

Empowering fathers to be fathers with voice email

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Participants' language profiles

	WAB AQ & Classification	
JD	AQ, 66.5 Broca's aphasia	Spontaneous verbal production is variable and characterized by single words and utterances, which range from short telegraphic utterances to more fluent, well inflected grammatical sentences. There are verbal and literal paraphasias but overall intelligibility is fair-good and given time, he is often able to correct and verbally communicate his messages effectively. Comprehension is within functional limits.
KSC	AQ=62 Broca's Aphasia	Verbal production is limited to single words and short phrases. Intelligibility is poor due to moderate apraxia of speech. He is able to follow conversations with little need for repetition but requires simplified instructions and repetition when learning new tasks. He is a "partner dependent communicator" (Garrett & Lasker, 2005), i.e., he requires cueing or assistance to utilize strategies in addition to or other than speech.
KSO	AQ=79.2 Anomia	Verbal production is characterized by short phrases and sentences, with frequent pauses, revisions and repairs due to significant word retrieval difficulties. Connected speech is marked by omission of inflections and morphological errors. Comprehension is relatively intact. He is an "independent communicator" (Garrett & Lasker, 2005), i.e., he can access and utilize strategies to support communication independently. He often writes single words and/or looks up information on his computer or other devices to support conversations.
LH	AQ=41.1 Moderate-severe Broca's Aphasia	Spontaneous verbal production is characterized by a few single words and stereotypic phrases largely devoid of content words (<i>Well, here is your (gesture)</i>) He supplements his verbal responses with gestures and messages from his speech-generating device (Lingraphica). Single word production can be facilitated by printed word cues, initial phoneme cues and repetition. Auditory comprehension is considerably stronger than verbal production and he is able to answer simple yes/no questions and follow simple directions. LH is 78 years old and 10 years post

		onset. He is a “partner dependent” communicator “, though he is able to independently initiate the use of strategies with increasingly frequency.
TM	AQ=22.4 Severe Broca’s aphasia	Spontaneous speech is limited to “yes”, “no”, “ok” and an occasional stereotypic response. Repetition is at the single word level and often requires multiple visual/auditory models to achieve an intelligible approximation of the target word. Auditory comprehension is considerably stronger than verbal production. He is able to answer yes/no questions and follow simple commands when asked questions directly. Comprehension decreases when multiple people are speaking or if the pace of conversation increases. Comprehension is enhanced when questions are repeated or rephrased. TM is a 78 yr old man who is 6 ½ years post onset. He lives with spouse and would be considered a “partner dependent communicator”.
WP	AQ= 48.9 Broca’s Aphasia	Verbal production characterized by stereotypic phrases (e.g., <i>I can do it, but it’s hard</i>) and single word utterances. His auditory comprehension is significantly impaired. He has difficulty understanding complex yes/no questions and following commands. He is a “partner-dependent communicator”.

Results of satisfaction survey (***) indicates that participant did not respond to question)

QUESTION	JD	KSC	KSO	LH	TM	WP
How much did your family member enjoy getting emails from you?	3.5	4	4	4	4	***
How much did you like working with a helper?	4	4	4	4	3	4
How much did you like adding your own photos?	4	4	3.5	4	4	3.5
How much do you like hearing the emails in your own voice?	3.5	4	2	4	3	3.5
How much did you enjoy creating emails with SentenceShaper?	4	3.5	3.5	3	3	3
How much would you like continue creating email messages to send to family and friends using SentenceShaper?	4	2.5	4	4	2	3
How comfortable do you feel talking to your family member on the telephone (without SentenceShaper)?	2	***	.5	1	4	4

Levels of support

LIGHT	Helper occasionally reminded user to replay Sentence Row or to use word-finding tools, and made topic suggestions; very rarely provided actual words. Helper assisted with downloading photos using voice search. User began inserting photos and emailing videos on his own.
MEDIUM	Helper and user jointly created a script using supported conversation techniques, and helper sometimes wrote down key words. Helper inserted photos. User has gradually moved toward greater independence in sentence creation.
HEAVY	Helper, wife, and user jointly created a script using supported conversation techniques. Helper provided various kinds of support (cloze completion, lip cues, written text) to support user in recording each word separately. Helper inserted photos and created/sent videos.

Complete set of comments received from users and family members

Note: Because members come to SCALE independently, we were able to interview only one SCALE participant’s family member.

JD	[WIFE] “I was thrilled to receive a personal 2015 Happy Valentine Day greeting from my husband in his own voice using words pieced together into full sentences with the Sentence Shaper program. I had not received a Valentine Day greeting from him since 2005 (prior to his October 2005 stroke). SentenceShaper e-mails have opened up a whole new line of communication for him.” [MOTHER-IN-LAW] “To hear his voice brought a lump into my throat and I felt my heart pounding in my chest. It has been such a long time since I heard John say so many words all at once.”
KSO	[DAUGHTER] “It’s pretty amazing when I receive a message that my Dad created using this technology. I get to hear all the things he wants to say to me- things he can’t say over the phone. I was kind of surprised the first time I received a message. When I hear about the technology that he is using at SCALE and then when I actually ‘see’ how it helps him, it was overwhelming. On the phone, our conversations go something like this, ‘SCALE is good for me, home is good, how are you?’ I never really get to hear what he really wants to say to me, just what he can say in the moment.”
LH	[WIFE] “My older son was very happy to get [the emails]. He got a big kick out of it. Grandchildren especially liked hearing him speak in his own voice because he doesn’t speak much around them and they didn’t know him before his stroke”
TM	“I sent the video e-mails to some family members. Everyone wrote back that they loved the video and to keep up the good work. Tom smiled and looked happy. I know he enjoyed it and the family enjoyed it. If we could fit it in down the road we would continue. [Interviewer asked if she could envision herself creating the video messages with tom and she responded] He’s a lot more patient and cooperative when others do it with him.”