



## Pupils with Physical Disabilities

### Comorbidity



## Comorbidity



### Classroom-based tips (focus on instructional methods)

1. Conduct a disability awareness training at the beginning of the school year
2. Provide activities promoting acceptance and support
3. Use task analysis, modelling, guided practice, and role-play to maximise pupil active participation in class
4. Ensure that each pupil has a role in class activities
5. Provide the pupil with 2-3 short breaks during a classroom period
6. Include all types of activities to favour disabled or comorbid pupils' participation
7. Implement social stories and peer-mediated learning strategies (e.g. peer-tutoring)
8. Include specific strategies for acquiring social skills (e.g. peer tutoring, collaborative groups)
9. Adopt specific strategies for academic skills (e.g. fluency-building activities).



### School-based practical tips (focus on instructional methods)

#### Class Divisions / Arrangements

**Ensure appropriate adaptations, accommodations and modifications made to the instruction and other activities.**

[Reference: <https://www.christopherreeve.org/living-with-paralysis/for-parents/education-for-children-living-with-paralysis-1>]

#### Community

**Ask for support in dealing with pupils' invalidity/disabilities on behalf of school community and parents.** Campaign for support to increase the level of awareness of the teachers, pupils and parents of what invalidity/ disability means.

## Curricular Adaptations

**Ensure related services:** physical and occupational therapy, school health services and rehabilitation counselling.

## Discipline

**Monitor safety of the pupils during their curricular and extra-curricular activities** during their classes, breaks or other types of activities.

## Educational Visits / Field Trips / Camps / School Exchanges / Trips Abroad

**Consider adaptation of the learning tasks and other extra-curricular activities** such as homework, educational activities, sports competitions) in order to diminish abandonment because of comorbidity.

## Homework

**Consider adaptation of the learning tasks and other extra-curricular activities** such as homework, educational activities, sports competitions) in order to diminish abandonment because of comorbidity.

## Parents / Parents' Associations

1. **Ask for support in dealing with pupils' invalidity/disabilities on behalf of school community and parents.** Campaign for support to increase the level of awareness of the teachers, pupils and parents of what invalidity/disability means.
2. **Support and include families, who may be in for a long physical and emotional haul;** they need to feel involved in the process at every stage and can only do this with enough appropriate information to hand. [Reference: <http://patient.info/doctor/disability-in-childhood>]
3. **Discuss possible therapy programmes for pupils with comorbidity with the parents.** Monitor their evolution and improvement.

## Safety

1. **Consider the inclusive aspect of school projects, events, and celebrations** for all pupils, providing facilities for those with comorbidity to be able to participate, such as safety conditions, hall accommodation, and managing traffic in the corridors.
2. **Monitor safety of the pupils during their curricular and extra-curricular activities** during their classes, breaks or other types of activities.

## School Breaks

**Monitor safety of the pupils during their curricular and extra-curricular activities** during their classes, breaks or other types of activities.

## School Celebrations / Events / Activities

**Consider the inclusive aspect of school projects, events, and celebrations** for all pupils, providing facilities for those with comorbidity to be able to participate, such as safety conditions, hall accommodation, and managing traffic in the corridors.

## School Purchases

**Ensure supplementary aids and services might include an aide, a note taker, or other assistive technology.** Adaptive equipment, such as powered mobility and the introduction of augmentative communication systems such as sign language and picture boards, can have impressive and widespread impacts on social, language and play skills as well as encouraging independent movement.

[Reference: <http://patient.info/doctor/disability-in-childhood>]

## Student Council

1. **Establish what type of disability the pupil in your class has.** Discuss it with the other pupils and organise the inclusion of the pupil affected by comorbidity.
2. **Ask for support in dealing with pupils' invalidity/disabilities on behalf of school community and parents.** Campaign for support to increase the level of awareness of the teachers, pupils and parents of what invalidity/ disability means.

## Pupil Support

1. **Establish what type of disability the pupil in your class has.** Discuss it with the other pupils and organise the inclusion of the pupil affected by comorbidity.
2. **Ensure related services:** physical and occupational therapy, school health services and rehabilitation counselling.

## Technology

**Ensure supplementary aids and services might include an aide, a note taker, or other assistive technology.** Adaptive equipment, such as powered mobility and the introduction of augmentative communication systems such as sign language and picture boards, can have impressive and widespread impacts on social, language and play skills as well as encouraging independent movement.

[Reference: <http://patient.info/doctor/disability-in-childhood>]

## Supportive Literature

### Definition

The concept of *comorbidity* is characterised by a variety of available definitions in specialised literature (according to Valderas et al.), which, in very brief terms, could be summarised as follows: when at least two disabilities or illnesses occur in the same person, simultaneously or sequentially, they are described as comorbid. Comorbidity also implies interactions between the illnesses that affect the course and prognosis of both.

