D-ESL

Adaptation of learning content for students with SLDs

Educational Needs and Adaptations for students with SLDs

How to effectively improve the memorisation of your students with SLDs

Introduction

Learning a foreign language without any memorisation skills would be very challenging for anyone. The problem is this essential memorising skill can be very challenging, especially for students with **Specific Learning Disorders** (henceforth **SLDs**). For that reason, students may need some help to memorise the learning content well, and fix the knowledge in their long-term memory. Fortunately, adaptations, tips and mnemonic devices are there to the rescue!

The need behind this adaptation

SLDs are disorders that affect how the brain receives, stores and/or utilizes information. Therefore, memorisation issues often arise. It doesn't mean, however, that people with SLDs are not able to memorize anything but simply that they may need some help to do so. Fortunately, there are plenty of tips and adaptations that you can apply. The strategies covered below are complementary: remember that **assimilation can only happen through repetition and diverse means of exposition**.

What is this adaptation all about?

Adopt motivating gamification and game-based learning techniques

Gamification and game-based learning can be your best ally! By adopting **common game mechanisms** in the memorisation process, you may **increase the motivation** of your students and have more impact on the retention of the information. To learn more about this, have a look at our booklet "Engagement as a key to success for ESL learning".
You may already know of apps that adopt some sort of video-game-inspired principles. For instance, language learning apps such as Duolingo or Memrise are built around the principle of flash cards (see below), with obvious gamified aspects.

Frequent revision is essential

Long-term memorisation can only occur with repetition. It is then worth taking about five minutes at the beginning of every learning session to **revise what has been covered during the previous lesson**. That way, students are reminded of what they previously learned, it helps fix things in memory and allows them to learn on top of previous knowledge more easily.

Organic acquisition: provide words when they arise

Students need to practise a lot in order to learn a language (or anything, really). Make your students produce language, and provide the vocabulary that they don't know yet when they need it. **We remember things better when learned at the moment they are needed**. However, we also need to use words several times to remember them. Keep track of the important relevant words that come up by writing them on the blackboard and try to make students use these words several times when they arise.

Explain linguistic structures and word relationships explicitly

For students with SLDs at least, simply "studying" by heart is not a viable option. They need more connected information in order to memorise something.

It is a good practice to explain how words are built and how they are combined to form sentences, for instance. That way, your students can make connections between words built similarly, or words of the same family, which will help them memorise vocabulary. It is also effective to take the time to teach words with their antonyms, homonyms, synonyms, or collocations.

Flashcards and spaced repetition theory

The principle of flashcards is very simple. On a piece of card (paper or virtual) is a hint; it can be a word, a sentence, a question or an image. On the back side of the card is a corresponding answer. With that system, learners can quickly make connections between the front side of the card and the back side that they have to remember.

Flashcards may have the following advantages:

- They **stimulate visual memory**, allowing direct access to the concept.
- They are **portable**.
- They **can increase the learning pace**.

- They are **adaptable to an endless number of topics and fields**.

- They are **inexpensive**.

- They are a **good way to divide the learning into smaller, more manageable units**.

The most obvious advantage, though, is the **principle of "spaced repetition"** that goes with flashcards. The idea is that **newly introduced or more difficult flashcards are revised more often** than those that are already well assimilated.

Of course, nothing is perfect, and flashcards may also come with some disadvantages.

- The context may be lost; for instance, vocabulary out of context.

- It may encourage limiting oneself to rote learning, whereas practice is very important for efficient memorisation.

- They may overburden the brain with too much information.

- If the front side is unclear, it may arouse complexity.

With those limitations in mind, though, flashcards can be very powerful to boost your student's memorisation. You can have a look at https://www.flashmind.eu/, a website based on flashcard learning.

Reinforce neural pathways

Learning occurs more easily when several senses are activated. This is the theory behind "multi-sensory learning", which is covered more thoroughly in one of our practice sheets dedicated to the topic. The idea is to develop other types of connections than traditionally, building visual, physical, audio (rhythmic patterns, songs, jingle …) and emotional connections. That way, the neural pathway to the learned item is stronger.

Ask your students to teach a concept to the others

Concepts are rarely as well assimilated as when one needs to explain them to others. That is why asking your students to explain things to their peers can be invaluable. In addition, it may

also be helpful for the other students, who could be more inclined to listen to a peer, and more at ease asking questions.

Make sure, however, that students asked to explain a concept feel comfortable with the topic. Otherwise, they could feel pressured and stressed. In those situations, learning doesn't occur well.

Other mnemonic devices

The adaptations above already suggest some basic principles of memorisation, such as:

- **Chunking**: information is easier to memorise when broken up into smaller pieces.
- **Understanding**: plain rote learning can be very inefficient
- **Learning by association**: for instance, a word would be better memorised when associated with a feeling, a sound, a memory or a physical action, etc.

Nonetheless, **you can teach other mnemonic techniques to your students**. For instance, you can explain the principle of **mind maps**, to visually connect concepts together. You could advise **making up rhyming sentences**, studying with **acronyms** or **making up small stories**. Storytelling can, indeed, help to memorise information effectively.

Conclusion

Learning a foreign language is no trivial task and it involves a large degree of memorisation. For students that have more trouble fixing things in their long-term memory, it is worth making some adaptations and having a discussion with them on what they can change and try in order to ease the memorisation process. Gamification, and games in general, is definitely an option that is worth investigating. Students may want to try other mnemonic devices, visualisation techniques or memorisation methods, such as using flashcards.

Resources and references

- Bress Silbert, L., & Silbert, A. J. (n.d.). *12 Great Memory Strategies For Better Grades*. Streetdirectory. Retrieved 2 June 2022, from https://www.streetdirectory.com/travel_guide/13043/education/12_great_memory_strategies_for_better_grades.html

- Hoque, D. E. (2018). Memorization: A Proven Method of Learning. *The Journal of Applied Research*, *22*, 142–150. https://www.researchgate.net/publication/330825027_Memorization_A_Proven_Method_of_Learning

- Singh, M. (2022, February 8). Advantages And Disadvantages Of Using Flashcards. *Number Dyslexia*. https://numberdyslexia.com/advantages-and-disadvantages-of-flashcards/

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