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**Title:** The role of emotions, mnemonic techniques, and memory in developing children's L2 skills

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## THE ROLE OF EMOTIONS, MNEMONIC TECHNIQUES, AND MEMORY IN DEVELOPING CHILDREN'S L2 SKILLS

#### INTRODUCTION

The main idea of this article is to present the role of emotions, mnemonic tech-▲ niques, and memory in developing children's L2 skills. It is a well-known fact that developing L2 skills is essential in improving language competence. Nowadays, more and more learners have problems with learning new vocabulary or grammatical rules. It is typical of primary school children who are not able to create their own learning strategies which could be extremely useful in organizing their process of learning. Problems with developing L2 skills are associated not only with lack of proper techniques but also with other factors such as personality, gender or even socio-psychological factors (e.g. motivation, attitude). For these reasons, this article explains why developing L2 skills is strictly connected with different types of memory which we possess, and which influence the way we learn and gain new information. Depending on the task and situation we use various kinds of memories, which either help us to store information for a longer or a shorter period of time or enable us to use different cognitive and metacognitive techniques which are essential in improving L2 skills. A typical example of such techniques are mnemonic devices which help our brain to understand difficult words more easily. This article also explains why emotions and feelings which we experience during studying contribute to the way we learn and organize our own process of learning. Finally, some conclusions from case study have been included here to show how emotions, mnemonic techniques, and memory contribute to developing children's L2 skills.

#### **DEFINITIONS OF MEMORY**

Salkind (2002) states that memory is an inseparable part of children's daily routines. It is involved in everyday activities such as brushing teeth or eating breakfast, it is

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present in some actions demanding effort such as learning for a test or doing homework, and it can also be noticeable in some emotional situations such as crying or expressing happiness. Salkind is of the opinion that memory is extremely important in developing L2 skills among children due to the fact that it is shaped throughout their whole life. Memory helps them to acquire various sounds and sights from the environment, which explains the phenomenon why children very often try to imitate dogs' barking or cats' meowing.

Gass and Salinker (2008) are of the belief that memory is used mostly to store and process information, which we gather systematically. They claim that memory helps children to develop their cognitive skills and abstract thinking. It is obvious that during early stages such as sensory-motor or presentational, children are not able to use these two concepts in practice and they need more time to develop them fully. Cook (2008), however, states that by means of using memory, children are able to store as many aspects of language as possible and retrieve them rapidly. She is of the opinion that memory can be compared to structure, which is getting bigger and bigger over time. The more children use it, the more capacious it becomes and the more information can be stored there. Cook also claims that a well-developed memory enables children to retrieve information, which they had gained before. It is good to mention that this feature of memory is very important during the time of developing their L2 skills. Only by systematic revisions and repetitions are children able to improve their language and achieve more effective results of their learning.

#### TYPES OF MEMORY

According to Baddeley and Kopelman (2002), implicit memory is one of two major subdivisions of long-term memory which can be defined as a kind of storehouse of all experience, information, moments, events, actions, skills, words, and even categories. In contrast to explicit memory, implicit memory does not require from us conscious thinking. Very often this type of memory is called non-declarative, unconscious or automatic. It means that we can perform various activities without thinking about them. We do not have to wonder how to perform tasks such as walking or riding a bike because it is our "how to" knowledge. The type of memory which is responsible for recollection of how to do things is called procedural memory. Procedural memory is based mostly on using objects or movements of the body. These skills are acquired through repetition and practice. The more we practice them, the faster they are embedded in our brain. Once learned, allow us to perform actions more or less automatically.

Baddeley and Kopelman (2002) state that another feature of implicit memory is priming. If we hear something more often, our brain is able to recall it more quickly than other things which we hear less frequently. For example, if a child is supposed to name a domestic animal that starts with the letter "c," he or she would probably

answer *cat*, rather than *cow* or *cock* due to the fact that he or she hears about cats more often. Benson and Haith (2009) claim that explicit memory, in comparison to implicit memory, is often defined as declarative memory which means that the individual has to make a conscious effort in order to recover information, facts or events from the past. Explicit memory enables us to make various associations which are extremely useful in developing L2 skills. Eloff and Ebersöhn (2004) are of the opinion that episodic memory is one of the types of explicit memory which has an autobiographical function. It means that it helps us to record past events, which are based on our own personal experience. The way we record all events depends mostly on us. For example, instead of using flashcards which illustrate some landscapes or nature, it is better to go for a walk with a child and show him things which are in the surrounding. Only by evoking certain emotions and feelings, will children be able to understand things better. Undoubtedly, such a walk or a short trip will be embedded in their minds for a longer period of time.

