FOREIGN LANGUAGE COMMUNICATION TRAINING BASED ON INTEGRATING INFORMATION AND COMMUNICATION AND MULTIMEDIA TECHNOLOGIES

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Abstract

The methodology of teaching and learning foreign languages has always paid great attention to the use of modern technologies which allow the outside world to go beyond the classroom limits. Information and communication technologies (ICTs) are inextricably linked with the advent and development of the Internet, which allows the text, image and sound to be transmitted over huge distances in a matter of seconds. With the advent of the Internet, a new environment of language functioning emerged as a means of communication in virtual space. The future in the system of teaching foreign languages is connected with ICT and multimedia technologies which contribute to the diversification and multiplication of educational sources. Therefore, hypertext technologies and online information resources of the network actively aspire to the role of a source of knowledge along with a teacher. The problem of cognition in the new media environment on the basis of hypertext technologies is related to the problem of learning new forms of a dialogue and communication by a student, when not a text is read, but a hypertext and a context. The process of informatization in the sphere of education and the related use of ICT opportunities in the learning process leads to the intellectualization of educational activities, the expansion and deepening of the content in studied subject areas, the integration of the subjects studied. This process initiates changes in the educational structure and content in its organizational forms, teaching methodology and the monitoring of its results, which ultimately leads to a change in particular teaching methods, and the limits of the ideas about fundamental educational principles are refined and broadened.

Keywords: Informational educational environment, virtual space, online communication, training principle,

1 INTRODUCTION

The 21st century is the era when the information society is established. The main characteristic of this society is the development of information and communication and multimedia technologies, which in turn create a basis for a single digital information space that provides effective interaction between people and an access to global informational resources. The virtual reality, created with the help of rapidly developing technologies, becomes an effective means of intercultural communication, therefore one of the important competences of a modern individual is the ability to effectively use information and communication technologies and multimedia capabilities in the sphere of professional activity, as well as the ability to set oneself up in the digital space - the most accessible, extensive and convenient communication environment.

2 PROBLEM STATEMENTS

2.1 Educational Environment of a Foreign Language Communication with ICT Integration

A substantial range of studies is dedicated to electronic environment. The researchers consider the electronic environment created for educational purposes as a complex of software which provides the integration of information technologies into educational process in order to increase its efficiency. Being a source of information, electronic environment also influences the participants of the learning process.

L.A. Dunaeva raises the question of didactic integrated environment and gives the following definition: this is the immediate environment of subjects in the educational process, integrated on the basis of the didactic principles. It is necessary and sufficient for achieving the goals of mastering verbal communication in the conditions of modern information and communicative educational space (Vishniakov & Dunaeva, 2017). The effective organization of educational process in such environment depends on the rational use of ICT by the teacher while developing or using the available educational programs and tools; while using the potential of telecommunication technologies in educational process; while planning, organizing and managing the students' independent work with the means of the environment.

Education by the means of this environment is of problem-communicative, activity oriented, developmental character. It takes place during the authentic communicative situations and spontaneous communication, which are aimed at students addressing real challenges by means of a language that they learn. A student, being a subject of this activity with a wide range of individual, psychological and national particularities and personal interests, is the focus of attention. Didactic informational environment is focused on forming the necessary productive oral skills. This is connected with the main internal motive of the educational activity – orientation towards a significant result.

The system of problem-communicative tasks, which represent the fundamental part of environmental education, allows using methods of information search in educational process in order to increase the students' cognitive activity and independence.

The methodical content of environmental education of a foreign language communication is the following: pedagogical technologies connected with using individual, team and collective forms of work, stating and tackling real challenges of scientific orientation, actively cooperating not only with a teacher and fellow students, but also with other subjects having the necessary information. The ultimate goal of learring is formation and development of competences in the sphere of a foreign language communication.

