



EVA

Therapy Handbook 2

Verb Network Strengthening Therapy (VNeST)



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Many thanks to Lisa Edmonds for permission to adapt the original therapy approach

Therapy Approach 2 - Verb Network Strengthening Therapy (VNeST)

(Edmonds, 2014; Edmonds & Babb, 2011; Edmonds et al, 2009; 2014a; 2014b)

Background: This approach aims to improve lexical retrieval, but with a focus on verbs. It is premised on the theory that the meaning of a verb is partly dependent on the thematic roles with which it combines. Thus, the semantic representation of the word 'measure' will include information about its typical agents (carpenter, chef, surveyor) and patients (wood, flour, land). In line with this, the treatment aims to activate networks of verbs and their associated participants, with the further hypothesis that related words, sharing members of the network, might also benefit. Evaluations of VNeST by Edmonds & Babb (2011) and Edmonds et al (2009; 2014a; 2014b) have supported this hypothesis.

Stimuli: Twelve target verbs. Concentrate on six verbs in each session, one verb at a time. The 12 verbs are listed in Table 1 below:

Table 1

Target Verb	Corresponding location in EVA Park where an avatar can perform the actions
1. Boil	Kettle in the kitchen of the blue house
2. Sew	Sewing machine in the kitchen of the blue house
3. Fly	Avatar can fly, there are flying birds, avatar can fly a kite on the lawn
4. Read	There are several places to read things around EVA Park, e.g. noticeboards
5. Scrub	Bucket and scrubbing brush on the decking outside the blue house
6. Fold	Towels in the upstairs dressing room in the blue house
7. Chop	Chopping board and carrots in the kitchen of the blue house
8. Brush	Hairbrush in the upstairs bedroom of the blue house
9. Mix	Mixer machine in the kitchen of the blue house

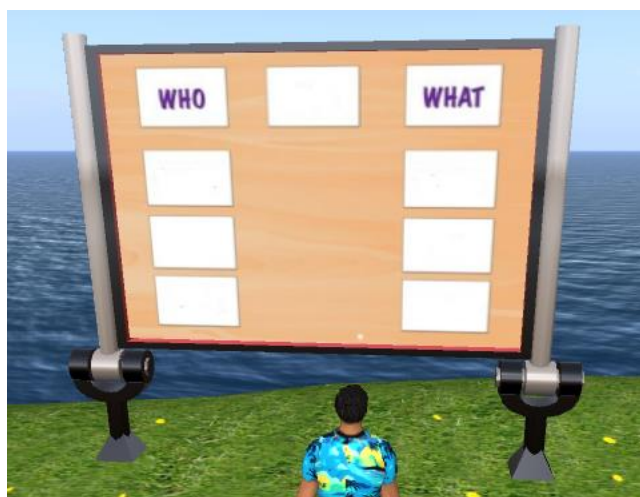
10. Measure	Measuring tape that measures is on the deck behind the house
11. Pull	A rabbit out of a top hat on the green
12. Throw	A basketball on the green

Therapy: To follow the VNeST protocol, spend approximately 45 minutes targetting verbs. Spend approximately 15 minutes on the carryover section.

Targetting verbs: Explain to the client that you will be working on verbs. Go to the sentence frame board on the grass by the treehouse.

Instant Messaging (IM): The client can use IM to write their responses if they cannot access the spoken word. The therapist can use IM to support the client’s output.

- 1) Write down the target verb using Instant Messenger (IM) and say it. Ask the client to look at the sentence frame board on the grass by the treehouse.



- 2) Start by eliciting thematic roles, firstly asking ‘**WHO?**’ - 3 ‘agents/subjects’ who *do* the verb, e.g. "who [verb]?" --> [Louise drives].
- 3) Then elicit 3 objects the action could be done to - ‘**WHAT?**’, e.g. “drive ...” --> [tractor, car] “What else can you [verb]?”.



Note: It may be easier to work on one complete set at a time, eliciting the subject and object together.

