Supplemental Material S1. Time-ordered session treatment plan.

1) <u>Delayed Memory Activity (10 minutes)</u>
   *Units of information, how many and moving from related to unrelated (semantic distance)
   *Time for delay (moving from baseline time to longer as improvement occurs; using a timer)
   *Training on Compensatory Strategies: visualizing, re-auditorization, semantic connections/chunking, story connections, acronyms

2) <u>ISMT (25 minutes)</u>
   *Set of 3 targets, 1 at a time, level/semantic distance based on assessment results
   *On a white board, or large pad of paper
   *Interactive but participant driven with cues as needed
   *Words verbally listed out by participant for each target
   *After all 3 words semantic feature analysis completed, connections are created/seen/discussed/added
   *Cueing occurred when participant unable to see connections, or generate semantic information
   *Clarification also if participant made odd/unexpected connections, however if participant rationale clarifies even abstract relationships, this was encouraged
   *Second set of 3 targets if time allows

3) <u>Traditional Short-Term memory/Working Memory tasks (20 minutes)</u>
   *All while using at least 1 strategy
   *Recall of short list of words and identify target
   *Recall list of numbers and sequencing them
   *Recall of short paragraphs like new stories, articles
   *Structured short conversation recall

4) <u>Delayed Memory Recall from #1 (5 minutes)</u>
   *Cueing as needed