



Physical Disability



Department of
Education

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Overview / Introduction

Physical disability is a generic term that encompasses a wide range of conditions. The condition may be congenital such as Spina Bifida, Muscular Dystrophy or Cerebral Palsy or be a condition acquired at any stage including post accident, tumour or stroke. A physical disability can be described as long term usually lasting a life time and is seldom static so changing needs should be revised often.

To allow young people with a disability to reach their full potential in the school of their choice, schools need to create an inclusive environment where every pupil is valued. A team approach, appropriate training and advice from both education and health professionals (occupational therapist, physiotherapists and speech and language) will provide a holistic approach to the inclusion of the pupil. Consider that it is often the environment and attitudes of others that disable young people more than their disability; a positive approach to their disability helps the young person reach their full potential.

The School and Classroom Environment

- Obtain accurate and up to date information about the young person's physical condition and any associated learning needs.
- Adapt the layout of the classroom and equipment to enable the young person to maximise their independence and learning.
- Make optimal use of the young person's ability – if they have difficulty recording look at the many aids available. Different sized keypads, predictive text software, various types of mouse.
- Most young people with a physical disability need specialised equipment to assist them – seating, height adjustable tables, computer adaptations and or software.

Learning

- Be aware of any perceptual or motor ability difficulties that are associated with a specific condition.
- Positively reinforce the young person's efforts in learning tasks and activities.
- Develop and use teaching and learning material that is appropriate for the pupil – copy of class notes, prepared worksheets with diagrams ready to label.
- Break down verbal instructions into stages and highlight or cut information into chunks.
- Frequently check the young person's understanding of information.
- Mixed media presentation with the emphasis on visual and "hands on" kinaesthetic learning.
- Try and give as much attention to effort as to achievement.

Independence and Daily Management

- Strong and clear communication links between teacher, SENco and classroom assistant are essential for an effective working relationship.
- All involved with young person should encourage independence and foster a positive can do attitude rather than a negative.
- Attention should be focussed on the young person's personal care and comfort – specialised seating, toileting, eating etc as advised by the appropriate health professionals.

Emotional Well Being and Social Inclusion

- Consider the young persons point of view.
- Be aware of the needs and challenges of the young person, do not be pitying or patronising.
- Encourage opportunities to promote the social inclusion of the young person even if this has to be engineered.
- In school young people need to have positive experiences to develop self confidence and motivation and enhance self esteem - counselling may be beneficial in certain circumstances.
- See the young person before the disability.

Links/Resources

Contact a Family – www.cafamily.org.uk

Scope for information on Cerebral Palsy – www.scope.org.uk and www.hemihelp.org.uk

ASHBAH for information on Spina Bifida www.asbah.org

Information on Muscular Dystrophy www.muscular dystrophy.org

General information on physical conditions – www.bbc.co.uk/health/conditions

Counselling – School Counselling Services or appropriate Charity/ Specialist Service

KIDS Team, Contact Youth, New Life Counselling, CAMHS, Mencap. Clinical Psychology Service.

Schools that specialise in teaching pupils with Physical Disabilities – Mitchell House Support services, Fleming Fulton School – Lilac Team

Spina Bifida and/or Hydrocephalus

Spina Bifida is a neural tube defect in the development of the spinal column. It can cause minimal or complete paralysis of the spinal cord. About 80% of people with this condition also have hydrocephalus. Young people with hydrocephalus often have a shunt device, which diverts fluid, maintaining consistent drainage and prevention of compression in the brain tissue.

It is important to note that medical treatment should be sought if a young person with a shunt shows signs of vomiting, headache or dizziness.

Top Tips

Young people's needs are individual, but some may require support in the following areas.

