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PSYCHOLOGICZNE WARUNKI WSTĘPNE OPANOWANIA JĘZYKA OBCEGO JAKO ŚRODKA KOMUNIKACJI W SPOŁECZEŃSTWIE INFORMACYJNYM

PSYCHOLOGICAL PRECONDITIONS OF MASTERING A FOREIGN LANGUAGE AS A MEANS OF COMMUNICATION IN THE INFORMATION SOCIETY

Streszczenie: Artykuł ukazuje naukę języka obcego jako ważną wartość w nowoczesnym społeczeństwie informacyjnym. Autor prezentuje eksperyment przeprowadzony przez Narodowy Uniwersytet Pedagogiczny Dragomanov na Ukrainie wśród studentów dziennych Wydziału Języków Obcych. Kładli szczególnie nacisk na umiejętność skupiania uwagi, samodzielnego myślenia i organizacji pracy własnej.

Abstract: Article presents learning a foreign language as a really important value in modern, information society. Authors presents the experiment conducted at Dragomanov National Pedagogical University at the Foreign Languages and Ukrainian linguistics departments among full-time students. They emphasize the role of attention, thinking and self-organization.

Słowa kluczowe: nauka języka obcego, skupienie uwagi, myślenie, efektywne uczenie, organizacja pracy własnej, społeczeństwo informacyjne

Key words: learning a foreign language, attention, thinking, self-organization, effective learning, information society

Actuality

Accelerating of the economic growth is impossible without social improvement of the society's modern means of communication and information services. Knowledge and use of a foreign language is the foundation for building of a scientific and information society.

The methodology of teaching a foreign language for many centuries relied on the researches in the field of psychology. This is not by chance, as learning a foreign language is a complex psychological process. Any teaching method is always based on a certain psychological theory, which determines the basic approaches to learning.

Until recently behaviorism has had the greatest impact on methods of teaching foreign languages. From the standpoint of behaviorism the most important feature is a collection of individual behaviors, organized and relatively stable system of skills. During the life a person acquires activity skills. The subject of learning, acquiring skills through trial and mistakes has become central to the behaviorists. Changing incentives and reinforcements, as they consider, you can find the person to program the desired behavior. As part of the process of learning a foreign language behaviorism ignores the possibility to influence thinking and consciousness of the learner. According to behavioral learning theory, learning a foreign language is the process of developing skills through imitation.

Among prominent foreign scientists and practitioners involved in the study of these issues were L. Blumfield, G. Palmer M. West, Charles Fries, Robert Lado, V. Rivers and others.

Throughout the long history of the formation and development of different approaches to learning a foreign language it can be observed that very often the researchers are interested in studying cognitive processes. For example, a large influence on the methods of teaching foreign language had heshtalyzm that recognizes the primacy of the perception of ordinary shapes of the reality surrounding man. This approach to the study of the human psyche was helpful in trying to introduce a foreign language in a simple language structures. This contributed to a better selection of linguistic material. The ideas of associanism proved to be very useful for memorizing foreign words¹.

¹ Мильруд Р.П. Методология и развитие методики обучения иностранным языкам / Р.П. Мильруд // Иностранные языки в школе. – 1995. - № 5 – С. 13 – 18.

Among our scientists considering these questions are: A. Leontiev², B.V. Beliaiev³, N. Zhynkin⁴, V.A. Artemov⁵, I.A. Zimniaia^{6,7}.

In the context of studying the nature of bilingualism the study of the problem of foreign language skills, which in turn ensure the success of learning a foreign language, is carried out. It is obvious that foreign language skills are interconnected with individual psychological qualities of students. This is confirmed by many studies of students' individual psychological characteristics and their relationship with other language abilities and successful learning a foreign language^{8,9}.

According to I.A. Zimniaia, P.V. Lushin, S.D. Maksimenko, the development of a foreign speech depends on many mental functions and aspects of mental activity, to which perceptions, attention, memory, and native speech belong. In order to investigate the regular changes that occur in the students' mental functions in the educational process of mastering foreign speech, we need to show their place and role in this process, while limiting ourselves to analyzing those that most influence it. According to our subject of study, the assimilation of foreign speech is carried out under the condition of activation of the features of attention, thinking and optimal manifestation of the organization of students' personality.

² Леонтьев А.Н. Деятельность. Сознание. Личность. / А.Н. Леонтьев. - М.: Политиздат, 1975. - 304 с.

