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**ЕФЕКТИВНІСТЬ ВПРОВАДЖЕННЯ ПСИХОРОЗВИВАЛЬНИХ  
ТЕХНОЛОГІЙ РОЗВИТКУ МНЕМІЧНОЇ ДІЯЛЬНОСТІ СТУДЕНТІВ  
ЗАСОБАМИ АУДІЮВАННЯ У ПРОЦЕСІ ВИВЧЕННЯ ІНОЗЕМНОЇ  
МОВИ**

*Анотація*

*В статті на основі експериментального дослідження розкриваються питання ефективності впровадження психорозвивальних технологій розвитку мнемічної діяльності студентів засобами аудіювання у процесі вивчення англійської мови. Представлено порівняльний аналіз кількісних показників процесу запам'ятовування студентів в цілому, а також слухової пам'яті та цілеспрямованості запам'ятовування, як важливих показників розвитку мнемічної діяльності. Експериментально доведено, що показники запам'ятовування учасників експериментальної групи після проведення тренінгу значно перевищують аналогічні показники у студентів контрольної групи. Показано, що важливими умовами активізації мнемічної діяльності майбутніх вчителів іноземної мови є систематичне впровадження в навчальний процес відповідних тренінгових вправ, спрямованих на активізацію слухового сприймання, побудову логіко-семантичних схем після прослуховування різних за стилістичним наповненням аудіотекстів, вправ на рецептивну ідентифікацію ключових слів за тренером у синтагмах англійської мови та на фіксацію акцентованих ключових слів з подальшим самотійним відтворенням*

*на цій основі речень. Високий рівень достовірності позитивних динамічних зрушень показників усіх змінних в учасників експериментальної групи підтверджено методами математичної статистики.*

***Ключові слова:** аудіювання, аудіотексти, запам'ятовування, мнемічна діяльність, психорозвивальні технології, логіко - семантичні схеми, слухова пам'ять, цілеспрямованість запам'ятовування.*

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## **ЭФФЕКТИВНОСТЬ ВНЕДРЕНИЯ ПСИХОРАЗВИВАЮЩИХ ТЕХНОЛОГИЙ РАЗВИТИЯ МНЕМИЧЕСКОЙ ДЕЯТЕЛЬНОСТИ СТУДЕНТОВ СРЕДСТВАМИ АУДИРОВАНИЯ В ПРОЦЕССЕ ИЗУЧЕНИЯ ИНОСТРАННОГО ЯЗЫКА**

### ***Аннотация***

*В статье на основе экспериментального исследования рассматриваются вопросы эффективности внедрения психоразвивающих технологий развития мнемической деятельности студентов средствами аудирования в процессе изучения иностранного языка. Представлено сравнительный анализ количественных показателей процесса запоминания в целом, а также слуховой памяти и целенаправленности запоминания, как важных показателей развития мнемической деятельности. Экспериментально доказано, что показатели запоминания участников экспериментальной группы после проведения тренинга значительно превышает аналогичные показатели студентов контрольной группы. Показано, что важными условиями активизации мнемической деятельности будущих учителей иностранного языка является систематическое внедрение в учебный процесс соответствующих*

*тренинговых упражнений, направленных на активизацию слухового восприятия, построение логико-семантических схем после прослушивания разных по стилистическому наполнению аудиотекстов, упражнений на рецептивную идентификацию ключевых слов за тренером в синтагмах английского языка, а также на фиксацию акцентированных ключевых слов с дальнейшим самостоятельным воспроизведением на этой основе предложений. Высокий уровень достоверности положительных изменений показателей всех переменных у участников экспериментальной группы подтверждено методами математической статистики.*

***Ключевые слова:** аудирование, аудиотексты, запоминание, мнемическая деятельность, психоразвивающие технологии, логико-семантические схемы, слуховая память, целенаправленность запоминания.*

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**EFFECTIVENESS OF THE PSYCHO-DEVELOPMENTAL TECHNOLOGIES  
IMPLEMENTATION FOR THE DEVELOPMENT OF STUDENTS'  
MNEMIC ACTIVITY BY MEANS OF LISTENING COMPREHENSION IN  
THE PROCESS OF LEARNING A FOREIGN LANGUAGE**