Problem-communicative environment supplements and integrates the existing educational forms and methods, creates conditions for effective independent educational activities dedicated to mastering a foreign language communication. Various technologies, methodological approaches to teaching and its arrangement can be combined in this environment. Due to this fact it is relevant to use educational and methodological resources of the environment in order to achieve the results which are difficult to get in traditional forms of education.

ICT stimulates the learners' activity, expands the borders of the traditional language environment.

3 RESEARCH QUESTION

Didactic environment, based on modern technology of collecting, transmitting and processing information should be created for the purpose of identification, disclosure and development of abilities and potential opportunities of learners towards a creative educational initiative, creation of conditions for independent extraction of knowledge and its subsequent comprehension.

4 PURPOSE OF THE STUDY

The ultimate goal of the environment as an educational process model is the achievement of a students' autonomy, based on their ability to independently form their own educational space by choosing the contents and the strategy of self-education in order to solve the specific objectives in the sphere of ca foreign language communication.

5 RESEARCH METHODS

Framework of studies is developed on the base of the scientific works of the following spheres**:**

- Theoretical and practical questions of foreign communicative competence formation in the second foreign language;
- Interrelation between competence-based, communicative and activity approaches in the foreign languages teaching;
- Theoretical and practical questions of cross-cultural competence formation in the context of linguistic education;
- Conceptual framework of the environmental approach;
- Pedagogic engineering and integration of educational system theory;
- Theoretical, methodical and psycho-pedagogical bases of foreign languages teaching with the use of multimedia means, ICT, mobile technologies;
- Methodology of scientific and pedagogic researches.

6 FINDINGS

6.1 Electronic Communication

In the scientific literature, the term "computer-mediated communication" is used to denote the network mode of communication. Electronic communication is seen as a verbal interaction in a computer network. Its specificity in the sphere of teaching a foreign language is explained by the following:

- A hypertext arrangement of the network space allows students to form new language-specific semantic and phonetic mechanisms, as well as the ability to operate with these new "stranger" language resources. It also brings the participation in intercultural communication on the basis of interactive technologies closer to natural communicative situations.

- Electronic speech as a new kind of speech activity that occurs in a global hypertext network environment, allows a student to arrange the information in his or her own hypertext in a foreign language. Thus, one may simultaneously search and select information and apply it in communication.

In order to actively use the hypertext network in practical activities in the sphere of teaching foreign languages, it is necessary to disclose the essence of the basic concepts of hypertext as a special kind of text, a source of information for intercultural communication, as a means of communication in the electronic virtual environment and the ability to conduct a discourse as a means of accessing foreign educational resources where language is functioning. This allows effectively solving the problems of forming the students' linguistic and communicative competence.

Since a hypertext is important as a method of communication in the electronic environment, the interrelation of language and text is important as well, where "language" stands for a verbal action, a verbal expression of thoughts, reflection, emotions. In this regard, the electronic environment performs the following functions: *cognitive* (knowledge acquisition tool); *thesaurus* (the accumulation and storage of knowledge); *culture-forming* (the formation of information culture); *aesthetic*. In modern research is defined according to different viewpoints: as a system of knowledge in interdisciplinary areas (*discursively*); as a system of functional units (*linguistically*) (Bakhtin, 1997); as a multidimensional phenomenon which implements the author's psychology in a certain form via language means (psychophysiologically); as a system of speech formation and upbringing (psycholinguistic interpretation) (Vygotsky, 1983); as a sphere of sociolinguistic, literary, cultural intertext reflected in a hypertext (poststructuralist interpretation). The electronic environment is no longer just a means of message exchange. The message is the decoding of the environment, since the flexibility of the media system allows sending any message to any audience, any addressee. The media system contains the features of non-linearity, polycontextuality and globality and any reader in the network is

at the same time a participant in the process of interactive communication, operating not with objects, but with their image. Such an arranged world of a virtual environment was called a "network conversation" (Blatt, 1997). A network hypertext is regarded as an author's compilation of separate texts, as the organization of a coherent text (discourse), as a means for storing or presenting information. In everyday life, a direct contact between a student and the native speakers of the language being learned occurs in rare cases.