According to Benson and Haith (2009), sensory memory is a part of short-term memory, which recalls information being processed at one particular moment. This kind of memory enables us to perceive some information from the environment through five senses of sight, hearing, smell, taste, and touch. The stimulus which is detected by our senses can be either perceived and stored in our sensory memory or ignored. In both cases, we cannot decide about it due to the fact that it is outside of conscious control. Sensory memory can become very helpful the moment we start to develop L2 skills. For instance, by means of using multi-sensory teaching when working with children, we can achieve more effective results. When we are about to introduce some names of fruits or vegetables, it is wise to bring some real objects, which children can touch, smell or even taste. When playing with them, children will be able to describe their shape, color or even make some other associations with places where we can grow them or with people who sell them. Such a multi-sensory teaching will help us to make our lesson more interesting and develop all possible L2 skills. Sensory memory which is responsible for a visual domain is called iconic memory, whereas memory for sounds is called echoic memory.

One cannot forget about metamemory, which plays a very important role in developing L2 skills. According to Dunlosky and Bjork (2008), metamemory refers to our personal knowledge about memory itself, its abilities, regulation, and some effective memory strategies which can be used to improve our knowledge. Cook (2008) is of the belief that there is a strong correlation between metamemory and learning due to the fact that metamemory enables us to use various cognitive and metacognitive factors depending on the tasks, for example during solving out problems or dealing with some abstract tasks. Depending on whether we are visual or auditory learners, we can choose the most suitable learning strategies and adjust them to our learning process. Visual learners will base on some pictures, images, using colorful marks, and draw various schemata, whereas auditory learners will use songs, podcasts or even some records to make their learning more effective.

Gass and Salinker (2008) point out that metamemory has also evaluating function. It means that it helps us to decide which information is crucial for us and which not. Obviously, people learn a lot and day by day they gain new information, which comes from various sources. In practice, it looks a bit different because not everything what we gain has practical implications. This is the reason why we use this feature of memory to make a distinction between aspects of knowledge which are essential and can be used more often and to make a clear decision whether those new aspects are consistent or inconsistent with our prior knowledge. Nunan (1991) emphasizes one more crucial feature of metamemory which is typical of adults and more problematic for children. Metamemory enables us to control our own process of learning. We are fully aware of the fact whether we are making progress or not and whether there is still much to acquire. We are also able to state whether the level of our knowledge is already sufficient or not. Very often children are not aware of their current level of knowledge or their progress. This is the reason why teaching children is more demanding and it requires from us much more effort and energy. We, as the teachers, are responsible to take control over their process of learning and predict potential results which can be the final effects of their work.

#### MNEMONIC DEVICES AND THEIR IMPLICATIONS

A crucial point that Devanand (2001) makes is that mnemonic devices are techniques which enable learners to remember more difficult aspects of language in a way that is much easier for them. Mnemonic techniques can be useful both for learning new vocabulary and grammatical rules. It is believed that learning by heart is very time consuming and very often not effective owing to the fact that we forget most information in a very short period. To change this situation for better, it is wise to use some techniques, which will be both pleasurable and helpful in developing L2 skills.

