

Helpful Study Skill Techniques

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How do we remember?

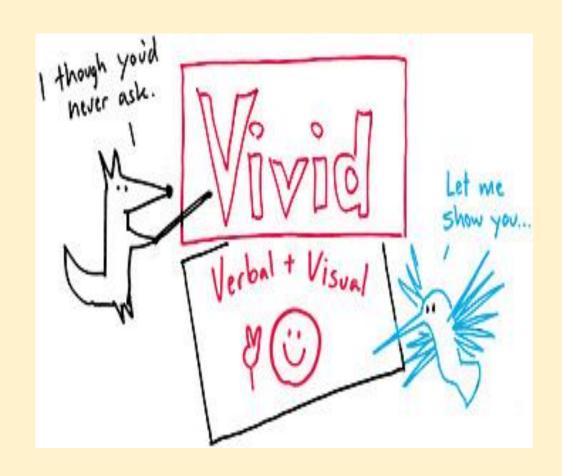
- >Concentrating/interested at the time we learnt it?
- >A multisensory approach helps
- ➤ More extra-ordinary = more memorable
- > New learning or new memories link onto old learning
- >Associations help us to remember, making links, remembering where we were
- ➤ Mind maps can help because they use visual images with words they also makes it easier for us to make links and associations between pieces of information



What is Verbal Memory?

Verbal memory is our ability to remember language-based information.

We use both our visual and verbal memories to help us remember information.





Long Term Memory

- Only important information is stored in long-term memory
- You may need to make an effort to retrieve it
- We may understand but we do not necessarily recall
- This can be helped by chunking time, constant review and preview



Different types of long term memory

Autobiographical memory

- Personal one off events, significant moments
- Links to sense of self makes you who you are
- Often multi-sensory







Episodic memory

Memory of recent experiences personal to you
 e.g. what you had for lunch, what you wore to work

- Associations are made between place, circumstances and what happened
- These memories are quite fragile and can fade
- They are good for learning if you can move them from episodic memory to semantic memory





Semantic memory

- Underpins learning
- Conceptual memory for information, facts, the meaning of words, concepts et cetera. Puts information into context based on what you already know
- Make associations
- Metacognition- become aware of the strategies that you use to remember
- The more multisensory a memory the better it is remembered





Procedural memory

- Developed with practice
- Needs mastery attention and commitment
- Once the skill is learnt it is usually permanent e.g. driving, riding a bike, skiing





Sequential memory

- The ability to perceive and remember information in the right order e.g. months of the year, the alphabet
- Can be a problem for people with dyslexia



ABCDEFGHIJKLMNOPQRSTUVWXYZ



Short-term Memory/Working Memory

- **Short-term memory** involves repeating information over and over to help you remember it, but you don't do anything with it e.g. remembering a phone number
- Working memory requires you to apply or do something with the information that is sitting in your short-term memory
- Working memory is used for holding onto information and manipulating it for a short time
- The information can slip away after a few minutes or seconds
- Adults can typically hold onto about 6 or 7 units of information
- Think of it like a post-it note or a jotter



Verbal working memory

is used to:

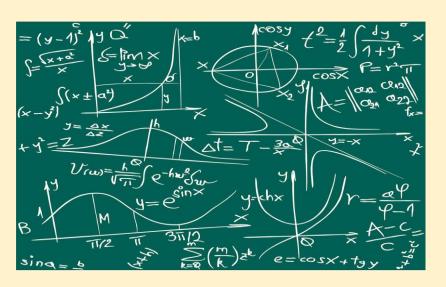
- Remember oral instructions
- Learn new words
- Perform comprehension tasks
- Write essays when free writing

Visuo-spatial working memory

is used to:

 Remember sequences of events, patterns, images and maths skills







Overlearning

- ➤ Preview

 Getting the big picture
- ➤ Repetition

 different ways build up layers of repetition

≻Taking notes

Studies show that when you take notes, you can learn material much better and retain it for longer, even if you never review the notes you take It is a kinaesthetic process connecting information directly to your brain It also helps with comprehension

> Taking breaks

Think of your brain like a muscle it needs break sometimes Breaks are vital for digesting information and for helping it to integrate information with what you already know



Metacognition/Learning preferences

- What kind of learner are you?
- What exactly works and doesn't work for you?
- Are you using your preferred learning strategies in an effective and reflective way?
- Can you explain how exactly you revise?
- Is there part of the procedure that you are missing out or that you need to strengthen?
- Use active, multi-sensory learning. Work to your strengths and consider
 ways of working that you hadn't previously used look at: visual word,
 visual picture, auditory, kinaesthetic



Committing new information to memory

The Palgrave Study Skills book 'Great ways to learn anatomy and physiology' by Charmaine Mckissock. Includes memory and learning strategies for body systems, numeracy, time management and more.

