

INFORMATION SOCIETY: THE CHALLENGES OF THE THIRD MILLENNIUM

Khyzhna O. P., Makarenko L. L.

INTRODUCTION

In the conditions of informative society, informatizations of education are pulled out new requirements to the teacher that must priority decide such questions now, as creation of cognitive, creative atmosphere in an audience, stimulation of interest of students to independent acquisition of knowledge, organization of communalizations and collaboration of students for the collective decision of general issues and others like that. A teacher in this case comes forward as a helper, adviser, educator, consultant and colleague of pupil; in such situation in an educational process the humane fitting will be realized for¹ by maximal individualization and differentiation of studies, creative approach at the use of information technologies.

In the conditions of informative society, informatizations of education are pulled out new requirements to the teacher that must priority decide such questions now, as creation of cognitive, creative atmosphere in an audience, stimulation of interest of students to independent acquisition of knowledge, organization of communalisation and collaboration of students for the collective decision of general issues and others like that. A teacher in this case comes forward as a helper, adviser, educator, consultant and colleague of pupil; in such situation in an educational process the humane going will be realized near students by maximal individualization and differentiation of studies, creative approach at the use of informative.

Information technologies in education do not substitute a teacher and basic functions do not substitute for him, and strengthen separate

¹ Колесникова И. А. Педагогическая реальность в зеркале межпарадигмальной рефлексии / И. А. Колесникова. – СПб. : СПб ГУПМ, 1999. – 242 с.

receptions and components of his activity. Therefore it follows to talk not about the redistribution of functions between a teacher and computer, but about optimization of separate components of pedagogical activity, for example, in presentation of educational information and mastering of educational material a student in the process of the interactive co-operating with a computer; reiteration and fixing of the mastered knowledge, working off some abilities and skills; intermediate and final control and self-control of results of studies; correction of results of process of studies as constituents of informatization of organizational, administrative work of teacher

In the conditions of informatization of education to the future teacher it is necessary to master many new abilities – together additionally information technologies, electronic educational foods; it is pedagogical expedient to use them in it professionally to – pedagogical activity, to adapt them and even to perfect, for the effective use of their possibilities in the process of the controlled from distance education and others like that.

However most teachers as yet are not ready to such professionally-pedagogical activity in education in the conditions of informative society, informatization of education.

Mainly reason of most problems of informatization of modern education financial pressures are considered, but not simple questions of providing of schools and institutions of higher learning computers and electronic educational foods are less difficult comparatively with difficulties of other character, that arise up in a pedagogical environment in connection with informatization of education. Researchers mark dividing of teachers into the supporters of the use of information technologies in education and his opponents. Three types of relation of pedagogical public to the use of computers in studies were distinguished by S. Peipert -critical and skeptical.

Teachers-criticisms accent attention on the negative consequences of application of computer, marked here, theta computer assists development of the unproductive thinking, that his introduction in the process of studies will entail the orientation of objects that study, on the symbolic methods of analysis, and the protracted use of computer in the interactive mode will result in a volume, that they will begin to provide

with a machine human internal's, and to liken to itself the computer that will bring to dehumanizing of studies (a negative aspect over application information technology in education be considered).

Teachers-sceptics welcome the ideas of normalization of education though, but to the idea of studies on the basis of computer-informative technologies belong as to the ordinary hardware of programmable studies, considering that these of information technologies will not result in cardinal changes in the field of education. This position, in our view, conditioned by that most teachers of middle of 90th of XX of century began the career at wide not enough application in the field of formation of information technologies. Experience teachers oriented to traditional educational practice are not inclined to over-estimate meaningfulness of those advantages that bring in information technologies to education, that is why they or in general they are not used in professional activity, or use episodically. Many teachers examine professional activity in the conditions of informatization of education as a difficult test through that they can not pass independently. Therefore informatization of education must be accompanied by the rich in content and by volume program

Teachers-optimists the amount of that increases examine information technologies in education as means that opens new possibilities in the reflection of educational activity and gives an opportunity fundamentally differently to organize an educational process change all system of education radically.