³ Беляев Б.В. Очерки по психологии обучения иностранным языкам / Б.В. Беляев. - М.: Просвещение, 1965. - 227 с.

⁴ Жинкин Н.Ш. Механизмы речи / Н.Ш. Жинкин. - М.: АПН РСФСР, 1958. - 370 с.

⁵ Артёмов В.А. Психология обучения иностранным языкам / В.А. Артёмов. - М.: Просвещение, 1969. - 279 с.

⁶ Зимняя И.А. Психологические аспекты обучения говорению на иностранном языке / И.А. Зимняя. - М.: Просвещение, 1985. - 159 с.

⁷ Кабардов М.К. Роль индивидуальных различий в успешности овладения иностранным языком (На материале интенсивного обучения): автореф. дис. на соискание учён. степени канд. психол. наук: спец. 19.00.07 „Педагогическая и возрастная психология” / М.К. Кабардов. - М., 1983. - 25 с.

⁸ Кабардов М.К. Роль индивидуальных различий в успешности овладения иностранным языком (На материале интенсивного обучения): автореф. дис. на соискание учён. степени канд. психол. наук: спец. 19.00.07 „Педагогическая и возрастная психология” / М.К. Кабардов. - М., 1983. - 25 с.

⁹ Мазурик Т.Н. Влияние индивидуально-психологических качеств студентов на успешность усвоения иностранного языка (В связи с иноязычными способностями): автореф. дис. на соискание учён. степени канд. психол. наук: спец. 19.00.07 „Педагогическая и возрастная психология” / Т.Н. Мазурик. - М., 1984. - 16 с.

Non-verbal speech activity is carried out during the processes of perception (listening, reading) and reproduction (speaking and writing) of oral and written speech.

Consequently, the attention properties in the process of learning a foreign language are actualized, and also organize and control the perception of information, its comprehension, memorization, preservation and formation of skills of productive reproduction of the acquired material. Although, in the process of mastering a foreign language not only the attention implements these functions, but their quality depends on the organization of the student's personality and deep thinking.

Purpose

The main tasks of our ascertaining experiment were to study the basic properties of attention, thinking of students, organization of personality and relationships between them and the success of learning a foreign language. The study was conducted at Dragomanov National Pedagogical University at the Foreign Languages and Ukrainian linguistics departments among full-time students. The study involved 240 students of 1–4 courses.

Methodology

We used the following empirical methods: observation, interviews, questionnaires, testing and statistical methods of data processing. In polls, surveys and tests we used standardized questionnaires and reliable psychodiagnostic methods (Bourdon test, technique "Encoding", "Attention span" by K.K. Platonov, switching attention – by changing the method of adding numbers written under each other; for determining the level of students' thinking – method for analyzing relationships of concepts "Simple Analogy"; ability to plan their activities was determined by the method of V.F. Morhun, students' responsibility – with help of multivariate analysis and functional responsibility by V.P. Priadiyev, subjective control – by the method of J. Rotter).

While studying sustained attention, we got some data, which indicate that the vast majority of students (50%) in each course has an average level of sustained attention, but the percentage of students with low and below-average sustained attention is greater than the percentage of students with high and above-average sustained attention. Thus, in the first and fourth courses about 5% of students have above average sustained attention, and with the below-average and low sustained attention there are about 23% of students. In the second course with high and above average sustained attention there are 13% of students, and low and

below average – 30.9% of students. In the third course with low and below the average level of sustained attention there are 46.2% of students, but no student has high or above average levels of sustained attention.

Observations make it possible to assert that students with low and below average levels of sustained attention have difficulty in listening texts, make a lot of grammatical mistakes in speech, and their writing is characterized by incomplete statements, lack of consistency and incorrect use of grammar and lexical units. The presence of a larger number of students with high and above-average level of sustained attention in the junior courses than older, we can explain by the fact that students are more interested in learning and their innovation in higher education compared with the school.

Having analyzed the number and distribution of mistakes while performing diagnostic tasks by students, who successfully learn English, and those with average achievement, we can state that the latter get tired when performing repetitive work, they can not mobilize their volitional efforts and therefore have less ability for self-organization in learning.

