Multisensory and active learning

How does memory work?

Memory isn't a box and it isn't singular. Memory is a process and it is multiple:

- verbal memory
- visual memory
- auditory memory
- muscle / kinetic memory

Traditionally, we tend to think of learning (especially revision) as largely involving reading - **looking** at information.

There are two problems with that:

- it doesn't make use of all the memory modes
- it's passive and not particularly effective for most people

This guide is about making your learning methods more effective by being more **active** and more **multisensory**.

Active learning

- The more you <u>do</u> with information, the more you will remember.
- Good studying doesn't mean sitting staring at a page.
- Good studying means **making** something (e.g. writing notes in your own words) or **doing** something (e.g. explaining a concept to a friend). Here's why:
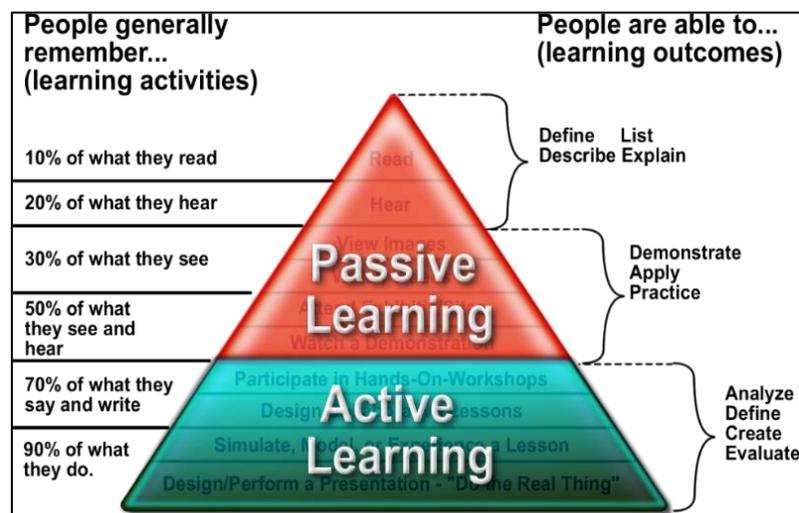
(University of British Columbia, 2012)

Testing is learning

Good studying isn't very different from taking an exam.

Constantly test yourself.
- Look at a small section of your notes.
- Read it out loud.
- Cover it with your hand and recite aloud the points you can remember.
- Uncover the notes and check how much you remembered correctly.
- Repeat.

More examples of active learning

- make notes from your notes
- change information from one format (e.g. text) to another (e.g. audio), for example, use your phone to record yourself reading through your notes and then listen back
- summarise a text
- make up tests and then sit them
- turn words into images, e.g. electrons move from anode to cathode
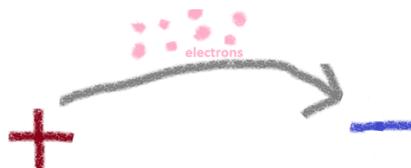
Multi-sensory revision methods

A good example of a multi-sensory learning method is the use of a text-to-speech app, such as Natural Reader. This free online resource allows you to listen to any text (that you have available electronically) being read to you. The automated voices are surprisingly good.

