

What is working memory?

Short term store for information we need right now

Very small!
5-7 items for adults
1-2 for lower primary

Visual and verbal systems- they can work together

Same small space is used for **storage** and **processing** info

If overwhelmed, all the information gets lost or confused

Working memory training doesn't work - we have to adapt!

Time devoted to learning and practising routines

Materials needed are ready to hand on pupil's desks

Displays - not too much, make key info easy to find

Word lists, number fact prompts, etc available at eye level

Cooperative and paired learning to support each other

Adults vigilant for early signs of information overload

A working memory friendly classroom ...

What does overload look like?

"Not listening" (they were, but the info is lost)

Starting tasks and getting lost or stopping

Inconsistent performance day to day, or task to task

Looking round, off task or distracted

Sticking to the safe and familiar - lower effort or risk

Difficulty learning sequences or new routines

Random errors or general muddle

Avoidances
Not using strategies
Relying on others

When learning new skills, use familiar materials/concepts

Ask children to talk through task before independent working

Keep instructions short and simple - use gesture & visuals

Prompt children to use memory aids, such as visuals

Relate new learning to existing knowledge - it sticks better

Break down tasks into "chunks" that can be learned one at a time

Working Memory Key Messages

Working memory capacity is very small and easily overloaded

Off-task behaviours can be a sign of working memory overload

Any child can get overwhelmed so adaptations benefit everyone

Adapting language & tasks to memory limits can promote learning success

credits: Sharon Smith, Jennifer Pickering, James Cook, James McTaggart, © 2019 @JamesEdPsych

Improving learning with working memory ...