation of the vital activities of the human society. Informational tools can make the furthest ends of the planet come together. Using computers in globalistics makes it possible the probable varieties of different events and phenomena to be calculated, in great perspective, with great punctuality and in shorter terms. Such electronical 'fortune-telling' presents people with the opportunity to find the probable alternatives for the development of mankind and enables taking anticipating decisions fast.

The so-called global network or the Internet plays a crucial part in human globalisation and its different activity fields. This world informational system comprises the cyberspace, the virtual reality, where cyberculture is being formed with its conceptions, values, ways of thinking and language.

The Internet has long been an international network. The system of the global network is undergoing continuous development. The possibilities of the Internet are limitless. You can always find here what interests you most at this particular moment. The global network has become not only a source of information on a wide range, but in its turn can be divided into two basic categories: exchange of information between the subscribers of the net and using the basic data of the net. The development of electronic trade must be included here, which shows that the business world use the Internet more and more.

The essence, the stages of development and the usage of the global network in a more and more globalising society has been mentioned so far, as well as the development of globalisation, as far as both processes go in parallel to each other and are strongly interdependent.

Not only the positive, but the negative sides of the global network can be discussed as well - beginning with the political and social issues and ending with the humanitarian and the medical ones. A good example can be the already defined mental illness, the 'dependance from the Internet' syndrome. Cases of death as a result of chronic lack of sleep, as well as suicides, the direct result of the stress, caused by the Internet, disturbances of the sense of time, break-ups with the surrounding physical and social media, to name but a few. But all these can be defined as irresponsible, illiterate and uncultivated usage of the Internet.

And so, the modern technological and informational achievements 'shrink' the planet into an entity as never before, which is far more global and all-consuming even in comparison with the Great Geographical Discoveries. This entity is called an informational society.

And this new characteristics of the society raises a new type of human behaviour - behaviour in an informational society.

Here is the place to ask the question about the cause why so much time was dedicated to the presentation of the informational society and especially to its connection with globalisation - after all, the topic of this work is to focus on the educational problems.

It is very important to be noted, as it will become clearer further on, that the educational system does not exist in the vast and seemingly empty space of the human relations, but is inseparably connected with the epoch in which it exists. It follows that without a short, but systematised review of the essence of the historical scene, in which the present society exists, any analysis of the education would have been separated from the causes which make changes in it necessary, as well as from the essence of these problems. Because each type of education is in direct connection with the necessities of the society as a whole. And because in its nature it is very conservative, the development of the society gets ahead of it and later on causes changes, corresponding with the new objective conditions and the new relations, connected with them.

As it has been already mentioned, education is the result of the basic changes in the society. While the essence of the informational society was being presented, the fact was stressed that it is the cause why people believe that all the rest foregoing stages of its development have already been exhausted.

2. WILL THE SYSTEM OF EDUCATION BE REPLACED BY GOOGLE, OR WILL THERE BE A SCHOOL IN THE FUTURE AND WILL THE SCHOOL HAVE FUTURE?

Education is first of all a function of the socium which provides reproduction and development of the society as a system, whole in itself, and a system of activity. This function is exercised through the processes of translation of the culture and the realisation of the cultural standards in the changing historical background.

A more precise definition of education is attempted here, as an entity of systematised knowledge about the basic sciences, skills, habits and traditions, necessary for the application of this knowledge in practice, in reality. In the sturdy, life-asserting and dynamic societies, not only the specially appointed social institutions, like schools of any kind and type and pedagogical staff, but also all the structures and institutions are included, plus social subjects as family, church, state, mass media, etc., take part in providing the functions of education.

As a social value and a field of the socio-cultural practice, education is performed and materialised through the following basic functions: creating of the basis and foundation of the culture; performing of the upbringing as a function of preservation of the cultural diversity, regional uniqueness, natural landscape, ethnic and national traditions, etc.; training of staff with various qualification; education as a function of technologisation of the cognitive activities; creating literate people as a function of providing with equal initial rights and possibilities for all individuals, social groups and social strata, in the society; formation of autonomous and free individuals through education and literacy, to enable the overcoming of the social inequality and self-promotion.

It is only natural that the fullest extent of education as a social value is performed in the industrially developed countries undergoing the post-industrial stage of their development. In the circumstances of the globalising market, for these countries education turns into an important factor for the development of their economy and for their social lives as a whole. Owing to the greater financial strength of this group of countries and because education is financially supported by the state, the expenses for the education of their subjects are several times greater in comparison with those in the developing countries.

The modern societies, drawn in the processes of globalisation, are apt to a new quality condition, we previously called it informational. In the informational society the real production power comprises not only the natural resources and the traditional factors of industry: the land, labour, capital, but knowledge, science, informational technologies as well. Reproduction of goods is no longer a priority in it, but the innovative, scientific and educational activity. Knowledge replaces labour in the informational society, which means that the workers of industrial type have been replaced by workers of intellectual labour, who, being qualified and informed, have the necessary tools of labour. Today, information and knowledge transform into direct production power.

The informational society brings the human being ahead, pushing aside (or even cancelling) the machine industry that has, for such a long period of time, defined the social development.

That is how in modern society, the center of gravity moves from the industrial to the intellectual field, and particularly in the system of education, which, as it has already been noted, reproduces the human and intellectual capital of the society.

