

# Checklist For Dynamic Display Device Semantic Compaction (Beginner)

"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](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 8 cells per page.

## 2. Access (Choose One Option)

### a. Direct Selection:

- i. Able to visually attend to and visually scan a minimum of 8 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) (i.e. 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 8 cells
- OR** able to attend to and scan at least 8 cells with auditory cues.

- ii. Demonstrates functional range of motion and strength to access switch activated by (MOTION) (i.e. lateral flexion) of the (BODY PART) (i.e. head).
- iii. Demonstrates ability to consistently use (BODY PART) (i.e. 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 8 (Mayer-Johnson OR Unity) symbols.
- b. Able to string phrases (pronoun-verb-noun; pronoun-verb-adverb).

### 4. Pre-Requisite Expressive Language Skills

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

### *Beneficial Features*

- These devices provide an introduction to the Unity program, which focuses on using core vocabulary to comment and direct across a variety of activities and environments.
- These devices progress from 8-symbol topic-based page sets for pre-literate pre-schoolers to 32-symbol vocabulary-based page sets for literate students with well-developed syntactical performance.
- These devices allow users to develop encoding skills via semantic compaction. Semantic compaction increases the amount of functional vocabulary available on one page by using symbol combinations. This

eliminates the need for page navigation, thereby increasing the speed at which the user can communicate.

- The use of semantic compaction activates procedural memory which increases the speed at which the user can combine phrases to communicate.