

Helping your child with Non-verbal Learning Disability

What is non-verbal learning disability?

Non-verbal learning disability (NVLD) is a term used to describe a pattern of strengths and weaknesses in children. This pattern is related to how they learn.

Children with NVLD learn best by using language, by speaking or hearing words. These are called verbal skills. They have difficulty learning by analyzing what they look at without spoken language (non-verbal learning). The cause of NVLD is not known.

What strengths do children with NVLD have?

Children with NVLD have relatively strong verbal skills. They usually:

- Have an excellent vocabulary and may have learned to speak at an early age.
- Have an excellent rote memory, especially for what they hear. Learning by rote is a way of memorizing by routine or repetition. These children may remember things without fully understanding them.
- Are very good at recognizing letters and numbers.
- Are very good at reading and spelling.
- Rely on spoken language to gather information and relate to others.
- Learn and solve problems best by talking and listening.

Children with NVLD take in (process) information verbally. Language helps them understand and remember information. Their strong verbal skills help them cope with everyday situations and make up for weaker non-verbal skills.

What difficulties do children with NVLD have?

Children with NVLD face some common difficulties, but it is important to remember that each child is unique. Not every child with NVLD will have the same difficulties or experience them in the same way.

Coordinating movements

Children with NVLD have difficulty controlling or coordinating their movements. They may bump into objects or other people, which makes them appear clumsy. Their balance is poor, making it hard to learn to ride a bike or kick a ball. They also have trouble with fine movements, such as tying shoes or using a pencil. As a result they may write slowly and their handwriting looks messy.

Non-verbal communication

Children with NVLD have difficulty recognizing and understanding how people communicate without words, through facial expressions, body language and tone of voice. As a result they may have trouble recognizing and expressing emotions. They may have difficulty developing social skills and may find it hard to make friends.

Non-verbal communication guides how people respond to each other. With limited non-verbal skills, these children may behave in ways that seem inappropriate to the situation. In conversation, children with NVLD may miss the cues that help people know when to speak. They may talk a lot, talk out of turn or interrupt frequently. Children with NVLD may use more complicated words than what is usual for their age group, but do not fully understand their meaning.

Unable to "read" non-verbal signals, children with NVLD may not grasp the true meaning of a conversation. They focus on the literal meaning of the words. They may miss the subtle or less obvious meanings (nuances) of what it said to them. This may be called "concrete" thinking or thinking "in black and white". It makes it hard for these children to understand a joke or sarcasm, or if they are being teased. For example, a child with NVLD may not understand that "raining cats and dogs" means it is raining very hard.

When reading, children with NVLD can "de-code" words, but may fail to grasp the overall meaning of what they have read. They can get lost in the details and not see the "big picture".

Finding their way around in the environment can be a challenge for these children. They get lost and disoriented easily. Maps with pictures may not help.

Adjusting to change

Children with NVLD find it hard to adjust to new situations. They do not understand what is expected or what is happening, and may withdraw from new situations. They may be slow to become familiar with new places or may be confused by even a slight change in a familiar situation. They may cope by making a routine for each situation. Clear rules and structure may help them feel comfortable.

Children with NVLD have difficulty transferring what they already know to new situations. They may not be able to generalize from one situation to another.

Children with NVLD may be hesitant to explore a new environment. They may prefer to seek information about it by asking many questions. Words and language help them perceive things better than by using their senses of sight and touch. They do not automatically adjust to changes in their environment.

Thinking and organizing information

Children with NVLS may have difficulty:

- With abstract reasoning. This is being able to think and make conclusions about ideas, things or events that are not present or real.
- Understanding how things fit into categories.
- Putting things in order, called sequencing.
- Organizing their work.
- Lining up words on a page or numbers in columns.
- Figuring out how to do a word problem in math.
- Putting their thoughts in writing.
- Understanding what they read.

Understanding "cause and effect" is also difficult, making it hard for these children to predict the consequences of their actions.

Emotional reactions

Children with NVLD tend to be anxious. When they are having trouble understanding, their anxiety may increase and lead to more intense negative behaviours. During the teenage years, they have a greater risk of depression and more serious problems with anxiety.

Summary

Children with NVLD:

- Learn best with verbal language skills.
- Have strong rote memory and vocabulary.
- Appear clumsy.
- Have trouble adjusting to change.
- Fear new situations.
- Tend to be anxious.
- Have difficulty with non-verbal communication.
- Have difficulty making friends.
- Have difficulty with math.
- Have difficulty understanding what they read.
- Have difficulty expressing themselves in writing.
- Have difficulty understanding directions or how things are related in space.
- Have difficulty with planning and organization.

Strategies to help your child

Non-verbal learning disability affects boys and girls. We have chosen to use "she" in the next section, as it is simpler than writing "he or she" every time.

How can I help my child?

This section describes some ways to help your child develop her thinking skills to help her with non-verbal learning. Your child's caregivers may give you other suggestions, based on your child's abilities and needs. All the people in your child's life can use these ideas to help her development.

Routines at home can help your child feel comfortable. She will like things to be familiar and predictable. Prepare her for changes. A written outline can help her remember things and organize herself. For example, make a list of the steps in personal care or simple chores. If your child is young, put pictures beside the words to help her understand and remember.

Help your child notice and take in information from her environment. First describe the situation to her. Then encourage her to describe:

- What she sees and feels (perceptions).
- What that means to her (understanding).
- What she anticipates will happen next (expectations).

Your child learns best by talking and getting verbal feedback. She does not learn well by watching. So it is better to teach her by talking rather than showing, or talk and show. She will likely ask a lot of questions.

