

Are you teaching a student who has epilepsy? The following information and strategies may help you to provide them with the best possible environment for learning and development.

The importance of understanding epilepsy

The fact that epilepsy can be associated with such wide-ranging learning problems makes it critical that children and adults with epilepsy have the appropriate supports in order to develop to their full potential. To ensure each person with epilepsy has this opportunity, teachers need to understand:

- The diverse manifestations of epilepsy.
- The specific nature of each individual'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 abnormal electrical activity in the brain. The impact epilepsy has on a person is individual - some are greatly affected while others feel it is little or no intrusion at all.

Not all seizures are convulsive. Non-convulsive seizures are more difficult to recognise and are frequently misinterpreted. Daydreaming and unresponsiveness, confusion or inappropriate behaviour and/or temporary speech impairment 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 present with:

- one or more types of seizures
- a known cause or no apparent cause
- other neurological problems
- little or no response to antiepileptic medications
- the possibility of full seizure control with medications
- a possibility of outgrowing seizures
- having lifelong seizures

Once the type of epilepsy has been diagnosed accurately, the aim is to prescribe medication for the particular seizure type, which is likely to cause the least possible unwanted side effects for that person.

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 will, however, experience varying degrees of learning difficulties, and their individual needs need to be assessed and managed. Some people may have had a neuropsychological assessment, so it may be worth asking them or a parent about this because it is very useful in determining strengths and deficits.

Learning and cognitive difficulties may be directly related to:

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

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Seizures and medication can affect:

- Attention
- Alertness
- Cognitive functioning
- Concentration
- Responsiveness
- Memory
- Motor skills
- Moods and behaviour

Some students with epilepsy may experience difficulties with:

- Short and long term memory
- Attention and concentration
- 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 - commonly attention-seeking or withdrawing
- Changes in mood



People with learning disabilities 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. It is also common for people with learning disabilities to have social difficulties. These can be made worse by socio-economic factors and differing family background, and unrealistic expectations either above or below the person's abilities.

Short-term memory difficulties are a common concern for people with epilepsy. This affects learning and has implications for teaching. Short term memory problems create difficulties remembering and following instructions or tasks. 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 proves effective especially 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 generalised to other learning tasks.
- **Mnemonics:** Use verbal, visual and symbolic techniques as memory aids. The acquisition of facts and procedural knowledge is governed by memory and the most effective measures for memory development are rehearsal related.
- **Regular evaluations** of the above strategies.



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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.
- Keep the student in clear view in the classroom so that any possible seizure activity can be seen.

What teachers can do

- **Seek information from the doctor or Epilepsy Action Australia** about epilepsy and seizures, how to recognise and administer first-aid for different seizures and the possible effects of treatment.
- **Obtain information** about the specific nature, treatment and possible effects of the students 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.
- **Seizure management plan.** In conjunction with relevant others an individualised seizure management plan will assist teachers to better care for a person having a seizures.
- **Utilise resources** available through Epilepsy Action Australia to develop a seizure management plan.

Teachers can make learning a positive experience for people with epilepsy in a number of 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 aware of the students seizure(s) 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 an individualised seizure management plan available to anyone who is teaching the person

Another good resource is www.epilepsyclassroom.com or http://www2.massgeneral.org/childhoodepilepsy/pdf/strategies_for_educators.pdf

There are many resources available with suggested teaching strategies and tools. Do2Learn covers a number of aspects <http://www.do2learn.com/> that may be of assistance.



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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.

