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FUNCTIONING FEATURES OF COMPUTER TECHNOLOGY WHILE FORMING PRIMARY SCHOOLCHILDREN'S COMMUNICATIVE COMPETENCE

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Abstract. The article reveals the problem of functioning features of computer technology while forming primary schoolchildren's communicative competence whose relevance is proved by the increasing role of a foreign language as a means of communication and modernization of foreign language education.

There is a great deal of publications devoted to the issue of foreign language learning at primary school by N. Biriukevych, O. Kolominova, O. Metolkina, O. Petrenko, V. Redko, S. Roman. Implementing of innovative technology as well as computer one is to intensify the language learning process and to improve young learners' communicative skills. The aim of the article is to identify computer technology functioning features while forming primary schoolchildren communicative competence.

In this study we follow the definition of the computer technology as an information technology whose implementation may be accompanied with a computer as one of the tools, excluding the use of audio and video equipment, projectors and other technical tools. Using computer technologies is realized due to a number of tools which are divided into two main groups: electronic learning materials; computer testing software. The analysis of current textbooks and learning and methodological complexes shows that teachers prefer authentic electronic materials to the national ones. The most available English learning materials are on the Internet and they are free. The author of the article discloses several on-line English learning tools and depict the opportunities to use them while forming primary schoolchildren's communicative competence. Special attention is also paid to multimedia technology, its functioning features and multimedia lesson structure. Computer testing software provides tools for current and control assessing results of mastering language material, communicative skills, and self-assessing in an interactive way. For making tests for assessing English skill development the author proposes teachers to learn the methodology of test designing and to use the following shell programmes: MyTest, TestYourSelf, MiniTestSL, Orion, HotPotato, Test-W and Test-W2. So in the paper we proved that computer technology contributes to the improvement of pupils' practical language skills which is helpful and useful to ensure and fulfill on effective result of teaching and learning.

Key words: computer technology; primary schoolchildren; multimedia technology; electronic learning materials; web-based resources; computer-based testing.

ОСОБЛИВОСТІ ФУНКЦІОНУВАННЯ КОМП'ЮТЕРНИХ ТЕХНОЛОГІЙ У ФОРМУВАННІ КОМУНІКАТИВНОЇ КОМПЕТЕНТНОСТІ МОЛОДШИХ ШКОЛЯРІВ

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Анотація. Статтю присвячено проблемі виявлення особливостей функціонування комп'ютерних технологій під час формування англomовної комунікативної компетентності молодших школярів. Актуальність цієї проблеми доведена зростаючою роллю англійської мови як засобу спілкування, а також реформуванням мовної освіти. Доведено, що впровадження інноваційних технологій, зокрема комп'ютерних технологій, інтенсифікує процес навчання іноземної мови і підвищує рівень володіння комунікативними вміннями та навичками. Розглянута нами класифікація комп'ютерних технологій – електронні комп'ютерні матеріали, мультимедійні навчальні матеріали, комп'ютерне тестування – можуть використовуватися на уроках англійської мови. У статті проаналізовано Інтернет ресурси, які є у вільному доступі і які відрізняються своєю різноманітністю, ефективністю та охоплюють значну кількість навчального матеріалу, що складає зміст комунікативної компетентності молодших школярів і корелюється з чинними підручниками з англійської мови для початкової школи. Отже, комп'ютерні технології виконують такі навчальні функції: реалізують принцип слухозорового синтезу, що забезпечує полісенсорне введення та переробку інформації; дають можливість поповнення активного лексичного та граматичного мінімуму; пред'являють усне мовлення у всіх його формах водночас із відео зображенням; технічні засоби створюють сприятливі умови для повного контролю процесу формування комунікативних умінь та навичок.

Ключові слова: учні початкової школи; комп'ютерні технології; мультимедійні технології; електронні навчальні матеріали; комп'ютерне тестування.

