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COMPUTER LINGUODIDACTICS IN FOREIGN LANGUAGE TRAINING OF TECHNICAL UNIVERSITY STUDENTS

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ABSTRACT

The article is devoted to the actual problem of linguistic didactics and methods of teaching foreign languages in technical universities. The informatization of education is reaching a new level: the problem of mass use of computer technologies in higher education is being solved. The article presents the concept of computer linguodidactics as a field of linguodidactics, studying the theory and practice of using computers in language teaching. It is shown that computer linguodidactics is closely related to such disciplines as computer linguistics, developments in artificial intelligence, computer program design, psychology. The model of didactic system of formation of professional foreign language communicative competence of technical university students is described. It is shown that this technology is aimed at the perception and assimilation of ready forms of social experience of native speakers, as well as the integration of the acquired social experience, its active reproduction and use for solving social and communicative tasks.

INTRODUCTION

Theoretical and applied aspects of computer linguodidactics have been developed by scientists from different countries for more than thirty years [1,2]. There are three areas of research in the terms of content:

1. The first area includes research on the development of theoretical aspects of the use of computers in language learning. This aspect is very important, especially if we take into account the short duration of the existence of computer linguodidactics as an independent section of language teaching methods. In the works of this direction the following aspects are being discussed: psychological and pedagogical problems of computerization of education; the questions of typology of computer programs; questions of design of training computer programs; ways and means of integrating computers into the educational process; the possibility of developing communication skills in the learning process using computers and a number of other problems.
2. The second area includes descriptions of projects for the development and use of specific computer programs in the educational process designed to develop various skills (for example, programs for teaching grammar, vocabulary, phonetics, language specialties, etc.).
3. The third area explores ways of integrating e-learning in the overall process of learning language and developing effective methods of organic use of computers in the classroom for language. This direction is of particular importance for the practical application of computer technology in the educational process.

The use of modern information and communication technologies (ICT) in higher education is constantly growing, radically updating the education not only in new forms, but also in new ways to achieve learning goals [3,4]. The theory of foreign language teaching is also undergoing significant changes under the influence of ICT which create conditions for the full implementation of the basic principles of didactics (visibility, accessibility, feasibility, consciousness, activity), radically changing the entire course of the educational process in the aspect of foreign language learning. Didactic and psychological aspects of the use of ICT and their pedagogical interpretation [4,5,6] have not been sufficiently studied, relatively few software tools for educational purposes, linguistic resource bases, electronic textbooks, and educational process dispatching programs have been created. At the moment, the informatization of education is reaching a new level: the problem of mass use of ICT in education is being solved. Actual problems of foreign language teaching methods are closely connected with computer learning tools. ICT are developing in the direction of creating tools that allow the teacher to produce independently electronic training materials that can be used in computer and network training; the flow of information processes in each area is associated with the solution of specific professional problems. Only highly qualified specialists in this field can solve these problems most successfully.

Thus, the introduction of computer linguodidactics in the educational process is to acquaint users with modern methods of using ICT in the educational process, ways to create their own developments based on computer technology, the method of implementation of computer linguodidactics in the educational process of universities. This is a kind of synthesis of modern theoretical and practical developments in the innovative scientific field.

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Received: 12 Aug 2019
Accepted: 11 Sept 2019
Published: 14 Sept 2019

MATERIALS AND METHODS

The term “computer linguodidactics” is defined by the appearance of new methods of working with information of different origin and new forms of communication. The linguistics feature of the computer lies in its interconnection with different disciplinarians. Many researchers point to the connection of computer linguodidactics with other fields of knowledge, for example, applied linguistics, psychology, mathematical linguistics, artificial intelligence systems, but the most natural and close connection of computer linguodidactics exists with the general didactics and linguodidactics. The subject of didactics is learning as a single process of teaching and learning. Language didactics, or didactics of a language, explores the laws of mastering any language regardless of whether it acts as a first or second language. The process of language acquisition in educational conditions is the subject of research of psychologists, psycholinguists, linguists and methodologists.

Computer linguodidactics is a field of linguodidactics that studies the theory and practice of using computer and network technologies in language teaching. The development of computer linguodidactics is directly related to the development of computer and network technologies, so the subject of this section of the methodology is not only the linguistic, psychological, psycholinguistic, methodological aspects of linguodidactics, but also the formal content components of new ICT. The purpose of this direction is to study the methodological aspects of the introduction of new information technologies in the process of teaching foreign languages.

In the Russian theoretical and applied linguistics the range of issues related to the use of computers in language teaching has recently been associated with the names of outstanding scientists, researchers and practitioners. At the beginning of the 21st century, the fast developing process of informatization has become an important cause of one of the rapidly developing areas of foreign language teaching methods – computer linguodidactics. In this regard, theoretical issues and practical aspects of the use of modern ICT in language teaching are reflected in the works of scientists and researchers of scientific schools, which laid the foundation for the formation and development of computer linguodidactics as a separate area of scientific knowledge.