As it was mentioned above, we possess lots of different types of memory and each of them has their own responsibilities. All of them contribute to the way we learn, gain more information, and achieve success. Our brain works more effectively when it receives various stimuli such as images, colors, smells, tastes, touches, sounds, and even emotions. The more often we use them, the better for our brain. The frequency of using them depends mostly on activities, which we perform during learning. The first mnemonic device concerns using different colors and shapes. Using this technique might be beneficial for children who are visual learners and who remember much more through observing and making associations. By means of associations, children are able to connect two or even more inconsistent elements, which normally would be too difficult to remember. Introducing various colors and shapes when teaching new words will enable them to acquire these words more successfully and effectively. The following two examples have been implemented during my teaching:

- 1. A small, grey cat jumped on the big green table. Two mnemonic techniques can be used in this example. First of all, we can change the font color from black to grey the moment we use word "grey" and from black to green when we introduce word "green." Second of all, we can also change the font size from 12 to 8 in the word "small" to make it as small as possible, and from 12 to 19 in the word "big" to make it even bigger. By using this technique, children who see such a sentence will easily associate the name of colors with their real hues and the name of sizes together with their real magnitude.
- 2. <u>Underline</u> *italicized* **bold** red words. Words such as "underline," "italicized" or "bold" do not really exist in children's lexicon, which means that they are unknown to them. It also would be too difficult to learn them taking into consideration the fact that the real meaning of these words can be too abstract for them. However, it is commonly known that children are more and more familiar with using modern technology, which can be very useful during the process of learning. That is why, in this example, it is advisable to underline the word "underline," italicize the word "italicized," bold the word "bold," and change the font color from black to red in the word "red." Only by showing them the real meaning of "being underline" or "being italicized," will they be able to make new associations and remember these words longer than by learning them by heart without any visualization.\*

#### **EMOTIONS AND THEIR ROLES**

Evans (2001) distinguishes emotions which are called "basic" and "higher cognitive." Feelings such as joy, distress, anger, fear, surprise, and disgust belong to the first group, whereas love, guilt, shame, embarrassment, pride, envy, and jealousy to the second group. The first group of emotions is innate and universal, they are not learned by people and they exist in our brain since we are born. When it comes to the second group of emotions, they need much more time to be fully developed and they usually last for a longer period of time.

Gerrig and Zimbardo (2002) are of the opinion that emotions shape a successful learning process. Not only do children have to see a certain goal of their learning, but they also must be encouraged in performing a particular task. This is the reason why we should motivate them and make their process of learning as effective as possible. Apart from pleasurable games and songs, we should create a nice atmosphere and show a very positive attitude towards their personalities and working with them. The better conditions of working we create and the more verified tasks we introduce, the more positive attitude will be established between young learners and their teacher.

<sup>\*</sup> Due to some editorial restrictions, these two examples must be in a Times New Roman font in 12pt and in black font color, without any further changes concerning the size or the color of the words.

Unfortunately, too high level of stress and lack of proper conditions of learning may contribute to the appearance of anxiety, which can affect both children and teenagers (Zybert, 2012). Solving out the problem of anxiety and fear may turn out unsuccessful without considering feelings and emotions involved. Defining foreign language anxiety is difficult due to the fact that each of us interprets it in various ways. Very often it is purely subjective and it is strictly connected with our autonomic nervous system, which is responsible for all processes which are present in our brain.

Barkley (2010) states that the way the learner perceives given materials during classes depends on the atmosphere which is present at that time. A positive attitude of the teacher towards the students facilitates their progress and makes that they are more open-minded and willing to take an active part in the lesson. On the other hand, should the students notice that there is too much tension, they will try to isolate from their teacher; consequently, the effects of learning will be unsuccessful. There are both internal and external factors responsible for evoking foreign language anxiety. Internal factors are those which are inside us. They are strictly linked with our feelings, emotions, experience, mood, and personality. External are those which come from the environment, for example the necessity of speaking in a foreign language in front of other classmates, comparing our attitude with other students' attitude, relation with the teacher and with other students, unexpected tests, feedback given by the teacher (Ellis, 1985).

#### THE STUDY AND DATA ANALYSIS

The participants of this case study were two primary school children (a boy and a girl at the age of 8) from the primary school in Bolesław. Both of them were in the second grade class of primary school and their proficiency level of English was elementary. During two months, eight private tuitions lasting 60 minutes were devoted to a very detailed observation and the analysis of their behavior while they were performing two particular tasks. Regular meetings took place on Tuesdays at 4:30 pm with a boy and on Saturday at 4:30 pm with a girl. The same hour of private lessons was chosen in order to avoid discrepancies in children's moods and attitude. They both had different personal traits – the girl was more extroverted, talkative, and open-minded whereas the boy was more introverted, shy, and close-minded.