Basically, communication with a foreign culture and language occurs in class, with the use of information and communication technologies. To discover all the diversity of a stranger world and to take it into account in the practice of teaching a foreign language is the main task within the framework of modern educational approach, based on the psycholinguistic study in the sphere intercultural and interlingual dialogues. It is necessary to emphasize how strong is the psychological effect of the network communicative environment, which has a positive influence on students. Thus, the search for information makes it possible for them to find a huge amount of material depending on personal interests and to get acquainted with different points of view on the problem. Moreover, it stimulates creativity and allows establishing contacts in a virtual environment.

Virtual identity during the network discourse is defined as "multiple individuality" (Kuhlen, 1991), when it becomes possible for a student to simultaneously play several roles and to express him- or herself adequately to the context and time of communication. Thus, chats, blogs and forums contribute to the construction of an identity. This is a fictional world, based on written texts, in which the participants of the online interaction use fictitious roles, thus creating a virtual game world. Thus, training with the help of a hypertext encourages active and creative collaborative work of students and teachers.

The student develops skills with which he approaches the "unfamiliar" and discloses it via the exchange of messages by e-mail or chat in a real-time mode. Therefore, the process of mastering a foreign language is qualitatively transformed, since such texts are created by the living native speakers of the modern language. This process includes linguistic and cultural peculiarities of conducting a "conversation" on the basis of a hypertext network. A student who reads a linear text is to only read it and concentrate his or her attention on the informative content, whereas during the work with hypertext, he or she pays attention to the multidimensional nature of the study and the use of this hypertext in various fields of knowledge and in different aspects of learning activity. A student should be able to use the didactic potential of an interactive resource for continuous self-education, learning a foreign language, the development of the ability to find a variety of links between its semantic blocks.

A hypertext integrates the reader into a mass of hypertext documents, gives the opportunity to discover new information windows, to use pictures, to turn over web pages. A student can transfer the learned information to the saving systems and apply it in his or her practice. In other words, "those students who use hypertexts acquire a greater amount of general knowledge on the subject than the students who work with the printed text" (Euler & Wilbers, 2005). The obtaining of the required online information initiates its further search and processing, which in turn forms the ability to construct an internal concept from separate elements. By including new information in his or her own hypertext, the student forms a network product, and via simultaneous communication, the network contributes to the students' independent creative activity.

A hypertext allows switching from one text to another, with hypermedia connecting texts with other media forms - sound, pictures and films. A hypertext link is a way of the student's self-identity in a certain network area: for example, an expression of his or her will to be accepted in a particular or imaginary community. A student should be able to find and build his or her own text from texts and hyperlinks by extracting information from the pages located at different addresses; he or she should be able to engage in a dialogue with the authors; to reconsider the content of the text.

A necessary component for the disclosure and penetration into the meaning of the text is comprehension, which is aimed at overcoming the "foreignness of the stranger". Text comprehension is the construction of its projection in a reader's mind. This process includes three aspects: cognitive (the actualization of the knowledge, its inclusion in the internal process); affective (the experience of the attitude to this knowledge); perceptual (the prediction of the possible ways to continue the message) (Leontiev, 1972). A student needs to understand the spatial organization of a hypertext and the emerging difficulties in working with hypertexts to compare it with a printed text (Baumgartner & Payr, 1992).

To work with a hypertext, students need skills that enable them to "pull out" the necessary material from its depth. The effect of working with the network hypertexts depends on the student's preliminary knowledge and his or her understanding of various text types. With a high level of preliminary knowledge, the student is capable of creating more his or her own texts after reading a hypertext than after reading a linear text. The

process of working with hypertext is the process of modularization and connection of the modules via hyperlinks. In this regard, there are two different viewpoints on working with a hypertext: working with a hypertext as a network product; or a work aimed at the very process of working with hypertext, i.e. on how the process of working with a hypertext in the online space is presented, in the mode of using all the new technical possibilities and conditioned by the communicative situation on the network.