Mind mapping is a way to make your notes more diagrammatic, and to see the hierarchy of the information represented visually.
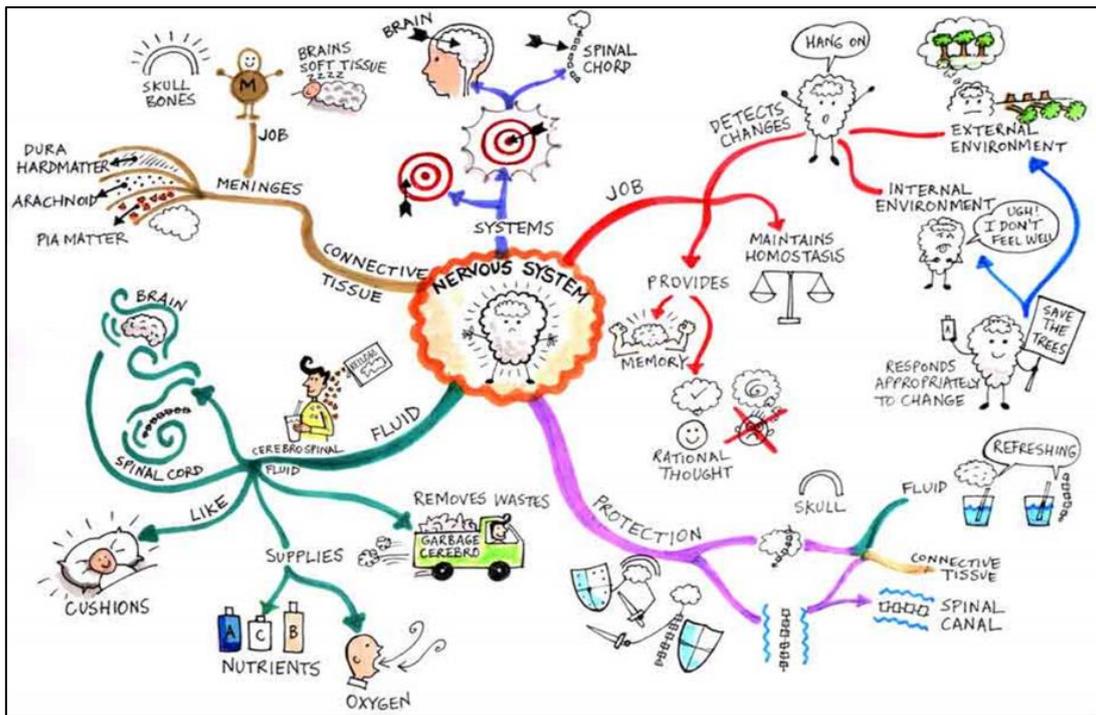
(Buzan, 2011)

Having made your mind map, use the **look-say-cover-test-check method** to memorise it, section by section:

- Look at a section of the mind map.
- Say it out loud.
- Cover it with your hand.
- Recite out loud what you remember.
- Remove your hand and check how much you recalled.
- Repeat.
- Then do the same for another section.
- Then repeat the process for both of those sections.
- Repeat until you have learned the whole mind map.

Memory journeys

- Think of a familiar room/building/journey
- Conduct a mental walk through it and create a list of landmarks
- Attach a piece of information, ideally in the form of a memorable image, to each landmark
- When you need to remember the points, recall the images by taking a mental walk through the room/building/journey

Repetition aids memory

New information needs to be recalled at least <u>four times</u> to enter long-term memory.

1. **Actively revise a topic** - 50 minutes (e.g. draw diagrammatic notes)
2. **Actively review it the same evening** - 15 minutes (e.g. read notes aloud, add colour or pictures, cover sections and try to recall points)
3. **Actively review it the next day** - 10 minutes
4. **Actively review it after a week** - 5 minutes

Studying with others

You don't always have to study on your own. What about meeting up with one or two people from your course?

Discuss the material. Take turns to test each other. Reviewing your notes in a pair or group can be more effective than alone.

In summary

- deal with a <u>small</u> chunk of information at a time
- use <u>repetition</u>
- use <u>multisensory</u> methods
- study with others

More advice from Academic Learning Support

For further study skills advice, and information on disability and specific learning differences such as dyslexia, enrol on the Learning Success Moodle page. Log into Moodle, go to tiny.cc/learningsuccess, and scroll down to click the enrol button.

To make an appointment for one-to-one study skills support:
- go to the Learning Success reception in the Student Centre (2nd floor, Northampton Square), or
- call us on 0207 040 0246

References

Buzan, T. (2011) *Mind Map Gallery.* Available at: http://www.tonybuzan.com/gallery/mind-maps/ (Accessed: 31 March 2017).

University of British Columbia (2012) *Active learning.* Available at: http://wiki.ubc.ca/Active_learning (Accessed: 31 March 2017)