ОСОБЕННОСТИ ФУНКЦИОНИРОВАНИЯ КОМПЬЮТЕРНЫХ ТЕХНОЛОГИЙ ПРИ ФОРМИРОВАНИИ КОММУНИКАТИВНОЙ КОМПЕТЕНТНОСТИ МЛАДШИХ ШКОЛЬНИКОВ

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Аннотация. Статья посвящена проблеме выявления особенностей функционирования компьютерных технологий при формировании англоязычной коммуникативной компетентности младших школьников. Актуальность этой проблемы доказана возрастающей ролью английского языка как средства общения, а также реформированием языкового образования. Доказано, что внедрение инновационных технологий, в частности компьютерных технологий, интенсифицирует процесс обучения иностранному языку и повышает уровень владения коммуникативными умениями и навыками. Рассмотренная нами классификация компьютерных технологий – электронные учебные материалы, мультимедийные учебные материалы, компьютерное тестирование – могут использоваться на уроках английского языка. В статье проанализированы Интернет ресурсы, которые есть в свободном доступе, которые отличаются своим разнообразием, эффективностью и охватывают значительное количество учебного материала, который составляет содержание коммуникативной компетентности младших школьников и коррелирует с действующими учебниками по английскому языку для начальной школы. Компьютерные технологии выполняют такие учебные функции: реализуют принцип слухового и зрительного синтеза, обеспечивают полисенсорное введение и переработку информации; дают возможность пополнения активного лексического и грамматического минимума; предъявляют устную речь во всех ее формах одновременно с видео изображением; технические средства создают благоприятные условия для полного контроля процесса формирования коммуникативных умений и навыков.

Ключевые слова: ученики начальной школы; компьютерные технологии; мультимедийные технологии; электронные учебные материалы; компьютерное тестирование.

Problem setting in general. The rapid changes in Ukrainian society contributes to modernization of foreign language education, advances in the theory and practice of teaching foreign languages determine the need to update the content, forms and methods of educational process. To fulfill this request foreign language learning starts since the first year at school. Also new textbooks have been elaborated and using the most recent data in pedagogics, psychology, linguistics and methodology of foreign languages intensifies an educational process.

Learning foreign language communication includes forming a certain level of communicative competence that realizes due to speech skills, developed on the basis of language linguistic country studying knowledge. A person, who starts learning a foreign language, sees the main role of his/her learning in ability to communicate with native speakers. Modelling real speech situations helps to overcome lack of natural language environment, lack of real language contact. All facts mentioned above make teachers look for innovations and implement them into the process of foreign language learning.

The use of computer technology opens up new prospects for effective solving of learning problems, as well as problems of education, behaviour and personal

development of young learners while mastering the foreign language. The computer as a storage medium has practically unlimited potential in meeting young learners' information needs and increases motivation level in various types of their activity: playing, communicative, linguistic and communicative, social and cultural, esthetic etc.

The latest papers and publications on the problem. N. Biriukevych, O. Kolominova, O. Metolkina, O. Petrenko, V. Redko, S. Roman address to the problem of optimizing and searching ways of increasing the efficiency of foreign language learning at primary school. They add new scientific and methodological elaborations of pupils' training in oral speech, different types of testing and other aspects of educational process. I. Zakharova, Yu. Zharkykh, S. Novikov, O. Polat, L. Tsvietkova work on the problem of designing and implementing computer technology into educational process. Ukrainian scientists R. Hurevych, V. Zhulkivska, I. Klymenko explore the opportunities and prospects of implementing ICT into process of a foreign language learning.

The practice has proved that the real level of young learners' communicative competence after leaving the primary school is insufficient for realizing foreign language communication according to the demands of Programme and Symposium of European Council. One possible way to improve the teaching of foreign languages at primary schools is implementing computer technology.

The aim of the study is to classify the computer technology and to reveal their functioning features while forming primary schoolchildren communicative competence.

Presentation of basic research material. To define the role and the ways of functioning of computer technologies while forming speaking skills it is necessary to define the concept "computer technology". Computer technology is a common notion of technology that involves storing, transferring, processing, protecting and reproducing information using computers, as well as the appropriate science [5].

Methodologists I. Zakharova, Ye. Pasichnik define "computer technology" in a narrower sense. They proved that a computer technology is an information technology whose implementation may be accompanied with a computer as one of the tools, excluding the use of audio and video equipment, projectors and other technical tools [2, p. 23].

We tend to agree with I. Zakharova's definition that any pedagogical technology is an information one and to master this information more effectively computers are widely used.

