Supplemental Material S2. Parameters and instruction of strategic self-cueing approach.

Parameters		
Intervention targets	*Measurable aspects of functioning including aspects of body structure and function, activity, participation, and environment (Whyte et al., 2014)*	• Improved picture naming of treated items across word types (noun, verb, and adjective) at a single word level • Improved picture naming of untreated items across word types (noun, verb, and adjective) at a single word level • Improved communicative efficiency and informativeness of connected speech across discourse genres (everyday monologue, narrative monologue, and picture description)
Ingredients	*Measureable and observable actions systematically applied by the clinician toward the targets as specified above (Whyte et al., 2014)*	i. *Essential ingredients* – those which define treatment, necessary for effects to take place • Repeated practice of self-cueing strategy for skill acquisition (Maas et al., 2008) • Massed practice of self-cueing of treated items to support treatment effects (Raymer et al., 2008) • Distributed practice to enhance generalization and maintenance of strategy (Maas et al., 2008) ii. *Active ingredients* – those hypothesized to enhance the therapeutic power of treatment • Strengthening lexical-semantic, lexical-syntactic, phonological, orthographical, and autobiographical associations of treated items (Beales et al., 2016) • Self generated information for active learning (Slameka & Graf, 1978) • Use of strategy across two levels; lexical and connected speech levels (Milman, Vega-Mendoza, & Clendenen, 2014) • Training of a family member to facilitate strategy use (Simmons-Mackie et al., 2016) • Errorless learning approach to support episodic and semantic memory deficits (Jokel & Anderson, 2012) • Cognitive scaffolds to support capacity to engage in active learning (see Supplemental Material S4) • Personal salience through the use of thematic topics and incorporation personal stimuli (Jokel et al., 2014) iii. *Inactive ingredients* – those which do not enhance treatment effects • The nature and modality of the stimuli used to elicit lexical retrieval (e.g., black and white or colour)

Mechanism of change	*Process by which the essential and active ingredients of the treatment induce the predicted change in the treatment target (Whyte et al., 2014)*	• Stimulation – repeated exposure to treated item • Relearning – active learning of semantic, autobiographical, phonological, and orthographic information of treated words • Cognitive relay – engagement in an internal cueing strategy • No post-intervention brain imaging was completed in the current study and therefore we are unable to ascertain the potential involvement of the reorganisation change mechanism
Dosage & timing	*Parameters of the schedule of treatment that promote and optimise functional adaptation and neural plasticity (Whyte, Gordon, & Rothi, 2009)*	*Frequency* – the number of sessions per week • 3 sessions per week (initial 2 weeks – 'massed practice') • 2 sessions per week (following 4 weeks – 'distributed practice') *Density* – the total number of minutes per session • Phase 1 and 2; 60 minutes per session • Phase 3; 90 minutes per session *Intensity* – the total number of minutes per week • 180 minutes per week (initial 2 weeks – 'massed practice') • 150 minutes per week (following 4 weeks – 'distributed practice') • Additional home practice *Duration* – the period of time between the first and last session • 6 weeks (total 14 sessions)
Instruction		
Orientation to task	*Pre-practice is essential for ensuring understanding of the problem and knowledge of performance, the goal, and the correct form for the skill or strategy to be trained (Maas et al., 2008)*	*Clear instruction of intervention target* • Explicit discussion of word finding difficulties, i.e., what are word finding difficulties? When do they happen? What kinds of errors might we make? What do we do when we experience them? • Explicit discussion of strategy use, i.e., instead of getting stuck or frustrated, what can we do to help? Are there any strategies in place already?
Direct instruction	*Comprehensive, explicit, and instructional method for teaching (Engelmann & Carnine, 1991)*	*Presentation of material* • Introduce components of self-cueing with explicit reference to the self-cue support cards (e.g., meaning, memory, letter, sounds). *Clinician modelling*

		• Model the strategy using the three different word classes and self-cue support cards, discuss each cue and provide an example. 'Meaning' – *(semantics)* e.g., What category does it belong to? What does it look like? What is a word that means the same? When would this word be used? 'Memory' – *(autobiographical memory / salience)* e.g., Do you have one of these? Do you go to this place? When do you do this? 'Letter' – *(orthographics)* e.g., What letter does the word start with? Can you write the first letter? 'Sound' – *(phonology)* e.g., What sound does the word begin with? Can you think of other sounds in the word? • Reinforce that we are trying to work through any of the cues we might know, rather than guessing. If the participant is still unsure of the word, the clinician will prompt, provide further cue information, and then provide the target item. • To promote transference of the cueing strategy in discourse, the therapist will prompt various discourse genres. The prompts will be based on the thematic topic. The structure of discourse (macrostructure elements) will not be explicitly targeted in therapy.
Strategy-based instruction	*Teaches participates to monitor their own thinking through strategy (Swanson, 1999)*	*Metalinguistic / metacognitive teaching of self-cueing strategy* • 'Conceptualiser'- thinking of what we want to say, an intention, • 'Formulation'- accessing the meaning of the words, the sounds in the word, and the letters (if we are writing the word), arranging the words into an order (if we are putting together a phrase or sentence) • 'Articulation'- accessing the information about the movements we need to make with the muscles of our mouth to produce the sounds, • 'Cognitive'- to help find the words we want, we can also use our attention (e.g. focus, reducing distractions) and memory (e.g. of our personal experiences). *Systematic probe* • "When you can't think of a word what should you do?" Answer: e.g., "Look at my cue card.