You can help "train" your child with repeated explanations of how to:

- Plan, organize and study
- Put thoughts into writing
- Understand social situations
- Communicate with others

Put into words what is usually thought, or "said" internally:

- Describe how decisions are made.
- Review past information before presenting new information.
- Help her make a connection between the new and old information.
- Tell her how to use information from one situation in other situations.

Whenever possible, involve your child in making choices. It is best to limit the number of options. For example, ask your child "Would you like to have milk or juice?" (2 options) instead of "What would you like to drink?" (unlimited options).

Encourage thinking skills and help your child "look and learn" (take in information visually) by doing activities that focus on:

- Categorizing grouping like or related information together.
- Comparing and contrasting how things are different and how they are the same.
- Observing watching carefully and explaining what specifically needs to be watched for.
- Identifying patterns the order in which things occur.
- Cause and effect what happens as a result of a certain action or activity.
- Generalizing learning how to apply what is learned to new or different situations.
- Problem-solving finding ways to overcome a difficulty.
- Fact and opinion what things are real and true, and what are people's views or beliefs.

To help your child learn tasks or skills, break them down into small, manageable steps. Teach your child by talking her through the task, one step at a time. You may need to teach slowly and repeat information often. Be patient and allow her extra time to do things. As your child completes a task give her feedback on how she is doing. Give her cues to the next step in the process.

Do not judge whether your child has understood directions by having her repeat them back to you. Because of her good rote memory, she may remember what you said, but not understand the directions or know how to follow them. She may use her rote memory of words to make up for weaker non-verbal skills. **Determine whether your child understands by what she does rather than what she says.**

Be clear and specific about what you expect. Try to keep your responses consistent. Give your child lots of positive feedback to encourage her. To change or stop behaviour, give her specific, constructive criticism and tell her what she should do, instead of punishment such as taking away privileges.

Helping your child learn social skills

Help your child recognize, understand and use non-verbal communication by discussing:

- What facial expressions and gestures mean.
- How people signal the end of a conversation.
- How people's reactions show whether she is communicating well. To be very clear, show her and describe exactly how different reactions look.

It can be helpful to use pictures that show different feelings. Practice with your child to label these pictures and the feelings they represent.

Help your child learn what to do in social situations by "talking her through" interactions with others. Help her become aware of her perceptions, how others may perceive things differently and how to respond. Talk about unspoken social rules. An example is "personal space", how close to stand beside someone without making them uncomfortable.

Rehearse social situations at home, where it is safe for your child to practice. For example: pretend you are eating a meal at a restaurant. This is called role-playing. Role-play can help your child at all stages of development. Consider using a social storybook to help.

Joining a local drama club or community theatre may help your child learn new social skills and practice them as part of developing a role for a performance. Drama or theatre camps during school holidays are also helpful.

Teach your child how to solve specific problems and find ways to cope with troublesome situations. Help her identify these situations before they happen. Discuss possible responses and solutions. Help your child find ways to cope if her attempts fail.

Social skills training programs may be available through your local school board. Some programs use special facial expression flash cards to help children become familiar with common facial expressions.

Helping your child at school

Here are some ways to help your child manage at school, and teaching strategies for your child's classroom teacher. These ideas may help reduce daily stress.

You may want to meet with your child's teachers to discuss her abilities and needs. Some teachers may not be aware of NVLD or know how to help a child with this type of learning disorder. You may need to work closely with school staff to meet your child's needs.

Most classrooms for young children have many decorations. Your child may find these distracting. To focus your child's attention, it may be helpful for your child to sit next to the teacher during circle time (discussions) or sit at the front of the class (away from windows and doors). By sitting at the front, your child will not see all of the room's decorations. Noise can also be distracting. Try to think of ways to reduce noise in the classroom. For example, cutting tennis balls to fit over the ends of chair legs.

It can help to ask which groups your child will be in. For example, have your child sit with a quiet student rather than a student who is restless. Ask about role models for your child. It can be very helpful to have a carefully selected peer or "buddy" to help guide her through the daily school routine.

Routines and a structured daily schedule in the classroom are helpful. If there is a classroom schedule, review it with your child at home. She may find changes in the schedule or environment difficult to manage. Try to keep changes to a minimum. Give her several cues, such as words or pictures, and discuss expectations before each change.

Unstructured activities, such as open gym time, will most likely be difficult. An adult or a capable student could help your child at these times, until she develops more confidence and skill in managing these situations.

Talk with your child's teachers to see if it is possible to give your child:

- Written outlines rather than having her listen and take notes.
- More time to get to places.
- Extra time to do tasks and homework.
- Activities in art and gym that suit your child's abilities and needs.
- Structured activities with step-by-step instructions.
- Help with organizing and sequencing.

Your child may benefit from taking part in structured social groups and clubs (such as chess). In these settings she can practice her social skills. It is best to choose groups that have clear rules and supervision, as your child would have difficulty in groups with unstructured activities.

McMaster Children's Hospital services

The services at the McMaster Children's Hospital for your child with NVLD are based on her identified needs and age, and not the diagnosis. There are many different services, groups, and workshops available to meet the needs of your child and your family.

Your child will receive care from a team of people. We will work together to build a team that meets the needs of your child and family. The health professionals on your child's health care team may include:

- Behavioral therapist
- Pediatrician
- Psychologist
- Psychometrist
- Social worker
- Speech-language therapist
- Occupational therapist
- Early Childhood Resource specialist

If you have any questions or concerns about your child, please talk with a member of your child's health care team.