The goal is to **be as specific as possible** with the nouns, so “*chauffeur*” would be a better subject than “*man*” for the verb ‘drive’. Family members, friends and pets are appropriate subjects. Try to vary the client’s responses, so that not all the nouns are personal or one type of profession, or the same subject. Similarly, try to use many different meanings of the verb if possible, which will elicit a range of objects.

Chat console button: Use the ‘chat console button’ to type out the elicited nouns. Type in the correct order around a verb. For example, if a subject is elicited, type “chef cooks”. If a whole triad (Subject-Verb-Object) is elicited, write the complete phrase, i.e. “chef cooks dinner”. If a theme is elicited, type “cooks dinner”. The aim is to ensure that the verb is being repeatedly reiterated in the correct context within its network.

Cueing:

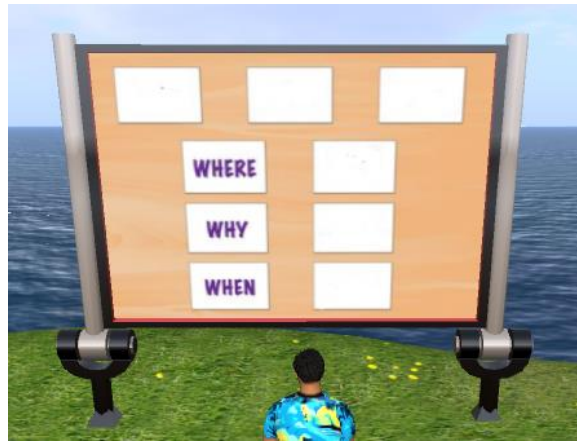
Minimal cue: Prompt the client with questions about “*who*” might do this for their job, their hobby, or in a certain location.

Maximal cue: Give the client choices, e.g. “Would you chop carrots or chop television?”.

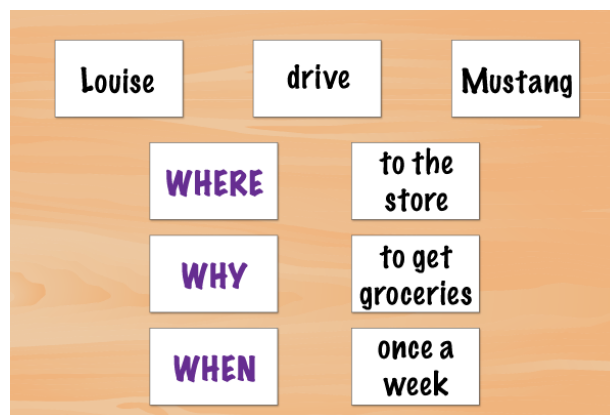
- 4) Read each triad of words aloud. It is not crucial for the client to conjugate the verb or add any articles to the nouns (e.g. “girl throw ball”) but it is okay if they do (e.g. “The girl throws the ball.”). **The therapist should always conjugate the verb correctly.** As a way

to measure progress on this step, take note of whether the client reads independently, needs to read in unison with the therapist, or repeats each word after the therapist.

- 5) Go to the second (expansion) sentence frame board, for 'where', 'why' and 'when', e.g.:



Select one of the three triads to expand upon. Ask “**WHERE?**” it happens, “**WHY?**” it happens, and “**WHEN?**” it happens, showing the relevant cards with those words. Try to get specific answers. Write the responses down on the whiteboard.



Encourage the client to read the original triad followed by the three answers to create a long, detailed sentence. Again, the grammar does not matter as the focus is on connecting the concepts.

Note: Once the client understands the protocol, move away from the sentence frame boards.

- 6) Ask the client to name the verb being worked on. If they cannot independently remember/say the verb, cue them to think of the three subject/object pairs. If this doesn't help, use IM to show them the verb in written form.



Note: It is not necessary to follow the procedure step-by-step every single time. Rather, it is important to understand the theory behind the steps and adjust as needed. Remember that this is an **activation** treatment, not a memorization treatment, so responses can change each time.

Carryover:

The aim is to elicit verbs worked on during the session, or their related verbs.

Go to a different area of the island each session and ask: “What can be done here? Who might do this? Why would they do this, where, etc...?”.



Practice:

The client has the opportunity for self-practice using animated items in-world.



References

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