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The importance of using mnemotechnics in teaching English to dyslexic children

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One of the most specific symptoms of dyslexia in learning a foreign language is the difficulty with the expansion of new vocabulary. As a result, children with dyslexia learn new vocabulary items with great difficulty and they found remembering them almost impossible. According to Katarzyna Maria Bogdanowicz¹ these pupils make more mistakes in the words than their peers without specific learning difficulties. Mistakes have often a different character – are connected with spelling, pronunciation or a flexion. Another difficulty which students with dyslexia struggle constantly is the assimilation of the material arranged in the sequences (e.g.: the days of the week, the months of the year, the seasons of the year). Zofia Klimaszewska² claims that to overcome these difficulties it is a good idea to use various memory techniques called mnemotechnics, which refer to the basic principles of acquiring knowledge, and therefore the information memorization, repetition of cognized material and forgetting it.

The mnemonic techniques are the art of remembering, and a series of highly effective techniques of memory supporting the learning process create them. When using the natural tendency of the brain and known processes of human memory a teacher can facilitate the process of teaching³. Modern memory techniques consists of the three basic components: space, image and association. The person focusing on such techniques can used at the same time all of these elements, but often the learner needs only one of them. This is conditioned to what he wants to achieve. According to Joel Levin⁴ mnemonic

¹ K. M., Bogdanowicz, *Dysleksja a nauczanie języków obcych. Przewodnik dla nauczycieli i rodziców uczniów z dysleksją*, Wydawnictwo HARMONIA, Gdańsk 2011.

² Z. Klimaszewska, *Tajniki ludzkiego umysłu*, Wydawnictwo Reader's Digest, Warszawa 1997.

³ T. Buzan, *Make the Most of Your Mind*, Wydawnictwo Pan Books, London 1988.

⁴ J. Levin, *Pictorial strategies for school learning*, New York. Heidelberg. Tokyo 1983.

techniques are characterized by three basic processes: recording (decoding information), relating (finding a connection between the real world and the assimilated content), and retrieving (reproducing, remembering the data already stored in memory). During the first phase such a form of new information is achieved, often very extensive and even abstract, which is close to its instantiation. In the second phase the several different virtual data is connected into one, usually comparing the gained knowledge with acquired previously, which in turn results in easier access to them in the future. The third phase is to create a transparent way of calling the stored information. Moreover, the keys are created that do not allow for interference decoding elements with the real world. For foreign language learners it is important to remember, however, such methods that allow for more effective teaching and ensure long-lasting effect of the knowledge gained forever.

Mnemonics are to help to improve the functioning of memory – some of them are used spontaneously but some require training. Katarzyna M. Bogdanowicz⁵ is of the opinion that a lot of memory techniques are very useful in teaching children with dyslexia, especially while dealing with new vocabulary items (presentation and practice), as well as grammar rules or sequences of words and phrases.

One of the most important elements of a foreign language is the word, which external form is for the dyslexic student often confusing and has no meaning. It turns out to be the main cause of the difficulties faced by children, who try to assimilate this abstract for them structure. One popular way of helping to overcome these problems is to create acronyms. The method of creating **acronyms** involves a word or a phrase in which the first letters refer to the memorized information. A word or phrase which is the acronym does not have to be sensible, although this is easier to remember for pupils with specific learning difficulties. These are some examples of acronyms:

1. **HOMES** – **H**uron, **O**ntario, **M**ichigan, **E**rie, **S**uperior – to remember the names of Great Lakes better.
2. **STAB** – **S**oprano, **T**enor, **A**lt, **B**ass – four voices in a quartet.
3. **NEWS** – **N**orth, **E**ast, **W**est, **S**outh – the points of the compass.
4. **FAN BOYS** – use o comma between two independent clauses separated by one of the “FAN BOYS” (for: **A**nd, **N**or, **B**ut, **O**r, **Y**et, **S**o).
5. **BEDMAS** – **B**rackets, **E**xponents, **D**ivision, **M**ultiplication, **A**ddition, **S**ubtraction – sequence in which should tackle any math problem with multiple calculations.

⁵ K. M. Bogdanowicz, op. cit.



Pictures 1. The method of creating acronyms.

According to Ewa Kaczur-Gryz⁶ in languages with very complicated spelling (i.e.: English language) **acrostics** are very useful in learning spelling of words. Especially young children show interest in this technique of learning. Thus, an acrostic is a phrase or a sentence constructed in such a way, that the first letters of words in the sentence convey some information. For example, a teacher invents a funny sentence in which the first letters of words put together give the correct spelling of the new one, that is difficult to learn or help in learning the order of new words. These are some examples of acrostics:

1. The names of the planets in the correct order:

Mercury	My
Venus	Very
Earth	Excellent
Mars	Mother
Jupiter	Just
Saturn	Served
Uranus	Us
Neptune	Nothing
Pluto	Passionately

2. *GARBAGE* – a poem by Bruce Lansky⁷
Whose job is it to take out the garbage?
Grounds (coffee)
Apple (core)
Rinds (melon)

⁶ E. Kaczur-Gryz, *Potęga osobowości. Pamięć*, Świat Książki, Warszawa 1996.

