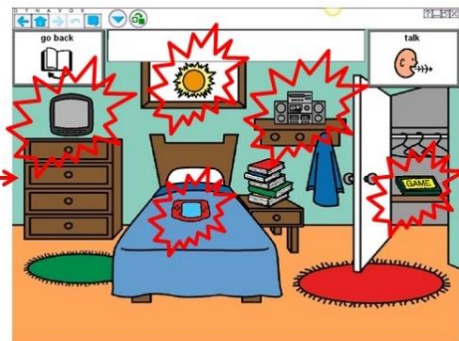# Visual scene displays: Creative ways to promote communication

What is a visual scene display (VSD)?

A VSD is a photo or picture used to communicate a message. The photo or picture depicts a familiar image or scene, and the user can touch buttons around the image or specific parts of the scene to communicate pre-programmed messages. These relate to a particular part of the image or scene. VSDs can portray events, people, actions, objects and activities against backgrounds within which they naturally happen. They provide an alternative visual interface for AAC, compared to more traditional grid layouts.
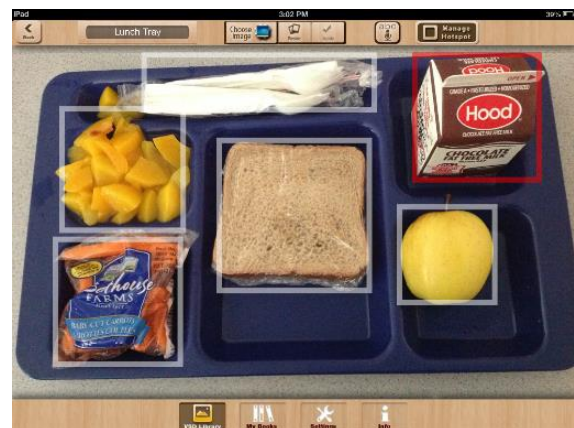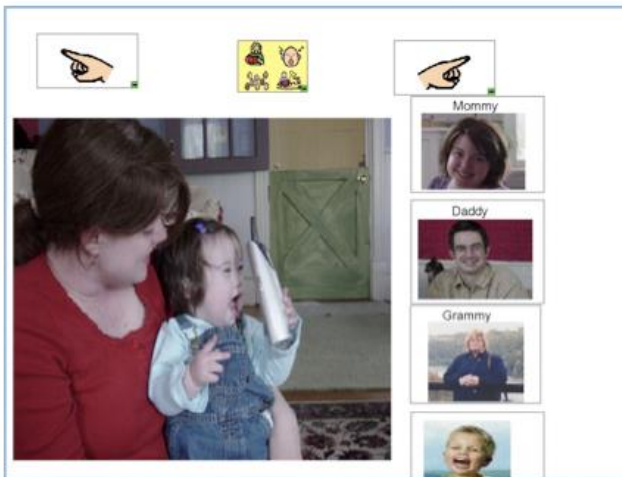

Scene Speak

Dynavox

TouchChat

Scene Speak

VSDs can be used to enhance communication on either low-tech boards or high tech devices. On high tech devices, 'hotspots' can be programmed so when the user touches certain parts of a picture or photo, they share messages about a particular part of the image. For example, a person might touch a sibling on a picture of their family (on her tablet device) to say "This is my sister Gina", or a child might use a printed out photo of their classroom with squares around it to talk about different activities they do at school, such as "I like doing maths on the computer".
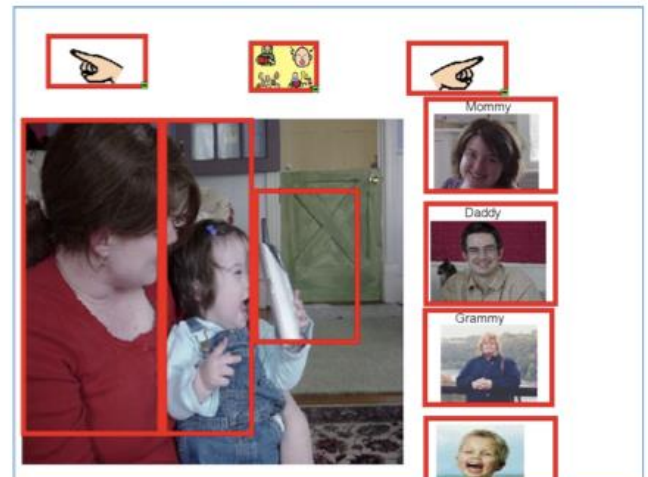
VSDs offer an easy way to capture and communicate about meaningful events in the AAC user's life. Visual scene displays can represent either:

A generic context: E.g. a picture of a row of shops, an office or a classroom.