Sustained attention is interrelated with the educational progress of students, which is also confirmed by correlation analysis, but not strong statistical relationship. This suggests that sustained attention does not significantly affect the success of mastering English language. The trends of correlation between these phenomena are not consistent, in the third year statistically significant correlations weren't found that could be explained by the influence of different reasons, such as acquiring those phenomena quantitative changes and preparing for the emergence of their quality. Other factors can also influence such as subjective complexity of the tasks in English for students of third year and so on.

The results confirm the lack of students' switching attention that can cause mistakes that they make orally and in written tasks, moving from one task to another as we received positive correlation between switching attention and academic success in the first, third and fourth years.

The coefficient of students' switching attention in the first year is less than the undergraduate that does not contradict the results obtained by L.N. Fomenko, that switching attention varies with age. This means that switching attention is changing gradually with the age, but our task will be the development of switching attention within the system of stable and focused attention of the individual. We assume that under such conditions, learning a foreign language will be more effective.

There is a statistical link between research results of sustained and switching attention among students of the first ($r = 0,38$, $p < 0,01$) and fourth years ($r = 0,33$, $p < 0,05$). As the statistical analysis shows there is no correlation between these

properties among the students of second and third course. It could also indicate that some properties of attention among students of second and third courses undergo internal changes, rebuilt or have any qualitative changes in the structure of individual students.

Many students have low switching attention combined with high mobility and sustainability of mental processes and switching attention. These students mainly have the average level of switching attention. Conversely, there are students who have intermediate and high switching attention combined with low mobility of mental processes. These students have mostly poor performance in English. This means that students with higher effectiveness in learning English have more developed sustained attention or exert more willpower and show greater ability for self-control to hold the attention of the material which is being learnt.

Students' distribution of attention is about 7 points, which means that the students have average level of attention of this property.

Correlation analysis showed that there is a statistical relationship between the distribution of attention and educational progress of students only of the first and second courses. The students of the third and fourth years have low correlation, which isn't statistically significant, that gives reason to believe that the success of learning a foreign language of the undergraduate does not directly dependent on the distribution of attention. The level of foreign language of undergraduate students requires more sustained attention than distribution.

Having done correlation analysis between the distribution of attention and success in learning a foreign language, we have received results that indicate that in the first and second courses there is a positive statistical relationship. In the first year we got such figures $r = 0,34$, $p < 0,01$, in the second year – $r = 0,33$, $p < 0,01$, which shows the connection between the distribution of attention and progress in learning a foreign language. The third- and fourth-year-students have low correlation, statistically unreliable. In the third year there is a tendency to negative correlation. We can assume that the distribution of attention at the undergraduate does not directly affect the success of mastering a foreign language. At the level of senior students' learning a foreign language is so that sustained attention is more needed. As mentioned above, in the fourth year students a statistical relationship has been found between the sustained attention and learning a foreign language. The third year students may have internal personality changes, their properties differentiate between them, which affects the display of attention and its impact on performance.

Students with low levels of the distribution of attention make mistakes in such tasks for listening, where they have to fill in gaps in the text with the right phrases and words, or complete the table. They can not properly and fully perform such tasks even when listening two–three times. When the level of the distribution of

attention is low, the students make mistakes when they have to read the text and at the same time do written assignments.

Between the distribution and sustained attention, there is statistical relationship among students in all courses, except the third. This means that students can perform tasks that require the distribution of attention, with large texts, as well as a fairly large task for listening. Correlation analysis showed statistical connection between distribution and sustained attention of the students in all courses (freshman $r = 0,24$, $p < 0,05$, in the second year $r = 0,52$, $p < 0,001$, the fourth – $r = 0,38$, $p < 0,01$), and the third year is very weak statistical relationship ($r = 0,35$). This means that, for example, when listening to the text, students can focus simultaneously on listening and taking notes. But between indicators of distribution and switching of attention statistical relationship exists only in the fourth year students ($r = 0,28$, $p < 0,05$). Students of the first, second and third courses don't have correlation between these phenomena – it is low, not statistically significant. For example, while reading text and responding to the questions, for students of 1–3 courses it is difficult to switch from translating the text or discussion. Therefore, from the provided above correlation between distribution and switching of attention, we see that the fourth-year students have a statistical relationship between the properties of attention (stability, switching, distribution), indicating better of the internal organization of attention. Students of the first, second and third courses have properties of attention which are more separated, they are not all closely related, especially in the third year students.

The students' attention span is on average three objects that meets age requirements. The percentage of students, who have the attention span of four, five and six objects, some of the first year – 19%, the second – 38%, the third – 8% in the fourth – 27%. The average attention span of students corresponds to the average accuracy of perception.

