

ПЕДАГОГИКАЛЫҚ ҒЫЛЫМДАР / ПЕДАГОГИЧЕСКИЕ НАУКИ /
PEDAGOGICAL SCIENCES

DOI 10.54596/2958-0048-2023-4-35-40

UDK 372.811.111

IRSTI 16.41.21

THE IMPORTANCE OF BRAIN DEVELOPMENT IN TEACHING ENGLISH

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Abstract

This article is devoted to an urgent problem - the importance of developing the students' brain activity in learning English. The object is the process of teaching a foreign (English) language in the first year of non-linguistic specialties. The purpose of the work is to identify the reasons for the deterioration of students' cognitive abilities, inability to express their thoughts, prove, convince. The article provides a number of techniques that increase the motivation of students to study a foreign language, developing the mental and cognitive activities of students.

The article is written in a simple, understandable language, not overloaded with exhaustion, highly specialized terminology. The authors' conclusions are quite reasonable. The results of the work can be useful for teachers not only of a foreign language, but also of other humanitarian subjects.

Key words: brain activity, motivation, cognitive abilities, conscious learning, quality of education.

АҒЫЛШЫН ТІЛІН ОҚЫТУДА ОЙЛАУДЫ ДАМУДЫҢ МАҢЫЗЫ

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Аңдатпа

Бұл мақала өзекті мәселеге - ағылшын тілін үйрену кезінде студенттердің ойлау қызметін дамытудың маңыздылығына арналған. Шет (ағылшын) тілін тілге жатпайтын мамандықтардың бірінші курсына оқыту процесі объект болып табылады. Жұмыстың мақсаты студенттердің танымдық қабілеттерінің нашарлау себептерін, өз ойларын білдіруге, дәлелдеуге, сендіруге қабілетсіздіктерін анықтау болып табылады. Мақалада студенттердің шет тілін үйренуге ынталылығын арттыратын, білім алушылардың ойлау және танымдық қызметін дамытатын бірқатар тәсілдер келтірілген.

Мақала қарапайым, түсінікті тілмен жазылған, тар арнайы терминологиямен жүктелген жоқ. Авторлардың тұжырымдары негізді болып табылады. Жұмыс нәтижелері тек шет тілінің ғана емес, басқа да гуманитарлық пәндердің оқытушыларына пайдалы болуы мүмкін.

Түйінді сөздер: ми қызметі, мотивация, танымдық қабілеттер, саналы оқыту, білім сапасы.

**ВАЖНОСТЬ РАЗВИТИЯ МЫШЛЕНИЯ
ПРИ ОБУЧЕНИИ АНГЛИЙСКОМУ ЯЗЫКУ**

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Аннотация

Данная статья посвящена актуальной проблеме - важности развития мыслительной деятельности студентов при изучении английского языка. Объектом является процесс обучения иностранному (английскому) языку на первом курсе неязыковых специальностей. Целью работы является выявление причин ухудшения когнитивных способностей студентов, неспособности выражать свои мысли, доказывать, убеждать. В статье приводится ряд приемов, повышающих мотивацию студентов к изучению иностранного языка, развивающих мыслительную и познавательную деятельность обучающихся.

Статья написана простым, понятным языком, не перегружена излишней, узкоспециальной терминологией. Выводы авторов являются вполне обоснованными. Результаты работы могут быть полезны преподавателям не только иностранного языка, но и других гуманитарных предметов.

Ключевые слова: мозговая деятельность, функция мозга, познавательные способности, сознательное обучение, качество образования.

Introduction

Why, after many years of learning a foreign language, fluency does not appear. Why is a foreign language so difficult to learn like a native language? From a scientific point of view, our brain is divided into zones: Broca and Wernicke, each of which is responsible for a specific function in the body. Each zone is responsible for the speed of memorizing new words, the formation of statements and coherent text in writing. Language is not just a unit of a word; all its parts (meaning, form, sound) are located in different parts of the brain. In order to learn a foreign language, it is necessary to determine 3 different language systems that are involved in the process of memorizing and using words in everyday speech: lexical, syntactic and phonetic. This also explains why some approaches to learning a language - either only from speaking, or only from grammar - do not work. The front of this area - Broca's center - is responsible for grammar and syntax, while the back - Wernicke's center - for the sound of words and their understanding. For example, if Broca's center is damaged, the person will not be able to speak, and if Wernicke's center is damaged, he will no longer understand what he hears. These areas need to be constantly trained and upgraded. Having "pumped" the language center, learning a foreign language will go much faster. But the main thing is to develop the student's abilities, to prepare for society a person who is able to think independently and make decisions. [3, 228]

When a person has a high motivation or a vital need to learn a foreign language, these zones are automatically turned on, but how can one awaken them, maintain interest in learning a foreign language among those who study it not as a specialty, but as part of a program in non-linguistic universities, for example, engineers or economists.