⁷ B. Lansky, *Garbage*, www.GigglePoetry.com, 2002.

- Banana** (peel)
Anchovies (from pizza I wouldn't eat)
Grapes (too ripe to eat)
Emptying the stinking bag (my job)
3. The writing form of the *-ician* ending, characteristic for English words, naming the group of professions (for example: optician, politician, physician, musician, beautician, etc.). The teacher can use the following sentence, and the learners may be asked to illustrate it.

Indian Cats Imagine Almonds & Nuts

Peter E. Morris⁸ suggests that the method worth mentioning, as far as teaching new vocabulary items to dyslexic students but not only is concerned, is **the method of hooks** – remembering through imagination.

Alan Baddley⁹ explains that the hook method is based on the fact that each subsequent digit is assigned to a specified image, i.e.: a hook. The first step on the way to improve the memory is to remember words-hooks. Each such word is numbered. These are the sample numbers for example from 1 to 10:

- 0 – an egg
- 1 – a candle
- 2 – a swan
- 3 – an apple
- 4 – a chair
- 5 – a hook (the part of the lift)
- 6 – a ram (its twisted horns)
- 7 – a shower
- 8 – a snowman
- 9 – a balloon
- 10 – a knight

When the hooks are remembered in a strict order, it is a time to use them. On the following hooks the particular information “hung”.

The example task: A child is supposed to remember in a particular order the following list of words: a *watering can*, an *anchor*, a *sword*, a *canoe*, a *fox*, a *torch*, a *king*, a *guitar*, a *locomotive*, a *rocket*. To perform this task well, our pupil may use the method of hooks, which connect the successive images of objects with different hooks:

Number 1 – a watering can = a candle.

Imagine floating watering can over a candle, the flame pouring streams of water.

A candle is extinguished with a hiss.

⁸ P. E. Morris, *Applied problems in memory*, Wydawnictwo Academic Press, London, New York, San Francisco 1979.

⁹ A. Baddley, *Your Memory: A User's Guide*, Macmillan Publishing Company, New York 1982.

Number 2 – an anchor = a swan.

Imagine the great white swan rocking on the waves of the lake.

Suddenly, a thick chain drops out of its beak and an anchor splashes into the water.

Number 3 – a sword = an apple.

The sword cuts an apple into two halves, the juice flows from the cut fruit.

Number 4 – a canoe = a chair.

The chair takes an oar with one of its leg, it jumps into the canoe, rows furiously and starts to flow with the current of the rough river.

Number 5 – a fox = a hook (the part of the lift).

The lift chases a fox trying to catch its red bushy tail with its hook.

Number 6 – a torch = a ram (its twisted horns).

The ram with a torch in the hoof falls into a dark cellar and looks for something to eat.

Number 7 – a king = a shower.

The king has a bath in the bath with the shower.

Number 8 – a guitar = a snowman.

The snowman plays the guitar during the concert.

Number 9 – a locomotive = a balloon.

The colourful balloons flies out of the chimney of the locomotive.

Number 10 – a rocket = a knight.

The knight with a shield and a sword sits on the rocket and flies.

On each hook the next word hangs in order to be remembered in a specific order. During the hanging the words imagination was activated. While creating such a story, the images should be dynamic, and associations of words and hooks unusual and funny. They need not be wise. Storing dry speech is difficult to remember, the funny stories are easy, unless they are based on the remembered and the hook grounded deeply. Remembering a story by the way a learner reminds the words that were to be remembered.

Two mnemonic techniques that are suitable for remembering either ordered or numerically identified information are **the pegword method** and **the digit-symbol method** (also known as the digit-consonant method). With the simpler-to-master pegword method, the numbers from 1 to 10 (or 1 to 20) are recoded as familiar rhyming pegwords (for example, 1 = *bun*, 2 = *shoe*, 3 = *tree*, 4 = *door*, 5 = *hive*, etc.). Then, each numbered item in a list is related to the pegword in an integrated scene. For example, if the fifth item in a 20-item list had something to do with sailboats, then one could construct a scene in which bees from a *hive* (for 5) were swarming all over the skipper of a *sailboat*. To later remember the fifth item of the list, one systematically retrieves *sailboat* from the *hive* pegword for 5. To reconstruct the complete list or to order the items in the list, one would need to retrieve the information associated with each of the 20 ordered pegwords.

The interesting method in dealing with new vocabulary items while teaching dyslexic children is **The surreal image method (collage)**. It deals with the new unrelated in meaning words. A learner who is supposed to learn them, creates one own picture out of these words in its imagination. The more unreal the picture is, more similar to the dream, the better. This

technique makes new vocabulary easy to remember, and at the same time increases the durability of storage. Such a picture can be captured as a drawing or a poster prepared by a learner.

Linking words in pairs, takes place through associating them, too. **Associations** are somehow created a binder for the whole story. Therefore, the associations are extremely important and determines the ease of recall of our story. Trivial associations are not sufficient. A learner must use its imagination to meet the criteria, so that remembering will become easier. Associations should attract our attention. Something ordinary, everyday, average stays in our memory for longer rarely. The easiest way to remember this as the original, exaggerated, absurd, bizarre, exaggerated, contrast, arousing emotions in learners. Using imagination, it is good to build such associations, which in everyday life, in the real world does not exist or are extremely rare. We can exaggerate, multiply, transform, enlarge or reduce, give human features to animals or inanimate objects.