<https://www.drugabuse.gov/publications/research-reports/comorbidity-addiction-other-mental-illnesses/what-comorbidity>

### Disability

The Disability Discrimination Act (DDA) defined disability as being inclusive of children with a limiting long-standing (12 months' duration or longer) illness, disability or infirmity, experiencing one or more significant difficulties or health problems. It also includes those who would have such difficulties or problems if they did not take medication. (Blackburn CM et al, 2010).

Child disability is an emerging global health priority. To address the need for internationally comparable information about the frequency and situation of children with disabilities, UNICEF introduced the Ten Questions screen for disability. Children and young people with disabilities constitute about 4-6.5% of the population in many countries. (Maulik PK, Darmstadt, 2007, Suppl 1: S1-55)

It appears that the incidence of disability among children and adolescents has risen over a period of thirty years.

### Physical disability

There are many physical disabilities that can affect children, such as delayed walking, deafness or visual impairment. Cerebral palsy (CP) is the most common physical disability in childhood. Approximately 2 per 1,000 infants in developed countries are born with the condition. CP provides an umbrella term for a broad group of non-progressive motor impairment conditions secondary to lesions or anomalies of the brain arising in the early stages of development. (Rosenbaum P, 2003, 326)

There are other conditions that may not be traditionally seen as disabilities but are chronic in nature and therefore can have an impact on the child's development in more subtle ways (e.g. through days lost at school, inability to partake fully in physical activities, need to take medication regularly). These include asthma or diabetes for example.

### Learning disability

This may be caused by genetic factors, infection prior to birth, brain injury at birth, brain infection, brain damage after birth or due to an unknown reason.

There is a significant list of associated conditions, perhaps the most well-known being Down Syndrome. The effects may be far-reaching, with speech and communication problems which can result in, or be associated with, behavioural problems. Associated physical problems are common. The stigma attached to some of these conditions places an extra burden on a family which may have to cope with significant stresses already.

(The child with general learning disability: for parents and teachers (Factsheet 10), Royal college of Psychiatrists, 2004)

## Useful Websites

<http://www.globalpartnership.org/focus-areas/children-with-disabilities>  
<http://www.lungchicago.org/understanding-copd-comorbidities/>  
<http://www.aihw.gov.au/chronic-diseases/comorbidity/>

## References

Blackburn CM et al. *Prevalence of childhood disability and the characteristics and circumstances of disabled children in the UK: secondary analysis of the Family Resources Survey*. BMC Pediatrics. Apr 2010.  
<http://bmcpediatr.biomedcentral.com/articles/10.1186/1471-2431-10-21>

Maulik PK, Darmstadt, GL, *Childhood disability in low- and middle-income countries: overview of screening*, Pediatrics. 2007 Jul;120 Suppl 1:S1-55.

Rosenbaum P., *Childhood disability and social policies*. BMJ. 2009 Apr 24;338:b1020. doi: 10.1136/bmj.b1020.

Rosenbaum P, *Cerebral palsy: what parents and doctors want to know*. BMJ. 2003 May 3;326(7396):970-4.

Pallapies D., *Trends in childhood disease*. Mutat Res. 2006 Sep 28;608(2):100-11. Epub 2006 Jul 18.

Croot Ej, Grant G, Cooper CL, et al: *Perceptions of the causes of childhood disability among Pakistani families living in the UK*. Health Soc Care Community. 2008, available online at <https://www.ncbi.nlm.nih.gov/pubmed/18384357>

*Half of the world's disabled children are out of school: report*, available online at <http://www.reuters.com/article/us-education-aid-government-idUSKBN12H009>

Valderas, Jose M., Starfield, Barbara, Sibbald, Bonnie, Salisbury, Chris et al., 2009, *Defining Comorbidity: Implications for Understanding Health and Health Services*, in Ann. Fam.Med., 2009 Jul; 7(4): 357–363.

*The child with general learning disability: for parents and teachers* (Factsheet 10), Royal college of Psychiatrists, 2004, available online at <http://www.google.ro/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKewiZsoCzpKbRAhVDMFAKHUnDBq4QFggcMAA&url=http%3A%2F%2Fwww.ccats.org.uk%2Fimages%2Froyalcollegepdf%2Fsheet10.pdf&usq=AFQjCNG3jVYFR1-cxsdOnHfJRTS7vhQhAg&bvm=bv.142059868,d.ZWM&cad=rjt>

MCH 13-09: Service support for children with a chronic illness or psysical disability attending nainstream schools, Dept of Health (February 2007), available online at [http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Aboutus/Researchanddevelopment/AtoZ/Motherandchildhealth/DH\\_4015002?PageOperation=email](http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Aboutus/Researchanddevelopment/AtoZ/Motherandchildhealth/DH_4015002?PageOperation=email)

The EU's strategic framework for European cooperation in education and training (ET 2020)