In addition to working with texts, students often simultaneously communicate in the network, connecting to various network stories and life situations by using new ways of creating stories and new forms of hypertext representation.

The integration of ICT into the educational process has significantly changed the didactic background of teaching foreign languages by presenting new opportunities for teachers to provide conditions for on-the-spot written and oral communication in a foreign language and giving the access to various authentic information resources. The use of telecommunication environment resources helps to solve a number of didactic problems: to form reading skills by using authentic materials, to improve listening skills on the basis of authentic audio-texts; to improve monologic and dialogic speech skills on the basis of problem-oriented discussion of the network material; to enrich vocabulary; to improve writing skills; to work with information based on national and cultural studies.

6.2 The principles of Organizing the Problem-Communicative Environment

The process of IT penetration into education and the related use of ICT opportunities in the learning process leads to the intellectualization of educational activities, the expansion and deepening of the studied subject areas, the integration of the studied subjects. Technologies initiate changes in the structure and content of education in its organizational forms, teaching methods and the monitoring of the results, which ultimately leads to a change in particular teaching methods. In connection with these processes, the limits of the ideas about educational principles are refined and broadened. L.A. Dunaeva distinguishes the following learning principles (Vishniakov & Dunaeva, 2017):

The principle of *visibility* is successfully implemented in the computer environment, providing practically all kinds of visual, audial, audio-visual, situative and extralinguistic visibility. Hypermedia technologies allow implementing the principle of visibility by the organizing, structuring and connecting various elements of the educational content, which are presented in different modalities: text, static and dynamic graphics, audio signals, video images, virtual reality objects. With the optimal use of these tools, the multimedia learning environment facilitates deeper intensional processing of the material and increases the learner's cognitive assignment. The visual creation of speech situations, which serves as a stimulus for verbal and cognitive activity and an effective motivating factor, may be attributed to visual means. Visibility in an open informational learning environment is completed by the capabilities of telecommunication technologies which allow accessing various electronic publications and global network resources of regional, cultural, scientific, educational and professional nature.

The topicality of the *problematicity and activity* principles is best explained by the fact that the informative teaching methods are replaced by active ones. The openness and dynamism of the informational learning environment, based on telecommunication technologies, conditions the possibility of various forms of learning activity aimed at creating problematic situations. In the informational computer environment such activity types as project, communicative, search and analytical, acquire a different quality in terms of ensuring the productivity of thinking, the degree of novelty of the received intellectual product in relation to the subject's knowledge.

The next principle is the principle of *scientificity,* which focuses on the correspondence of the educational content to the level of modern science, on the students' ideas about general methods of scientific cognition. To implement this principle, it is important to involve the students in adequate research activities. The means of ICT are the best solution for this task: they contribute to the formation of the students' skills of searching and transforming information; they acquaint the students with modern methods, means of knowledge and communication. At this point, the principle of scientificity is linked with the principle of motivation.

The use of ICT facilities conditions the new way of implementing the principle of *cross-cultural interaction*. The great influence of cross-cultural interaction on the educational process finds its expression in the national and specifics of the foreigners' cultural behavior. The accounting of cross-cultural interaction in global networks contributes to the formation of the students' cross-cultural competence, their ability to solve extralinguistic tasks in a foreign language: to acquire knowledge of the linguistic and scientific world picture of the native speakers, to master background knowledge, to expand the general outlook which ensures the effectiveness of communication in the language environment – both real and virtual.