- When working on practical activities, verbal prompts to start work, support to organise materials and checklists can be helpful, as short term memory and sequential thinking skills may be limited.
- Pairing young people or working in small groups of no more than 4 can be quite effective. This system can also be extended to P.E. and help foster positive social relationships and active participation.
- Mobility: where aids or wheelchairs are used, consideration should be given to access and movement around the classroom. Where young people are wheelchair users interactions should take place at eyelevel.
- Co-ordination, perception and visual problems can cause learning delays in reading, writing and numeracy.
- Consider allowing the young person to audio record lessons and work on these later when not under pressure.
- If hand function is poor and handwriting is affected consider the use of freely flowing implements e.g. felt tip pens, soft pencils or seek the

advice of an occupational therapist, who could advise on touch screens or keyboards with large keys. Occupational therapists can also advise on adjustable desks and portable reading racks/easels.

- Teaching skills such as, skimming and scanning, how to use eye movements, focusing on set activities, increasing attention skills, practical sequential work and allowing adequate time to complete activities may be very important for some young people.
- Be conscious that some young people have difficulty with sensory information and may not react to extreme conditions e.g. heat/cold. So be wary of hot radiators/water and involvement in practical classes.
- Others will exhibit differences between the level of language use and the level of language understanding. It is easy to assume that an articulate young person has the same level of comprehension skills.

Resources/Links

ASBAH – The Association of Spina Bifida and Hydrocephalus

www.asbah.org

Special Education Support Service

www.sess.ie

Central Remedial Clinic, Ireland

www.crc.ie

Enable Ireland

www.enableireland.ie

Muscular Dystrophy

Muscular Dystrophy is the overall name for a group of muscle disorders that cause progressive weakening of the body's muscles. The dystrophies are usually inherited. In some instances learning difficulties, epilepsy and eye abnormalities can be present. The most common muscular dystrophies are Duchenne Muscular Dystrophy (DMD), which affects mainly boys, and Myotonic Muscular Dystrophy, which can affect both sexes. The majority of boys with DMD will become full time wheel chair users by the age of ten. DMD is progressive and the abilities of the young person can deteriorate rapidly over their school years. This is a life limiting condition.

Top Tips:

- Give the young person adequate time to complete tasks, taking into account that they will tire during the day.
- Think of the practicalities in the classroom. The floor areas need to be clutter free; a child with MD can trip and fall very easily. There also needs to be adequate space if the young person begins to use a wheelchair.
- The Occupational Therapist may recommend a height adjustable table that will "grow" with them. Everything on the table (e.g. pencil pot, scissors, work tray) needs to be within easy reach of the young person.
- If the young person also has learning needs, model every task clearly and give adequate thinking time.
- For writing/reading at their tables, the young person may benefit from a Dycem non slip mat.
- Avoid asking a young person with MD to sit on the floor (e.g. at story time, assembly etc). It can be extremely difficult for them to get back up and will tire them unnecessarily.

- Only a trained professional should ever pick up a young person with MD. If they fall over do not pick them up by lifting them under the arms or by the hands. This could cause a lot of muscle damage. A physiotherapist will be able to advise on the correct way to assist.
- The young person may need assistance with some fine motor activities such as cutting out. As time passes, they may need these sort of activities completed for them.
- As fine motor skills deteriorate the young person may need a roller ball mouse and an adapted computer keyboard (see link below).
- Many young people with MD can suffer from depression and self-esteem issues due to the implications of the condition i.e. losing the ability to do previously easy tasks. Consult with the parents, SENCO and the school counsellor (if present) to establish a holistic approach to this issue.

Resources/Links:

Muscular Dystrophy Campaign: www.muscular-dystrophy.org

NHS Direct: www.nhsdirect.nhs.uk

(Search for 'Muscular Dystrophy')

Dycem: www.dycem.com

Inclusive Technology: www.inclusive.co.uk

(Adapted ICT equipment)

Limb Abnormality

Limb deficiencies may be congenital or traumatic affecting one or more limbs.

Congenital abnormalities account for the majority of cases and deficiencies can be partial or total, affecting the whole limb, elbow, hand, leg or foot.

Traumatic abnormalities may occur at any stage and can be the result of illness or accident. The young person may suffer from self esteem difficulties that may require counselling/pastoral support – a useful classroom activity would be Circle Time.

Upper Limb Abnormalities. Affecting young person's arms and hands – most children function well and can hold or move objects even when parts of their arms and hands are missing or misshapen.

