

Epilepsy and Education

Are you teaching a student who has epilepsy? The following information may help you to understand their needs, providing some strategies so you can prepare the best possible environment for learning.

The importance of understanding epilepsy

Epilepsy can be associated with a wide range of learning difficulties at different levels, so it's critical that children and adults with epilepsy have the appropriate supports, so they can achieve their potential. To ensure each person with epilepsy has this opportunity, teachers need to understand:

- The diverse symptoms and effects of epilepsy.
- The specific nature of a person's seizures and treatment.
- How epilepsy may affect a person cognitively, emotionally and socially.

What is epilepsy?

Epilepsy is a tendency to have recurrent seizures due to temporary abnormal electrical activity in the brain. The effect epilepsy has on a person varies considerably. Some are greatly affected, while others experience little impact.

Not all seizures involve convulsions. In fact, over half of all seizures are non-convulsive. Non-convulsive seizures can be more difficult to recognise and are frequently misinterpreted as behaviours or other events. Daydreaming and unresponsiveness, confusion, unusual or inappropriate behaviour and temporary speech difficulties may all be signs of seizures.

Epilepsy types

There are many types of epilepsy or epilepsy syndromes, and different responses to treatment. This can mean someone with epilepsy can have:

- one or more types of seizures
- other neurological problems
- the possibility of full seizure control with medications
- continuing seizures despite medications (1 in 3)
- a possibility of outgrowing seizures
- lifelong treatment for seizure control
- some epilepsy syndromes are more predictable in nature, although many types of epilepsies are unpredictable

Epilepsy and learning difficulties

Learning disabilities are not an automatic consequence of epilepsy. Many children and adults with epilepsy achieve both academically and socially. Some people however, will have some degree of learning difficulty and their individual needs should be assessed and managed accordingly.



Epilepsy and learning difficulties continued...

Some people have a neuropsychological assessment. This measures cognitive functioning, can be very useful in determining strengths and deficits, so it might be worth asking your student (or parent) if they can offer information regarding these test results. This will help you understand the students learning needs.

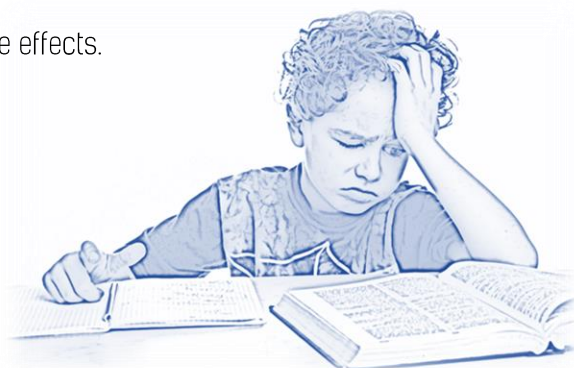
Learning and cognitive difficulties may be directly related to:

- the epilepsy syndrome or type of epilepsy
- the type of seizures and how often they occur
- the time absent from class because of seizures
- the time it takes to recover from seizures
- medication type and unwanted medication side effects
- existing neurological impairment

Epilepsy medication may cause some possible unwanted side effects.

Seizures and medication can affect:

- Attention and concentration
- Alertness and responsiveness
- Cognitive functioning
- Memory
- Motor skills
- Moods and behaviour



Some students with epilepsy may have difficulties with:

- Visual and/or verbal learning – reading, spelling, rote learning, speech and language
- Perceptual abilities, numeracy, problem-solving and memory recall
- Motor ability – handwriting may be poor and performance slower
- Psychosocial problems – low self-esteem, frustration, anxiety, depression and poor motivation
- Maintaining consistency in learning
- Behaviours – such as attention-seeking or withdrawing
- Changes in mood

People with learning difficulties may become frustrated, lose interest in learning and avoid challenges. They may have low self-esteem and emotional problems such as withdrawal, anxiety, depression or aggression and consequently, social difficulties. These can also be influenced by socio-economic factors, differing family background and unrealistic expectations either above or below their abilities.

Memory

Short-term memory difficulties are commonly reported by many people with epilepsy. Problems remembering and following instructions or undertaking tasks, impacts learning and has implications for teaching.

Teachers can provide written or pictorial instructions or a tick list of tasks for students. For children, additional support may help to keep them on task and to be reminded to do homework activities.



