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## THE INFLUENCE OF ICT ON STUDENT MEMORY WHILE LEARNING FOREIGN LANGUAGES

Abstract. This article examines the impact and role of information and communication technologies on the memory of students in the study of foreign languages. The definitions of modern techniques and examples of their use in interactive services are given. It is concluded that ICTs have a sufficiently favorable effect on the memorization of foreign vocabulary by students.

*Keywords:* memory, foreign languages, ICT, memorization methods, memory training, vocabulary training.

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# ВЛИЯНИЕ ИКТ НА ПАМЯТЬ УЧАЩИХСЯ ПРИ ИЗУЧЕНИИ ИНОСТРАННЫХ ЯЗЫКОВ

Аннотация. В данной статье рассматривается влияние и роль информационно-коммуникационных технологий на память учащихся при 196 изучении иностранных языков. Приводятся определения современных методик и примеры их использования в интерактивных сервисах. Делается вывод, что ИКТ в достаточной степени благоприятно влияют на запоминание иностранной лексики учащимися.

*Ключевые слова:* память, иностранные языки, ИКТ, методы запоминания, тренировка памяти, обучение лексике.

At the moment, in the field of education, there is a situation that requires innovative pedagogical solutions, methods and techniques. This trend is due to the widespread use of various information and communication technologies.

In modern science, there are many different definitions of the term «information and communication technologies». According to the dictionary of pedagogical use (edited by L. M. Luzina), information and communication technologies (ICT) are a set of means and methods for transforming information data to obtain information of a new quality (information product) [5, p. 283].

According to the psychologist S. Müller, a person uses various areas of perception (hearing, motor skills, vision, speaking, smells, etc.), and, for example, while memorizing a word, only a few of them are involved [2, p. 146]. The solution to the problem can be found in various information programs that will help one can better memorize different vocabulary.

There are many simple exercises for memorizing words, rules, dates, numbers, and any other information. At the moment, information technology is developing very quickly, and there are already programs that use different methods such as:

- 1) Associative method;
- 2) Method of pictograms;
- 3) Selection of context: dialogues, stories, situations.

Next, we will analyze each method in more detail.

## Associative method.

The method of associations is the main method of developing memory, which must be mastered without fail, since it is not only functional in itself, but is also an integral part of most methods of effective memorization. T. B. Nikitina defines an association as: «a connection between two or more phenomena in which the actualization of one of them entails the emergence of another» [3, p. 46]. There are several types of associations:

- 1) By similar sounding with a word in the native language;
- 2) Association with the sound that denotes a word;
- 3) Visual association.

Apps use visual association most often because it is the most effective. It is easy for the program to find an association for the student, thanks to which he will remember a foreign word for a long time. In addition, eye contact is accompanied by the sound or pronunciation of the word.

#### Method of pictograms.

Among the techniques aimed at studying mediated memorization, the pictogram occupies a special place. For memorization the subject is offered a certain number of words and expressions [7, p. 72].

#### Selection of context: dialogues, stories, situations.

In training, interactive services often use voiced dialogues, while generating various situations. It is much easier for learners to understand in what situations it will be appropriate to use the studied vocabulary. Short stories evoke positive emotions in learners, which keeps them interested and promotes better memorization. In this case, dialogs are accompanied by audio and/or video content. The student can repeatedly play an audio file, speak words simultaneously with the speaker, listen and memorize, which facilitates the process of memorizing and mastering foreign vocabulary.

#### Quizlet interactive service.

The Quizlet app is chosen as an example. Users of this application can create virtual flash cards with the target language on one side and with the specified value in their native language.

The service offers several options [4]:

1) Demonstration: flash cards (Cards), which teachers can create themselves with exactly the words that their students are studying at the moment, one can add a

picture for better understanding and memorization, a big plus is that students can listen to the pronunciation of all words and write down their voice, while they can vary the speed at which cards appear;

2) Reinforcement: in the Learn (to write the translation of words) and Speller (to write the words one hears) exercises, the first execution of operations with words occurs, which allows students to consciously remember them;

3) Control: tasks Test and games Scatter and Space Gravity. The test consists of items for correspondence, multiple choice and true or false statements, translation of words;

4) Interactive online game for the Quizlet Live group: during the game, not only the studied material is consolidated, but also the skills of interpersonal communication are developed.

### Ebbinghaus' forgetting curve.

The forgetting curve is a curve that clearly demonstrates how long information once learned can be stored in memory. Most of the material learned is forgotten in the first time after memorization, and the more time passes after that, the less information is forgotten, unrepeatable material is forgotten faster [1, p. 60].

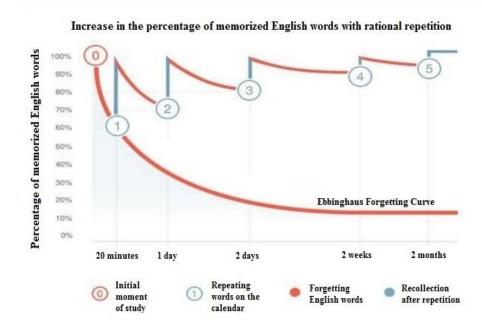


Fig. 1 – Ebbinghaus' Forgetting Curve.

The curve demonstrates the success of mastering foreign vocabulary during its repetition. In modern programs for learning foreign languages, algorithms are used that help a person learn words much more successfully, choosing a context using the learned words, dialogues or visual associations.

The main forgetting occurs during the period immediately following memorization. It is during this period that a person forgets the largest amount of recently studied material. O.V. Galustova believes that «if a person approaches memorization of the material meaningfully, then the necessary information is memorized 9 times faster» [1, p. 64]. The more often a person repeats the material studied, the less the speed of its memorization becomes.

Most applications use two main methods of repeating and fixing foreign words in a person's memory: flashcards and testing.

Specially created flashcards are a kind of repetition plan. When using this method, a term or concept is written on one side, and a description of this term or concept in the form of a thesis on the other side.

Testing as a way of repeating and memorizing information is quite effective. The questions that come across in the test remain in the memory of a person almost forever. The maximum benefit from testing is achieved by starting the test as soon as you become familiar with the new information.

Based on the above, we can conclude that interactive services are effective and easy to use when learning a foreign language. The use of ICT means increases the interest of students in the subject and the effective formation of all types of speech activity. Systematic work with computer tasks forms students' stable skills of independent work, which leads to a reduction in the time for completing standard tasks and allows increasing the time for performing creative work. By combining classroom learning with in-app learning, the learner will achieve good results much faster, as well as help develop memory and reduce the time to remember words.

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