*Summary*

*On the basis of the experimental research the article reveals the issues of the effectiveness of the psycho-developmental technologies implementation for the development of students' mnemonic activity by means of listening comprehension in the*

*process of learning the English language. The comparative analysis of quantitative indicators of the students' remembering process is presented, as well as audible memory and purposefulness of memorization as important indicators of the development of mnemonic activity. It has been experimentally proved that the memories of the participants in the experimental group after the training significantly exceed those of the control group students. It is shown that the important conditions for activating the mnemonic activity of future foreign language teachers are the systematic implementation of the appropriate training exercises into the educational process aimed at intensifying auditory perception, the construction of logical-semantic schemes after listening to different stylistic contents of audiotexts, exercises on the receptive identification of the key words in syntagmas of the English language and fixing the accented keywords with subsequent self-reproduction of sentences. The high level of reliability of positive dynamic changes in the indicators of all variables in the participants of the experimental group is confirmed by the methods of mathematical statistics.*

**Keywords:** *listening, audiotexts, memorization, mnemonic activity, psycho-developmental technologies, logical-semantic schemes, audible memory, purposeful memorization.*

**Articulation of issue.** One of the priority directions in the process of the educational reforms, defined by the State National Program "Education. Ukraine in the XXI Century ", is necessity of "achieving a totally new level in learning foreign languages ". The problem of mnemonic activity development of the person becomes highly relevant and of particular social significance at young age. By its psychological meaning mnemonic activity is meta-activity, meta-cognition, because it helps a personality to carry out the cognition and regulation of the personal processes of his/her own interaction with reality, first of all - memory and cogitation. The activity and selectivity of mnemonic processes ensure the uniqueness of life experience of the individual and contribute to the formation of the individuality. The student's

period plays a significant role in the formation of the mnemonic activity of the individual that is focused on the educational and professional activities which ensure the development of intellectual and cognitive spheres. Taking into account that the mechanisms of listening comprehension can be carried out only on the basis of mnemonic processes, any changes in their work lead to improvement of the mnemonic activity itself. Thus, the importance of introducing psycho-developmental technologies for the development of students' mnemonic activity through the means of listening comprehension in the process of learning a foreign language is beyond doubt.

**Analysis of scientific research.** Special studies are devoted to solving the issues of the students' mnemonic activity development in the context of professional training. So, G.Katona [5], emphasizes the need to use the logical methods of organizing the learning material actively during memorization of educational material.

In his experimental studies the author suggested that students study the sequence of numbers based on his own inventive organizing principle. The author has found that the use of such logical memorization techniques improves the efficiency of the students' mnemonic activity by 30% compared with the participants of the experiment, which used exclusively mechanical memorization of the educational material without the use of special logical techniques. I. Bentov [4], K.Pribram [6] draw attention to the high importance of the correct organization of educational material as an important condition for the effectiveness of memorization by students. Investigating the peculiarities of memorization in the learning process, H. von Restorff [7] notes that those elements of stimulating material that are different from others are better remembered, that is, an increase in the efficiency of memorization is facilitated by the purposeful allocation of a number of reference points that form the basis of memorization new learning material. I.V. Vashchenko [1] considers effective methods of developing logical memory such methods as active group learning, in particular: heuristic conversation, game techniques, group discussion, didactic game, role play, analysis of a particular situation. According to the author the use of such

methods has a positive effect on the development of logical memory, since it activates the use of productive forms of information assimilation which occurs through a combination of frontal and group work in small groups. Such methods contribute to the activation of cognitive activity in the learning environment and contribute to the establishment of various relations between the elements of the material being studied. It provides a solid and meaningful processing of the training material. According to V.V. Kryvoderev [3] it is the simulation of mnemonic processes that promotes the habits of the conscious use of own mnemonic processes and the choice of effective algorithms for remembering new information. Creating a model of material as an effective heuristic means of cognition of the psychic process, which is inaccessible to direct observation, makes it possible to increase the efficiency of awareness and functioning of memory. The problem of activating logical memorization techniques is also researched in the works of E.F. Ivanova [2]. In the context of an integrated approach, whose representatives explore all the mental processes in unity, in her researches of adult memory the author devotes considerable attention to the type of thinking that the individual operates. Since the individual features of memory are largely determined by the type of human thinking, the consideration of the type of thinking in terms of professional training contributes to the activation of mnemonic activity of students. In particular, according to the author, in the process of teaching people with an empirical type of thinking, based on external comparison, the tasks of the external organization of memorization are highly effective for memory development. Instead, for the students with a theoretical type of thinking, based on internal analysis, the optimal tasks for the memory development are the tasks oriented on the internal organization of memorization.

