What is Verbal Working Memory?

Our 'long-term' memories go back to early childhood. We also have a 'short-term', or 'Verbal Working' memory which we use to deal with what we hear. Someone says "Add 157+85 mentally – no pen or paper!" Try it! Or try listening to a sentence and then writing it down from memory. For tasks like these, we need to remember the information we've just heard and WORK with it in our heads!

Our Verbal Working Memory doesn't last long – about 6-9 seconds on average. After that, we need to refresh our memory by processing what we heard again – IF we can remember what we heard!

About 1 in 10 people will probably not remember. It is not their fault. That is how their Working Memory is. On average 3 children in every class will have only 2 or 3 seconds of Working Memory time. This can significantly affect their learning.

How might it affect my child in school?

As we grow up, we absorb new words and store them in long-term memory. We store their meaning, their sounds and how they look.

But when reading or spelling new words, we need a reliable Verbal Working Memory so that we can sort out the letter sounds, in the right order, and then process them to get the meaning or the right spelling.

Students with a poor Verbal Working Memory, such as those with dyslexia, are likely to have problems doing all of this, which in turn can impair their learning. Problems are caused mainly by:

- Difficulties holding information for more than 2 or 3 seconds;
- Difficulties keeping focused;
- Often experiencing overload and in the turmoil, losing the capacity to do anything.

What might I see at home?

- Your child might forget what you've just asked them to do recalling instructions is a difficulty at home and school;
- Problems organising themselves and their school needs in general;
- Easily distracted or often lapsing into day-dreaming;
- Problems learning by heart, e.g. times tables, alphabet, days of the week...;
- Problems 'sounding out' words, remembering spellings, slow writing;
- Difficulty understanding what they read or hear, needing to re-read text;
- Vague about time: the school timetable, or which day it is, what to do next...
- Sometimes this can lead to frustration, or changes in motivation and self-esteem

However, your child may also have great skills in other ways – Lego, creative activities and ideas, art work, sports, be keen and articulate about their interests.

Often their Visual Working Memory for what they <u>see</u> can be much better than their Verbal Working Memory, <u>i.e.</u> for what they <u>hear</u>!

It can be puzzling for us to understand.

How can I help at home?

- Some recent research suggests that working memory can be improved – look online for your own knowledge, any games to play and apps.
- Be understanding and patient with your child. Give one instruction at a time and gradually increase this.
- Prepare for school the night before.
 Organising personal belongings, write big-print lists or use pictures.
- Limit homework to the time suggested by school. Or give a break/snack. Ask the teacher's advice. Make learning <u>fun</u>: use plastic letters, shaving foam, sand trays for spellings/ times tables, a 100 square
- Avoid 'screen time' before bedtime! Ensure sufficient sleep.
- Use large clear timetables / calendars, checklists, white boards, coloured pens, Lego blocks to help with arithmetic.
- Try aids such as digital recording devices, tablets, musical times table CDs.
- Encourage their strengths, interests, hobbies and extra-curricular activities.

How do teachers help my child

in class?

- Consider the memory load of a lesson and be prepared to repeat information.
- Recognise when your child has 'lost' some information, such as instructions or the sequence of letters for a spelling, and repeat it for them.
- Provide photocopies of power-points.
- Provide visual reminders and vocabulary support.
- Use alternatives for writing such as bullet points and flow charts.
- Use peer support, such as a memory buddy.
- Encourage your child to use techniques such as repeating sentences out loud when reading and writing.
- Encourage the use of technology such as typing skills, photos of the whiteboard, science equipment or homework tasks.
- Reassure your child that they understand the difficulties he or she may be facing.



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A Guide for Parents

With support and encouragement from you and school, your child can learn effective strategies to reduce the impact of these difficulties and grow in confidence.