The students who show low attention span, basically make lexical mistakes while listening, reading and grammar mistakes while writing essays and performing tasks which contain more than one grammatical phenomenon.

The correlation analysis of data concerning the attention span of the students and their academic achievement shows that the students of the second and fourth year have a statistical relationship ($r = 0,41$, $p < 0,001$ and $r = 0,46$, $p < 0,001$). Among the students of the first and third courses correlation between these indices is low, not statistically significant. Thus, learning lexical and grammatical material, as well as reading and listening texts of large volume depends on the level of attention of students.

The correlation analysis has revealed the following correlations between attention span and sustained attention of students: freshman ($r = 0,41$, $p < 0,001$), in the second year ($r = 0,32$, $p < 0,01$). Among the students of the fourth and third

courses statistical relationship between the phenomena mentioned is unreliable. Perhaps more in terms of texts for reading and listening require greater students' attention span and greater sustained attention, but it requires proper level of distribution of attention and correlation analysis showed that students in the first, third and fourth courses have statistical relationship which is very low, unreliable. Among the second year students there is the relationship between distribution and attention span ($r = 0,34$, $p < 0,01$). Correlation analysis showed a correlation between attention span and switching attention only of first-year students ($r = 0,39$, $p < 0,001$). This means that when learning a foreign language at an early stage when the texts are small and there is less lexical material, students' switching attention has a close relationship with the attention span.

To determine the level of students' thinking we used the method to analyze relationships in pairs of concepts. The students were given the pairs of words, which are in certain relationship, to reflect significant in the sense of concepts and relationships between them and to choose the best word for the given one.

Once we've processed the data, we obtained the following results. Among the students of the first year the level of thinking operations to find the successful solution of problems of establishing analogies equals 3.9 (maximum score – 9), in the second year – 3.8 points; the third – 2.1 points; the fourth – 5.8 points. Most students have made mistakes in genus-species relationships. So, when they have a pair of words *diamond* – *rare*, the correct word for *iron* to pick would be *common*. The students also made a lot of mistakes in relationship like this pair of words *electricity* – *wire*, for which the right answer for word *steam* would be *pipe*. In fact in this type of setting relations between the concepts 70.3% of first-year students, 78.5% of students of the second year, 84.6% third-year students and 46.4% fourth year students made mistakes. The data indicate students' low ability to think abstractly, which can cause poor formation of reproductive vocabulary and grammar skills, especially during tasks such as to fill in the gaps with an unlimited number of words, lexical transformation, to pick a sentence to fill gaps in the text, placing parts of the text in the correct order.

The correlation analysis revealed that almost all properties to some extent are linked, but the organization of attention of the students is at a low level. This is especially true for the third-year students, as properties of attention are weakly related. The reason for this could be the restructuring of internal changes in personality.

Using correlation analysis of the results of attention research and thinking we have found out that first-year students' thinking has connection with the sustained attention and switching attention; the students of second course – only with the attention span; the third year students' thinking has the relationship with sustained attention, attention span and switching attention, and the fourth year

students' thinking has relationship with all the properties of attention and success in learning English, except the switching attention (which we can explain that the students have low ability to switch their attention in the process of thinking and deep concentration). These data are consistent with the opinion M.F. Dobrynin [85] that the level of attention is closely associated with the level of mental activity and the level of mental activity affects the level of the general organization of attention.

On analyzing the results of students' development of attention and thinking and the results of statistical data such as correlation analysis, we can say that the level of organized attention of the internal organization of the students is low. Not all properties of attention, thinking are closely linked among the students from first to fourth year. Considering the level of ability to manage time and responsible attitude to the target and self-control, we found the levels of the students' ability to self-organization.

With a high level of students' self-organization we found only 2.3% (2) of students in the second year and 10.7% (6) students in the fourth year. These students with a high level of self-organization have high achievements in a foreign language (they are characterized by systematic homework, consistency in the presentation of the written works, they always do tasks thoughtfully, ask teacher to explain the material they don't understand). Intermediate level of self-organization was determined among 70.2% (52) of first year students, 61.9% (52) of second year students, 61.5% (16) of the third and 75% (42) students of the fourth year. It is interesting that the students, who have intermediate level of self-organization, are with high, medium and low achievements in a foreign language, but the average level of achievement prevails. These students are mainly oriented to external control and responsible attitude to group tasks, they are able to set a goal, but not always are successful to end.

