

Special Educational Needs and Disability Leaflet



Working Memory Difficulties

What is working memory?

Working memory (or 'short term memory') is the ability to 'do two things at once' in tasks involving learning and reasoning.

Working memory is the system we use to keep information mediately available. We use it when we perform calculations in our heads, track the meaning of a conversation and remember what we are supposed to do next.

What affects our working memory?

We do not use our working memory in a vacuum. There is always something going on in the background and that affects the child's focus:

Sensory distractions

Reduce distractions such as noise, movement and even strong smells to a minimum.

Illness

We experience dips in working memory performance when we are uncomfortable, ill or in pain, so allowances need to be made for this.

Anxiety

Anxiety uses up precious working memory, leaving less room to think about other things. Some individuals have anxieties that affect their working memory for specific tasks, like problem solving mathematical problems.

Lack of sleep

It is not surprising that performance on working memory tasks deteriorates when children are tired.

Children with poor working memory skills typically make poor academic progress in literacy and mathematics.

Specific difficulties they may face include:

- Developing letter knowledge
- Reading comprehension tasks
- Forgetting instructions
- Losing their place in task
- Remembering to collect their equipment and belongings.



Positive traits

People with working memory difficulties can often perform well on logic and reasoning activities.

Children with working memory difficulties are still able to develop good social relationships.

Children with working memory difficulties can be very specific e.g. children diagnosed with dyscalculia usually perform normally on many tests of working memory capacity except remembering precise order of items on a list.

Strategies to help children to improve their working memory:

Rehearsal: verbal repetition of items to be remembered. Encourage the child to say or whisper the words to themselves, over and over.

Categorisation: grouping items into categories e.g. cat, dog, orange, horse, apple, pear could be remembered in two groups: cat, dog, horse and apple, orange and pear.

Chunking: words can be chunked into syllables and digits into groups of 2 or 3.

Elaboration: generating a visual image to link together unrelated items e.g. to remember the words 'hat' and 'dog' the child could imagine the dog wearing the hat. The child may visualise a whole story that they use to link together information to be remembered.

Visual information- will be remembered better if linked to a verbal label e.g. if a child is looking at a table, it helps to say the word table.

Mnemonics for spelling etc.. e.g. 'big elephants can't always understand small elephants' for 'because'.

External devices e.g. pictorial checklists, directional signs, lists, notebooks, diaries and colour coding.

Help children to recognise their memory strengths and weaknesses and make them aware of the different memory strategies to try.

Classroom strategies used to support a child with a poor working memory:

- When giving instructions say the child's name first, break instructions down and say them in the order you want them done. Keep language simple and concise.
- Ask the pupil to repeat the instructions back and check understanding.
- Use visual prompts.
- Give thinking time for pupil to process the information.
- Seat the child in a space away from distractions.
- Use concrete and real-life experiences to make learning memorable.
- Use multi-sensory learning approaches.
- Use task management boards
- Use games and activities to develop memory.

Grow together
Excel together
Learn together



What to do if you have any concerns:

- Speak to the class teacher
- Speak to the SENCo/ SENCo assistant

Contact the school office to make an appointment: 01432 273 784

