An excerpt from:

Chapter 14. Where Do We Go From Here? PROMOTING PROGRESS

When the daily data show that the individual has achieved the current learning goals, we don't rest on our laurels, we decide what to do next to promote continued progress. There are seven major changes that you can make that will promote progress in tangible symbols acquisition. These are described below in the approximate order of importance.

Expand Vocabulary

It is essential to increase the learner's vocabulary as rapidly as possible, so that she is able to communicate about as many aspects of her environment as possible. Therefore, the first and most important change is to **expand the learner's vocabulary**. As soon as the individual has acquired one set of symbols, introduce more. There are an infinite number of referents or topics about which an individual can communicate using tangible symbols. Ongoing preference probes will enable you to keep up with the need to add new vocabulary.

Increase Size of Array

Gradually increase the number of symbols available to the learner in the symbol array. The more vocabulary presented to the learner at one time the more efficiently he will be able to communicate. Also, the learner will be less dependent on the communication partner for deciding what symbols should be in an array. For some learners, the size of the array may be restricted by limited motor abilities. For example you may remember Katie's case study from the

videotape. She is a child with restricted trunk control who uses eye pointing as an indicating response. She is able to turn and look at the symbols in a way that is readable, to the left, midline and right with the symbols spaced 10" apart. The limit of her array size is three for now. For another student without sight, symbols spaced too close together presented a problem in his ability to tactually scan and discern one symbol from another. This limited the size of his array. The size of the individual symbols will also influence how many may fit into a single array.

Generalization

Generalization of behavior does not occur spontaneously for many tangible symbol users, but must be systematically targeted through instruction. Once a learner understands how to use a set of symbols under carefully controlled conditions, show her that the symbols can also be used in other settings, such as at home, in the community, with other people, and at other times of the day. Generalization is also necessary for the sake of consistency. Take the situation where certain materials are used in a variety of contexts throughout the day. It might be confusing to the learner and counterproductive to require that he use tangible symbols to request those materials if he can get them at other times without having to use the symbols. Therefore, the expectation should be the same in all contexts, namely that access to those items is accomplished through the use of the tangible symbols.

New Functions

Once learners have become adept at making requests, show them how to use symbols for other communicative purposes, such as labeling or making comments. Although being able to obtain things that are desired is likely the single most important communicative function, there are other important reasons for communicating which broaden the user's options for interaction.

Sometimes it helps to teach the learner to use a different indicating response to express new functions. For example, some learners will touch the symbol for the referent they want to comment about, while they pick up and give symbols for things they are requesting. For learners who are able to combine symbols into a single utterance, requests may be naturally distinguished from other functions because they are preceded by a symbol for "want" or "I" + "want"

Multi-symbol utterances

It is possible to chain tangible symbols together into simple phrases, just as it is possible to chain words together.   "Want" is usually one of the first symbols to be incorporated into multi-symbol utterances. In cases where the user points to or touches symbols that are fixed on the array, symbols for " want" or "I" + "want", can be added to the permanent display. Often the learner at this stage has her communication system in a book, with a page or more for each context of the daily routine. Generic vocabulary such as "want", "more", "finished" will be placed on the facing page for each context's vocabulary. If symbols are removable (as in the case where the learner uses a pick up and give response) a "want card" may be used. In this instance, the learner selects the symbol for the desired item, removes it from the array, places it on the "want card" and hands it to his partner.

Portability

Tangible symbols must be available whenever they might be needed. If a learner doesn't have constant access to her symbols, she will not be able to communicate at will. Unfortunately some symbols may be large or difficult to carry from site to site. Once a learner understands how to use one type of symbol, think about how to make the symbols more portable by making them smaller, lighter, or placing them in a permanent array such as a book that can be easily carried.

Portability should also encourage use of the symbols in more settings, including the general community. If the meaning of a symbol is not immediately obvious to strangers in a new setting, then a printed label should be added for each symbol so that anyone can understand them.

Change the Type of Symbol

The last area for change is the type of symbol--or the level of representation. Although you may probe this variable initially before discovering what is the most appropriate level of representation to start with (see Tangible Symbols Pre-Test), this is usually the last variable to change after the initial pre-test. It is more important to teach a learner to communicate competently and as spontaneously as possible with a large vocabulary that is really meaningful, than to spend valuable time and energy trying to teach the use of more abstract symbols. Sometimes a learner will show the need and readiness for a more abstract type of symbol even as an initial system is being developed. In such instances we would respond by introducing the appropriate abstract type of symbol (see Damien's case study)

Once an individual is ready to learn a new type of symbol (periodic probes will help gauge this readiness), you want to move to a level of representation that is more abstract, more conventional, and/or more portable. All of these qualifications make a symbol system more likely to be accepted and used by the people in the learner's environment. Our research has shown repeatedly that the acquisition of one type of tangible symbol is likely to serve as a bridge to more abstract types of tangible symbols and sometimes even to abstract symbols such as speech, manual signs or printed words (Rowland & Schweigert, 2000).