Low self-organization we found among 29,8% (22) of first year students, 35.8% (30) students of the second, 38.5% (10) students of the third and 14.3% (8) fourth-year students. Students with low level of self-organization have mainly low and average marks in a foreign language; they don't systematically prepare for classes and do not show the persistence in performing tasks. There were found several students with low level of self-organization who have high achievements in a foreign language in the fourth year. These students have well-developed communication skills as they use English to communicate with foreigners, they are also good at listening tasks.

Thus, the data show mainly intermediate and low level of self-organization of students, which means that students have low ability to work on their own on the study of a foreign language. And because learning a foreign language requires working on vocabulary and grammar material and reading original texts and arti-

cles, we can assert that low marks in learning a foreign language can be caused by the inability of students to organize their educational activities. They have mostly low and intermediate level of self-organization that may be the cause of poor performance in learning which was conformed by correlation analysis. This means that students can not organize themselves in order to study a foreign language, that's why systematic work on vocabulary suffers, they also demonstrate inability to focus and understand foreign speech, they make common mistakes especially when moving from one task to another in oral and written language (for example, moving from theoretical assimilation of grammatical rules and structures to their practical application, from reading the text to its discussion.) Since stable relations between attention, thinking and self-organization have not been revealed, so we can speak of middle and low-level of the students' self-organization.

Scientific novelty

Formation of the attention with its relationship with thinking and self-organization is a time-consuming, planned and systematic process that requires training self-organization according to the requirements of credit-modular system of education, and for the teacher it's hard work and careful selection of exercises, tasks (both individual and group) and role-playing games relevant to the class and the level of students' foreign language. Development of attention together with thinking is advisable to perform such tasks as discussions, talk shows, creating a range of ideas and others. The development of students' ability to plan time – can be through group and individual counseling for planning individual work on the study of foreign languages and using of role-playing, and the development of responsible attitude and self-control can be realized in group and pair activities using mutual control.

At English workshops we used various communication tasks and training exercises that affect the development of attention and improve the understanding of theoretical questions and the grammatical structure of a foreign language. While doing the exercises on the development of attention, we tried to use mutual checking of written assignments that promotes concentration and takes into account the fact that too rapid transition from one activity to another is tiring; that the distribution of attention between multiple activities can be effective only if all activities, except basic, are automated; that the level of attention and attention span are inversely related – increasing elements perceived causes reduction of attention and vice versa.

Foreign language lessons have great potential for the development of thinking. Learning a foreign language is teaching foreign-speaking thinking, because owning a language means thinking it. A foreign language is only a means by which a person expresses his thought. We created natural communicative situations in

our classes, the purpose of which was to exchange opinions taking into account the interests, life experiences and individual characteristics of students. For example, the use of detective stories is effective for the development of thinking. The teacher tells the students the beginning of the detective story, and then one or two sentences of the end, or the result of the story. Students should analyze the situation, develop the course of events so that logically reach the end. Then the teacher reads the whole story from beginning to end, and students compare their story with the original one, which also develops the sustained attention, as well as the flexibility and criticality of thinking. An exercise that can be used to revise lexical units of the topic of any kind is called "Bingo!". It develops students' sustained and distribution of attention, as well as the switching attention in a complicated version. Here is an example of a game that we did when we taught irregular past verbs (Past Simple). The teacher gives students cards with a list of words. Then he reads the words, and students, after hearing the word, should cross it out. If the student has all the words crossed out, he says the word "Bingo!". When the teacher finishes reading the words, students should have all the words crossed out. If there are lexical units left on the card, it means that the student listened inattentively and missed the word. In a complicated version, the teacher reads words in the present tense or in their native language. Thus, we focused only on several examples of holistic work, the goal of which is to increase the effectiveness of learning a foreign language, taking into account individual psychological characteristics of students.

Conclusions

We have revealed that students have mostly low and intermediate level of attention, thinking and self-organization that may be the cause of poor performance in learning. This means that students can not organize themselves in order to study a foreign language. We examined the properties of thinking and attention in their close connection with self-organization, which are necessary for effective learning of foreign languages and identified opportunities for the development of mental functions in foreign language lessons. Mastering of foreign speech activity comes true on condition of activating of attention, thinking and optimal display of good organization of students' personality. We have also given examples of games and tasks at English lessons for the development of these properties.

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