Suggested teaching strategies

- **Co-operative Learning:** group work develops listening and talking skills, encourages interaction with peers in problem solving and allows students to ask questions and learn from each other.
- **Task Analysis:** by breaking specific tasks into their most basic steps, teaching and learning stages can be established that the student needs to achieve, in order to succeed. Task analysis can be applied to any learning or social situation activity.
- **Cueing:** This provides positive outcomes, particularly with listening activities. Warn the student ahead of time of the purpose of the activity. Give a quick summary of the task and ask if they understand what is needed. Knowing the purpose of the activity will help to keep them on task.
- **Reviewing:** Reviewing the processes used to solve a complex task can be helpful for the student.
- **Repetition:** This leads to the consolidation of skills learned in mastering a task. Unconsolidated skills are not likely to be applied to other learning tasks.
- **Mnemonics:** A memory aid that employs the use of verbal, visual, acoustic and symbolic techniques, which bridges prior learning with new knowledge and assists in memory development. Mnemonics may help people to remember facts, processes, procedures and diagrams.
- Regular evaluations of the above strategies.

On a day-to-day level:

- Make sure key words and main points are displayed for each subject.
- Give clear instructions suitably detailed for the student and their family to understand.
- Be aware that epilepsy can lead to changes in ability from day to day. Some days will be better than others.
- Keep the student in clear view in the classroom so that any possible seizure activity can be seen.

What teachers can do

- **Seek information about epilepsy and seizures**, how to recognise and respond to different seizures and understand the possible effects of seizures and treatment.
- If possible, obtain information about the specific nature, treatment and possible effects of the student's epilepsy on educational, physical and emotional development. Primarily this information should be sought from the person or their family. If needed, consent can be obtained to talk to the person's doctor.
- **Observe seizures.** When a child has epilepsy, apart from the parents, the teacher is often the adult who sees the child more than anyone else and can be an important source of seizure description. Such observations and documentation can greatly assist the doctor as they diagnose and treat the child. See [Observing And Recording Seizures Fact Sheet](#)
- **Observe behaviour.** Monitor the pattern of each student's behaviour and learning processes. Share these observations with the person or their family and relevant school staff, to develop a consistent team approach.
- **A seizure management plan (SMP)** will help staff know how to respond to the persons seizures. Parents or a carer/giver are encouraged develop and provide a SMP for the school to use.
- Epilepsy Action Australia has an easy-to-use online [seizure management plan](#).



Teachers can encourage positive learning experiences for people with epilepsy, in several ways:

- Encourage active participation in all activities (apart from anything not advised by doctor or parents)
- Help others to understand epilepsy and encourage social acceptance
- Have a matter-of-fact approach to normalise the condition
- Be familiar with the student's seizure type and respond appropriately
- Avoid letting the student use their epilepsy as an excuse
- Encourage the student to deal with new or difficult situations to help build confidence
- Act quickly on any teasing or bullying
- Accept that a person with epilepsy may feel angry and resentful about their epilepsy
- Recognise and record any changes in behaviour, mood, energy and performance
- Ensure that there is a SMP available to anyone who is teaching the person

Revealing epilepsy at school– telling other children

Sometimes there is a need to tell the child's classmates (with permission from the child and parents) as they may be near by when a seizure happens. This sometimes lessens the child's worries about having a seizure at school. At the same time, their friends learn how to help and not be afraid.

When describing seizures to children a demonstration helps. If this is difficult, a clear explanation, a large doll, puppet, story book or a video can be helpful.

Epilepsy Action Australia has online tools, courses and resources to help teach children and youth about epilepsy. [Contact us](#) for further information.

First Aid

We have some first aid animations that are suitable for adults and children, as well as first aid posters. [Click here](#).

Education for teachers and students

Epilepsy Action Australia provides education sessions to school staff and students, by explaining seizures, epilepsy, planning and first aid. For more go to [Seizure Smart Schools](#) or call **1300 37 45 37** or email education@epilepsy.org.au for more details.

Animated Seizure First-Aid video for Children



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This information is given to provide accurate, general information about epilepsy. Medical information and knowledge changes rapidly and you should consult your doctor for more detailed information. This is not medical advice and you should not make any medication or treatment changes without consulting your doctor.

