



## REVIEW OF: Using Visual Scene Displays to Create a Shared Communication Space for a Person with Aphasia By: Hux, K., Buechter, M., Wallace, S. & Weissling, K.\*

### Background Information

- Traditional communication books for persons with aphasia (PWA) present information in a non-contextual manner. For example, they may have isolated lists of words or phrases separate from any particular event. Or, in some cases, the book may include family portraits that, although they provide information about the PWA's family, offer little opportunity to support an interactive conversation beyond who is represented in the photo.
- Visual Scene Displays (VSDs) are contextually rich pictures representing situations (playing cards), places (pharmacy), or experiences (trip to Hawaii). VSDs incorporate the residual strengths of PWA such as memory for life events, visual-perceptual skills, and intellectual functioning fostering increased or improved communication interactions. Both low and high tech VSDs use a combination of contextually rich images paired with written text that references key people, objects, and events or provides partner-focused questions to create a shared communication space.
- A shared communication space is a strategy that gives communication partners joint access to the same tools and support materials used by the PWA allowing for more meaningful interactions. Communication partners can play a more active and supporting role in the interaction, eliciting co-construction of meaning and multiple communication exchanges.

### Purpose of this Study

This study seeks to explore the effect of low tech VSDs to establish a shared communication space with a variety of unfamiliar communication partners to determine its effect of the content and quality of the interaction.

### Research Method

For this study, one PWA (RL) and nine unfamiliar communication partners engaged in short, one-to-one conversations about a specified topic (antique car acquisition and restoration) with three different conditions: a shared low tech VSD in which the two VSDs created for the study were available in front of both participants, a non-shared VSD in which the VSD pages were only accessible to RL, and no VSD. Following each interaction, RL used a Likert (5 point) rating scale to indicate his perception about the interaction and the communication partners recited the information conveyed by RL as well as specific information prompt questions by the researcher.

### Key Findings

- Using the low tech VSD to establish a shared communication space noticeably affected the way the PWA and the communication partners engaged in conversations.
  - **PWA:**
    - RL demonstrated increased initiations and responses during the interaction as well as greater number of correct content units. Content units, for example, can be single words (e.g., "Chevy."), phrases (e.g., "Blue, real blue.") or sentences (e.g., "Car broke down" while pointing to a car with the hood up in the photo) that contain specific information.
    - Impacted social competence (i.e., the ability to interact successfully or social effectiveness) as relayed in RL's perception of how well and/or with ease that he was able to transfer information with the communication partner.
    - Impacted strategic competence (i.e., the ability to solve communication problems) as demonstrated when RL increased his use of pointing and referencing behaviors to assist with relaying his message and/or to overcome or avoid a communication breakdown.
  - **Communication Partner:**
    - Using the VSD prompted the communication partner to:
      1. Take more of a leadership role in the conversation; resulting in more conversational turns overall.
      2. Increase the level of complexity of their interactions by providing more information.
    - VSDs "promote the demonstration of competence by allowing people with aphasia the express what they know rather than only what their impaired language system will allow them to express" (pg. 655).

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## Application of Key Findings in DynaVox Compass™

- **Visual Scenes:** Clear, contextualized Visual Scenes are used to support successful communication. The visual image may be used to trigger speech, clarify speech or to access related messages to speak. Both the PWA and the communication partner can utilize the Visual Scenes to increase comprehension and expression within a conversation.
- **Access to Topic Messages:** Topic Messages can be used to trigger speech, assist in repairing speech and/or serve as an alternative to speech. Three types of Topic Messages provided are:
  1. Topics/Topic Messages provide individual messages that can be produced at will. For example, “Van Outing” has related Topic Messages such as “I’m ready to go” or “Where are we going?” under the Topic image.
  2. Sub-topics within the general Topic are identified by yellow Hotspots around a particular object (e.g., a “bench” or “picnic table” in the “Park”). Sub-topics can be used to encourage lengthier or deeper interactions. For each Topic Message and Sub-topic, we have four intents in columns – Questions, General Comments & Requests, Positives and Negatives.
  3. Scripts are a series of messages that appear in order to help you communicate in important situations. Scripts can be used to tell stories, share information back and forth, and to practice, as a cue for what to say verbally. Every Topic has three scripts that you can use “as is” or edit , or add your own.
- **Shared Communication Space:** Both users and communication partners have access to a variety of compensatory strategies to maintain successful interactions. Both participants can utilize the Visual Scenes and additional compensatory tools such as the Whiteboard and Rating Scale for co-construction of meaning as well as support expression and comprehension.
- **Personalization:** Individuals have the ability to easily replace our provided Topic images with personal ones as well as create and/or edit Topic Messages to support topic initiation, storytelling and stored message retrieval.

\*Hux, K., Buechter, M., Wallace, S. & Weissling, K. (2010). Using visual scene displays to create a shared communication space for a person with aphasia. *Aphasiology*, 24:5, 643-660.