Quizlet is useful and can store them in different files per "condition"

Make flash cards - with names spelt either word within word or phonetically or graphological methods/details of drugs on reverse - bullet points - side effects, dosage, dangerous combo, taken for what condition

.



Using Technology

- Youtube clips offer a great way to revise, especially for anatomy. Also some of the US colleges have on-line quizzes, for example
- http://ect.downstate.edu/courseware/haonline/quiz/practice/u8/quizto p8.htm
- http://inst.visiblebody.com/index.htm
- http://www.getbodysmart.com/index.htm



Mnemonic Devices = Memory Techniques

- Mnemonics stimulate your imagination using words and other tools to encourage your brain to make associations
- Rhymes: Necessary it necessary for a shirt to have 1 collar and 2 sleeves
- Acronyms: e.g. HOMES = Great Lakes Huron, Ontario, Michigan, Erie and Superior
- Memory Palaces or Roman Rooms /Routes: Linking something you know your home to information unknown through imagination

Imagination and Association = Memory



Mnemonic Devices = Memory Techniques

This BMJ student guide has mnemonics on page 22 survivingmedicalschoolbmjguide.pdf
You could also look here for mnemonics:
https://www.oxfordmedicaleducation.com/emergency-medicine/abcdefghijklmnopq-assessment/

Create mnemonics using the first letters of each part of the procedure or key words to make up sentences - like using Rinse Out Your Grandfather's Boots In Vinegar to remember the rainbow colours, for example



Mnemonic Devices = Memory Techniques

For entertaining and memorable mnemonics, try:
Mnemonics and Study Tips for Medical Students, Second Edition:

Two Zebras Borrowed My Car (Hodder Arnold Publication) Paperback – 30 May 2008 by Khalid Khan:

http://www.amazon.co.uk/Mnemonics-Medical-Students-Second-

Edition/dp/0340957476/ref=pd_sim_b 1?ie=UTF8&refRID=1XJKJ5EWM2WXMFKH32QT

Try <u>www.joglab.com</u> to help to make them up - it only needs to make sense to you.



Retrieval

- Retrieval deals with getting the information out
- many studies show that retrieval is one of the best ways to reinforce memory
- it helps you identify gaps in your learning
- summaries after you have learned
- low-level self-quizzing, asking a question activates an automatic mechanism in your brain
- the more you practice retrieval the more it motivates your mind to commit new information to memory





Low-level self-quizzing

- What are the key ideas?
- What terms or ideas are new to me?
- How would I define them?
- How did the ideas relate to what I already know?





Low-level self-quizzing & spaced-out retrieval

 Use self-quizzing and space out (and interleave if possible) your study sessions so that a little forgetting has happened since your last practice, In affect you are reloading it from long-term memory

 this effort to reconstruct the learning makes the important ideas more memorable and connects them more securely to other knowledge and to more recent learning

it's a powerful learning strategy



Elaboration

- The process of finding additional layers of meaning in new material
- relate the material to what you already know
- explain it to somebody else in your own words
- explain how it relates to life outside of lectures/tutorials
- discover a metaphor or visual image for the new material
- using summary sheets, with graphics and keywords, promotes the learning of concepts, structures, and interrelationships





Generation

- Or **prediction** has the effect of making the mind more receptive to new learning.
- attempt to answer a question or solve a problem before being shown the answer or the solution
- filling in a missing word in the text results in better learning and memory of the text than simply reading a complete text
- wade into the unknown first and puzzle through it, you are far more likely to learn and remember the solution than if somebody was to teach it to you





Reflection

- Taking a few minutes to review what has been learned in the recent class experience and asking yourself questions:
- What went well? What could've gone better? What other knowledge or experience does it remind you of? What might you need to learn for better mastery? What strategies might you use the next time to get better results?
- Weekly learning paragraphs students are asked to reflect on what they learned the previous week and how their academic learning connects to life outside the class





Calibration

- Is the act of aligning your judgements of what you know and don't know with objective feedback so as to avoid being carried off by the illusions of mastery that catch many learners by surprise at exam time
- mistaking familiarity with a text for mastery of the underlying content is just one example
- the aim is to be sure that your sense of what you know and can do is accurate
- students use quizzes and practice tests to see whether they know as much as they think they do
- Passmedicine





Make Revision More Fun to Remember More

- **Buddy group:** Have 1 or 2 colleagues form a buddy group for the next two ideas:
- Learning by teaching: once the information is charted, teach it to colleagues, members of the family (one student was nursing her sick grandmother and so granny is now an expert in equine reproduction), even a pet (dog) or the mirror!
- Playing Academic Trivial Pursuit or Pairs: take out key ideas/concepts/drugs onto index cards (key word on one side, explanation on the other) then play trivial pursuit or pairs with them with the buddy group or on your own with pairs..



