

Checklist for Dynamic Display Device Semantic Compaction (Intermediate-Advanced)

"Semantic compaction is the systematic use of secondary iconicity to reduce the number of symbols in a conceptually-based selection set for the representation of natural language." (http://www.iicm.edu/thesis/ahollosi_html/node8.html)

1. Pre-Requisite Cognitive Skills

- a. Demonstrates understanding of and familiarity with using symbolic representation of expressive language.
- b. Independently initiates, directs and terminates activity in addition to expressing needs and wants using a static display device.
- c. Demonstrates functional visual/auditory memory to perform page navigation to locate desired cells and return to home page.
- d. Demonstrates ability to sequence symbols.
- e. Able to attend to, scan and discriminate between a minimum of 45 cells per page.*

2. Access (Choose One Option)

a. Direct Selection:

- i. Able to visually attend to and visually scan a minimum of 45 cells.*
- ii. Demonstrates functional range of motion to access all cells available on display.
- iii. Demonstrates ability to cross midline (visually and physically).
- iv. Demonstrate functional strength to depress cell.
- v. Demonstrates ability to isolate (BODY PART) (e.g. index finger of left hand) to access a _____ inch by _____ inch cell.

b. Scanning:

- i. Able to visually attend to and visually scan a minimum of 45 cells*
OR able to attend to and scan at least 45 cells with auditory cues.
- ii. Demonstrates functional range of motion and strength to access switch activated by (MOTION) (e.g. lateral flexion) of the (BODY PART) (e.g.. head).
- iii. Demonstrates ability to consistently use (BODY PART) (e.g. head) without signs of fatigue.
- iv. Demonstrates ability to time switch activation to select desired cell.

3. Pre-Requisite Symbol-Based Knowledge

- a. Demonstrates recognition of a minimum of 45 symbols.*
- b. Able to string phrases (pronoun-verb-noun; pronoun-verb-adverb).

4. Pre-Requisite Expressive Language Skills

- a. Student must have proficient understanding of functionality of various parts of speech, (nouns, verbs, descriptors, spatial words, etc.), and morphemes.
- b. Student must use a variety of language functions across a variety of environments (i.e. commenting, rejecting/denial, affirmation, directing, etc.)

Beneficial Features

- These devices focus on using core vocabulary to comment and direct across a variety of activities and environments.
- These devices use semantic compaction, increasing the amount of functional vocabulary available on one page by using symbol combinations; eliminating the need for page navigation and increasing the speed at which the user can communicate.

- Symbol placement remaining constant on the core page allows for procedural memory to assist in the retention of symbol combinations. The activation of procedural memory increases the speed at which the user can combine phrases to communicate.

*NOTE: The 45-symbol minimum may need to be reduced if there is an access issue.