We consider that, really, the technical rigging of schools and institutions of higher learning does not answer the level of informative society (with the gradual decision of tasks to informatization of education this situation changes in Ukraine), however more substantial defect is absence of integral professional preparation of teacher to realization of pedagogical activity in new informative terms, her weak orientation on forming of integral informative culture of future teacher, that can result in reduction of his possibilities as personality and as a specialist in the conditions of informative society, normalization

There are technological transformations of not less historical scales in the culture of informative society, than with the origin of the written language, that, in our view, incarnate in: a 1) super text («hypertext»); to

2) meta-languages (a resource is multimedia) that unites writing, verbal and audiovisual facilities of human communication in one system; 3) to virtual communication. Distribution in the modern culture of approaches of hermeneutics creates pre-conditions for a reflection in herall three technological transformations.

One of key concepts of culture today is «text»² M. Bakhtin expounded the idea of understanding of culture's to text for reading of that with him it is necessary to enter into a dialogue. According to his opinion, text is primary given (reality) and initial point of any humanitarian discipline.

If to understand text widely – as the constrained sign complex is certain, then the study (musicology, theory and history of fine arts) of art deals with texts (by works of art). Ideas about ideas, experiencing of experiencing, word about words, texts about texts. Herein a basic difference of our (humanitarian) disciplines is from natural (about nature), although absolute, impenetrable, limits and it is not here. A human act is potential text.

Bakhtin M. marks that any text «has a subject, author». There are a «cognitive idea» and «estimating idea» in text. Text as a subjective reflection of the objective world, text is expression of consciousness, something represents. When text becomes the object of our consciousness, we can talk about the reflection of reflection. Understanding of text and is the correct reflection of reflection. Through a stranger reflection to the removed object. Meeting of two texts takes place during reading – the prepared and created reactive text, thus, meeting of two subjects.

Yu. Lotman, examining a culture as semiotic space («semiosferu»), interprets her as difficult informative text³.

Text, – marks L. Mikeshyna, – provided with objective properties that provide to him the real existence and transmission in a culture, thus not only in the direct function – transmitter of information but also as the

² *Бахтин М. М.* Автор и герой: к философским основам гуманитарных наук. – СПб. : Азбука, 2000. – 336 с. – (ACADEMIA); *Извозчиков В. А.* Концепция педагогики информационного общества / В. А. Извозчиков, В. В. Лаптев, М. Н. Потемкин // Наука и школа. – 1999. – № 1. – С. 41-45.

³ *Лотман Ю. М.* Семиосфера. – СПб. : Искусство, 2000. – 704 с.

phenomenon of culture, her humanistic parameters that exist, as a rule, in non-obvious forms come forward as pre-conditions of various reconstructions and interpretations⁴.

Thus, cultural texts are totality of cultural objects, forms, lines and others like that, shown in a sign form. By the transmitter of senses and maintenance of cultural text, incarnate in that or other form that or other language, there can be practically any socially meaningful and in a civilized manner conditioned product (result) of material, intellectual, artistic or social activity.

New possibilities of reflection of cultural text by facilities of information technologies – hypertexty, multimedia and TCNS extend the sociocultural range of humanity.

Technology of hypertext gives an opportunity to any cultural text to become supertext – component part of global open polilohu (wide exchange by ideas, values, the author of any hypertext, possibility of creation of book of «thousand and one author» enters into that), intertekstom (by co-operation between hypertexts, to the potential над'ємністю hypertext) Main description of hypertext is folded by a not extent, but non-linearity, connectedness, structured, saturation by various copulas and, in addition, semantic plenitude that gives an opportunity to bind all displays of culture in giant social supertext.

