

An Educator's Guide to Teaching Students with Physical Disabilities:

(adapted from Bright Hub Education: www.brighthubeducation.com)

To maintain inclusive classrooms, teachers should have knowledge of physical impairments, assistive technology, teaching strategies, and necessary accommodations and modifications.

Children with physical disabilities, once taught in separate classes and even separate schools, now learn beside their peers in regular classrooms. Inclusion has changed how these students are educated, with the continuing development of the Disability Standards for Education (2005) working to ensure rights to a quality education.

As types of physical disabilities vary in degree of impairment, teachers will find a general knowledge of various conditions and how they affect children helpful. Assistive technology can level the effects of these impairments by allowing students to participate in classroom activities more easily and independently. Specific classroom and instructional strategies, as well as accommodations and modifications, also assist students in achieving their best individual educational outcomes. Explore the following articles to learn how all of these factors come together for the inclusion of students with physical disabilities in today's classroom.

Types of Physical Disabilities

The term "physical disabilities" encompasses a wide range of congenital and acquired conditions and impairments. While students with varying diagnoses and severities benefit from physical, occupational and speech therapies, each child has differing abilities and requires individualized supports. Some conditions, such as muscular dystrophy, are progressive, but those such as cerebral palsy and epilepsy can improve with treatment.

- [Overview of Physical Disabilities and Special Education Services](#)
- [Muscular Dystrophy](#)
- [Cerebral Palsy](#)
- [Fetal Alcohol Syndrome](#)
- [Epilepsy](#)

Assistive Technology

Any device or tool that enables a student to participate in learning activities can be called assistive technology. Simple pencil grips or ergonomically designed pens can make holding and manipulating writing instruments easier. Oversized art supplies and handmade adaptations can allow students with fine motor difficulties to create art.

For those with more severe impairments, [assistive technology](#) lets students have access to computers for learning and expressing themselves. Keyboard and mouse alternatives replace standard input devices. Voice recognition software allows users to speak what they want to input instead of typing it.

- [Assistive Writing Tools](#)
- [Adaptive Art Tools for Students with Spasticity](#)
- [Computer Devices for Students with Cerebral Palsy](#)
- [Funding Sources for Assistive Technology](#)

Classroom and Teaching Strategies

Teachers can significantly improve educational outcomes of students with physical disabilities by implementing specific strategies. Classroom arrangement with easy access to supplies can prevent accidents and improve participation in activities. Using a buddy system or working with paraprofessionals can provide students with necessary assistance to complete assignments. Finally, individual accommodations and encouragement can promote learning and ease frustrations over physical difficulties.

- [Tips on Educating Children with Physical Disabilities](#)
- [Classroom Arrangement for the Physically Disabled](#)
- [Accommodations Under IDEA](#)
- [Teaching Students with Speech Impairments](#)

Accommodations and Modifications

Since each student differs in degrees of impairment and ability, accommodations and modifications must be individualized according to needs. Although some subjects are more difficult to accommodate and modify for certain disabilities, many options make learning more accessible. Accommodations can include notetakers, the use of scribes for written assignments, handouts in alternative formats, and separate rooms for testing. A teacher's creativity also opens new opportunities to learn.

- [Science and Math Accommodations and Modifications](#)
- [Accommodations for Students with Visual Impairments](#)
- [Adaptations for Orthopedic Impairments](#)

Adaptive Physical Education

Physical disabilities should not exclude students from participating in gym activities. Depending on a student's disability, a separate, adaptive class or modifications within a typical gym class both offer physical education. Basketball, golfing and tennis can be adapted or participated in with the assistance of a physical education teacher or aide. Other physical activities, even swimming, can provide great therapeutic benefits to students.

- [Options for Adaptive Physical Education](#)
- [Modifying Physical Activities](#)
- [Sports Activities](#)
- [Teaching the Physically Disabled to Swim](#)

Making Inclusion Work

To make inclusion work, general classroom teachers, support specialists, parents and students themselves must work together to create the best educational environment possible. With knowledge of inclusive practices and strategies, teachers can manage classrooms that encourage learning and discovery among all students, regardless of physical abilities.

Have you had a physically disabled student who made educational strides in your classroom? Did you implement a unique accommodation to give a student better access to an educational experience? Use these resources and you can make a real difference in your students' lives. Leave a comment and share your best inclusive practices with other readers.

Assistive Technology - Ergonomic Pens and Pencils

Ergonomic pens and pencils make writing easier for children who have disabilities that make holding a standard pen or pencil difficult. Different styles of these writing devices are available to meet a child's individual needs.

Some children with disabilities may not be able to hold a standard pen or pencil. Others may be able to hold a standard pen or pencil but may have a great deal of difficulty using the pen or pencil to write. Ergonomic pens and pencils are designed to be easier for the child to hold and utilize. They come in different weights and shapes. Heavy weighted pens can help children with coordination difficulties write. Fatter pens and pencils may be easier to grip. Writing utensils with rubber grips are easier to hold on to. Some children may find large pens and pencils easier to hold and grip. Other children may find small pens and pencils easier to hold and grip. Allow the child to experiment with various writing devices, so they can determine which one is most suitable for them. Also have the child experiment with holding the writing utensils in different ways. For example, some children may have more success when holding a pen between the middle and forefingers.