Implementing computer technologies is realized due to a number of tools, they are divided into two main groups:

- electronic learning materials;
- computer testing software [1].

Electronic learning materials make an information content of English lessons. These materials include electronic primary school textbooks in English, annexes to the textbooks, and different types of electronic trainers [5].

Learning the English language at comprehensive schools is conducted in accordance with the current curriculum and by means of textbooks that are recommended by the Ministry of Education and Science of Ukraine. Nowadays they are textbooks by O. Karpiuk, A. Nesvit and L. Kalinina and others. The content of these textbooks meets the requirements of the curriculum and corresponds to schoolchildren's age characteristics. The learning material is organized according to the didactic and methodological principles. There are means that are aimed at forming schoolchildren's language and communicative competence. Forming linguistic competence is conducted through implementing phonetic, grammatical and lexical exercises. Communicative competence is formed through introducing language material gradually from the level of a sentence to the level of a monologue or dialogue.

All the textbooks are brightly illustrated. But we should note despite a number of visual means there are few pictures that present communicative situations with sequential events. By the way, the pictures in the textbooks are static and, as a result, have less influence on children's perception than dynamic ones. Every textbook has audio CDs. The main disadvantage of these CDs is unauthentic recording of speech. Dynamic audio and visual tools stimulate the work of auditory, visual and speech motor analyzer, which improves the efficiency of foreign language learning and confirms the need of using electronic materials while learning a foreign language. So the the main function of electronic materials is realizing the principle of audio and visual synthesis, providing multisensory input and processing of information.

Electronic learning materials allow to form language and communicative skills by means of a computer and multimedia technology.

Modern educational and methodological complexes in English has only audio CDs, but we think that standardized software is didactically valuable while forming

primary schoolchildren's communicative competence. Its implementing into the educational process supports children's gaining computer literacy, skills of educational autonomy, intellectual, communicative and metalinguistic abilities and thereby contributes to developing individual "information society personality" that is one of the major tasks of computer linguodidactics [3].

Nowadays primary school teachers really lack the standardized software to form pupils' communicative competence and which is designed and released in Ukraine. That's why working on forming primary schoolchildren's communicative competence authentic software may be implemented into the educational process.

Developing language skills usually precedes forming of communicative competence. So before a pupil can build his/her monologue or dialogue speech, he/she has to acquire lexical units and grammar structures on the level of phrase or overphrasal unity. Another functioning feature of the electronic learning materials is replenishment of active vocabulary and grammar minimum.

Having analyzed the electronic materials of British editions for developing grammar and lexical skills, we found out that most researched publishers offer interactive materials for teaching English at primary schools. These publishers usually produce web-based software which is free and can be used on-line or downloaded from sites. Web-based electronic materials are focused on developing all language (phonetic, lexical and grammar) skills. Materials from learning site "ThoughtCo" can be widely used in English classes because it is aimed at learning English language as a foreign language by beginners who are just starting out. Materials, available on this site, include pronunciation and conversation; vocabulary and writing skills; reading comprehension and grammar part. These parts meet the main requirement of the current curriculum – learning the language based on speech patterns and real-life communicative situations.

Another web-based language resource is "English for Kids" which is designed to promote children's learning English and the special attention is paid to the development pronunciation skills through typing and listening. It consists of language interactive games, on-line videos and worksheets.

There are also more specific programmes. For example, Zak's Wordgames (Langmaster) learning materials are concentrated mainly on development of vocabulary skills. Tell me More Kids courses are focused mainly on listening and speaking development. The largest publisher in our market is Oxford University Press (OUP). This publishing house produces interactive electronic materials, which

accompany course books for students. These material can be used in primary schools in our country as due to reforms that took place in Ukraine in 2016 the following themes were added to the foreign language curriculum for primary school: Food, Going out, Emotions, At Café, In the Shop, At the Airport, At the Station etc. These spheres of communication are similar to those which are covered by OUP course books. The educational programme that is most focused on practicing English grammar is “English Grammar for Kids”. This new English course is intended namely for primary school. But this educational program is designed for practicing language using the computer both at school and at home.