Top Tips

- Let the young person experiment with various methods of holding pencils/pens/felt tipped pens i.e. holding pencil inside cuff of sleeve or at elbow joint.
- Use of Dycem (non slip mat) to hold books, pages or objects in place on desk.
- Trial various types of adapted scissors to suit the individual young person's needs e.g. Easy grip, Training, Spring Assisted, Mounted Table Top.
- Handouts of notes or cloze procedure exercises may be appropriate if handwriting is laborious.
- ICT adapted hardware may be explored if writing proves difficult e.g. Big Keys Keyboard, Keyguard, Roller Ball mouse, Big Mouse.
- In PE consider using different pieces of equipment e.g. chiffon scarves, Koosh balls etc for throwing and catching, a piece of guttering for rolling a ball in target games i.e. skittles.

Lower Limb Abnormalities

Affecting young person's legs or feet – they may require adapted footwear, occasional or permanent use of a wheelchair. The young person may suffer from tiredness associated with increased effort to complete tasks.

Top Tips

- Classroom furniture and protective equipment e.g. adjustable table, adapted seating (should be recommended by Occupational Therapist).
- PE lessons should be adapted to include the young person i.e. use of a gym ball, having a member of staff available assist in games including pushing the wheelchair while the young person concentrates on the upper body activity.
- Mobility in school – time given for young person to move safely from room to room (i.e. leaving classroom before peers).

Resources/Links

The UK Limb Loss Information Centre
(www.limblossinformationcentre.com)

The Murray Foundation
(www.murray_foundation.org.uk)

The Meningitis Trust
(www.meningitis-trust.org/meningitis-info)

Inclusive Technology (Adapted ICT equipment)
(www.inclusive.co.uk)

Dycem
(www.dycem.com)

Rompa (complete resources guide classroom equipment)
(www.rompa.com)

Anything Left Handed
(www.anythinglefthanded.co.uk)

Brittle Bone Disease

Brittle Bone Disease is a genetic inherited disorder which causes bones to break easily. It may affect stature, muscle tone and coordination. Breakages may occur during growth spurts and can happen with even the simplest of movements i.e. shutting the door or lifting an object off the floor. The young person may have to spend time in hospital, therefore it is important to liaise with parents and other carers to give continuity in education.

Top Tips

- A medical Action Plan should be in place to provide a procedure for all staff to follow if a break occurs.
- It is likely that they have had many hand fractures, therefore allow the young person to experiment with different pencils/pens/felt tipped pens and various types of paper/individual whiteboards.
- The use of a writing wedge and Dycem (non slip mat) may achieve a more comfortable writing position.
- Handouts of notes may be appropriate as handwriting is likely to be slow and poorly formed.
- Daily use of ICT may include; computer keyboard, voice activated word processor, dictaphone.
- Flexible arrangements should be in place for break and lunch depending on the numbers of young people in various settings, e.g. indoor activities or secluded area in the playground.
- Most forms of PE are not suitable, swimming may be the exception (see advice from parents and medical personnel).
- Circle Time could be used to help reduce the young person's anxiety about their safety in the school environment.

Resources/Links

SEN Teacher

[\(www.senteacher.org\)](http://www.senteacher.org)

Anything Left Handed

[\(www.anythinglefthanded.co.uk\)](http://www.anythinglefthanded.co.uk)

Brittle Bone Society

[\(www.brittlebone.org\)](http://www.brittlebone.org)

Inclusive Technology (Adapted ICT equipment)

[\(www.inclusive.co.uk\)](http://www.inclusive.co.uk)

Dycem

[\(www.dycem.com\)](http://www.dycem.com)

Rompa (complete resources guide classroom equipment)

[\(www.rompa.com\)](http://www.rompa.com)

Acquired Brain Injury

Acquired Brain Injury (ABI) is any injury that occurs to the brain at any stage of a child's life e.g. road traffic accident, falls, brain tumours, strokes and neurologically based diseases. Teaching a young person after ABI can be quite challenging as the effects of the injury can be subtle, hidden and diverse. A teacher will need to recognise that the educational needs of each young person are unique; physical ability and cognitive processes such as memory, concentration, reasoning and language can all be affected. Everyone involved with the young person needs to be aware of the considerable impact that ABI will have on social and emotional well being and every day behaviour. The consequences of ABI are regularly under-recognised and underestimated in the school environment.