Make Revision More Fun to Remember More

- Rhythm/melody: For those who are musical and can remember melodic lines and/or long lyrical sequences this can work. A good intro piece of music is the Gospel Song 'Dry Bones'. Available in itunes and also a very graphic demonstration on
- Youtube at https://www.youtube.com/watch?v=hYeQUXXYvK0. A medical student who one week could manage to recite only a half dozen of the 206 human bones, by the next week, using Dry Bones, had all of them down pat.



Simple Med - SimpleMed is an **entirely FREE** platform for Medical Students to learn and revise Medicine more easily, with <u>concept-based articles</u> and a free <u>multiple choice question bank!</u> SimpleMed is built by Med Students, with only the key information needed and without the extra fluff - all with the aim of reducing the stress that students experience.

https://simplemed.co.uk/

<u>Medincle</u> - It is specifically designed for med students with SpLDs or who speak English as an additional language. Created by doctor with dyslexia. https://www.medincle.com/



Khan Academy - Khan Academy is an American non-profit educational organization created in 2006 by Sal Khan, with the goal of creating a set of online tools that help educate students. The organization produces short lessons in the form of videos. Its website also includes supplementary practice exercises and materials for educators. https://www.khanacademy.org/coach/dashboard



Medical terms and roots

https://cjnu-

matt.webs.com/List%20of%20medical%20roots,%20suffixes%20and%20prefixe

s.pdf

ISMP list of confusable drugs

https://www.ismp.org/recommendations/confused-drug-names-list

Pronunciation of common drugs

https://clincalc.com/PronounceTop200Drugs/

https://www.drugs.com/uk/



3D Body anatomical software:

<u>https://www.zygotebody.com/</u>Medical words plug-in for Word Spellcheck:

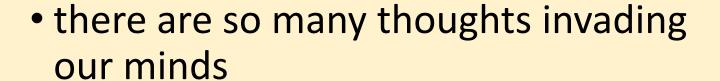
<u>https://www.medincle.com/https://www.lexable.com/global-autocorrect/</u> - they also have a medical dictionary that can be activated to help with spell-checking medical assignments.



Concentration



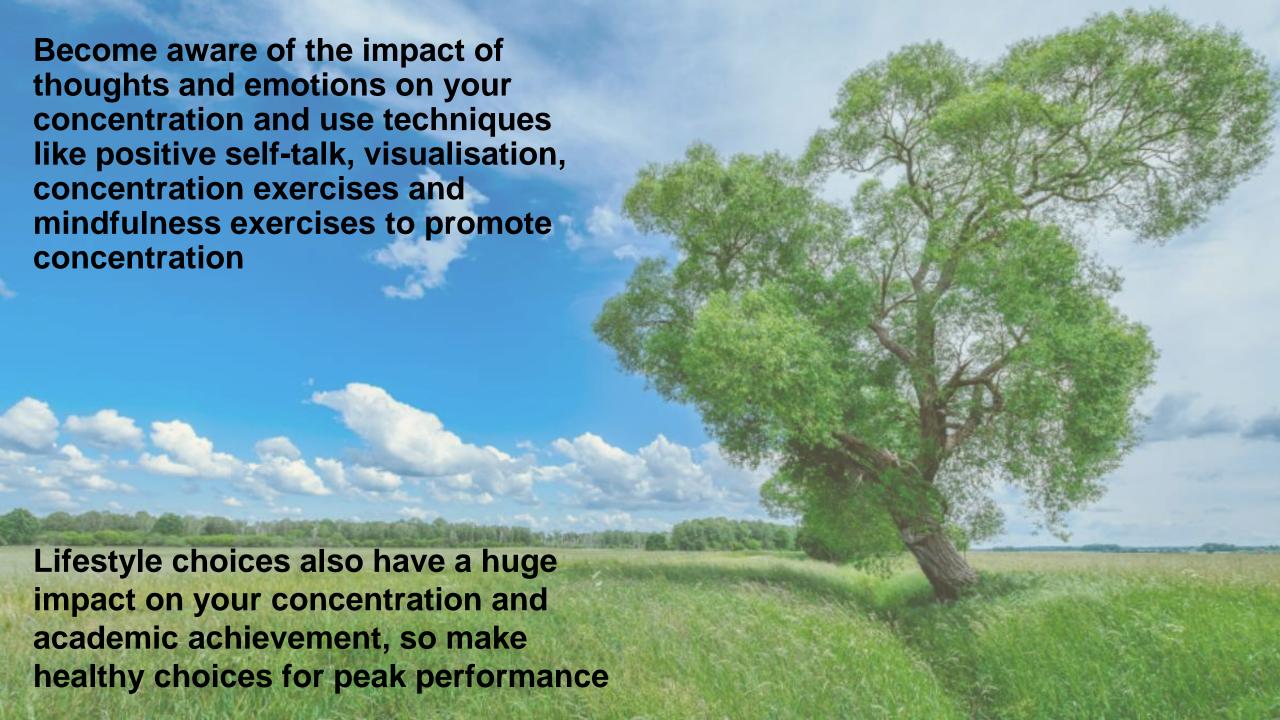
• We can't concentrate because:







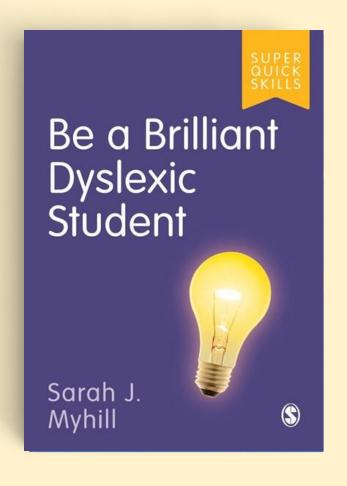








Be a Brilliant Dyslexic Student: Sarah J Myhill



There's more where these tips came from...









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Further help from Microsoft's (Free Accessibility Features)

"At Microsoft, we understand the power of technology, and that's why we continue to innovate, create, and design in a way that gives everyone the ability to achieve more."

Microsoft Office Home

Microsoft Immersive Reader

https://youtu.be/3n5emMEm3Uk

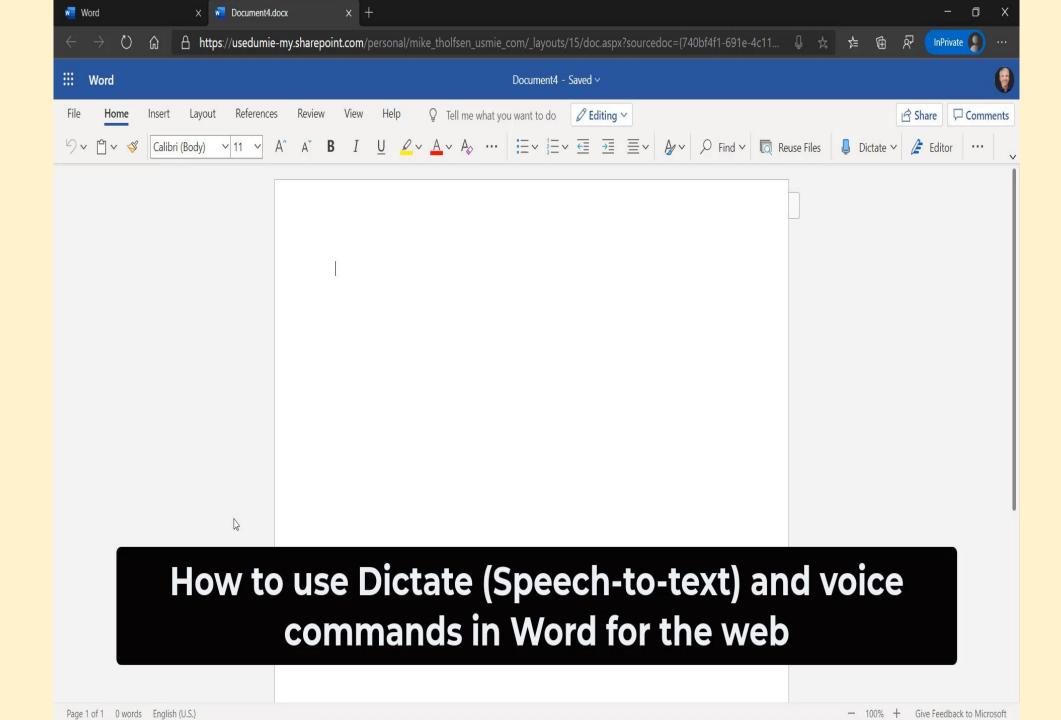
Microsoft Accessibility Features

Microsoft Dictate

https://www.youtube.com/watch?v=2zfnWTSObf

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Office 365 & Microsoft Edge













Excel

PowerPoint

OneNote

OneDrive

Outlook



Teams

Microsoft Office Home



Microsoft Edge

Useful Links

- Al-powered article summarizer: https://www.scholarcy.com/
- Assignment Survival Kit <u>Assignment Survival Kit (kent.ac.uk)</u>
- Forest stay focussed and in the present <u>www.forestapp.c</u>
- Mapping software <u>Mind View</u> <u>Mind Master</u>
- MindTools TimeManagement http://bit.ly/MindToolsTimeManagement
- MindTools Procrastination
- MindTools Prioritisation http://bit.ly/MindToolsPrioritisation
- ToDoist Linear Task List https://todoist.com
- Trello Visual Task List https://trello.com
- Technology for Studying <u>Technology for Studying Graham Jones</u>



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