Generally speaking, the programmes offered by different companies are due to competitive struggle very good. The only major drawback can be incompatibility of designed programmes with various school educational programmes. The way out of situation when there is no programme in market that would cover what we need to teach – such as grammar, vocabulary, speaking, is creating own teaching material in the software supplied with modern computers. Teachers usually prefer to use PowerPoint Office software to design multimedia presentations as an audio and visual interactive aid.

Implementing multimedia aids into the educational process should meet methodological requirements for the lessons of such kind. Multimedia technology applies interactive computer elements, such as graphics, text, video, sound, and animation, to deliver a message [4]. From a perspective on didactics and methodology multimedia technology:

- provides feedback in the learning process;
- makes mastering foreign language more intensive and more effective as multimedia opportunities allow to turn the traditional lessons into more active and visualized presentation of language material;
- individualizes educational process for schoolchildren with different learning styles and abilities to percept the learning materials;
- provides organizing collective and group activities in class;
- monitors educational progress;
- creates a favorable atmosphere for communication [3].

By means of multimedia oral speech is presented in all its forms, being accompanied with cinematic image of those situations in which it operates, taking into account the time and place. But designing the lesson with multimedia technology teachers have to remember that any lesson has a strict plan which corresponds to its

goals. Electronic materials, which are picked up, are to meet the main didactic principles of regularity and consistency, availability, differentiated approach, as well as methodological principles of communication, taking into account the mother tongue, the dominant role of exercises. Teachers also should remember that multimedia means should be centered around the lesson and its aim but not a lesson is centered around multimedia. Another strict demand to a lesson from the methodological standpoints is a structure and content of each stage:

- 1) announcing the lesson theme;
- 2) introduction (introducing speech);
- 3) presenting new language material using the means of multimedia demonstration;
- 4) developing the practical language skills;
- 5) testing;
- 6) summarizing the lesson results.

The sequence of the lesson parts may change. Unchangeable are parts one, two, four and six. Presenting new language material and testing can be varied or transformed due to computer technology.

Computer testing software provides tools for current and control assessing results of mastering language material and communicative skills, self-assessing in an interactive way [1, p. 14-15]. As for computer testing it has its advantages and disadvantages. It is not advisable to use standard tests in the process of assessing skills within the theme as such tests should correspond to the objective level of development of language and communicative skills. Teachers usually make tests for English lessons on their own, having learned the methodology of test designing. The following ideas should be taken into account while making and implementing tests:

- content of the test tasks meets the curriculum requirements;
- avoiding the tasks that are too easy to make;
- the answer on one question shouldn't contain tips to the others;
- it is necessary to use clear, understandable language, but not the polysemantic or rarely used words;
- wrong answers on test questions must have real relevance to the subject being studied to minimize guessing;
- the average time – 15 – 20 minutes (at primary school);
- the number of tasks – about 20;
- sorting tests according to their levels of complexity;

– the complexity of the test should correspond to intermediate level of schoolchildren's language and communicative skills;

– creating different types of tests that prevent invariability of work [4].

The programmes for creating tests that are free on the Internet are MyTest, TestYourSelf, MiniTestSL, Orion, HotPotato, Test-W and Test-W2. They are so-called shell programmes which are easily installed on the computers and are multifunctional. Another drawback of computer testing is lack of computer equipment at schools. Teachers can find way out by presenting the tests on the main screen and students put their answers on the paper answer sheets. But such testing doesn't consider each pupil's individual speed of doing the tasks and opportunity to return to some tasks.

Summary. Schoolchildren's communicative competence is formed more efficiently by implementing computer technology into the educational process, which is realized due to a number of computer and web-based tools. They are electronic materials (textbooks, trainers, on-line resources) and testing software. Using of them in English classes has to meet a number of psychological, methodological and organizational requirements. In the paper we proved that computer technology contributes to the improvement of pupils' practical language skills and has the following functioning features:

– realizing the principle of audio and visual synthesis, providing multisensory input and processing of information;

– replenishing active vocabulary and grammar minimum;

– presenting oral speech in all its forms, being accompanied with cinematic image of those situations in which it operates, taking into account the time and place;

– creating favorable conditions for controlling communicative skill formation by computer technical means.

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