A personalised context: E.g. a photo of a child playing at their neighbourhood playground, or of the child's family playing at the beach while on their recent holiday.

This is a screenshot of Lili's computer screen with a hybrid display as it appears when she's playing a telephone game.

In this screenshot, the red rectangles illustrate the hotspots that were programmed into the scene. In addition, the display now has some concepts in a grid layout. Lili could touch the hotspot of the phone to speak out the word "phone" and the sound of the ringing phone; or she could touch the picture of the little boy laughing to speak out "That's funny" and the sound effect of a child giggling.

(http://aackids.psu.edu/index.php/page/show/id/5/index.html)

Who can benefit from using visual scene displays?

Research has shown that these displays can be particularly useful and effective for emergent communicators, and those with significant cognitive and/or linguistic difficulties. They have been used most often in the documented literature with children on the autism spectrum, young children with complex communication needs, and adults with acquired language disorders such as aphasia. They can, however, be beneficial for a variety of people with communication disorders.
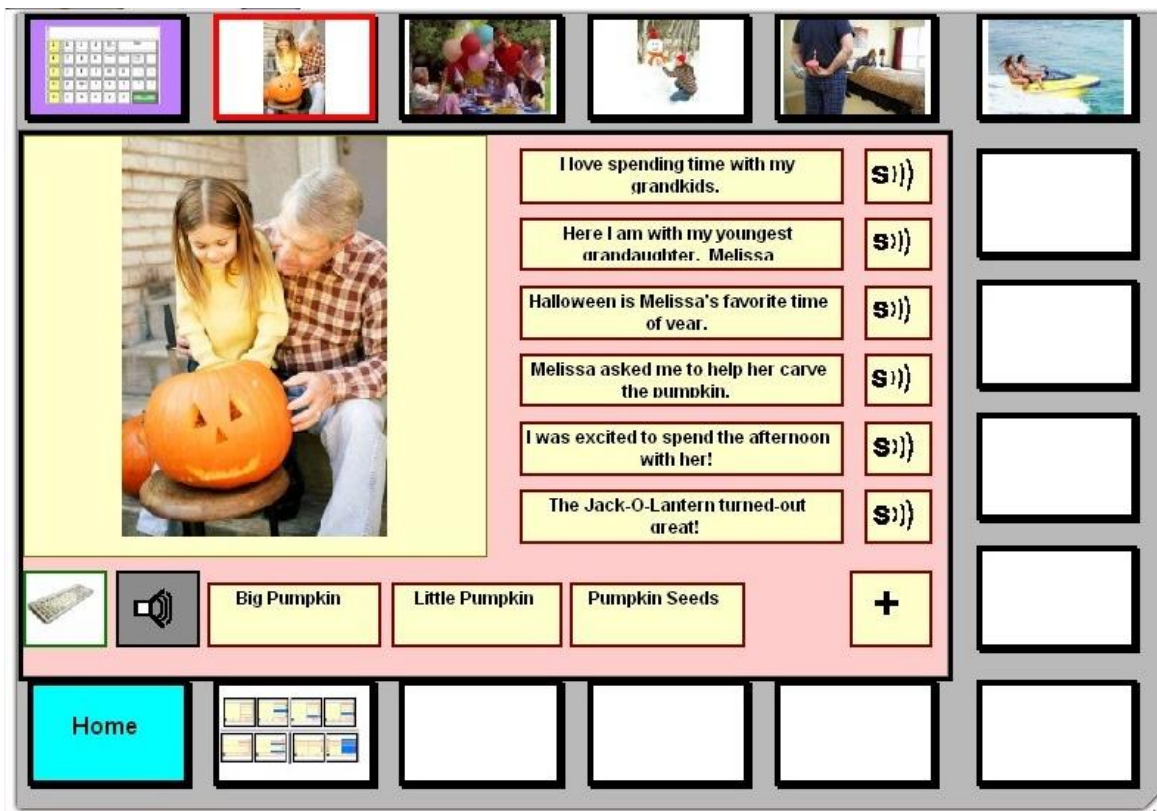
What are the benefits of visual scene displays?

