

Memory: Strategies to promote retention and retrieval

Key principles

1 Memory is the residue of thought, meaning that the more you think about something, the more likely it is that you'll remember it later.

As teachers, we need to focus on ways to help learners think about meaning and avoid study methods that do not encourage them to think about meaning.

- Present new language by asking students to generate the meaning of each key word themselves (either by drawing a representation or writing what they think it means). Then reveal the meanings and ask students to correct their drawings / written versions.

2 Repetition is helpful, but only when one repeats thinking about meaning. "Shallow" repetition...i.e. repetition without thinking about the meaning is not helpful to learning.

Can we tweak any drilling tasks so that the word-meaning relationship is sustained throughout?

- Put students frequently in the situation where they need to retrieve language from memory, but keep the link to meaning. E.g. Mini whiteboard Q&A, sentence-completion, translation – cued by pictures, gestures, English. Also works orally.

3 Your access to things that are stored in your memory will succeed or fail depending on the quality of the cues or triggers that get you back to the information.

Experiment with different types of triggers: visuals, gestures, miming. Where possible, involve students in the generation of the cues.

- Layer up! Strengthen the 'fixative' power of learning by using gesture, sound and picture to embed new language (especially language that's key and a springboard to other language i.e. the 'phonics' words) In phonics, it's the **gestures** above all that are key. Gestures also effective with pronouns and verbs
- Use music and rhythm in memorisation of key structures e.g. verb paradigms and pronouns (and reinforce by using gestures too) – for key verbs there are now lots of tried and tested tunes but for other language this does not need to be a well-known song if nothing occurs. The key here is automatizing the language in a fun, yet challenging way. The cognitive challenge is in the speed and regularity of the recall that the rhythm of the song or soundtrack demands but learners don't experience this as a test of memory (which it actually is!) but rather a fun activity.

4 But some to-be-remembered material interferes with other to-be-remembered material, and the greater the similarity between them, the more likely that the cues will be the same, and therefore the more ambiguous they will be.

To minimize forgetting, focus on ways to ensure that we have cues and that they are distinctive.

- Have different songs for different verbs in the different languages – don't overlap them.
- Deliberately use one song for all regular verbs in the present tense in one language and set up challenging starters by giving them new verbs to conjugate to the music.

5 Students (and adults!) over-estimate what they know and therefore under-allocate time to study (just 68% of the time needed to achieve their target knowledge)

Find ways to get students to assess their own knowledge more realistically.

- Use a routine like the one below to get students to improve their judgement about what they know and don't yet know

Look at the following list of words and give each one a number rating 1-5 based on how well you know the word.

Look at the VKS (Vocabulary Knowledge Scale) below:

- 1. I don't remember having seen this word before.**
- 2. I have seen this word before but I don't know what it means.**
- 3. I have seen this word before and I think it means....**
- 4. I know this word: it means.....**
- 5. I can use this word in a sentence, e.g.....**

(ref: Wesche M & Paribakht T.S. (1996) "Assessing second language vocabulary knowledge: depth versus breadth", The Canadian Modern Language Review 53, 1:28)

6 Master it and keep going (an extra 20% of the time it took to master) – overlearn. Some forgetting occurs so don't just learn to the point where you only just have it memorised, keep going beyond that point.

Convince students of this! Tell them "Don't learn it until you get it right, keep going until you can't get it wrong!"

- Use peer tasks to make over-learning varied and enjoyable, either Q&A style such as **speaking lines**, or **peer testing** style, where one has access to the answers.

7 Make the meaningless meaningful.

Use a range of mnemonics to support the process of memorisation and retrieval.

- Present language in as meaningful a context as possible, generally within a text of some kind, possibly a story or poem or song.
- Use mnemonics (e.g. keyword, word association, first letter, acronyms, acrostics, roman room)
- Chunking – breaking things down into smaller chunks to memorise is effective. For particularly important texts e.g. a presentation, lines for a play, narration of a story that learners need to memorise, maybe try the 6 or 9 box approach in a lesson and then suggest they use it for other tasks.
- Elaboration is the key! Doing something active to re-work the language over and over is how to fix it. This could be: 1. Taking notes of key words 2. Organising the material by finding patterns 3. Putting the key pieces of information into a story 4. Repeating the key words in a distinctive way to yourself 5. Making anagrams yourself of the key words and making yourself work them out again

8 Test yourself *the way you will be tested.*

Think carefully about the precise demands of the assessment, but with sufficient time to allow planning for the gradual accumulation of knowledge and skills.

9 And there's more..!

- Spotlight on memory – be explicit (and entertaining!) about some key aspects of memory and therefore the rationale for using certain strategies with them (e.g. colour for gender or music for verbs)
- Autonomy – let learners trial some different memory strategies and experiment to find those that work well for them
- Make 'active memorisation' tasks part of the lesson activity to develop the skills they need to be able to learn and consolidate language at home.
- Collective memory – this fun (whole lesson) activity highlights the need for good 'noticing' and attention to detail at the outset when learners encounter new language as well as a variety of strategies that we use when engaging our working memories i.e. trying to fix the knowledge visually in our heads, repeating words over and over softly to ourselves
- Set 'active' vocabulary learning, by using online tools.
- Consider setting vocabulary learning as preparation for the next lesson, rather than consolidation of the last, giving it a sharper focus and purpose.

NB: All of the classroom activities described in the document **Presenting new language: Strategies to include thinking and variety** also fulfil the aim of fixing new language. In this document are strategies not described in that one.