



Augmentative and Alternative Communication for Persons with Aphasia (Review)

Articles at a Glance · Pathways for Aphasia

Hux, K., Beukelman, D., & Garrett K. (1994). Augmentative and Alternative Communication for Persons with Aphasia. *Language Intervention Strategies in Adult Aphasia*. (3rd ed., 675-687) Baltimore: Lippencott, Williams, & Wilkins.

Background Information

- Understanding the components of a conversation (specifically the forms of conversation of elderly adults) is important because most stroke survivors are over the age of 60. Since aphasia may affect their ability to engage in some or all segments of a conversation, it significantly impacts social interactions.
- Typical conversations consist of the following elements:
 - 1) **Greetings:** A conversation usually begins with a brief, generic message to indicate awareness of the other person, gain attention, and/or encourage engagement into a conversation. The types of greetings may vary depending on the age of the individual. For example, an adult may say “Hello. How are you feeling today?” and a teenager may say “Hey! What’s up?”
 - 2) **Small Talk:** Following a greeting, individuals may exchange a brief message that requests or shares information about either participant, such as “What do you think of the weather?” or “How was your weekend?” Individuals may use small talk with a variety of communication partners because it is non-specific, compared to “individual-specific” exchanges such as “How is your hip?” In addition, small talk serves to extend greetings into further conversation.
 - 3) **Information Sharing:** Question-and-answer and storytelling tend to be the most common forms of information sharing. Question-and-answer serves to engage topics of mutual interest for the participants. Storytelling serves the purpose of instruction, entertainment, transfer of cultural traditions, and

establishing relationships. Storytelling may occur as stories that:

- Occurred to the speaker personally (first person).
- The speaker learned from a source like the news (second person).
- Are used to teach lessons or highlight specific points (official stories).
- Are made up by the speaker (fantasy stories).

4) **Wrap-up and Farewell Statements:** Wrap-up statements precede a farewell statement to prepare a person for the end of the conversation. A wrap-up statement could be “Nice talking with you, we should talk soon” and a farewell statement may be “See you later” or “Goodbye.”

- Research shows that communication patterns in elderly adults indicate the following:
 - 1) Small talk may slightly decrease, but storytelling and narratives increase.
 - 2) Storytelling serves to “establish social membership with peers” with the bond of “common experience” (e.g., discussing participation in WWII).
 - 3) References to the past occur just as often as references to the present.
 - 4) Many utterances are activity-specific, such as games or game playing.
- Research indicates that AAC may be:
 - 1) Viewed primarily as a replacement for natural speech.
 - 2) Introduced only at the end of intervention when it appears that a restoration of natural speech is not achievable.
 - 3) Provided only for individuals with severe or profound aphasia.
- Typical conversations consist of the following elements:
 - 1) **Mild Aphasia:** Although individuals in this category may primarily rely on natural speech, communication breakdowns secondary to anomia or word finding difficulties may still occur. Word lists may help to facilitate word retrieval or scaffold natural speech.
 - 2) **Moderate Aphasia:** In this category, the degree of language impairment limits the effectiveness and success of communicating daily needs. AAC strategies and techniques may serve to either supplement or replace natural speech as well as the ability to convey more complex (longer) messages or topics.

- 3) **Severe Aphasia:** At this level, natural speech is significantly compromised, and individuals may rely heavily on AAC strategies and techniques to communicate. The ability to initiate or carry out a specific technique varies and may require additional support from a communication partner to be successful.
- 4) **Receptive Impairment:** If an individual has a significant impairment in the ability to understand others, AAC strategies and techniques would serve to augment or support comprehension. In this case, communication partners facilitate comprehension using AAC techniques such as drawing, writing key words, or using a rating scale.

Key Findings

- The authors suggest that when Speech-Language Pathologists view AAC as only a replacement for natural speech, it may not be introduced until the end of intervention. This leaves little time for training or practicing AAC strategies/techniques, subsequently rendering AAC ineffective, unsuccessful, and/or unaccepted.
- The use of specific AAC techniques varies with the severity of the aphasia, the situation or environment, the familiarity of the communication partner, or the amount of assistance the PWA may need from the communication partner.

Note: In this summary, we do not discuss the entirety of the chapter's content. Rather, we highlight the main concepts that influence the development of the Tobii Dynavox Aphasia Pages.