The analysis of the basic modern researches on the development of mnemonic activity gives an opportunity to conclude that the problem of mnemonic activity of teachers – philologists was investigated only by few scientists. However, there are not enough solid works about the development of the mnemonic activity of students involved in the process of foreign listening comprehension. Accordingly, the lack of such a training for the development of the mnemonic activities of future foreign

language teachers in the process of listening led to the emergence of a need for an experimental program, the task of which would be to create a set of exercises to improve the mnemonic activity of future specialists in foreign philology using means of listening.

**The purpose of the article** is an analysis of the effectiveness of the psycho-developmental technologies implementation for the development of students' mnemonic activity by means of listening in the process of learning English.

**Presentation of the basic material and research results.** As we studied audible memory with the help of identifying the features of the development of audible memory and the purposefulness of remembering, the specifics of the development of students' memory in the conditions of the educational experiment were found on the basis of these indicators.

In the context of our study, the peculiarities of audible memory were identified by the ability of future foreign language teachers to have audio perception of information in the process of listening a foreign language and to distinguish the lexical filling of the logical parts of the text.

The purposefulness of remembering is the ability of the individual to focus on the material to be remembered without getting distracted for other thoughts or tasks that may arise in parallel.

After the implementation of the training program and conducting the checking part of the experiment a positive dynamics of the development of the basic mnemonic activity processes was revealed. The results of the comparative analysis of the indicators of the memorization process in the control and experimental groups before and after the educational experiment are presented in Table 1.

The analysis of quantitative indicators of the students' audible memory after the training makes it possible to conclude that the experimental group had an increase in the percentage of the students with high levels of the investigated phenomenon (to 34.8% of respondents respectively) by reducing the number of students with low level of audible memory.

*Table 1*

***Indicators of the memorization process of students in the conditions of the educational experiment***

**N = 45**

Levels			Peculiarities of memorization					
			Audible memory		Purposefulness of memory		Memorization in general	
			Abs.	%	Abs.	%	Abs.	%
High	Before exp.	EG	-	-	-	-	-	-
		CG	-	-	-	-	-	-
	After exp.	EG	8	34,8	9	39,2	8	34,8
		CG	2	9,1	2	9,1	2	9,1
Average	Before exp.	EG	7	30,4	6	26,1	6	26,1
		CG	8	36,4	7	31,8	7	31,8
	After exp.	EG	12	52,2	11	47,8	12	52,2
		CG	9	40,9	9	40,9	9	40,9
Low	Before exp.	EG	16	69,6	17	73,9	17	73,9
		CG	14	63,6	15	68,2	15	68,2
	After exp.	EG	3	13,0	3	13,0	3	13,0
		CG	11	50,0	11	50,0	11	50,0

According to the results of the statistical analysis, as well as the statements of the students, we can say that the revealed dynamics is caused by efficiency of the training exercises to enhance students' memorization, namely with the help of exercises on receptive identifying of keywords in syntagmas of English and exercises on fixing accented keywords with further process of reproducing sentences on the basis of independently fixed keywords and phrases. The mentioned exercises promoted the students' skills of passive emphasis on selected keywords, which, in turn, contributes to improving the audio perception of the participants in the experiment.

As one can see in Table 1, the quantitative indicators of audible memory of the experimental group participants after the training are significantly higher than those of the control group students.