Research methods

According to The Applied Learning Processes Center (2019, January 5th), brain needs social stimuli. Social stimuli are abundant in group activities. These activities reduce teacher talk and increase interaction between students. The fact that there exist mirror neurons implies that group support and positive interdependence among group members help create a sense of togetherness, which is helpful for language learning. In a real world, cooperative skills such as asking for help, thanking, asking for explanations, offering help, and so forth, are indispensable.

In learning a language context, students learn better when they have opportunities to practice using the language. Cooperative Language Teaching emphasizes the use of English for communicative purpose; structured group work allows equal participation, increasing the amount of time the learners can practice the language. One of the leaders in the brain-based movement in education Eric Jensen [4, 89] has reminded us of the status of brain-based education: “Brain-based education is not a panacea or magic bullet to solve all education’s problems”. Research on the brain is still in its infancy. Many of our existing teaching principles and methods such as CL and CLT, in many aspects, are brain compatible. Brain research has gained its currency in the EFL/ESL discourse, and it will continue to do so. In the 21st century, scientific evidence from brain/neuroscience research is going to affect how educators work. Jensen [4, 90], in particular, has pointed out that it is important for educators to be able to “support the use of a particular classroom strategy with scientific reasoning or studies.”

Even now, when there are many opportunities and resources for learning, students entering the first year, according to test results, have a low level of foreign language proficiency. As practice shows, studying at a university also does not bring results for some students. One of the reasons, in our opinion, is the lack of motivation of such students, in unconscious learning, when there is no specific goal, not everyone understands why a foreign language is needed, for example, for an electrical engineer or a builder, i.e. for all those for whom a foreign language is not a profession. Despite the fact that we study according to authentic textbooks, where everything is thought out, logically arranged, many students begin to get bored, getting used to already familiar, expected tasks. Carl R. Rogers [1,64], a humanistic psychologist, stated: “Why bother?” in other words, as far as learning is concerned, the actual cognitive process of learning should not be our major concern. What we need to consider is the context of learning: “If the context for learning is properly created, then human beings will, in fact, learn everything they need to” (Roger, 1983, quoted in Brown, 1994). Another reason lies in the excessive use of Internet resources: artificial intelligence will come to the rescue even when writing term papers or dissertations, and Google will answer any problematic questions that the teacher raises in class and even express any opinion in any language. It is safe to say that the brain activity of the learners, in this case, is replaced for the Google functions: copy, paste. All this, in turn, leads to a decrease in memory, ingenuity, creativity and inability to express one's own opinion. And there are already many such students after distance learning during the lockdown, for whom learning 10-15 new words is a problem, not to mention learning and telling a whole story. In order to motivate students, return them to conscious learning, we conducted a survey in English on the topic: Understanding the brain. The purpose of the survey is to obtain data on the attitude of students to the learning process as a creative process. The number of students surveyed is 60 people. Here are some questions:

1. Is our brain's storage capacity ...?

a) Unlimited

b) Limited

2. Our brain...

a) Processes the information only

b) Memorizes the information only

c) Controls all processes of our body

3. Does the brain sleep at night?

a) yes

b) No

c) don't know

4. Why is it important to exercise your brain?
 - a) to make it strong
 - b) to develop it
5. How many seconds does it take to respond to something and generate an action?
 - a) 1/10,000th of a second
 - b) 2
6. Do you think the brain helps us to ...?
 - a) Create thoughts and stores pictures in our head.
 - b) Regulate our breathing
 - c) Remember colors
 - d) Manage the rhythm of our heart
 - e) Control our body temperature
 - f) Remind us to blink
 - g) Remember information
 - h) Ride a bike
 - i) Determine what the soft fur on a dog's back feels like
7. What points above from a-h we can do without help of our brain?
8. Doing any tasks in English, do you do them ...?
 - a) always googling
 - b) sometimes googling
 - c) never googling
9. If you google topics or other things in English, you
 - a) translate them and try to change
 - b) just copy information
10. Is the statement True or False?

If people always use googling, the work of their memory and the process of thinking will be slow down.

