



Memory Skills and Strategies

Memory is the general term given to the storage and subsequent retrieval of information. It is an essential part of effective learning, enabling us to recall, link and use skills and knowledge. It is a major factor in the successful acquisition of basic Literacy and Maths skills.

Short term memory

This is a temporary store of verbal or visual-spatial information. It can be thought of as a part of the working memory system. The capacity is limited to about 7 items at any one time. This information can be stored for a short space of time (up to 30 seconds).

Working memory

This is a system by which small amounts of information are held for a short time while simultaneously processing the same or other information. The amount of information which can be held is limited and varies between individuals. Information can be lost by: distraction; trying to hold too much information; doing something else. Once information is lost it cannot be retrieved and the process has to be started again.

Long term memory

This is made up of memories of experiences that remain for more than a few seconds and for knowledge that has been acquired over long periods of time.

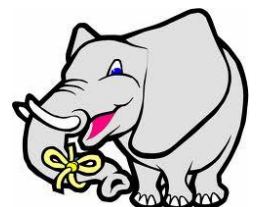
- Semantic memory - for meanings of words
- Episodic memory - for specific events
- Procedural memory - actions and skills we have learnt through practice.
- Autobiographical - personal facts and significant events.

In order to recall skills and knowledge they have to be stored in long term memory.

Difficulties with memory can:

- have a negative impact on the acquisition of basic literacy and maths skills: reading; spelling; writing; number facts / operations; sequences
- result in difficulties with following instructions and completing multi-step tasks.
- present a barrier to learning
- contribute to frustration and anxiety
- lower self-esteem and self confidence

Memory can be affected by:



- medication
- illness
- tiredness
- anxiety
- hunger
- environmental distractions



Warning signs:

- incomplete recall
- failure to follow instructions
- place keeping errors
- task abandonment

Ref: Gathercole and Alloway (2008)

Improving Memory

Introduce and teach memory strategies and encourage children to find the appropriate strategy for the task in hand. Memory games can be used to identify supportive strategies such as verbal rehearsal, visualization and association.

Remembering

We all remember things more easily if:

- they are important and relevant to us
- they are practiced or used regularly
- they involve a practical application

Successful Classroom Strategies

- Multi-sensory activities – by increasing the number of senses involved in an activity the learning is more likely to become embedded in long term memory.
- Connect information to prior knowledge
- Reduce the working memory loads of tasks by:
 - using long term memory to exploit existing knowledge to supplement working memory demands
 - chunking to decrease working memory load
 - breaking tasks down into smaller steps
 - repeating important information





Encourage the Use of Memory Aids

- Reinforcing instructions with visual clues eg gesturing / signing
- Visual timetables
- Labeling classroom equipment, with pictures and words.
- Diaries or Planners.
- Pen and pencil! (make a note of it)
- A friend / study buddy - encourage children to discuss their learning, this can help them to remember.



Ideas for Supporting Memory in the Classroom

- Give instructions at a steady pace and make sure you have undivided attention.
- Keep instruction to a minimum and check he/she has heard them correctly. It helps to ask for the instruction to be repeated (verbal rehearsal).
- Try to avoid giving important instruction if he/she is tired, anxious or hurrying to finish something (homework).
- Teach the style of verbal rehearsal of information needed for a short while such as when taking a message,
- When asking questions, give thinking time for answers.
- Allow self-talk of words quietly to himself / herself when copying from a book or from the board. Mouthing the words helps if he/she is reluctant to say them. This can also help when reading text for information.
- Show as well as tell how to do something.
- Have him/her sit near you during shared activities and attract his / her attention to the part being discussed by pointing to it frequently.
- Make sure instructions for homework are written down correctly and include what equipment may be needed to complete it.
- Provide a dyslexia friendly visual timetable—use pictures to represent the lesson topic, eg a violin for music, a pyramid for history. Put an enlarged version up for everyone.
- Use colour coding when labeling classroom resources.
- Demonstrate how to organise information into groups, patterns or categories.

(SpLD Guidance Folder p142)



