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AN OVERVIEW OF <u>SOME</u> EDUCATIONAL TECHNIQUES

TO USE DURING HIGH TEACHING TIMES

The following techniques are appropriate for many (not all) students with CVI. The techniques also may be appropriate, if individualized, for students and adults with TBI. **<u>Please Note:</u>** The word "student" is used because the author primarily works with school teams on behalf of individual students. It is hoped that many of the techniques will be equally helpful in working with adults.

- Control the type, intensity, and duration of sensory information. Students must be calm and alert before being able to orient for the purpose of learning. Keep your own arousal at an appropriate level. Clarify the sensory-motor demands of the task.

- Provide salient cues to bring structure and order to experiences
    - structure activities by time, place, and person
    - structure events within activities
    - use defined areas
    - space stimuli
    - use relevant color; avoid a kaleidoscope of colors that may be confusing.

- Manage novelty: Too little novelty is boring. Too much novelty is scary.

- Determine the intrinsic value of requested tasks to the student (person, objects, events). Make the experience fun for the student. Make yourself the source of pleasure.

- Precue the student. Surprises may be scary.

- Respect the student's tolerance (stimulation, timing). Proceed slowly. Use "*gentle insistence"* and enticement rather than coercion. Pay attention to the student's <u>autonomic nervous system</u>, <u>motor system</u> and <u>state system</u>.

- Introduce new experiences carefully. Choose activities and materials based on <u>*near-same*</u> to familiar activities and materials by
    - teaching a new way to use a familiar material
    - teaching how to use a new material but in a familiar manner
    - teaching in a non-threatening location with a known and trusted other
    - teaching in a social and interactive manner

- Alternate activities of high sensory-motor demand with activities of lower sensory-motor demands
- **Tactile Saliency**: Examine materials the student is asked to use for their tactile saliency. Many students with disabilities have reduced sensation and awareness in their hands. Enhance the materials through building up handles or padding. For example, magic markers with a thick wad of elastic bands may increase ease of holding and <u>awareness</u> of gripping.

- **Script nouns, verbs, and directives** so that everyone calls objects, people, activities, and motor patterns by the same vocal labels. Such consistency reduces confusion about what is referred to and reduces the sensory-motor processing load. The same is true of giving oral directives - especially during high teaching times. Plan *how* to give the directive in as few words as possible, give the directive, and give the directive one or two more times. Then be quiet while the student plans what to do and implements the necessary motor patterns. For example, decide if the directive for switch work will be ("Student, press switch" or "Student, push switch").

- Use a **written dictionary of terminology** for scripted nouns, verbs and common directives so there is consistency across people and environments. I suggest beginning with the vocal labels/manual signs/gestures the family uses at home.

- In working with some students, I suggest playing games where the student learns to *Ride the Adult's Hand* (called **hand-under-hand**). Begin by sliding your hands under the student's hands. Allow the student to become used to this sensation. Subsequently, start with simple motor patterns on the tray or tabletop so the student may learn to anticipate what the adult is doing. If the student's hands "fall off" the adult's hand, see what happens if the adult keeps their own hands in the location where contact was lost. Once co-active movement has been attained on the surface, see what happens if there is some "flying" in the air. This last step will take a long time to achieve. The activity is important so the student may learn scripted motor patterns (see # 5). However, the process may take a long time before some students learn what is expected. It also takes a long time for adults to learn how to move their own hands to a routine and to make the activity fun but educationally productive.

- Some activities that require fine motor skills benefit **from scripting aspects of motor movements**. The occupational therapist can be very helpful in examining fine motor tasks, determining which aspects would benefit from motor scripting, and helping staff learn the motor scripts to use with the student. Where possible, it is suggested that hand-over-hand be avoided and either a gentle wrist grip or a hand-under-hand technique be used (#4).

- **Personal Objects of Reference (POR) and Use of Ceremonies**:
  Some students with disabilities may find it difficult to distinguish between the varying involved school staff - especially since some staff provide services only one or two times/week. A POR is a specific object worn by a person to provide the student with a tangible means of knowing who is touching or working with him/her. Once the student makes the association between the POR and the specific person, then the non-speaking student also will have a way of asking for that person. For example, my vocal label is "Mary". My tangible label is identical wristbands made out of soft black/white yarn and shiny beads. I greet my students with a ceremony, which incorporates placing the bands on my wrist. I remind them many times throughout each activity who I am via my vocal label/manual sign and tangible bands (the bands are called "Mary"). I end the sessions with a closing ceremony of having the student *help* me take the wristbands off. Other people, who see the same students with as much frequency as I, have their own (but different) POR. It is particularly important that the prime person who is with the student in school have a POR.