The main goal of the first task during each meeting was to improve listening and speaking skills by means of listening to the songs and singing them aloud. Every week different songs were chosen and they were played twice. The main hypotheses stated before conducting the analysis were the following: The girl who is characterized as being more extroverted and open-minded will be more eager to sing the songs rather than the boy who is more introverted and close-minded and

# the task will evoke emotions typical of the general character of both children.

Results from careful observations are presented in the table below:

**Tab.** 1. The boy and the girl's attitude towards the first given task.

	The boy		The girl	
1.	showed a great willingness to listen to the songs and sing them over and over again without hesitation	1.	songs twice	
2.	made an attempt to sing them	2.	did not want to make an attempt to sing them again	
3.	was focused on the lyrics of the songs	3.	was not focused too much on the lyrics of the songs	
4.	Observed emotions:	4.	Observed emotions:	
	happiness	•	boredom	
	excitement	•	lack of enthusiasm	
	pride	•	apathy	
	curiosity	•	disgust	
•	engagement	•	embarrassment	
•	joy	•	confusion	

Source: study of author.

Taking into consideration these observations and two hypotheses, one can notice that more introverted boy seemed to be more open-minded and relaxed while he was listening to the songs and singing them, whereas more extroverted girl turned out to be more skeptical and distanced. Such emotions and feelings were observed not only during the first meeting but also during following classes despite the fact that songs varied. The task may have been too simple for the girl who was more ambitious and had expected something more creative, challenging, and extraordinary. However, it seemed to be optimal for a boy who did not have such high expectations. It can be deduced that listening to the songs and singing them, later on, is not girl's favorite tasks. It must also be stated that the task-evoked emotions, which were not necessarily typical of the general character of both children. These songs may not have fully satisfied girl's expectations connected with this particular lesson. It can be the reason why emotions such as boredom, apathy, and lack of enthusiasm appeared during this task. The boy was curious about new songs, he was proud that he can sing them later on and what is the most important – he was engaged in the activity. It can be stated that echoic memory is developed better in the boy's case. It may be the reason why he enjoyed listening to the songs and singing them over and over again. The boy can also be an auditory learner who pays more attention to sounds and music.

The main goal of the second task during each meeting was to improve speaking by means of revising vocabulary covered during private classes. For instance, both kids were supposed to give the name of some words after hearing some hints, e.g.:

- give me the name of the fruit which has two different vowels: ORANGE;
- give me the name of the color which does not contain letter "p": BLUE.

Two hypotheses had been stated before conducting the analysis: short-term and long-term memory will have a significant influence on revising vocabulary from previous classes and potential difficulties which may appear can have a bad influence on doing a particular task.

Tab. 2. The boy and the girl's attitude towards the second given task.

The boy		The girl	
1.	had some difficulties to recall words from previous lessons (he needed around 1 minute to re- call a simple word)	did not have any difficulties in recalling words from previous lessons (she needed no more than 10 seconds to recall a specific word)	
2.	could not concentrate on a task and was distracted	could easily concentrate on a task did not get tired at all	
3. 4.	got tired after first five minutes did not show much excitement during this game but did not want to give up	<ul><li>4. showed excitement and joy during this game and wanted to play it over and over again</li><li>5. it was enough to repeat each word</li></ul>	
5.	lots of repetitions were needed	just one time	

Source: study of author.

These observations lead us to the conclusion that short-term and long-term memory had a significant influence on performing this task. Words which appeared during previous classes were not fully acquired by the boy who had some difficulties in recalling them. Lack of a proper revision and repetition at home also contributed to these problems. These words could have been stored in short-term memory and later on forgotten. The boy admitted that he did not revise them at all at home in comparison to the girl who spent some time on learning them. Despite some problems and negative emotions which occurred while the boy was doing this task, he did not want to give up and he was putting much effort to complete the task. He was motivated and self-determined, which is quite important in learning foreign languages. More challenging task satisfied the girl and evoked better emotions than previous one. She admitted that this task was much more interesting and finally she could do something more productive. She was full of energy and willingness to perform this activity and later on she was willing to do even more exercises similar to this one.

