



'Discover Your Potential'

hello@discoverspeech.com.au www.discoverspeech.com.au 0466 351 588



Working Memory

A child with working memory difficulties:

- Often has problems learning literacy and mathematics.
- Can be reserved in social situations that include a lot of verbal interaction.
- Finds it hard to follow instructions.
- May find it difficult to multi-task. For example, looking at the board and copying down sentences as the teacher explains about homework.
- May become overwhelmed easily which leads to stress, which leads to greater
 problems remembering. Instructions they could follow yesterday may be too
 difficult to comprehend today. This inconsistency can be puzzling and frustrating
 for parents and teachers.
- May spend a lot of their time being confused, but sometimes may be totally unaware that they have misunderstood.
- May find it extremely difficult to focus on a task that taxes their memory while there are distractions. A distraction could be a noisy class next door.

How to Support Working Memory

- 1. When speaking to the child, try and use <u>words that they are familiar with</u>. If you need to use new words, repeat them, and if possible, explain them. "It's near that protea bush... the pink bush... near the pink protea..."
- 2. When using long sentences, <u>break them into chunks</u> with slight pauses. Instead of "Your toothbrush needs to go in the container that's under the basin", try, "Your toothbrush... needs to go in the container... under the basin." In addition to chunking, <u>use gesture and stress</u> when you can. You might gesture toothbrush and under and you might point towards the other bathroom.



- 3. <u>Avoid tricky structures</u>. If you use sentences that contain tricky structures, they will be less familiar to the child and harder to hold on to. Tricky structures include:
 - If you don't get your hat within ten seconds, you're not going to go out on the play equipment. (Instead try: "Get your hat now... and then you can go out.")
 - You can stand next to the heater although make sure you're not too close with those pyjamas on. (Instead try: Stand by the heater... don't get too close.")
- 4. <u>Repeat important information</u>. The more you repeat, the better it will be retained for processing.
- 5. Consider the <u>speed and clarity</u> of your speech. A clear message is also one that will be retained more easily. At the same time, you don't need to speak painfully slowly! Aim for <u>clear</u>, <u>slowed speech with pauses</u> between chunks.
- 6. <u>Stressing important words</u> means that the child can hold on to the main parts and disregard the "fluff". This will mean there is less to remember. "Wait on the CORNER near the SHOP..."
- 7. Have the child <u>repeat back</u> important information. "Wait on the corner near the shop."
- 8. <u>Provide visuals</u> where possible. This may be gestures or scribbles in a notepad that you train your child to use.
- 9. Around the age of 7, start talking to the child about their memory and <u>teach them</u> <u>specific techniques</u> to assist with remembering, such as <u>rehearsing</u> (repeating things to keep the message in the short term long enough for it to be processed), <u>adding</u> <u>visuals</u> (repeating and gesturing or thinking of a picture that goes with the words), <u>using attention</u> (actively attending to and thinking about the meaning of the words).
- 10. <u>Acknowledge the frustration</u> of the problem with the child. Memory difficulties are not a result of laziness. Engaging in learning may take a lot more effort for the child with working memory difficulties. Stay positive and be creative in how you keep the child engaged and motivated.



- 11. <u>Show children</u>, don't just tell them. After you have shown them, encourage them to show another child, while talking through each step.
- 12. Consider <u>distractions</u> and reduce background noise. Consider where the child is seated.
- 13. Consider the visual presentation of school materials:
 - Some children may find it useful to read with a rolling ruler moving down a page of text.
 - Use numbers rather than bullets for a list of tasks.
 - Show the child how they can cover the part of the page that they have completed.
 - Avoid having the child copy from the board on to a page.
- 14. Make sure the child has lots of time engaging in <u>activities where there is no pressure</u> on using working memory.

Working Memory Key Points

- 1. Reduce the load on the short-term memory store.
- 2. From 7 years of age, teach the child about how to use strategies to keep information in the short-term memory long enough to be processed.
- 3. Repetition and chunking are two strategies that should be used by the person delivering the information and if they are old enough, the child receiving it.
- 4. Build up the child's long-term memory store of knowledge and language.
- 5. Consider other factors that reduce memory capacity and if possible, change them.