RESULTS AND DISCUSSION

Computer linguodidactics is one of the rapidly developing areas of language teaching methods. For a relatively short period of its existence, it has passed a significant way, closely associated with the development of computer technology, on the one hand, and the concept of language learning on the other. The opportunities offered by modern information technology are so important in language learning that it is no longer possible to separate one from the other. There is a growing interest in this area of methodology, and the use of computers becomes an integral part of the educational process [7]. Its use in the methodology of teaching foreign languages opens up new opportunities for teachers and students in their research and allows them to solve fundamentally new problems in the methodology of teaching foreign languages.

The constant progress in ICT has created the conditions for language teaching on the Internet [8]. The researchers drew attention to the study of the didactic potential of computer training by using new opportunities that the computer has acquired in connection with the development of local and global networks, as well as software for system, application and special purposes. It is known that the process of learning a foreign language is based on the use of the teacher a variety of learning tools from basic training materials to complex technical devices. The means of teaching used in the foreign language educational process can be divided according to the principle of feedback from students: passive and active [9]. Passive means of learning such as textbook, book for reading, notebook on a printed basis, audio and video recordings, information resources of the Internet, etc. do not involve feedback from students and require significant involvement of the teacher to realize their didactic potential. Active means of learning (programmed learning systems) provide the programmed response of the student, manage it and control it.

Many researchers in the field of informatization of foreign language education [10,11] recognize that most of the existing active learning tools can effectively be applied in the educational process of a foreign language teaching for several reasons: lack of targeting, i.e. consideration of the specific needs of the user program; the mismatch of methodological principles of teaching foreign languages; the unsystematic nature of their development and application. According to the leading methodologists, it is possible to overcome these shortcomings by combining all means of teaching a foreign language on the base of ICT in the form of electronic educational content.

Electronic content is able to systematize almost everything that is required for the organization of the process of formation of foreign language skills and abilities: visual graphic material, video and sound recordings, texts, textbooks, workbooks, books for reading, books for teachers, etc. at the same time, electronic content should be not just a set of educational materials, but a multidimensional software package that provides tools for development, implementation, control, management, training.

The most important functional advantage of electronic content in comparison with the system of “traditional” learning tools should be the possibility of programmable management of students’

independent activities, allows maximum use of classroom time for the development of communication skills.

Electronic content has the potential for a qualitative breakthrough in terms of the formation of language skills and is an innovative approach to the organization of the educational process in teaching foreign languages. The main scarce resource limiting progress in foreign language acquisition is time. The computer as a virtual tutor will individually explain to each student the language material, which can be much more informative. For example, to improve vocabulary skills it is necessary to give a significant amount of information about the word (meaning, interpretation, examples of application, phrases, synonyms). At the stage of acquaintance with the information about lexical units and performing various exercises, the student forms an image of the studied word, which is necessary for its correct use and perception and development of language consciousness in general. It is impossible to do it without prejudice to work on other aspects and types of speech activity, and in the mode of independent work with a computer it is quite feasible. In addition, the system of electronic exercises, checked automatically, provides one hundred percent verification of their performance. The quantity and quality of these exercises thanks to multimedia ICT capabilities (sound, graphics, animation) allow to achieve a high level of language skills development with minimal time and effort of the student, free up the resources of the lesson for the development of communication skills.

Electronic content becomes a modern means of organization of programmed independent work of students, helps to explain phonetic, grammatical and lexical material in a new way, provide the training in sufficient number of exercises and exercise instant control of their performance. The specificity of the student's independent work with electronic content is the lack of genuine communication of the latter. As a means of forming a multicultural linguistic personality capable of foreign language communication, the content itself does not enter into genuine communication with the learner, but only creates the basis for the formation of speech skills.

ICT has significant opportunities to intensify the educational process. This is due to the automated control, instant access to information, the individualization of learning. However, the implementation of the electronic content cannot replace the teacher as an organizer and coordinator of communication in a foreign language teaching. Thus, the most urgent task of modern computer linguodidactics is the active use of ICT to solve professional problems in practical work at a new technological level.

The growing linguistic and didactic possibilities of ICT have not yet received a clear scientific and theoretical explanation, which could become a guide for teachers in their daily practical work within the framework of computer and network technologies. By its nature, the method of language teaching, like no other science, is interested in the use of multimedia and interactive properties of computer technology, as these qualities most fully allow to implement the basic principles of didactics: visibility, accessibility, feasible, individualization, consciousness, activity. The scientific analysis has shown that new information technologies create conditions for their full implementation, radically changing the entire educational process. This thesis is confirmed in numerous scientific works devoted to this problem. The natural development of ICT poses new challenges to the methodology of language teaching, the priority of which is the active use of ICT to solve professional problems in practical work at a new technological level.

The prospect of improving the methodology of language teaching requires further development of computer linguodidactics as a new scientific discipline, which studies the features and patterns of development of the process of teaching foreign languages in new conditions.

CONCLUSIONS

In conclusion, it should be noted that research in this area is intended to be a catalyst for modern means of teaching foreign languages on the basis of ICT, to promote the study and implementation of ICT in practice of teaching foreign languages, to exhibit linguodidactic material developed on a digital basis. The content and philosophy of the research should be aimed at the promotion of advanced technologies in the field of language teaching and learning, the educational process and the training of highly qualified specialists.

CONFLICT OF INTEREST

There is no conflict of interest.

ACKNOWLEDGEMENTS

The work is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University.

FINANCIAL DISCLOSURE

None.

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