#### PRACTICAL IMPLICATIONS

Working with children and developing their L2 skills can be troublesome in some cases. Taking into consideration differences in gender, age, level of English or even some personal factors, it is wise to remember about some practical implications which can be useful and helpful when we want to improve the effectiveness of learning. First of all, we need to remember about small warm-ups before starting our lesson. This technique enables us to make our learners more relaxed, create less tense atmosphere, and check the knowledge of our students in the form of games or some songs. Second of all, lots of revisions and repetitions must be implemented. It is crucial to revise vocabulary and grammar from previous classes due to the fact that the most important information will be stored in their long-term memory.

Third of all, we ought to avoid tasks which can evoke negative emotions and may have a bad influence on learning English. If we know our learners' personalities, we should choose only these tasks which will be pleasurable for them. Introducing a great variety of activities which develop all possible language skills is essential for a successful learning. It is commonly known that children have a very short attention span and they can lose their enthusiasm very easily. By means of these verified exercises, we will be able to increase interest among children and make our lessons more exciting. Finally, we need to remember that both receptive skills are of the same importance as productive skills but still, more emphasis should be put on tasks and activities which require from children engagement and effort.

#### CONCLUSIONS

Taking into consideration the background which has been provided in this article together with some observations from the study, it must be stated that developing L2 skills among children is quite complex and many interrelated factors contribute to this process. As it has been observed in the study, different types of memory determine how fast and accurately they gain new information. Moreover, emotions, and feelings which are evoked during particular tasks contribute to establishing an attitude, which is either positive and helps them to learn new materials and organize their own process of learning or negative which may result in anxiety towards learning a foreign language. However, it must be stated that potential difficulties, which may appear, do not have to necessary discourage children from making an attempt to complete the task. Apart from it, we need to remember that there are many ways which can be used in order to enhance the effectiveness of improving L2 skills among children. Mnemonic techniques, constant repetitions, and revisions, transferring information from short-term to long-term memory and evoking positive emotions will finally result in increasing their language competence and performance.

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# THE ROLE OF EMOTIONS, MNEMONIC TECHNIQUES, AND MEMORY IN DEVELOPING CHILDREN'S L2 SKILLS

Keywords: emotions, memory, mnemonic techniques, language skills

**Abstract:** The paper aims to present the correlation between developing L2 skills and the role of emotions, mnemonic techniques, and memory. The paper concerns the explanation of the concept of memory seen from different perspectives, definition of mnemonic techniques together with some vivid examples, and the notion of emotions. The present article presents also findings of the case study conducted between two primary school children during private classes of English. The author of the study wants to verify what sort of practical activities evoke particular emotions and which factors may have a significant influence on developing L2 skills such as listening and speaking. Final results are presented in the form of tables together with extended descriptions. This paper also includes some practical implications which can be used when working with children and which may help to cope with negative emotions.

## ROLA EMOCJI, TECHNIK MNEMONICZNYCH ORAZ PAMIĘCI W ROZWIJANIU ZDOLNOŚCI JĘZYKOWYCH DRUGIEGO JĘZYKA U DZIECI

Słowa kluczowe: emocje, pamięć, techniki mnemoniczne, umiejętności językowe Streszczenie: Głównym celem artykułu jest ukazanie powiązania pomiędzy rozwijaniem zdolności językowych drugiego języka a rolą emocji, technik mnemonicznych oraz pamięci. Artykuł zawiera wyjaśnienie definicji pamięci, która jest rozpatrywana z różnych perspektyw, a także technik mnemonicznych oraz emocji. Oprócz części teoretycznej w artykule znajduje się analiza studium przypadku, która została przeprowadzona w ramach badań potrzebnych do artykułu. Studium przypadku dotyczy dwóch uczniów szkoły podstawowej. Głównym zadaniem autora artykułu było sprawdzenie, które ćwiczenia wywołują konkretne emocje i jakie inne czynniki wpływają na rozwój zdolności językowych w zakresie drugiego języka. W artykule znajdują się także praktyczne wskazówki, które mogą okazać się użyteczne podczas pracy w dziećmi.