- 1) **Written Choice:** During conversation, the communication partner may ask a question related to the topic and write down possible answers. The communication partner says each choice aloud and the PWA points to the choice that indicates their response. This continues throughout the conversation and the number of choices may vary with the aphasia severity (e.g., only two choices for a person with severe expressive and receptive aphasia). This strategy supports the idea that conversation improves when PWA use multiple modalities, such as speech and written choice. Rating scales are another variation of written choice.
- 2) **Rating Scales:** Rating scales provide a way for a PWA to express an opinion by assigning a value, like taking a poll or survey. For example, a rating scale may be a range of numbers, 1-5 with 1 being very important and 5 being not important. Or the scale may be labeled with a range of words: "always, sometimes, never" or "bad to good." "Even individuals with severe expressive

aphasia may understand the notion of rating scales and find them an effective means of conveying opinions” (p. 685).

- 3) **Drawing for Expression:** In this technique, the PWA uses simple drawings like a map to supplement natural speech. The drawing helps to guide the conversation by establishing the topic, adding details to clarify or extend the topic, or repairing a communication breakdown.
- 4) **Partner Drawing:** In this technique, the communication partner uses simple drawings to supplement their speech and facilitate comprehension. Additionally, both the PWA and communication partner can continue to add to the drawing to enhance or clarify the intended message or topic.
- 5) **Alphabet Board:** The PWA can use the alphabet board to supplement communication, pointing to the first letter, first several letters, or the letters for an entire word.
- 6) **Word Dictionary:** A word dictionary may be a list of words that the PWA has difficulty saying or lists of words in categories that he/she can use to self-cue, supplement speech, or clarify/ extend the conversation or topic.
- 7) **Picture/Photo Directory:** This strategy is like the word dictionary but uses symbols (icons) or photos to represent words or messages. A picture dictionary may be modified to fit the aphasia severity. For example, an individual with mild aphasia may use it if they have difficulty reading to self-cue, while an individual with severe aphasia may use it to communicate needs, greetings, and basic information or ideas.
- 8) **Communication Devices:** Communication devices provide a voice output option for both message retrieval and formulation. A single button can retrieve a word, phrase, or sentence for efficient communication. Each message is represented by a graphic symbol, photograph, word, or short phrase. Additionally, PWA may also create messages through access to an alphabet (spelling) or by combining words and/or phrases.

Applying the Findings with Tobii Dynavox Aphasia Pages

- **Topics:** Topics are used to support successful communication. The visual image may be used to trigger speech, clarify speech, or to access related messages to speak. Topics can be presented in either a visual scene or grid format.

- **Topic Words:** Topic Words can be used to trigger speech, assist in repairing speech, and/or serve as an alternative to speech.
- **Scripts:** Scripts are a series of messages that support communication in everyday situations. Scripts can be used to tell stories, share information back and forth, and as a cue for what to say verbally. Every Topic page includes a script that you can use immediately or customize. You can also add your own original script.
- **Whiteboard:** The Whiteboard is one of the most easily accessible and broadly applicable communicative tools. It provides a Shared Communication Space for both the PWA and the communication partner, enabling both individuals to increase their participation in and understanding of the conversational topic through interactive drawing. Individuals can store and retrieve previous drawings as a reference.
- **Rating Scale:** This tool supports Written Choice conversation as facilitated by the communication partner in a variety of conversations and settings, as well as providing access to a pain scale that is familiar to many of us.
- **Word Lists:** Word Lists are topical, with semantic categories (e.g., food, drink, transportation, actions, etc.) linked to the Toolbar. The PWA can use the Word Lists to produce single words within a topical interaction or to clarify/extend the current conversation topic or message. The Word Lists are customizable; they can be used with or without symbols and sorted either alphabetically or by favorites.
- **Keyboard:** The Keyboard can be QWERTY, alphabetical, or AEIOU. The PWA can use it to spell a word letter by letter or to self-cue or cue the communication partner to the first letter or letters of a word (like the alphabet board). If appropriate, an individual can use a Keyboard with Word Prediction that predicts a word as typed (with or without symbols).
- **QuickFires:** QuickFires are messages that allow quick interaction in any conversation, at any time and in any place (e.g., Yes, No, Wait, What? Good, Bad, OK, Help, etc.). Individuals can edit QuickFires and remove any phrases they do not want to use.
- **Photo Album and Camera:** Both tools take and store photos of remnants (e.g., ticket, brochures, menus, daily or special events, etc.) for use as Topic Pictures, photo albums, or pictures on buttons. This supports topic initiation, storytelling, and advanced AAC strategies.

Copyright notification: User may not copy or distribute these materials except for use with the students, patients, clients, or other individuals who receive instruction, therapy, supervision, assessment, care or other services directly from the User. Otherwise, these materials may not be copied without the written consent of Tobii Dynavox.