



Learning Difficulties And Epilepsy

- Most children living with epilepsy are typical learners — they perform well academically and socially.
- However, it's estimated that approximately 30% of children with epilepsy will encounter significant learning and educational challenges.

Why are some children with epilepsy prone to learning difficulties?

Presence of associated brain conditions:

- Children with complicated or more severe forms of epilepsy, in which the epilepsy is associated with known or suspected brain abnormalities, are particularly vulnerable to learning difficulties. On the other hand, children with mild epilepsy, with no evidence of brain abnormality other than the tendency to seizures, are less likely to have learning problems.

Seizures:

- Children having frequent seizures, especially absence seizures, can have trouble paying attention before, during, and after seizures. If seizures are very frequent, they may not allow for enough recovery of normal processing between seizures.
- For some children frequent seizures and medical investigations may result in many days of missed school that in itself will compromise learning.

Medication:

- Anti-epilepsy drugs, especially when a child is taking more than one medication, can also have adverse effects on learning.
- Some common medication side effects that can have an impact on learning are:
 - Drowsiness and unsteadiness
 - Difficulties in alertness and attention
 - Slowing of mental processing
 - Slowing of fine motor and visual motor speed
 - Difficulties in mood and behaviour

Some indications that learning difficulties are a result of medication:

- Difficulties happen at a particular time of day, corresponding to the peak levels of medication in the blood;
- Difficulties are noticed to begin with the prescription of medication rather than the onset of seizures;
- Difficulties or side effects are noticed the first one to three weeks of medication as the child develops a tolerance for the medication or when there is a change in type of medication or increase in dosage of medication.

Social-emotional issues:

- Societal attitudes and expectations may contribute to particular difficulties with self-esteem, mood and behaviour in children with epilepsy. Teachers and parents may underestimate the abilities or restrict and overprotect these children. Confidence and motivation to learn may be diminished.



What are some ways to help the child succeed?

Assessment:

- To help the child become a successful learner an *evaluation* of the reasons contributing to the learning difficulties is essential. Seizures, medication, neurological factors and psychosocial factors need to be considered. As far as possible, assessments should be done when the child is medically stable.
- The assessment should be a team effort and include parents, school and health professionals.
- The assessment process may result in a specific designation such as a learning, attention or intellectual disability, which may qualify the child for special services from the School District.
- The child may then be given access to regular blocks of learning assistance, language support, an individual aide, specific concessions, technological support, or other types of supports.
- Some children, who do not meet the criteria for learning-related disabilities, may be eligible for extra support if they can be designated as having a physical disability or chronic health impairment. In such children it is important that their condition has a direct and significant impact on their learning.

The Individual Educational Plan (IEP):

- An IEP can be developed based in part on the child's unique profile of strengths and weaknesses identified in the assessments.
- The IEP addresses how to support the child in a wide range of skills and functions such as attention, motor skills, academic functions, memory, organization, personal care, health care as well as social and emotional functioning.
- The IEP should take into account the particular issues for the child with epilepsy such as the possible impact of seizures and medication on readiness to engage in learning during the school day.
- As well, it should recognize that children with frequent seizures or who take several medications may have particular difficulty in making gains or may show declines in learning.
- Some children may continue to have learning problems, even after medication is discontinued and they are completely seizure-free. Although the tendency for seizures has abated in these children, the underlying brain conditions may persist and thereby continue to affect learning.
- Thus, children with epilepsy and learning problems will often require more frequent review and monitoring. Periodic reevaluations should be built into the IEP.

Social-emotional directions:

- To build the child's motivation and self-esteem, it is important to acknowledge and incorporate his or her strengths into the school program.
- If emotional factors are seriously affecting the student's functioning, counseling or family therapy may be advisable.
- In the older student or adolescent, connecting to or developing peer support groups should be considered.
- Affiliation with associations for people with learning disabilities may also be supportive to the student and his or her parents. (See Learning Difficulties Association of BC: www.ldav.ca)
- Classroom discussions of the causes of epilepsy, presenting age-appropriate videos, books, and activity guides, teaching students to respond to seizures, and "normalizing" the issue generally may all help the student with epilepsy feel less stigmatized.
- Similarly, medical or epilepsy organization staff can be invited to make a presentation to the classroom.

Web sites:

More information on the *IEP process* in British Columbia can be found at: www.bcssa.org/PDFs/Resources/IEP.pdf

A guide to strategies for helping children with *specific learning problems* can be found at: www.bced.gov.bc.ca/specialed/landbdif/

Teaching strategies for children with *attentional difficulties* can be found at: www.bced.gov.bc.ca/specialed/adhd

And, some strategies to help with *memory problems* can be found at: www.ldonline.org/article/5736

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You can join the BC Epilepsy Society as a member and receive all the program and service benefits.

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