Technology multimedia is provided by a transition from the hardly fixed text characteristic for a classic writing culture, to «soft» text on the screen of monitor. Instantaneous readiness of multimedia text to transformation literally pushes slightly a reader to the dialogue with him. The use creates multimedia fundamentally new possibilities in perfection of feeling. They become instrumental basis of new culture that develops quickly, – the CRT culture; new direction in an art – the CRT art that does accessible to millions of people masterpieces of world culture (by means of telecommunication

By the important lines of technologies multimedia and there is that they embrace most types of cultural expression in all their variety through an only meta-language and «their advent identical to the end

⁴ Микешина Л. А. Методология научного познания в контексте культуры: Тр. исслед. центра по проблемам управления качеством подготовки специалистов. – Москва, 1992. – 143 с.

division a hypertext (hipermedia), even differences between audiovisual facilities and printed mass medias, by a popular and high culture» that provides komplimentarnist of the rationally-logical and emotionally-vivid thinking.

The new social structure of informative society (as marked higher) is organized not on principle of hierarchy, but on principle of networks (an analogy is with TCNS). Exactly networks fold new social morphology of future society, and distribution of such «network» logic largely appears both in the field of a production and consumption and in the field of a culture. M. Kastels marks that belonging to that or other network is in a great deal analogical to previous belonging to that or other social strategy and comes forward as a major source of power and social changes. Other business, that relations between network structures in society are characterized by transparent enough not principle of hierarchy, but far more difficult dynamics of co-operation of networks. Certainly, the network form of social organization existed and before, however the network paradigm of modern information technology provides material basis for expression of cultural models in informative

Telekomunikation networks stipulate the origin of new form of communication (electronic or virtual) in informative society. Underlining connection between development of the systems of code of social experience in the processes of communication and degrees of public progress, M. Makliuen⁵ distinguishes the different stages in communication (writing society, origin of the written language, book-printing, appearance of radio and television). In informative society appearance of new methods of code (computer) fastens the changes of character of communications and methods of including of personality in social copulas.

The new paperless stage came in development of social communications. Hlushkov V. marked that role of systematization, storage, processing of information, and also the transmissions of her on large distances were undertaken by a technique⁶. Interpersonality verbal

⁵ Новая постиндустриальная волна на Западе: Антология / под ред. В. Л. Иноземцева. – Москва : Академия, 1999. – 385 с.

⁶ Глушков В. М. Основы безбумажной информатики. – Изд. 2. – Москва, 1987. – 552 с.

communication changed an electronic dialogue the main difference of that consists not so in by a screen (origin of term «the CRT culture»), as in the fact of commoncommunication of man with a man by mediation of electronic memory. In opinion of A. Sokolova, herein the main difference of electronic communication consists from verbal or documentary, where a direct or mediated dialogue takes place a «man is a man»⁷.

In opinion of researchers Hlushkov V. and Sokolova A., appearance of the new system of electronic communication is characterized her by global scales, by decentralization and simultaneously by integration of all mass medias, individualization, potential interactiveness that changes a culture irreversibly.

Computers and computer communication become all more important in forming of new culture of informative society. They revolutionized the process of human communication really, and through him culture on the whole, and this revolution spreads concentric circles, beginning at high level of education and riches, but while remaining unable to overcome the uneducated masses and poor countries.

Computer communication in informative society envisages cultural polymorphism that opens space for transformation of monologue in a dialogue and poliloh (nature is a culture, a culture is society, science is an art, elite and mass cultures, east and western cultures, national cultures and others like that). A man in informative society masters the types of experience of possession by it and by stranger values, that stimulates integration of different cultures, assists making of integral perception of the world and forming of only penetrating and complementary culture.

After an ordinary social commoncommunication and instrumental use of computer communication some researchers was the educed phenomenon of forming of virtual network concords, that assists strengthening of in a civilized manner dominant social connections, increase of their globalization, interpenetration of the cultures, incorporated round general aims, interests, ideas.

