

Overview - poor working memory

Working memory is used to hold, process and transform information in the mind for short periods of time. It is needed to store information in long-term memory and retrieve it later. It also plays a vital role in concentration and blocking out distractions.

Many people with dyslexia, dyspraxia and ADHD have a lack of working memory capacity. They may understand what they see, hear or read, but as more information comes in, earlier information is lost. It then becomes difficult for them to complete study tasks and they may feel frustrated and overwhelmed. This may result in them giving up the task altogether.

Students with poor working memory may have difficulty with:

- Reading quickly, accurately and with good comprehension.
- Taking complete and accurate notes in lectures.
- Remembering new information and terminology.
- Keeping track of ideas when speaking or writing.
- Planning, editing and proof reading writing.
- Carrying out mental arithmetic or recalling maths procedures.
- Keeping track of instructions or the steps required to complete a task.
- Concentrating for long periods (e.g., in lectures or when reading).
- Starting or finishing off work.
- Remembering appointments, tasks and events.



Top tips for teaching students with poor working memory:

- Reduce the memory load by breaking tasks into smaller chunks and frequently recapping the key points. Or, better still, get students to summarise them.
- Back up verbal points, instructions and terminology with written versions – explicitly show students where to find this information on the Learning Space or ELE.
- Make learning multisensory: include visuals, practical hands-on activities and discussion wherever possible.
- Encourage the use of graphic organisers, storyboards and mind maps for planning and structuring.
- Make explicit links between new and known information and provide concrete examples that students can relate to.
- Be aware that students may need longer to process and learn new information and skills.
- Provide short breaks (or activities with a change of focus) during lectures to maximise concentration.
- Encourage the use of assistive technology, such as alarms, reminders, calendars, spell checkers and audio recording.

Useful links

- http://canlearnsociety.ca/wp-content/uploads/2013/03/LC_Working-Memory_N2.pdf
- http://dyslexstudyskills.group.shef.ac.uk/organising/pages/memory_page1.html

