



Special Educational Needs and Inclusion team (SENIT)

Memory Matters

Memory is a skill which relies on the ability to attend to, process, store and retrieve information as required.

Auditory short term memory is the ability to retain verbally presented information for a short period of time.

i.e. information that has just been heard, for short periods of time.

Visual memory is the ability to retain visually presented information e.g. a menu, shopping list, picture, a word or phoneme flashcard.

Working memory is the term used to describe how we hold and manipulate information in the mind for short periods of time. The duration may range from just a few seconds to several minutes.

Pupils with poor memory often display the following characteristics.

- Inattentive and distractible.
- Difficulty in following instructions or retaining more than 1 or 2 items of information.
- Often fail when attempting problems requiring storage and manipulation of information.
- Reserved in group activities.
- Copy from their peers.
- Lose place when reading and writing, or copying from the board.
- Slow progress in maths and reading.

How can we improve memory?

How memory can be improved remains a topic of contention among psychologists. However on a day to day basis it is possible to impact on the effectiveness of pupil's memory in the classroom by teaching memory strategies, and encouraging pupils to develop and use the strategies that work best for them.

Memory aids

Be more organised and encourage use of memory aids such as lists, charts, visual or computer diaries, mind maps, graphic organisers, pin boards, notepads, planners and calendars; to indicate what is happening next, what has to be completed.

Rehearsal or repeating strategy involves receiving information and sustaining it in short term memory by repeating it over and over again. This is useful when information only needs to be retained for a short period of time e.g. repeating a telephone number you are about to dial, remembering a verbal instruction.



Making connections, or linking, allows pupil to retain information for longer periods of time. The aim is to develop the ability to remember a series of items (or instructions) by creating a story. In creating a story semantic links are fired and visual images produced. What starts out as a random list now becomes a meaningful story. For example if 4 items need to be remembered for the next school day (swimming kit, trip money, reading book, Christmas card for the teacher) these can be connected in a visual story which can be recalled e.g. A boy ran from the swimming pool after his lesson. He ran into the shop and gave the man some money to buy a card for the teacher. He rushed out and the man shouted stop! – you left your book and swimming things on the counter.

Visualisation is the ability to create internal images to support memory. It is useful to introduce pupils to the idea of having a 'camera in your head' that can provide photos and images. Practice by thinking about a recent event (trip, party) and pupil to 'see' the event by creating images and pictures. Pupils can then use this strategy to remember lists and instructions. For example; remember the 4 items for school (as above) by creating an mental image of themselves walking to school wearing a swimming costume, balancing a reading book on their head, money in one hand and a card in the other. Similarly a list of instructions can be visualised.

Chunking information into more manageable amounts is powerful way of remembering lists. eg if we see BBCITVGMTV as a string of letters to remember, this can be challenging. If we "chunk" this information as BBC ITV GMTV we are more likely to remember this. Similarly, with phone numbers 21-34-68 rather than 213468

Motor skill memory The use of actions acts as a memory prompt. For example Jolly Phonics (an action accompanying the chanting of the phonemes), Action Words (signs to represent high frequency words), touching digits when making list to recall later when touched again, are a few examples of how capacity for learning can be maximised.

Activities to support the development of memory skills

Pupils need to be explicitly taught memory strategies and to say which strategy they are using (share with the group) and then encouraged to generalise these to other learning opportunities.

1. Storytelling. Present set of 6 random pictures/objects;

- Pupil links pictures to make a story
- Re-tell story out loud
- Adult removes items
- Pupil re tells silently to self, but says target item out loud as they crop up in the story.
- Similar activity but give items verbally (no pictures/objects).

2. Action games. Give 3/4/5 commands for pupil to respond to.

For example stand up, clap hands, touch your head and turn round. Pupils can make up (and retain!) commands for each other.

3. Shape tank. Give each pupil a 'tank' (square of paper) and 2D shapes.

Give instructions and check against teacher model when completed. For example;

- Select 2 circles
- Place one circle in centre of tank

- Place other circle under the first circle.
- Ensure pupils are familiar with shapes and language used e.g. 'bottom right hand corner'.

4. **Picture frames.** Provide set of 'frames' for pupils to draw within and coloured pencils. Give out instructions for drawing e.g.
 - A banana, orange and apple
 - Some sand, the sea and rocks
 - A brown spider in a web
 - Or provide a picture and give out instructions for colouring e.g. colour the big bear blue.
5. **Memory games** such as I went to market...using pictures or real items – pupils recall the sequence of items.
6. **Story re-telling,** Start with familiar stories and then move on to unknown stories. Pupils to recall key features in sequence.
7. **Recalling verbal message-** send on spurious or real errands- e.g. go and ask Mrs Smith to bring me pencil, a ruler and some drawing pins please.
8. **The use of mnemonics** in a range of learning situations such as spellings. For example words ending in ough (oh you ghostly horror) or ould (oh you lucky duck).
9. **Repetition and sequencing** - repeat sequence of 2-3 or more colours with cubes, beads or Compare Bears .
10. **Learning recall of sequences** – such as the alphabet, days of the week, months, personal phone numbers, address and post code .

Classroom differentiation; Ten top tips!

1. Sit pupil near front of class
2. Ensure pupil is looking and listening before giving an instruction.
3. Preface questions with pupil's name.
4. Use visual prompts to support instructions and information.
5. Keep verbal instructions/information concise and chunk into manageable stages and repeat as necessary
6. Check-in. Continue to check that pupil has remembered the task throughout the lesson.
7. Self esteem and confidence can be low so praise pupil's successes frequently and explicitly.
8. Provide support for recording homework tasks and remembering equipment.
9. Reassure pupil that it is ok to ask for help and for instructions to be repeated etc.
10. Keep a clear focus on developing the pupil's own strategies for supporting memory.