Top Tips:

- It is normal for young people with ABI to suffer from high levels of fatigue. This is not something that they can control so allowances must be made and a rest period may need to be included in the school day.
- Limit distractions and reduce the amount of information presented. Use visual cues, chunk work and give instructions in small steps.
- To encourage working memory provide a notebook for the young person to include- a daily timetable, notes regarding ongoing work and special things to remember. When teaching present information in a variety of ways and allow for repetition to reinforce learning.
- Allow extra time for the young person to process verbal or written information and, if appropriate, use a tape recorder, note taker or ICT software.
- Be conscious that the young person could have difficulty sequencing language and may need appropriate communication modelled. Developing language and social skills through role-play can benefit brain injured pupils.

- Present material within the young person's field of vision. Enlarge printed materials, reduce clutter on a page/worksheet and introduce cues such as highlighting, coloured dots and arrows to encourage tracking.
- Reasoning and problem solving are often affected so be aware of the young person's inflexibility and inability to alter plans. Help them to think about alternative solutions to problems, predict consequences and set personal targets.
- Inappropriate behaviour can sometimes present itself such as passivity, aggression, frustration, lack of inhibition and a sense of danger. Set out clear boundaries and teach routines, prepare the young person for any new situation and have an agreed behaviour management strategy throughout the school.
- Counselling may be considered for the young person, their family and even their peer group who all have to deal with the consequences of ABI. Consulting with health professionals such as physiotherapists, occupational or speech and language therapists etc who are involved with the immediate provisions, can often provide the most up to date information on the young person's circumstances and advice on any additional equipment to meet their physical needs.
- Strategies used in the classroom should be reviewed according to the changing needs of the pupil.

Resources/Links

Acquire: www.acquire.org.uk

Child Brain Injury Trust: www.cbituk.org

Headway: www.headway.org

Head Injury: www.headinjury.com

The Children's Trust: www.childrenstrust.org.uk

Cerebral Palsy

Cerebral Palsy (CP) occurs when there is damage or lack of development in the area of the brain which controls movement. The young person may be very unsteady and shaky, this is known as Ataxia. Cerebral Palsy may cause physical difficulties and poor social integration; there can be huge variations in any two young people with this condition.

Types of CP:

- Hemiplegia – The left or right side of the body is affected.
- Diplegia – Both legs are affected – arms are affected to a lesser degree.
- Quadriplegia – Both arms and both legs are affected. Head and body control may also be poor.

Top Tips

- Take into account their physical disability allow extra time for written and practical tasks.
- Give thinking time for the young person to process information.
- Some young people with CP have poor memories therefore provide them with opportunities to practice and reinforce their work.
- A coloured paper clip positioned on the page will indicate where they are working from.
- Chunky pencil/felt tipped pen (with grip) for writing and use of Dycem (non slip mat) to hold paper or books in place.
- ICT adapted hardware may be explored if writing proves difficult e.g. Big Keys Keyboard, Keyguard, Roller Ball mouse, Big Mouse.

- Adapted scissors i.e. Easy grip, Training, Spring Assisted, Mounted Table Top.
- The use of a writing wedge may help with distraction, poor concentration and better posture when writing or copying from the board.

Resources/Links

SEN Teacher

[\(www.senteacher.org\)](http://www.senteacher.org)

Cedar Foundation

[\(www.cedar_foundation.org\)](http://www.cedar_foundation.org)

Anything Left Handed

[\(www.anythinglefthanded.co.uk\)](http://www.anythinglefthanded.co.uk)

Inclusive Technology (Adapted ICT equipment)

[\(www.inclusive.co.uk\)](http://www.inclusive.co.uk)

Dycem

[\(www.dycem.com\)](http://www.dycem.com)

Rompa (complete resources guide classroom equipment)

[\(www.rompa.com\)](http://www.rompa.com)

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