**Auditory working memory**

Commonly, weaknesses in either phonological awareness or auditory discrimination are easier to improve through direct training than memory limitations are, especially with younger students. On the other hand, older students can respond well to metacognitive approaches to memory improvement, i.e. techniques designed to promote understanding of their own memory limitations and to develop appropriate compensatory strategies (Buzan, 2006; Reid, 2016).

The emphasis should be on variety and on stretching the student steadily with each training session. The tasks should not be too easy for the student (which would be boring) nor much too difficult (which would be discouraging), but they should give just the right amount of challenge to motivate the student to maximum effort. Use of prizes, star charts for improvement, etc., should all be used if these will help motivation.

Activities can usually be carried out at home as well as in school.

Auditory memory training activities include:

● I went to the supermarket – teacher says sentences of increasing length and complexity and the student has to repeat these back verbatim (e.g. 'I went to the supermarket and bought three tins of beans, one loaf of bread, a carton of milk, a packet of sweets, two bars of chocolate....' etc.).
● Find the changed (or missing) word – teacher says a sequence of words to the student (e.g. dog, cat, fish, monkey, spider) and then repeats it changing one (or missing one out altogether), either slightly or more obviously (e.g. dog, cat, fox, monkey, spider) and the student has to identify the change.
● What's their job? – Teacher says to the student a list of name–occupation associations (e.g. 'Mr Pearce the painter, Mrs Jolly the teacher, Mr Fish the hairdresser, Miss Brown the electrician') and then asks for recall of one (e.g. 'Who was the teacher?' or 'What is Miss Brown's job?').
● Word repetition – teacher says sequences of unrelated words to the student (e.g. hat, mouse, box, cup, ladder, tree, biscuit, car, fork, carpet) and the student has to repeat them in the correct order. The length of the list can be gradually extended. If the words are semantically related it is more difficult, and if they are phonologically related (e.g. fish, film, fog, fun, phone, finger) it is more difficult still.
● Phoneme repetition – as word repetition, but with phonemes ('oo, v, s, er, d'). Note that phonologically similar lists will be much more difficult (e.g. 'p, b, k, d, t').
● Letter name repetition – as word repetition, but with letter names.
● Digit repetition – as word repetition, but with digits. About one per second is the maximum difficulty for short sequences. Slightly faster or slower rates are both, generally, easier to remember, but dyslexics tend to find a slower sequence harder (because their rehearsal processes in working memory are deficient).