⁷ *Сokolov A. B. Эволюция социальных коммуникаций . – СПб., 1995. – 149 с.*

However, to our opinion, as though cultural communications did not make progress in informative society, without losses to carry spiritual values from a country in a country, from a region it is impossible in a region. We agree with opinion some researchers, for example M. Ariarskoho, H. Butikova⁸, E. Kassirera, that the only world of culture integrates in itself common to all mankind values; we agree from O. Shpenhlerom, that underlines that development of culture is inseparable from every people, region, epoch. Within the limits of only spiritual values a culture is called to keep the unicity of subculture of separate people, regions, task forces; such sociocultural situation that gives an opportunity to the man to see a culture in unity of variety and perceive all better in all consisted of development of computer communications, that ethnic, national and transnational cultures are able to give.

In informative society take place destandardization and demes character of economic, social and spiritual life. On changing to the compatible-mass way of life of industrial society the individualized possibilities that are based on modern information technologies, and services of wide access, come to the cultural forms, freeing of creative potential, forming of new type of activity culture of man. Due to simplicity and availability of language of electronic mass medias a transnational mass culture can become a starting point with that the included of man will be begun in the world of high culture. From other side, electronic facilities of communication assist a display in the culture of opposite processes. Intellectual activity and her foods all persistently aim to purchase a «easy» to understand communicative form; high, the elite in a culture aims to set direct connection with a mass culture, to take pity on her, certainly to please mass (under the imperious action of economic factors) that can.

There are changes of negative character in the culture of informative society, namely: computer drug addiction is an infatuation for computer games, that propagandize aggression and violence, internet-dependence, virtualization of communalisation, origin of asocial subculture of virtual concords (hackers, supporters of pornography, extremists e tal),

⁸ *Ариарский М. А.* Прикладная культурология на службе развития личности / М. А. Ариарский, Г. П. Бутиков // Педагогика. – 2001. – № 8. – С. 9-16.

computer criminality and others like that. It can result in destructive tendencies in a culture, canonization of social life, that, to our opinion, it is related to the huge break between megascopic external possibilities and terms of development of man in informative society and her by the inner spiritual world that did not change, what we already displaced on

Without regard to all advantages of potential of information technologies in the field of education, enriching of culture, dominant strategy is directed as yet first of all for development of the giant electronic system of entertainments, that, from the point of view of business, promises a most income and safety of investments.

Commercialization spreads to the sphere of culture, related to the electronic mass medias. Electronic «journalistic» in hisvarious genres applies on an image and interpretation of any phenomena of reality, events, spheres of policy, economy, science, art, workaday life depending on certain political and economic interests, including group and institutional. A keen competition, permanent time trouble, stipulate fragmentariness, situation, quite of tenunidimensionalness and superficiality of reflection (image)of reality; a current event acquires klipoidnoho character, she is divided by arbitrary fragments – «unexpected» personalities, things, poses, actions, appear.

Among the most meaningful values and senses of informative society mark such understanding of man as responsible independent that operates personality, that carries out in harmony with nature and civilization of cognition and transformation of the surrounding world and aspires to new experience, search of internal pleasure; value of education, objective scientific knowledge, setting on their permanent increase; perception of nature as «fields of objects» that come forward as material and resources of converting activity of man only on the basis of her integral humanitarian examination ⁹; value of innovations and progress; priority of free self-realization, work of personality; her aspiring is to the noninteraction and at the same time gravitation to

⁹ *Симонов В. М.* Дидактические основы естественнонаучного образования: гуманитарная парадигма : монография / В. М. Симонов. – Волгоград : Перемена, 2000. – 294 с.

community, compatible making of decisions with the participants of informative co-operation.

Constantly growing possibility influence of separate man on the informative processes of all society determines a question about the «top limit» of correlation of freedom, responsibility and self-restraint of man as basic regulators her informative activity. Problems of cultural competence of personality, forming of tolerance to other cultures and systems of values, education of socially responsible, critically intellectual personality with more clear valued reference-points, adaptation of man in an excessive informative environment envisage clever reduction of excessive information, creation of optimal filters, covering forces put

With further development of democracy, unprecedented increase of possibilities and individual freedom uninformative society there is an only mechanism of adjusting of behavior of man or her an own culture is an informative culture of personality.

