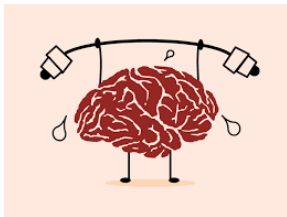


# Working Memory Difficulties Fact Sheet

## Working Memory Difficulties are....

- ✓ Working memory refers to the ability we have to hold and manipulate information over short periods of time.
- ✓ Working memory capacity develops between early childhood and approximately 15 years of age.
- ✓ Working memory is important because it provides a mental workspace to hold information whilst engaging in other relevant activities (**crucial to learning**). Information to be remembered may, for example, be the sentence that they intend to write while they are trying to spell the individual words. It could also be the list of instructions given by the teacher while carrying out individual steps in the task. Losing crucial information from working memory will cause young people to forget: instructions, the details of what they are doing, where they have got to in a complex task etc.



**Working memory is a crucial factor in mathematics learning**, when it is necessary to hold questions in mind while calculating answers. If the calculation involves more than one step, or if time elapses between questions and finding answers, the working memory may falter.



## Working Memory Difficulties are not indicative of....

- ✗ Intellectual capacity, or the lack of it.
- ✗ language problems.

### Difficulties:

- Forgetting general instructions.
- Forgetting specific task guidance.
- Losing track in complex tasks.
- Failing to cope with simultaneous processing and, even moderate, storage demands.
- Longer-term forgetting (due to poor working memory failing to adequately lead to longer-term memory).



## Working memory difficulties include...

The **incremental process** of acquiring skill and knowledge over the school years is **disrupted**.



**Memory overload** leads to: **failure to follow instructions; difficulty completing tasks that combine storage and demanding mental processing; and problems in keeping track of their progress in complex tasks.**



## Ways to help pupils with Working Memory Difficulties...

**Classroom accommodations** : positive behaviour intervention plans and informal supports like **mind maps**, use of **acronyms** and **brief and simple instructions**.

### Minimise working memory demands.

Intervention should **minimise task failures** due to excessive working memory load by: **recognising** working memory failures; **monitoring** the child for these failures; **evaluating** working memory loads; **reducing** working memory load when necessary; being prepared to **repeat** important information; encouraging the use of **memory aids**; developing the child's **use of strategies** to support working memory.

**Self-advocacy training** can help pupils understand, ask for and explain to others what they need to succeed.

## Other Information

<https://www.understood.org/en/learning-thinking-differences/child-learning-disabilities/executive-functioning-issues/working-memory-what-it-is-and-how-it-works>

