



*Assistive and Instructional Technology
Supporting Learners with Disabilities*

ASSISTIVE TECHNOLOGY SUPPORTS FOR EARLY COMMUNICATION

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ASSISTIVE TECHNOLOGY SUPPORTS FOR EARLY COMMUNICATION

Augmentative and alternative communication (AAC) devices are AT tools that address the communication needs of a child. Infants and toddlers with disabilities use multiple ways to communicate. They are used in combination with other communication strategies such as gestures, baby signs, vocalizations and speech. As language develops AT, is customized to address the emerging abilities of young children at any stage. The early use of AAC devices has been shown to enhance a child's language development.

Prelinguistic Language Stage

- ❖ *Behavior as communicative attempt though gestures, reaching, pointing, touching, eye gaze*
- ❖ *Vocabulary through communication photographs + communication books*
- ❖ *Adult supported contextual language/communication opportunities*

The child...

- uses movement, vocalizations, and gestures to communicate (e.g. fussing, reaching, waving, shaking his/her head, baby signs, posture and body shifts, pays attention, etc.)
- hears and associates names of objects/people
- connects a picture, photo, or other symbol with object, person or activity
- learns contextual language within visual scenes
- uses picture or device to express intent

Single Message VOCA Devices:

Symbol/object on device linked to message

Recordable

- Recordable photograph frame
- Talking Brix (Ablenet)
- BIGmack, LITTLEmack Communicators (Ablenet)



LITTLEmack

Prelinguistic Apps:

- Everyday Things
- iCOMM

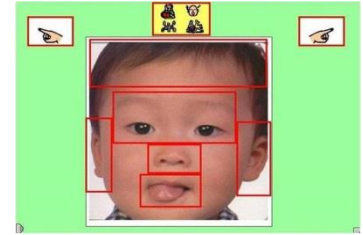


Everyday Things



Visual Scene Displays

Visual scene displays (VSD) portray events, people, actions, objects and activities against the backgrounds within which they occur or exist. These scenes are used as an interface to language and communication. Spoken messages can be embedded under red box 'hot spots' in the digitized photo.



VSD App:

- Scene and Heard

Emerging Language Stage

- ❖ *Clear communicative intent*
- ❖ *Natural expressive and social messages*
- ❖ *Make choices, requests, gets attention, greets, refuses, more/all done*
- ❖ *Increased contextual communication of role in routines/activities*
- ❖ *Messages expand from words to phrases and simple sentences*
- ❖ *Partner supported communication*

The child...

- continues to use gestures + behaviors
- uses a simple activity-based communication system with photos, pictures, symbols, and/ or line drawings
- expresses needs/wants from pictures/symbols displayed on boards, vests, frames, and albums
- participates in simple stories, rhymes and finger plays with sequential supports
- uses a grid display for choice making
- uses AAC devices with 1-8 recordable messages on a single level

Sequential Message VOCA Devices:

- BIG and LITTLE Step-by-Step Communicator (Ablenet)
- Big Talk, Small Talk sequencer (Enabling Devices)
- Partner Plus (Amdi)



Small Talk Sequencer

Dual Message VOCA Devices

- iTalk2 (Ablenet)
- Twin Talks (Enabling Devices)



iTalk2

Multiple Message Devices:

- Talkable 4 (Enabling Devices) with object holder and scanning
- PartnerPlus 4 (AMDI)
- SuperTalker 2,4,8, (Ablenet)
- GoTalk 4 (Attainment)



PartnerPlus

Emerging Language Apps:

- iCommunicate
- So Much 2 Say



iCommunicate

Developing Language Stage

- ❖ *Social interactions*
- ❖ *More complex sentence forms*
- ❖ *Tells events + narratives*
- ❖ *Expanding vocabulary*
- ❖ *Complex sentence forms*

The child...

- uses all natural methods of communication
- is becoming an independent communicator
- uses a variety of communication tools across situations
- applies core language across activities and situations
- wants more options for expressive vocabulary; fast mapping of language

VOCA Devices with more than 8 Choices and Multiple levels:

- GoTalk 9, 20, 32 with 5 levels (Attainment)
- QuickTalker 7, 12, 23 (Ablenet)
- Tech/Talk 8 (Amdi)
- Tech Scan (AMDI)



QuickTalker12

Developing Language Apps

- Go Talk Now
- Speak for Yourself
- Proloquo2Go



Speak for Yourself

Features to Consider:

Symbol:

- object
- photo
- picture library
- line drawing

Display:

- symbol size
- number of symbols _____
- layout
- surface
- levels _____

Access:

- direct selection; pointing
- switch scanning
- eye gaze

Output:

- visual only
- visual + text
- recorded
- speech generated (TTS)
- multiple messages
- sequential messages

Other considerations:

- activate toy/other device
- mounting
- switch selection

Let's Participate!
1825 Connecticut Ave., NW
Washington, DC 20009
letsparticipate@fhi360.org
www.letsparticipate.org