Thus, today exactly a man becomes the main factor of development and simultaneously to the risk in society. She adapted centuries to nature and public changes, grew the institutional, technological and intellectual power that in informative society purchased global scales. The new instrumental possibilities of modern man in informative society, based on computer and informative technologies, hide in itself both new advantages and new threats; radical disparity of human existence and global character of accessible to the man and society of tools of cognition and transformation appeared.

Dangerous is position of not understanding, unrealisation of variety of problems of modern sociocultural situation a separate man in connection with that she allegedly «little man» and from her nothing depends. Today all in a greater degree everybody acts part «focus», that collects, absorbs the world, displaces it in individual personality microcosm, and from that, how we will be able to influence on itself, directly the future of natural for sociohistory depends in her, space, civilization, ecological, national and other global measuring¹⁰.

¹⁰ Мазур И. И. Путь к экологической культуре / И. И. Мазур, О. Н. Козлова, С. Н. Глазачев. – Москва : Горизонт, 2001. – 194 с.

In new informative terms a question becomes quite not vain about the «top limit» of correlation of freedom and responsibility of man as basic regulators her informative activity, and the decision of problems of modern sociocultural situation is directly related to the necessity of the purposeful forming of informative culture of personality.

Overcoming of crisis situation in modern society is largely determined by the level of education and culture of individual and society on the whole. In informative society to a full degree fundamental dependence of all civilization appeared on those capabilities and internal's of personality, that is mortgaged by education. The special role is exactly taken her, as she represents a specific and features of the modern stage of civilization development and simultaneously determines them.

In the system of higher education one of major types of preparation of specialists there is the informative preparation sent to forming for the students of informative culture. Informative preparation of specialists must be built taking into account a having a special purpose orientation them future professionally-pedagogical activity and must provide forming of specialists able to adapt, inculcate, to analyzes and accompany the professionally oriented facilities of informatively-communication technologies¹¹.

REFERENCES

1. Ariarskij M. A., Butikov G. P. Prikladnaya kul'turologiya na sluzhbe razvitiya lichnosti Pedagogika. 2001. # 8. S. 9-16.
2. Bakhtin M. M. Avtor i geroj: k filosofskim osnovam gumanitarny`kh nauk. SPb. : Azbuka, 2000. 336 s. (ACADEMIA).
3. Glushkov V. M. Osnovy` bezbumazhnoj informatiki. Izd. 2. Moskva, 1987. – 552 s.
4. Izvozhnikov V. A., Laptev V. V., Potemkin M. N. Koncepctiya pedagogiki informacionnogo obshhestva Nauka i shkola. 1999. # 1. S. 41-45.

¹¹ Романов А. М. Педагогические условия и средства формирования смыслообразующей мотивации студентов в информационно-образовательной среде [Текст]: автореф. дис. ... докт. пед. наук: 13.00.01 / А. М. Романов; ННГАСУ. – Новый Новгород, 2009. – 48 с.

5. Kinelev V. G. Kontury` sistemy` obrazovaniya XXI veka Informatika i obrazovanie. 2000. # 5. S. 2-7.

6. Kolesnikova I. A. Pedagogicheskaya real`nost` v zerkale mezhpardigmal`noj refleksii. SPb. : SPb GUPM, 1999. 242 s.

7. Kolin K. K. Fundamental`ny`e osnovy` informatiki: Sotsial`naya informatika [Tekst]. Ekaterinburg, 2000. 350 s.

8. Lotman Yu. M. Semiosfera. SPb. : Iskusstvo, 2000. 704 s.

9. Mazur I. I., Kozlova O. N., Glazachev S. N. Put`k e`kologicheskoy kul`ture. Moskva : Gorizont, 2001. 194 s.

10. Makarenko L. L. Informaczi`jna kul`tura osobivosti: i`storiko-pedagogi`chnij anali`z Naukovij chasopis Naczi`onal`nogo pedagogi`chnogo uni`versitetu i`meni` M. P. Dragomanova. Seri`ya 5. Pedagogi`chni` nauki: reali`yi ta perspektivi. Vipusk 53 : zbi`rnik naukovikh prac` / M-vo osviti i` nauki Ukrayini, Nacz. ped. un-t i`meni` M. P. Dragomanova. Kiyiv : Vid-vo NPU i`meni` M. P. Dragomanova, 2016. S. 128-141