- Learning to **use voice tones** to emphasize important words also is helpful. Frequently, too many words are used with students who have CVI. They, then, do not know what words are the most important to attend to and have a hard time

associating the words with what is occurring. Thus, cutting down on the number of words used and emphasizing certain words helps the student attend better to what is said. Frequently, the speech/language specialist is very helpful in teaching adults *how* to talk with emphasis without sounding sing-songy or infantile.

- **Pacing of activities** will be essential in order to respect the student's sensory motor processing needs and to avoid overtiring. It will take some students longer to understand the demands of a task and to plan and implement what needs to be done. To rush students who have CVI will teach the student nothing.

- **Task analyze activities** and set up **clear routines** to assist the student in seeing the important steps in each functional activity and reduce confusion. This is essential for many students in order to learn what is expected, to learn the motor aspects of the activity, and to better understand what they see. Simultaneously, consider the environment in which the routine is to be performed. For example, if eating is a difficulty activity, one that requires the student's concentration, then eating in a noisy cafeteria may be contraindicated.

- **Ceremonies**: Highlighting certain aspects of the student's day is an important part of learning for those with CVI. Ceremonies may help the student begin to anticipate what is to occur. Anticipation is an indicator of recognizing a routine and remembering it. It means that learning has occurred. In general, I suggest the use of ceremonies when the student arrives at school, whenever s/he is transitioned to working with another person, and when s/he leaves at the end of the day. Each person's ceremony is consistent unto themselves but different from service provider to service provider.

- **Touch Cues** : Many students with CVI are unable to predict what is going to happen to them - especially those students who have both hearing and visual handicaps. Things appear and disappear. They are touched and moved without warning. Touch cues are a way to give information about what is going to happen. Touch cues are signals placed on the person's body to give a specific message. When home and school coordinate the use of touch cues with certain activities, vocal labels and tangible objects, the student receives structured input through many channels if the action immediately follows the cues.

- **Object Communication** : The purpose for using object communication is to provide students who (a) have limited understanding and/or use of words (be they verbal or signed) and/or (b) limited understanding or use of visual symbolic representations (i.e., pictures, line drawings, etc) with an alternative form of communication. Objects, called *objects of reference,* may be used to represent activities, places, and people. The student uses these objects for obtaining information about the activities, people, and places, making choices, and/or telling others his/her message. A well planned object communication system may be transitioned into higher levels of symbolic use as the student is ready.

- **Schedule System**: A schedule system supports the development of communication, provides emotional support and power, and teaches abstract time concepts and vocabulary. A schedule provides a student with the security of knowing what is going to happen, allows for anticipation, and alerts for unexpected changes in the routine that may prove to be very stressful if they occur without notice. Although schedule systems typically are NOT choice systems, they allow a student to participate in decisions about the day's events, give the student something to talk

about, and provide a mutually understood topic for discussion. The schedule system can provide a clear way to represent the passage of time.

- **Sub-Schedules**: For those activities that have more than one event (e.g., physical therapy, circle/group meeting time, going to different locations within the school and then returning to the classroom), place *concrete or tangible word*[**] from schedule on a sub-schedule and use other concrete or tangible objects to show the sequence of events within the activity.

    Concrete or tangible words[**] The decision of whether to use *concrete &/or tangible words* rests entirely on the format most easily understood <u>by the student</u>.

- **Calendars, sequence cards, learning to make lists**

- **Choice-Making** : By and large, schedules and sub-schedules are not choice-making systems. Choices are built into activities. Thus, if it is time for breakfast, choices may be provided as to type of cereal and what to drink. But it is time for breakfast.

- **Accessibility** : For students who are non-ambulatory and have no expressive vocal language, their communication systems <u>must</u> be accessible to them just as vocal words are accessible to the speaking student. Such accessibility includes objects, object symbols, pictures, technology devices, etc.

- **Activity Sequence Set-ups** : This technique assists a student in visually and/or tactually understanding events that need to be performed in an activity. To implement this technique, sequence the materials that will be used in the activity in a left-to-right order and in a defined area (e.g., work tray, cookie sheet, or on placemat).

- **Motor-Friendly Materials** : If the student has physical challenges, be sure to adapt the materials to be as *motor-friendly* as possible. For example, a pump toothpaste container is easier to use than one that needs to be squeezed and a flat dish of paste is easier to use than a glue stick (which requires about 12 different motor steps).

- **Natural Packaging**: In all activities, present each product in its own natural packaging, clearly demonstrate how the individual packages open differently, show the student how the product is removed from the package, and leave the package accessible. Point to the packaging and provide the consistent vocal label frequently. The objectives for this technique include (a) recognition of items by the design on the label, (b) increased communication around the natural packaging, (c) increased understanding of <u>where</u> things come from and <u>how</u> things work and (d) increased hand usage as the student becomes more confident to explore.