

Communication Considerations

This section is for students who have physical disabilities and who have unintelligible speech (e.g., dysarthric speech) or no speech. When this occurs, it is important to provide alternate means for the student to communicate with others.

Determining the Reliable Means of Response

If the student does not have understandable speech, it will be important to determine how the student will answer questions in order to teach and promote literacy skills. One way to determine this is to list the various ways the student can respond. This may be by:

- using a yes/no system (e.g., gestures, symbols);
- directly selecting an answer out of an array of choices (e.g., by pointing with finger, pointing with foot, eye gaze, headstick, mouthstick, pointer, or electronic means);
- using auditory scanning (in which the student is provided with spoken choices and the student makes a motor movement or vocalization upon hearing the item the student wants to select);
- using visual scanning (in which the student indicates a correct answer when provided with written choices);
- using the student's AAC system via direct select or scanning (or encoding).

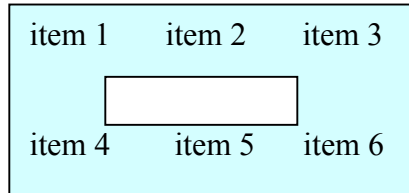
Even when a student has an AAC system, it does not mean that the student has learned to use it well or can access it reliably. It is important to select the most reliable means of response. A **reliable means of response (RMR)** is the most motorically accurate response that is also the most consistent each time it is used. Ideally, the RMR is also the response that: is least fatiguing, uses isolated movements (e.g., entire body does not move), and can be accessed visually as well as motorically.

When assessing what a student knows (e.g., spelling words), it is important to use the reliable means of response since an error would indicate a learning error, not that the student could not motorically answer correctly.

For some students, eye gazing the desired item or answer may be the most reliable means of response. The teacher may hold up items for the student to make a selection by eye gazing at his or her answer, or the teacher may use an eyegaze board (on which objects, symbols, or words may be placed). See the following box for more information.

HINT: Using an eyegaze board (E-Tran Board)

An eyegaze board should be constructed of see-through material, such as Plexiglas. Usually a hole is cut out of the middle to reduce glare and to make it more personal (so that a piece of Plexiglas is not in the student's face.) Items are attached (e.g., velcro, tape) around the sides of the eyegaze board. Sometimes rectangles of erasable white board material will be put along the edges to allow the teacher to quickly write the choices. The example below has an arrangement of 6 items.



Note: Eyegaze boards are usually clear, not blue tinged. Color was added to more clearly show the board with a hole in the center.

The number of items and arrangement will depend upon the student, the size of the board, and the size of the material. Items may be letters, vocabulary words, pictures, or whatever is being taught. The board is held in front of the student with the teacher looking through the hole in the middle of the board at the student's eyes.

Students are taught to

- 1) look at the items (they often need to look at each one)
- 2) look at the desired item
- 3) look at the teacher

The teacher knows that the last item the student looked at before looking back at her/him, was the selected item. It is important to have the student look back at the teacher, otherwise it is difficult to know when the student has made a selection, since the student may spend some time looking at the choices (e.g., sounding out the words to himself to determine the correct answer). Teacher may also verify the student's choice (Ex. As teacher points to item and asks "Is this the one you chose?")

AAC Use to Promote Literacy

A close examination of the student's AAC system, will help determine its usefulness in instruction and if it can be used to promote literacy. Background information regarding how the student accesses the system, the type of symbols, and accuracy with the device will be useful to document in order to observe changes over time. Also whether the AAC system fits the current needs (e.g., it is too simplistic or complicated at this time) is important to note and sets the stage for future consideration regarding any changes. How long it takes the student to accurately access a symbol is important and will help determine if this will be the best way to ask questions and obtain responses during literacy instruction. (For example, if the student takes an average of 35 seconds to touch each letter/word/symbol, during instruction, eyegazing a response may be quicker and less fatiguing.)

Academic messages supporting literacy. If the student has an AAC device, it will be important that it contains sufficient messages to support literacy instruction. For example, does the device have messages such as "I don't know", "please repeat", "let's sound it out", "I don't understand the meaning", "my turn", "read it again", "help me get my book", or "I want to write on the computer"? The exact messages will depend upon the age of the student, the ability of the student, and what is being done during literacy instruction. Some of the main questions to ask regarding the use of the AAC system during literacy instruction are:

- Can the student answer and ask questions regarding reading and writing using their current AAC system?
- Can the AAC system be used to construct reading or picture pages to support vocabulary instruction?
- Can the AAC system be used to write or spell?
- Does the AAC system hook up to the computer for computer access?

If the AAC system cannot be used in the above manner, the AAC system should be modified or alternate methods need to be provided.

Symbol Support

Whether or not a student has an AAC system, he or she may still use symbols to support reading and writing. Here are a few suggestions:

1) Beginning reading and writing with symbols

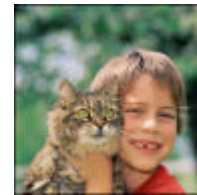
Pair the words with symbols. All of the words may be paired or just selected words. For example, in patterned/predictable words, the student may participate by selecting the repeating word, which is paired with a symbol. There are several software programs that provide symbols with written words. Writing with Symbols by Mayer-Johnson (www.mayer-johnson.com) is one example of this type of software.

2) Learning word and slowly fade the symbol

Symbols may be used as a strategy to assist in learning its corresponding written word. In this strategy it is important that the written word be large enough to see in addition to its corresponding symbol. The symbol and written word are paired. Slowly, the picture is systematically reduced until it is removed and student can read the desired word without the symbol.

3) Comprehension

Student may read a written passage (that has only written words), then point to the symbol(s) the passage describes. This can be done very simply in which the student reads “She pet the dog” and pictures of a boy feeding a dog, a girl petting a dog, a boy looking at a dog, and a boy holding a cat are shown and the student must select the correct picture.



For an advanced student who has learned the symbols that correspond to all written words, the student may read the sentence “She is eating the cookie that she found in the bag”, and match pictures that corresponds to each word (as well as tense ending “-ing”). If the teacher is unable to hear the student speak, having the student point to corresponding pictures is one way to ascertain if the student read and comprehended the sentence.

4) Picture Dictionary

Words may be paired with their symbols in a separate binder for reference to aid in comprehension. When a student is unsure of a word meaning, the student may look up the word in the picture dictionary.