11. Makarenko L. L., Pevse A. A. Osoblivosti` i`nformatizaczi`yi osviti v sistemi` neperervnoyi osviti Neperervna osvita v soczi`okul`turnikh vimi`rakh : kolektivna monografiya / N. G. Nichkalo (golova) / Mi`n-vo osviti i` nauki, Nacz. ped. un-t i`meni` M. P. Dragomanova ; kafedra osviti doroslikh. Kiyiv : OLDF`-Plyuc, 2018. 216 c.

12. Makarenko Lesia, Smakovska Yeva Czivi`li`zaczi`jni` konteksti vishhoyi pedagogi`chnoyi osviti: vikliki s`ogodennya (pol`s`ko-ukrayins`kij dosvi`d) : monografi`ya. Kiyiv : OLDF`-Plyuc, 2018. 188 c

13. Mikeskina L. A. Metodologiya nauchnogo poznaniya v kontekste kul`tury` : Tr. issled. czentra po problemam upravleniya kachestvom podgotovki speczialistov. Moskva, 1992. – 143 s.

14. Novaya postindustrial`naya volna na Zapade: Antologiya / pod red. V. L. Inozemczeva. Moskva : Akademiya, 1999. 385 s.

15. Rams`kij Yu. S. Metodichna sistema formuvannya i`nformaczi`jnoyi kul`turi majbutni`kh vchiteli`v matematiki : avto-ref. dis. ... d-ra ped. nauk : 13.00.02; Nacz. ped. un-t i`m. M. P. Dragomanova. Kiyiv, 2013. 56 s.

16. Romanov A. M. Pedagogicheskie usloviya i sredstva formirovaniya smy`sloobrazuyushhej motivaczii studentov v

informaczionno-obrazovatel`noj srede : avtoref. dis. ... dokt. ped. nauk : 13.00.01; NNGASU. Novy`j Novgorod, 2009. 48 s.

17. Simonov V. M. Didakticheskie osnovy` estestvennonauchnogo obrazovaniya: gumanitarnaya paradigma : monografiya. Volgograd : Peremena, 2000. 294 s.

18. Sokolov A. V. E`volyucziya soczial`ny`kh kommunikacij. SPb., 1995. 149 s.

19. Ursul A. D. Informatizacziya obshhestva (vvedenie v soczial`nyu informatiku). Moskva : AON, 1990. 192 s.

20. Khizhna O. P., Mova L. V. Pedagogi`chnij resurs etnokul`turnoyi pìdgotovki majbutni`kh uchiteli`v v sistemi` neperervnoyi osvìti Ukraini: perevagi i` nedoli`ki Neperervna osvìta v soczi`okul`turnikh vimi`rakh : kolektivna monografiya / N. G. Nichkalo (golova) / Mi`n-vo osvìti i` nauki, Nacz. ped. un-t i`meni` M. P. Dragomanova ; kafedra osvìti doroslikh. Kiyiv : *OLDI`Plyuc*, 2018. 216 c.

Information about the authors:

Khyzhna O. S.,

Doctor of Pedagogical Sciences, Professor,
Professor of the Department of Theory and Methods of Music Education,
Choral Singing and Conducting,
National Pedagogical Dragomanov University
9, Pyrohova str., Kyiv, 01601, Ukraine

Makarenko L. L.,

Doctor of Pedagogical Sciences, Professor,
Professor of Department of the Informative Systems and Technologies,
National Pedagogical Dragomanov University
9, Pyrohova str., Kyiv, 01601, Ukraine