Audible memory indicators in the control group students before and after the educational experiment do not differ significantly. In particular, at the stage before the educational experiment, only 36.4% of the students in the control group had the average level of audible memory, 63.6% of the students had low level of audible memory. After the training, only 9.1% of students achieved a high level and 40.9% of students achieved an average level of audible memory, respectively. The obtained results make it possible to conclude that, under normal conditions, the formation of the memorization of English texts during listening comprehension in the process of learning is slow. Therefore, the results of the memorization of the control group students during the training did not change much. Instead, the active participation of experimental group students in the training provided an opportunity to get effective listening comprehension skills of English texts and to achieve a significant enhancement of memorization skills in general.

The next feature of memorization is the purposefulness of memorization, and we have studied it in the English listening environment. According to the results of the checking part of experiment, it can be stated that the number of students of the experimental group with a high level of purposefulness of memorization during the training increased to 39.2%; the results of the students with an average level of the investigated phenomenon increased from 26.1% to 47.8% of the respondents; the number of the students with a low level of purposeful memorization has dropped significantly - from 73.9% to 13.0%. The revealed positive changes are due to the purposeful work of the students during the training on the enhancement of the skills regarding the perceived purposefulness, as well as the additional skills, namely, the skills of step by step fixation of information in the listened sentences, the concentration of attention on the semantic center of the phrase and the active emphasis on the selected keywords using exercises on individual selection of keywords from the suggested sentences, and further individual fixation of keywords with the reproduction of syntagmatic content on their basis. It, in turn, contributed to the growth of the purposefulness of memorization, as the participants of the training improved their ability to record information on a principle from the main to the

secondary correctly, which leads to improved ability to organize their perception and establishment of the appropriate logical links between the parts of information that needs to be remembered rationally.

Compared with the experimental group, the indicators of the purposefulness of memorization of the control group students after the educational experiment did not change much. The insignificant growth of the results of the purposeful memorizing in the control group of students at all levels shows that without specially organized training the development of the skills of purposeful memorizing of the students is not sufficient.

During the educational experiment the memorization indicators in the experimental group have increased significantly and in the majority of students they correspond to the high and average levels of memorization, namely: 34.8% and 52.2% of the participants of experiment respectively. Instead, statistically significant differences were not detected in the control group students when comparing with the results before and after the experiment. Thus, before the training 0% of students were enrolled to a high level of memorization, 31.8% of the respondents were enrolled to an average level, 68.2% of the participants of the experiment were enrolled to a low level. However, without specially organized training, the number of students with a high level of memorization in the control group has increased to a small extent and is only 9.1% at the stage of the checking part of the experiment. The average level corresponds to the results of 40.9% students. 50.0% of the participants of the control group after the end of the training program were credited to a low level of memorization.

According to the results of the use of mathematical statistics methods a high level of reliability of positive dynamic changes in the indicators of all variables in the experimental group was revealed based on the results of the confirmatory and checking experiments, as well as the reliability of the revealed differences in the results of the experimental and control group students by the results of the checking experiment ( $p \leq 0,01$ ).

Thus, the results of the statistical research confirm the high efficiency of the training program as a means of developing the mnemonic activity of future teachers.

**Conclusions.** The results of the educational experimental research give an opportunity to make a number of conclusions. The author's training program is highly effective. Accordingly, it was found that the development of mnemonic activity of students in the conditions of traditional education is not sufficiently intensive. The effectiveness of activating mnemonic activity of future teachers depends to a large extent on the integrated use of audio tasks to form all the major processes of the phenomenon (mnemonic activity) under investigation in the process of learning a foreign language. Important conditions for activating mnemonic activity of future foreign language teachers are the systematic implementation into the educational process the appropriate training exercises, namely exercises on the activation of audio perception, the construction of logical-semantic schemes after listening to different stylistic contents of audio texts. The effectiveness of the author's training is confirmed by the quantitative and qualitative results of the checking experiment. The reliability of the obtained data is provided by their sufficient statistical significance ( $p \leq 0,01$  -  $p \leq 0,05$ ).

In general, after completing a training on activating mnemonic activity in their self-reports, students point to an increase in their success in foreign language classes, an increase in interest regarding learning in general, an increased desire to develop and improve their own memory using the knowledge and skills acquired during participation in the training program.

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