HYDROCEPHALUS CANADA

The differences in types of **Understanding & Learning**

Understanding Learning

Many people with spina bifida and hydrocephalus have difficulties in specific areas of learning. Your child may or may not have difficulty with some types of learning. Some children may require educational support strategies to cope with aspects of learning that are difficult for them. It is important to recognize these needs early on in order to minimize frustration and avoid difficulties at school.

Above all, your child will need your involvement and support, and that of his/her teachers. Every child is different, but the following are some common difficulties that may occur.

Thinking and learning that can be affected:

Attention:

- Selective attention or the ability to focus on important information and ignore the parts that are not important for the task.
- Ability to keep attention focused on a task.
- Ability to shift attention (it might take your child longer to pull his/her focus away from what captured their attention and on to something new.

Language:

- Understanding of abstract language (that is, words or ideas that cannot be directly seen or experienced.
- Making connections in longer conversation and text.
- Going beyond what is clearly stated to understand ambiguity, read between the lines, and make inferences.
- Organizing what is said. These difficulties may cause trouble with grasping concepts, following instructions, and reading comprehension. You may find that your child can learn and remember facts, but has difficulty applying concepts or procedures to new problems.

Visual perceptual and spatial skills:

- Recognizing, making sense of, and remembering what is seen.
- Understanding and visualizing the positions of objects in space and in relation to each other.
- Eye-hand coordination. These issues can cause difficulty with academic subjects that make use of visual-spatial materials (such as mathematics, geography), and trouble with written work.

Types of Memory

- Working memory (holding information in short-term memory while using it to perform a task.
- Spontaneous recall (freely remembering information, without cues).
- Prospective memory (remembering to remember something in the future, like remembering to take your medication or go to an appointment).

Children who have these difficulties might have trouble remembering and following instructions and remembering steps in a sequence.

Executive functioning:

- Planning and organization.
- Initiating tasks.
- Working independently.
- Completing assignments.
- Monitoring performance.
- Shifting between activities, or shifting to a new way of doing something.

Executive functioning difficulties can make it hard for your child to keep track of assignments, organize their belongings, organize their thoughts and information in written work, sequence information, think ahead and plan the steps needed to carry out a task.

Processing speed and motor speed

For some children, slower processing speed and motor functioning may result in difficulty with written work, note taking, and work completion in school.

Why These Challenges Occur

Processing difficulties result from:

- Hydrocephalus and the effects it has on the brain
- Differences in early experiences from those of other children (e.g. physical play, social experiences). Frequent school absences, surgeries and seizures can all add to the challenge.

How Can I Help My Child?

At home

- Encourage and provide lots of opportunity for play that develops eye-hand skills (examples: puzzles, coloring, blocks, tracing and dot-to-dot games, beads, stickers).
- Talk with your child about what he/she is doing to promote learning of vocabulary and concepts.
- Help to develop language and reasoning skills by talking about objects and events in your child's life, how objects and words group together in categories, and how different ideas relate to each other.
- Begin by talking about concrete objects and events that are happening now, which will be easier for your child to understand. Gradually begin to include ideas not immediately present in your child's experience.
- Help the development of problem solving skills by talking about situations as they arise and talking through how you solve the problem.
- Encourage age appropriate independence, social interaction and recreational activities; discuss situations and problems that occur during those activities and problem-solve together.

At school

- Have a psychological assessment of your child's cognitive functioning done in your child's early primary years to identify areas of strength and learning difficulty.
- Communicate early with your child's school to discuss learning needs and determine the most appropriate programming and teaching strategies.
- Communicate regularly with the school and monitor your child's progress to make sure that programming remains appropriate as expectations change, and your child changes.
- Your child may need some special education support or strategies, and accommodations such as help with note taking, extra time for tests and assignments, assistance with organizing tasks. These may be documented in an individual education plan (IEP).
- Have your child's learning abilities and academic skills reassessed at transition points throughout your child's school career, such as before beginning the junior grades, middle school, secondary school, or towards the end of secondary school for future planning.
- Available resources include health care professionals in the spina bifida service at your child's rehabilitation centre, Hydrocephalus Canada), and the local school boards' Special Education Advisory Committee (SEAC).

Hydrocephalus Canada

We are the voice of
Canadians living with hydrocephalus and spina bifida.

Every day we strive to empower those impacted by both conditions to experience the best life possible.

We do this by establishing environments that protect, support and enhance the lives of those living with, or at risk of developing, these conditions.

Our work focuses on four areas of influence – Education, Support, Awareness and Research.

HYDROCEPHALUS CANADA

Bridging, Advocacy, Research & Innovation
With Awareness, Education & Support

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