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Non-Verbal Learning Disabilities
School Interventions:

Research (B.P. Rourke) has shown that 99%, or virtually all, of the individuals diagnosed with Turner Syndrome exhibit the strengths and weaknesses seen in individuals diagnosed with a Nonverbal Learning Disability.

Nonverbal Learning Disability is a term used to describe a specific learning profile. It is characterized by a number of cognitive strengths and challenges that impact a child's success in the academic and social settings.

What is accomplished in the resource room as the result of appropriate, and specialized instruction is nothing short of magic. Having the right list of strategies and instructional interventions is the key to working this magic.

The ability to verbalize ideas is the primary strength for the student with NLD. The difficulty occurs when the student is asked to translate these verbal ideas into a written product. Either the student feels overwhelmed by the ideas circulating in his or her head and cannot even begin the task, or they start immediately and are left with a jumble of ideas that have little continuity.

The student with NLD, however, cannot avoid the need to put ideas into a written format. The role of the special educator at this point is to put a structure in place for the child so that he or she can see that written discourse can closely parallel verbal thought.

The intervention strategy for written language begins by verbalizing and outlining what the final product will look like. The special educator begins by teaching the components of a sentence, a paragraph and then an essay. At times, using a math-like algorithm, a topic sentence + specific supporting details + a concluding sentence = a paragraph, gives the student with NLD the teacher's expectations up front. It is important to allow the student with NLD to understand the structure first so that, following this structure, a response can be formulated mentally.

While students with NLD are notorious reading decoders, the depth of their understanding of what they read can vary greatly. Fiction writing, where characters interact, can be very confusing for the student with NLD. Understanding personal interactions that play out in front of them is confusing enough. Extracting meaning from interactions that occur in text is even more difficult. Nonfiction writing, where fact upon fact is

presented, can overwhelm the NLD student as they weigh what is the key concept and what are supporting details. If a number of photographs or charts are thrown in to support the material, such as in a history or math text, they can become visually distracted. Again the student with NLD needs to see the underlying steps that when put together, allows an individual to understand what has been read.

The special educator's job is both to get the information in and out, and also give the student an understanding of how his or her brain works and how to become an independent learner.

Of all the academic areas, mathematics can be the most challenging for the student with NLD. Math relies on the visual mode to communicate a large quantity of ideas in a limited amount of space. The more the task can be made into a verbal process, the greater the chance that the student with NLD will incorporate the ideas.

Often a variety of applications will be required of the student in a mathematical task. The student is asked to use visual information to determine which system or procedure to use.

When deciding which materials or texts will be used for math, choose those resources that develop the awareness of the concept prior to introducing the algorithm. A greater focus on language is used for these programs, allowing the student with NLD to verbally understand the idea before being presented with the system of how to complete the problem. The more language that is available to understand the underlying principals of an idea, the greater the probability of understanding for this student.

The thread that holds all of the coursework together is how the student brings his or her ideas together in an organized framework. The special educator cannot trust that the student with NLD will independently develop a system of organization that has the level of structure that is needed. Just as verbal thoughts are organized cognitively before they go from pen to paper; materials need to have a set location for storing and a system for retrieval. Once in place, the student has the confidence of knowing how to record information in class, store materials collected in class, set academic priorities once in the resource room, and keep completed work for class submission.

For the student with NLD, the binder system, while simple, meets the need for external structure. The method is not overwhelming as there are only three places to put materials; however, the sections allow for greater efficiency for taking in material and for returning the work completed to the teacher. After the student becomes comfortable with the system, efforts should be made to personalize the approach to meet specific needs.

Through specialized instruction, the student with NLD can become aware of his or her academic potential. With strategies and new skills in place, the student sees that the ideas that have been circulating in his or her mind can be translated to a format that others can appreciate and teachers can evaluate.

While the specialized instruction needs of the student with NLD may appear extreme, having the right balance of time for one-on-one instruction and access to the regular curriculum is important. The student with NLD has a need to be with age peers to access his or her verbal skills in class discussion, gain further knowledge, and practice socialization skills. However, these students also need time with the special educator to develop skills and to interpret the general curriculum. Establishing the right balance can be challenging, but neither environment can be short-changed by the other.

*This article contains excerpts from: *Nonverbal Learning Disabilities: A Guide to School Success (Middle/High)* by Dr. Dean Mooney et al. (2006) and *Nonverbal Learning Disabilities: A Guide to School Success (The Teacher's Manual)* by Dr. Dean Mooney and Sherry Newberry.