Using **the chain of associations method** a pupil should not be afraid of absurdity, ridiculousness, and the strangeness of associations. This approach to the learning process is a completely different, often perceived as something that should be serious, not humorous. Unfortunately, the “serious” usually means boring, difficult, discouraging, and often giving rise to anxiety for students. With the use of imagination and sense of humour, the use of either method chain of associations, as well as other mnemotechnics, can make associations and intriguing images, which increases the concentration. Memory techniques are more effective, the more our association are humorous, unusual, fantastic, colourful. In this way learning will become not only more pleasant and easier, but also more effective. We learn best through play and activity.

Visualization is a very powerful tool, and used in a skilful way can help our grey cells in an original manner. The images designed in our memory must be clear, distinct, special for us, individual, often even absurd, exaggerated, but at the same time as simple as it possible. An important feature is also movement, because the particular images can create stories, and these, if they are dynamic, they are the part of our imagination, and then will be no way to forget the material associated with them. We make them when we want to draw some information together. For example, the student has to learn a list of words that are exceptions of the particular grammar rules. The learner does not need to learn the words by heart. Mnemonics give a pupil a tool – **the associative method**. It is enough to combined words into one whole, generating **a story** (a narrative) that will connect all the new items. The learner can help itself by applying its mother tongue, although the new contents created in a foreign language will occur to be more fruitful certainly. And in this case the only limits are put for us by our imagination.

The sample task. To create a story while using these illustrations (they should appear in the following order) in order to learn the new vocabulary items:

1. a clown
2. a cat
3. a star
4. ...
5. ...
-

- 18. a candle
- 19. a frog
- 20. a horse

The method of key words formation is also worth mentioning. Typically it is based on the phonetic similarity of words in a foreign language and the mother tongue. It is based on linking new information to keywords that are already encoded to memory. A teacher might teach a new vocabulary word by first identifying a keyword that sounds similar to the word being taught and easily represented by a picture or drawing. Then the teacher generates a picture that connects the word to be learned with its definition. According to M. A. Mastropieri and T. E. Scruggs¹⁰, the keyword strategy works best when the information to be learned is new to students.

The sample task. To teach students the definition of the new word, the teacher will ask the students to remember the keyword, envision the picture and how it relates to the definition, and finally recall the definition. If a teacher is trying to teach her students the definition of the old English word *carline*, she will first identify a good keyword. In this instance, “car” is appropriate because it is easy to represent visually and it sounds like the first part of the vocabulary word. *Carline* means “witch” so the teacher shows the students a picture of a car with a witch sitting in it. When asked to recall the definition of *carline*, students engage in a four-step process:

1. Think back to the keyword (car),
2. Think of the picture (a car),
1. Remember what else was happening in the picture (a witch was in the car), and produce the definition (witch).

The method of mind mapping or creating **the map of thoughts** in teaching dyslexic children is popular, as well. This method involves the creation of trees, diagrams, or associations. Around the central element – the key word – the next associations are being built. This results in maps that allow the students to systematized primarily known issues (vocabulary), organize them and remember better¹¹.

In this article I have listed only a few basic mnemonic techniques, which surely every teacher can find useful and effective in the process of teaching English to dyslexic students. However, this is a very broad topic, therefore in order to get familiar with the subject better, I do strongly recommend reading some of the books mentioned in the bibliography.

Bibliography

Baddley A., *Your Memory: A User's Guide*, Macmillan Publishing Company, New York 1982.

Bogdanowicz K. M., *Dysleksja a nauczanie języków obcych. Przewodnik dla nauczycieli i rodziców uczniów z dysleksją*, Wydawnictwo HARMONIA, Gdańsk 2011.

¹⁰ M. A. Mastropieri., T. E. Scruggs, *Teaching students ways to remember: Strategies for learning mnemonically*, Brookline Books, Cambridge 1991.

¹¹ T. Buzan, *Mind Maps for kids. An Introduction*, Thorsons, London 2003.

Buzan T., *Mind Maps for kids. An Introduction*, Thorsons, London 2003.

Buzan T., *Make the Most of Your Mind*, Wydawnictwo Pan Books, London 1988.

Kaczur-Gryz E., *Potęga osobowości. Pamięć*, Świat Książki, Warszawa 1996.

Klimaszewska Z., *Tajniki ludzkiego umysłu*, Wydawnictwo Reader's Digest, Warszawa 1997.

Levin J., *Pictorial strategies for school learning*, New York. Heidelberg. Tokyo 1983.

Mastropieri M. A., Scruggs, T. E., *Teaching students ways to remember: Strategies for learning mnemonically*, Brookline Books Cambridge 1991.

Morris P. E., *Applied problems in memory*, Wydawnictwo Academic Press, London, New York, San Francisco 1979.

Lansky B., www.GigglePoetry.com, 2000.