Environment learning of verbal communication by using ICT facilities makes certain adjustments to the use of the *verbal advancement* and *interrelated learning* principles: the interrelated learning of reading and writing in their peculiar, computer-mediated forms comes to the fore. In turn, a foreign-language verbal activity in a computer sphere, having its own special features, is presented as an object of learning. Thus, reading texts with the help of computer facilities (word processors, reading programs), due to the provided opportunities, acquires the features of a synthetic type of speech activity: reading / writing, i.e. using different ways of selecting topical information for the reader, writing comments on fragments of the text, re-compiling, deleting unnecessary information. These actions occur in parallel with the reading process, leading to the appearance of the reader's own version of the text. The same may be concluded about writing. Written online communication in global network chats, on forums and conferences gets close to the oral speech forms, synthesizing the features of quick reading and writing / speaking (oral-written speech forms).

The use of computer training means is based on the leading methodological principle - the principle of *communicativeness*, according to which the learning process is organized in natural communicative situations, or in the closest possible alternative. The work taking place in the telecommunication environment is connected with a genuine communicative activity, stimulates the direct intuitive process of mastering the language. In the computer environment, a student becomes a real participant in real communication. In the context of learning with the involvement of computer means, communication becomes not only a goal and a means of achieving the set goal, but also the content of education.

The motivation of the students' oral and written statements and their speech actions in the computer environment is linked to their internal need. In a computer environment, this is proved by the fact that students create practically meaningful texts, which may later be used in other spheres and communicative situations.

The principle of a *self-sufficient computer environment* suggests that all the students' needs during their work in the environment are to be fully assured. According to this principle, if, for example, a student needs an automatic translator or a database to perform a task, the environment should have both this tool and this resource. We consider self-sufficiency to be useful at the early stages of learning a foreign language, when a student is only learning to master the techniques of working with the environment, but it is more complicated, if necessary, to predict all the student's needs at the later stages. When a higher level of the skills development is achieved, a student is able to construct his or her own environment, chooses the necessary means, and lack of self-sufficiency in this case stimulates to develop the environment and conditions its openness, dynamism and variability.

Thus, the linguo-didactic principles of communication and problematicity, or their synthesis, make up the basis for the methodical tools in mastering foreign-language verbal communication.

7 CONCLUSIONS

The above-mentioned facts allow concluding that for improving the quality and effectivity of teaching foreign languages in any of its aspects, the ICT should be implemented not episodically but permanently in the teaching practice. The complex systematic implementation is possible only with the creation of a specific informational environment, which will include both paper and electronic resources, together with the resources on magnetic media, supporting the disciplinary training in all its variability. ICT is a natural communication vehicle, providing the development of all the competences as a result of language education.

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REFERENCE LIST

Bakhtin, M.M. (1997). "Problema teksta. Sobr. Sochinenii", Moskva, 5, 306-326.

Baumgartner, P. & Payr S. (1992). "Lerntheoretische Grundlagen fur die Kategorisierung von Bildungssoftware". In: Dette, K./Haupt, D./Polze, C. (Hrsg): Multimedia und Computeranwendungen in

der Lehre. Berlin, p. 24.

Blatt, I. (1997). “Von der Textkompetenz zur Hypertextkometen”. In: Osnabrucker Beitrage zur Sprachtheorie, p. 102.

Euler, D. & Wilbers, K. (2005). “Radikaler, bologna-konformer Change an einer Hochschule am Beispil des Selbststudiums der Universitat” St. Gallen. Zeitschritt für Hochschuldidatktik, p. 10.

Leont'ev, A.N. (1972). “Problema deiatel'nosti i psikhologii”. Voprosy filosofii.

Vishniakov, S.A. & Dunaeva, L.A. (2017). “Inoiazychnaia verbal'naia kommunikatsiia: prepodavanie, izuchenie, osvoenie v kontekste teorii sredovogo podkhoda”. Monografiia. Moskva: Flinta, Nauka, p. 94-125.

Vygotskii, L.S. (1983). “Istoriia razvitiia vysshikh psikhicheskikh funktsii”. Soch. v 6 t. Moskva: T.3.