

Strategies for Using Voice Output Communication Devices With Children who are Deaf-Blind

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What is a voice output device?

A voice output device is an electronic device that “speaks” for a child. When activated by the push of a button or using an adapted system, the child can expressively communicate one or more messages. The messages are recorded specifically for that child, so that they are relevant to the child’s needs and environment. These devices are typically commercially produced by manufacturers in the field of augmentative communication systems. Voice output devices have been used successfully by many individuals with combined vision and hearing problems, and there are instances where the use of a voice output device has provided a child or young adult with their first true success at expressive communication using a formal system. The device becomes an important component of the child’s expressive communication system, along with other possible expressive modes such as speech, objects, signed communication, pictures, gestures, etc. The touch pads on these devices can have printed words, line drawings, photographs, textures, objects, or any combination of these to represent the contents of each recording.

What are some strategies to consider when using voice output devices?

The following are some strategies that may be helpful when using voice output devices. Throughout these strategies, the term “user” will be used to refer to the individual who uses the voice output device.

1. Give careful consideration when choosing the person who records the messages. When possible, choose someone of the same sex and near the same age of the user. For users who are hard of hearing and young, however, don’t choose a child who is so young and has a voice so soft that it will be difficult for the user to hear it.
2. Make certain that the person who records the voice isn’t someone known to the child. It can only truly be the user’s voice if the recorded voice is a neutral party. It isn’t likely that most users want parents, siblings, or teachers to be their voice, except in occasional situations when no one else is available and a message is needed on the spot.
3. Pay close attention to any slang or vernacular used in the age group of the child, the use of which will give warmth and personality to the child’s communication.
4. It is extremely important that the device never “speaks” if the user isn’t the one who has pushed a button to make it speak. It is very confusing to a user to hear his or her voice output device say something that he or she didn’t intend. For example, imagine a child sitting in his classroom and then hearing his voice

Fact sheets from California Deaf-Blind Services are to be used by both families and professionals serving individuals who are deaf-blind. The information applies to students 0–22 years of age. The purpose of the fact sheet is to give general information on a specific topic. More specific information for an individual student can be provided through individualized technical assistance available from CDBS. The fact sheet is a starting point for further information.

output device from across the room say “I’m thirsty; I want some juice please”. The child’s reaction may be to think, “Wait, I never said I want juice—I’m happily involved in an activity right now!” If a service provider or family member needs to test the device, check its power, etc., the device should briefly be taken somewhere where the user won’t hear the voice activated by others.

5. The user must have access to the device at all times. Opportunities for communication occur throughout the entire day. For some users, having a voice output device might provide them with their first real success at formal expressive communication and, while temporarily relishing the newfound power and control over their environment, they may activate a message over and over. In these instances, we might be tempted to put the voice output device on a shelf out of reach of the user, but we can’t do this. Taking a user’s voice output device away because it is annoying to us would be like taping a verbal child’s mouth closed because the child says the same thing over and over throughout the day; instead, think of these situations as great teachable moments to reinforce the use of schedule/calendar systems, and explain to the user that while it may not be the appropriate time to do whatever it is the user wants, there may be an opportunity later in the user’s schedule.
6. Children are naturally curious, and the classmates and/or siblings of the child with the device will probably want to touch, play with, and explore the device when it is first introduced to the classroom and/or home. In fact, there are some children who simply will not think about anything else until they have had a chance to touch the device. To satisfy their curiosity, give these children an opportunity to play with the device, perhaps during a morning circle activity or for a half-day in small groups. Make sure that the user is either a direct part of this or out of hearing and vision range to know its happening. After this activity, the other children can be told that they have had their opportunity, and they are never again allowed to push a button to make the device speak. Of course, if they’re assisting the user to use the device effectively, that is another matter—we want to encourage natural peer supports whenever possible.
7. It will be necessary to teach the user how to use the device, but this instruction must be conducted in the context of naturally occurring, meaningful activities. It will be confusing to the user if he or she is expected to participate in drill activities in which the device is used purely for instruction.
8. When choosing the phrases/messages that will be included on the device, try to consider meeting everyone’s needs, including the users. For instance, if a device only has nine possible phrases, it may be tempting to fill all nine with phrases that make life easier for caregivers and service providers, such as “I need to use the restroom”. If the user has a particular interest, e.g., a favorite pet, a hobby, a collection, family members, a favorite place or activity, consider including a message or messages about these interests. Similarly, think about the user’s age, and what other children at that same age are interested in. Be sure to include some of these interests on the device as well. This will give the user something to use as an icebreaker or conversation starter with peers.
9. For users who do not have enough residual hearing to hear what the device says, the team may want to adapt the device with a signal (light or vibrator) that lets the user know the device has “spoken” effectively. For example, it would be frustrating and counter-productive for a user to think their device has “spoken” when in fact the device’s battery is dead. In this case, the user would be waiting for a response from their communication partner, and be confused by this lack of response.