



Contemporary Approaches to Intervention:  
Visual Scene Displays

*Special thanks to Nicole Klein, Blair Markowitz and Andrew Angeles*

**Background:** Visual Scene Displays (VSD) is a type of augmentative and alternative communication system that is highly contextualized and personal to enable and support communication. Its goals are to create a more personal and contextualized AAC system, to reduce cognitive demands and make learning easier, and to support social interactions and exchange of ideas.

Dr. Janice Light (2004, 2010) determined that typically developing children perform better when language concepts are presented in VSDs than when symbols are organized taxonomically on grid boards. She is currently conducting a longitudinal study with a group of children with significant cognitive or linguistic limitations. Preliminary data shows that when these children use VSDs, interactions are longer, involve more commenting, and devices are used independently more frequently.

Dr. Howard C. Shane, Director of the Center for Communication Disorders at Children's Hospital Boston report that VSDs are more effective than traditional AAC because they focus on both receptive and expressive language. Adults prefer and are better able to use personally relevant contextualized VSDs than typical AAC systems.

**Population:**

- Beginning communicators and individuals with significant cognitive and/or linguistic limitations
- Young children with complex communication needs
- Children with Autism Spectrum Disorders
- Adults with aphasia

**Description:** VSDs can be a highly contextualized picture, photograph, or virtual environment that includes people, actions, and/or objects against the backgrounds they exist in. Interactions are meant to last longer than typical AAC devices because they involve special routines, commenting, and can be used independently. User touches "hotspot" to access speech and language.

**Functional Uses:**

- Stimulate and support conversation and play
- Tell stories
- Provide instruction, specific information, or prompts
- Create learning environment

**Cost:** The following is a list of Visual Scene Display related Apps that can be found on iTunes

- Click n'Talk: \$2.99
- Scene Speak: \$9.99
- GoTalk Now: \$79.99
- AutisMate: \$149.99
- Scene and Heard: \$398.00

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>● Personalized and shared context for users</li> <li>● Provides language in context utilizing episodic memory</li> <li>● Shifts focus of AAC from wants and needs to social interaction and commenting</li> <li>● Reduces cognitive demands of typical AAC systems</li> <li>● Uses motivating and interesting contexts</li> </ul>	<ul style="list-style-type: none"> <li>● Involves intensive clinical support to keep up with users' rapid rate of concept and vocabulary acquisition <ul style="list-style-type: none"> <li>○ Designing pages must also be done in collaboration with the family</li> </ul> </li> <li>● Most research studies typically developing children</li> <li>● Current research uses very small and homogeneous samples</li> <li>● Apps for iPads only offered in English</li> </ul>

**Additional Information:**

Recommendations When Designing VSDs for Clients from Janice Light, Ph.D.

- Use developmentally appropriate and motivating scenes
- Represent familiar social interactions
- Use engaging voice output
- Involve people

*For Infants*

- Use alone (without other distractions)
- Include few vocabulary concepts
- Create large "hotspots"

*For Toddlers*

- Can use with other objects/toys
- Gradually increase the range and number of vocabulary concepts
- Gradually increase the number of "hotspots"
- Gradually decrease the size of "hotspots"

**Sources:**

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