- VSDs are easy and accessible to use, with communication skills being intuitive to learn.
- They are visually appealing, particularly for young children.
- They provide a high level of visual contextual information. This enables:
    - the AAC user to easily relate to the conversation topic
    - a facilitative context for the communication partner to repair any communication breakdowns, and
    - overall increased social interaction
- They reduce cognitive demand on the AAC user (as they do not need to learn the meaning of individual symbols), making learning how to communicate easier, quicker, and offer the user immediate communicative success.
- They can be a time efficient way for an AAC user to share a large amount of information about an event or topic, without having to construct sentences and navigate through multiple pages.
- VSDs shift the focus away from expressing basic wants and needs toward communication that is more social, such as the exchange of ideas and information about personal stories.
- VSDs can help with receptive language (For example, a parent pointing to a scene of a playground and saying "We're going to the playground now!").
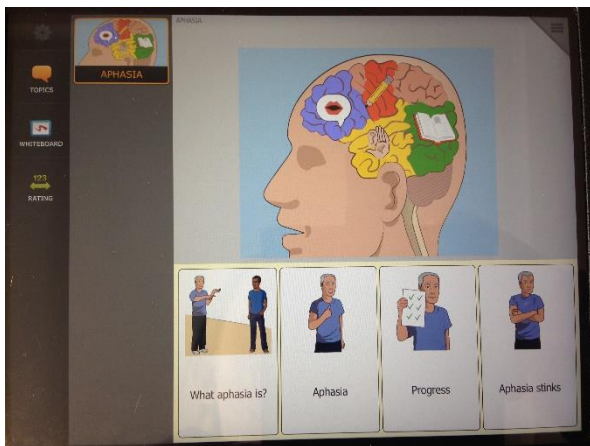- VSDs can be highly personalised, which is motivating!

Some ideas on how to use visual scene displays (VSDs)

- ❖ Use pictures of family holidays with comments in boxes around the picture to share at circle time in school.
- ❖ Use a picture of the person completing a daily routine such as brushing their teeth to support independence.
- ❖ Use pictures of fun school outings to share with family, e.g. a picture of an outing to the recycling centre and then boxes saying 'we went on a class trip to the recycling centre', 'we got to sort the recycling' 'I had fun with my friends' etc.
- ❖ Use a picture of a child's new classroom or a person's new house to prepare them for transitions, and explain aspects of that transition to them (E.g. "My new teacher's name is Mrs Smith").
- ❖ Use an image of the persons' favourite movie/cartoon/hobby as a way of sharing what they like.
- ❖ For adult AAC users, images or pictures depicting what the person does or did for a living as a way of sharing that information with others, e.g. a picture of their wedding day with boxes saying who the people are, date of the wedding, what they did, something they loved about the day, OR a picture of their previous work place with boxes saying what their job was, why they loved it, how they got into that line of work, how long they worked there, etc.

Remember: Where possible, involve the AAC user in deciding what scenes they want to have and share (particularly for adults with acquired communication disorders). If using high tech they could take the photo on their device. If using low tech, they could choose a photo out of a few different options.

Dynavox

Each of the buttons below the picture can be programmed to describe aspects of the condition when pressed Eg " I can understand what you say even though speaking is difficult", "Aphasia is a language disorder that is common when people have a stroke".

Compass

Limitations and other things to consider

While VSDs can be a useful communication tool, there are some things to consider:
- The language they offer is often simple, which can be limiting for the AAC user. So make sure you are using a robust communication system alongside this, e.g. a core board, PODD book or high tech communication system.
- Once programmed, the language can become stagnant and/or inflexible. So make sure that you add new stories often. You could ask the AAC user if they want to 'overwrite' a story or just add a new one.
- They can limit the user to a subset of predetermined topics or ideas, most often decided by the communication partner or the person programming the device/making the resource.

The ultimate goal for AAC users is that they have access to language that allows them to say whatever they want to say, whenever they want to say it. This requires a complete language system, including core vocabulary, which cannot be met with VSDs alone. VSDs must therefore be part of an AAC toolkit.

VSDs are now an integrated feature of many communication apps and high tech communication devices, making them easily accessible for many AAC users. Some apps that include VSD displays are TouchChat, ChatAble, Scene Speak, Scene & Heard and Compass.

References

Get Real with Visual Scene Displays. Jeanne Tuthill, *The ASHA Leader,* June 2014, Vol. 19, 34-35
Augmentative Communication News, August 2004, Vol. 16, no. 2
Designing Effective Visual Scene Displays for Young Children, Light et. al., Seminar presented at ASHA Nov 2010
Visual Scene Displays (VSD): New AAC Interfaces for Persons with Aphasia. Aimee Dietz, Miechelle McKelvey, and David R. Beukelman. *Perspectives on Augmentative and Alternative Communication*, April 2006, Vol 15, 13-17

Further links and information

http://www.slideshare.net/Speccos/visual-scenes (Jane Farrall slideshow)
PrAACtical AAC website http://praacticalaac.org/tag/visual-scene-displays/
https://www.youtube.com/watch?v=O_H6ebRU8bo (Presentation by Beukelman et. al: AAC for Aphasia: Use of Visual Scene Displays)
How to create VSDs with highly relevant context https://cehs.unl.edu/documents/secd/aac/vsr/ASHA_VSDTrain.pdf

Created by Emilie Logan, Speech Language Therapist, 19th Jan 2018