



kids therapy made simple

Working Memory

Often, when we think of memories, we think about long-term memories (those that are stored for indefinite periods of time), or short-term memories (those small amounts of information that are stored in an active, readily available state for a short period of time).

If practiced and rehearsed, short-term memories can become long-term memories.

Recently, short-term memory has been redefined as **working memory**, focusing on functionality rather than duration. As an executive function, working memory involves both storage and manipulation of information.

A key to learning, it allows us to hold information without losing track of what we're doing.

How Working Memory Works

- acts as a temporary 'sticky note' in the brain
- holds new information in place so brain can work with it briefly and even connect it to other information if necessary
- holds roughly four to five elements of new information at one time
- information is temporary - it is either encoded and organized into long-term memory or it is replaced
- working memory occurs in 2 ways:
 - auditory memory: records what you hear
 - visual-spatial memory: captures what you see

5 Ways Children use Working Memory to Learn

Accessing Information	<ul style="list-style-type: none">• memories need to be 'played back' immediately, even as new information is being taken in
Remembering Instructions	<ul style="list-style-type: none">• kids rely on information stored in working memory as well as incoming information to complete an activity• you need to be able to remember what comes next while you're doing what comes now
Paying Attention	<ul style="list-style-type: none">• working memory and maintaining focus and concentration are located in the same part of the brain, so working memory helps kids remember what they need to be paying attention to
Learning to Read	<ul style="list-style-type: none">• auditory working memory helps kids hold on to the sounds letters make long enough to sound out new words• visual working memory helps kids remember what the words look like so they can recognize them throughout a reading passage
Learning Math	<ul style="list-style-type: none">• working memory assists in the ability to recognize and reproduce the patterns needed to solve and remember basic math facts