 - a) True
 - b) False
11. Is learning new words a good way of training our memory?
 - a) yes
 - b) No
 - c) Not sure
12. Do you like thinking?
 - a) Yes, I do
 - b) No, I don't
13. Do you enjoy doing creative tasks?
 - a) Yes I do
 - b) No, I don't

Results of a research

The survey showed that 95% of the students have an idea about the activity of our brain, about understanding the importance of developing their thinking, and not resorting to the help of technical intelligence. Only 2% of students could not correctly determine the functions of our brain activity and 3% doubted the correctness of the answer. To question 8, which asks about using Google when doing English assignments, 55 students answered that they always use it. To question No. 9, do they copy the information without changes and do not even try to process it, more than half of the students answered positively. But, the positive thing is that to

question No. 10, which finds out whether students agree that if you use the Google platform in solving educational problems all the time and do not process the material, then memory and thinking do not develop, everyone answered, that they agree.

Discussion

In fact, there are a huge number of exercises, which make English learning easier. The main condition is to arouse interest in the cognitive activity of students with the help of these exercises, that is, to teach them how to learn. Here are some of the tasks we use at our classes.

Name the things you see

We suggest starting with small exercises. So, a good first step is to think in individual words.

Let the students look around them. What do they see? They should try to name each object in their surroundings.

Start with nouns and then add in verbs.

Describe unknown words

Another exercise is describing in objects; the students don't know the words for.

An example would be if they couldn't think of the word "**library**", they can say, 'The place, where I can take a book.' or, 'It's next to my house. Books are kept there.'

They can also use shorter phrases, such as "It's similar to..." or "It's the opposite of..."

Think in sentences

The next exercise is thinking in simple sentences.

For example, if your students are sitting in a classroom, they can tell themselves things like, "It's a lovely day" and "Teacher is reading a book."

Once this becomes easy, you can move on to more difficult sentences.

Describe your day

Another exercise is to describe your daily activities. There are a few ways to do this.

Students can describe their day using the simple present verb form. So, they would think to themselves things like, "I get up at 7 o'clock" and "He drives the bus."

Or they can mentally make plans in the morning when they wake up. This would require other verb tenses. So the skill level is a little higher.

For example, "When I leave the house, I'm going to get a coffee. Then, I'll take the bus to class. I'm studying with Rosa today. She said she **booked** a study room at the library for 2 p.m."

Think in conversation

Now, let's move to thinking in **conversation**.

When you do this, you are imagining yourself speaking to someone else. You are asking the questions *and* thinking of replies.

This is a great way to practice what you might say in a real conversation.

For example, let's say the imaginary person asks you a question like, "What did you think of the film last night?" How would you answer? Imagine the conversation and practice it in your head.

You can do this out loud or in **silence**.

Take notes

For all of these exercises, there will of course be words and phrases that students do not know. So, at some point they will need to use a dictionary.

If their skill level is high enough, they might consider using an English-to-English dictionary.

We suggest writing down just five to 10 new words and phrases each day.

Conclusion

Man has the power of speech and language given by nature. The brain is responsible for language, and we now know that it is plastic and malleable. In this article, we have discussed why cooperative learning activities are brain compatible. As brain is a social organism, it needs social stimuli. Cooperative language teaching and group work, thus, are good ideas for language learning and teaching. One may sum up the universe of brain research with regards to education as follows: “Our understanding of the brain is continually evolving, ... Brain research cannot prescribe what we should teach, how we should organize complex sequences of teaching, nor how we should work with students with special needs. Educators should not abandon their traditional sources of insight and guidance to draw on and develop their own insights about learning based on their classroom experiences and classroom-based research to complement the insights that are emerging from advances in brain research”. Genesee [3, 19]

Like any other part of the body, brain can become stronger by exercising it. The use of technologies that develop thinking in teaching a foreign language can significantly improve the quality of education and help students become effective and independent learners.

References:

1. Brown, H.D. (1994) Principles and language learning and teaching (3rded) Prentice Hall.
2. Galskova N.D. Modern methods of teaching a foreign language: Text book for teachers. - M: ARCTI-GLOSSA, 2000, Глосса, 2009. p 165;
3. Genesee, F. (2000). Brain Research: Implications for second language learning. McGill University. U.S. Dept. of Education, Office of Educational Research and Improvement, National Library of Education.
4. Jensen E.P. (2008) Fresh Look at Brain-Based Education. Phi Delta Kappan, 89 (6). Available online at http://www.pdkintl.org/kappan/k_v89/k0802jen.htm [18 November 2008]