There is a wide variety of assistive handwriting aids on the market. The following sections list some of the popular models.

[Pen Again](#)

The Pen Again is an ergonomic pen that has a "U" shape at the top of the pen. The forefinger rests inside the "U" shape. The Pen Again shape requires less hand strength to use the pen. Less grip is needed to control the pen because the forefinger rests in the "U" shape and naturally holds the pen in place without requiring hand grip. Pen Again is also coming out with a child size ergonomic pencil for smaller hands.

Because the Pen Again has a much different shape and requires a different grip than a standard pen, it takes time to get used to writing with it. With practice, the Pen Again can make writing easier.

Ring Pen

The Ring Pen is similar to the Pen Again. Instead of a "U" shape at the top, the Ring Pen has a circle that the forefinger goes inside. The pen is worn like a ring and requires no grip when writing.

Wanchick Hand-Based Writer

The Wanchick Hand-Based Writer is a tool that is worn on the hand. It fits around the base of the hand and the forefinger. The part on the forefinger has a loop where a pen or a pencil is inserted. The Hand-Based Writer requires minimal grip and strength. Children that do not have the strength or coordination to hold onto a pen or pencil might benefit from this tool. Since it is worn on the hand, the pen or pencil cannot be accidentally dropped.

EZ Grip

The EZ Grip is a rubber grip that can be slipped on most pens and pencils. The softness of the EZ Grip reduces hand pain when writing. Pen grip and writing coordination may be easier for some children using the EZ Grip due to increased diameter of the pen.

Other Ergonomic Writing Tools

Electronic devices are a good alternative to ergonomic handwriting aids for children who do not have the strength or coordination to use pens and pencils. Some children have more success typing on a keypad such as one on a laptop computer. Another option is to use transcription software such as Dragon Naturally Speaking.

References: Cumberland County College; *Assisstive Technology Handbook*; 2009

Special Instruction: Classroom Strategies for Teaching Physically Disabled Students

Students with physical disabilities are now taught in inclusive classrooms with their peers. Educating them can require modifications and different methods of teaching. Read below to learn strategies for creating an effective learning environment to educate children with physical disabilities.

Physical disabilities in students can include a wide range of both congenital and acquired disabilities and health issues. According to the US Individuals with Disabilities Education Act (IDEA), an individual with a brain injury, orthopedic impairment, or other health impairment who needs special education or related services is considered to have a physical disability. Some of the common ones include cerebral palsy, muscular dystrophy, and spina bifida. Since many more conditions may affect students in your classroom, you should gather specific information about each child in your classroom and his or her disability.

Set Up the Classroom

Regardless of the specific handicap or condition, some general tips apply when teaching students with physical disabilities. For example, you should **arrange the room so that everyone can move around easily**. Even if a student does not use a wheelchair or other medical equipment, he may need extra room to get around in class and avoid falling.

A **larger desk** may help a student balance books, papers, and classroom supplies. This larger table can accommodate a paraprofessional, too, if she is in class with the student. You should also ask the student where he would prefer to sit in the classroom.

Teaching Strategies

Teaching strategies to educate children with physical disabilities include setting up a **buddy system** so that another student can take notes for the student with the disability. A paraeducator may be needed to act as a scribe for other in-class requirements.

Specific assignments can be adjusted or modified for students, too. A student who has difficulty speaking due to cerebral palsy may need an alternative presentation format in place of an oral presentation. Do not assume, however, that the student cannot or does not want to give the presentation. He may need more time to speak – and better attention from his audience. The key is to make sure all activities include all students.

Talking to the student about what he can do will help identify a student's areas of expertise. The student may have become extremely proficient with the computer, for instance, due to the inability to write. Perhaps he can share that knowledge with the class, or show his peers how he uses [assistive technology](#) to access the computer. This can provide ways to incorporate computer instruction into a lesson.

Finally, when experimenting with teaching strategies for these types of children, be flexible and accept suggestions. Since most schools or districts employ inclusion specialists, they can provide you with specific guidance in teaching students with physical disabilities. Necessary accommodations or modifications in your classroom can facilitate learning, no matter the impairment.

ALSO RECOMMENDED:

- **[Common Factors of Students with Orthopedic Impairment](#)**
- **[A Teacher's Guide to Hearing Disabilities and Learning](#)**
- **[The Benefits of Assistive Technology in Schools](#)**
- **[Five Barriers to Inclusion in Education](#)**
- **[Activities to Improve Pencil Grasp](#)**
- **[Teaching Kinesthetic Learners](#)**
- **[I Can't Read Your Writing!](#)**
- **[Helping Children Develop a Tripod Pencil Grasp](#)**



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