The informational revolution is connected with the processes of globalisation, which was previously defined as avalanche-like formation of an entity of world informational space, based on the new, mostly computer, technologies. The consequences of the globalisation have been witnessed in the multiple processes connected to education, among them bettering the academical mobility of the pupils and the students, internationalisation of the curriculum, development of the scientific and educational contacts, development of the quality of education to acquire competitive level, enlarging the usage of the English language as a communication language in many fields of education.

It must be specially noted that the global net has been used for social communications and marketing of intellectual products of any kind more and more often. The importance of the world information network is practically of inestimable value for the process of modernisation of the educational

processes. In connection with this, unique opportunities emerge for access to information of any kind: almost instantaneous delivery of information into any, even the furthest server from any point on earth without substantial investment of time or money. Then, conditions for the development of the interactive character of the communication between the person and the information have originated. Further on, the variety of 'sizes' for the presentation of information, as well as the methods for creating 'a virtual reality' transform the educational process into a fascinating and entertaining activity. What is more, the public character of the informational medium allows the creative result to become accessible to all the users of the global network immediately. Next, due to the democracy and accessibility of the knowledge banks of the global network, the time and age frames of the traditional process of education expand. Finally, the expansion of the traditional limits of the conception 'education' brings to the formation of a new attitude towards it: it becomes necessary for all the members of the society, because the process of education is permanent, interactive and individual to a great extent.

At the beginning of this study an important question was stated, and its answer, to our humble opinion, is going to bring people closer to the new paradigm of education in the informational society: the question what could be done, so that the student to reach the creative process stage. However weird it might sound, the answer is closer to the negative impact of the global network and to the informational technologies themselves over the students, regardless of their age.

As it has been already stated, using informational technologies in combination with the global network excessively increases the flow of information, which 'floods' the person seeking information. The human brain is incapable of high quality processing the 'flood' of information and the effect is, as if information does not exist at all. This situation needs a two-in-one solution, retaining the possibility for receiving a huge quantity of information and at the same time making its selection and processing, with rational and creative application, possible.

To our opinion, obtaining such serious result is possible through preceding tuition in the direction of selective reading and selective processing in regard to each definite task. This way, the tutor will have to set an individual task first, unique for each student: it should not be duplicated with the tasks of the rest of the students. Each student should be given directions about the contents of the task and about searching of information, without stating definite sources. The students should be able to cope with the informational 'flood' all by themselves and when necessary, but not continuously, could turn to the tutor for additional explanations.

In short, this method should make the students cope with seeking the appropriate information by themselves, to part the important from the irrelevant issues and to be able to present a thoughtful and independently formulated answer to the task set.

When assessing the students' works, control should be exercised as to whether they are not simply compilations from the Internet, but creative solutions, to which they have come as a result of profound work with the sources on the Net. In addition to that, the thoroughness of the answers should be weighed, the extent to which the students have made an effort to find the appropriate source, authentic or close to authenticity.

In a few words, the following results from the changes in the contents, the methods and forms of education, following the use of informational technologies in teaching in the system of education, can be formulated:

1. The integrated method of education becomes more and more important and replaces the traditional method of getting knowledge, habits and skills in a definite number of disciplines.
2. Knowledge of the world is gained as a result of creating its model, not through traditional learning by heart.
3. Formation of the individuality of the learner becomes the purpose of education, in the process of gaining knowledge, habits and skills, and not only gaining knowledge, habits, skills.
4. The method orientated towards the average individual should be replaced by a psychologically and individually orientated towards the learner method.

Through using the new informational technologies the relationship 'student - teacher' has been thoroughly transformed. While the traditional system supposed authoritarian scheme of relations, where the teacher appears in the role of a subject and the student, in the role of an object of the teacher's work, the educational process using the new informational technologies intensively gives rise to new relations 'teacher - student', where both the tutor and the learner are simultaneously subjects of the educational process and their relations are built on the basis of pedagogy of collaboration.

References

- Alexeeva I.Yu. Vozniknovenie ideologii informatsionnogo obshchestva, Institut filosofii RAN. <http://emag.iis.ru/arc/infosoc/emag.nsf/BPA/99a40acf200e2915c32568b1002fcb16>
- Bell D. 1986, Sotsialnie ramki informatsionnogo obshchestva// Novaya tehnologicheskaya volna na Zapade. Progress, Moskva
- Bell D. 1999, Gryadushchee postindustrialnoe obshchestvo. Opit sotsialnogo prognozirovaniya, Moskva
- Vasilenko I.A. 2010, Politicheskaya filosofiya, INFRA-M, Moskva
- Globalizatsiya i obrazovanie. Bolonskij protsess: Materiali "kruglogo stola". 2004, "Alfa", Moskva, vip.2
- Kolev. J.1993, Istoriya na pedagogikata, Izd.N/A
- Latishina D.I. 2005, Istoriya pedagogiki, Gardarniki, Moskva
- Mirchev M., "Tretata valba" – Alvin Toffler (referativno predstaviane na knigata), http://novata-jurnalistika.blogspot.com/2008/11/blog-post_8814.html
- Nikolov A.N. Virtulaniyat chovek i negovata identichnost, <http://www.spisanie.virtualna-kultura.com/statii.php?cat=70&arx=3&id=112>
- Okinavskata harta za globalno informatsionno obshtestvo, . Okinawa Charter on Global Information Society, <http://www.g7.utoronto.ca/summit/2000okinawa/gis.htm>
- Peskov D.N. Internet-prostranstvo: sostoyanie premoderna? 2003 "politicheskie issledovaniya", №5. - S.46-55
- Toffler A., 1991, Tretata valna Izd. kashta "Yavorov"