<h1 style="text-align:center">Sign Language Recommendation Information</h1>

Talking and signing are almost identical forms of verbal behavior for the speaker but the picture exchange or symbol selection are quite different forms of communication. These differences in response forms may have a profound effect on the acquisition of verbal behavior by person with autism. Below is a diagram to illustrate their differences:

Topography Based (sign)	Selection Based (pointing, exchanging)
Different motor movement for each controlling relation. Example: the sign for candy requires a different topography (motor movement) than the sign for shoes.	The "speaker" makes virtually the same motor movement for each controlling relation (pointing, exchanging). Example: the mand (request) for candy requires the same topography (motor movement) as the mand for shoes.

This analysis leads to the observation that signing and talking are quite similar while selection-based systems share very few characteristics with talking.

- Recent research supports the superiority of sign compared to visual symbols in reducing problem behavior due the efficiency of the response.
- Research has shown that persons with developmental disabilities acquired topography based skills more quickly with fewer errors.
- Research suggests that children may develop vocal verbal behavior with both topography and selection based methods. However, it appears that different motor movements associated with each sign and the response product may facilitate the development of vocalizations. The unique motor movement associated with each sign may act as a built in prompt for the vocalization.
- When a person uses a selection based method, teaching tacts (labeling) becomes a matching task and not tacting. Teaching intraverbal behavior (conversation) skills cannot be taught because pictures act as prompts.

The advantages of sign are listed below:

- Requires one less level of discrimination (have motivation to speak, form response (sign))
- Person doesn't need to carry a device
- No pictures need to be present when you want to talk so opportunity to teach is always present
- Iconic nature may facilitate learning
- May lead to talking when mands (requests) are taught first
- Each word is felt differently when paired with the vocalizations
- Person can develop a full verbal behavior
- Sign provides an expressive system that may support the development of sophisticated receptive understanding (joint control)
- No equipment costs or maintenance

The **disadvantages of sign** are that the teacher needs to be trained to teach signing procedures and the listener has to have some understanding of sign.

The **advantages of Selection based** communication

- May lead to talking when mands are taught first
- Listener does not need any special training
- Teacher does not need any special training
- First responses may simply be match to sample

The **disadvantages of Selection** based communication

- Pictures become increasingly complex
- When language becomes complex, speed is slow and speaking becomes effortful using pictures
- Person needs pictures in order to talk
- Added level of discrimination to make selections (have motivation to speak, scan for response, find response, make selection)
- May be difficult to teach all functions of verbal behavior
- Can be costly and need repairs
- Requires training to set up and maintain system

Sign Language is taught using specific procedures in the VB project to ensure its success. Some specific procedures are as follows:

- First signs taught are mands (this increases the student's motivation to communicate (sign))
- First signs taught are not too complex. (please, yes/no, help, more, thank you)
- First signs taught do not closely resemble one another which reduces confusion
- First signs taught do not involve complex response forms
- Signs are taught to fluency
- Prompts are faded quickly so that spontaneous responses can occur
- Individual verbal operants are established (i.e. mands, tacts, intraverbals), so that responses are not multiply controlled.
- A progressive curriculum for teaching signs is developed
- Others are trained to use/understand the student's signs
- Signing is used outside of training in the student's natural environment
- Generalization to novel stimuli, staff, settings, times, etc. is taught

References that provide the research support for sign language are included below for your convenience.

Research Studies that Support the Use of Sign Language to Increase Vocal Responding. Barrera, R. D., Lobato-Barrera, D., & Sulzer-Azaroff, B. (1980).

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Effects of simultaneous communication in a child-directed treatment approach with preschoolers with severe disabilities. Augmentative and Alternative Communication, 4, 222 – 230. Linton, J.M. & Singh, N.N. (1984).

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