Adaptive P.E. Characteristics and Causes

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According to the Adapted Physical Education National Standards website (Apens.org), adapted physical education is physical education which has been adapted or modified, so that it is as appropriate for the person with a disability as it is for a person without a disability. There are a multitude of categories that a student may fall under that allows them to be part of an adaptive physical education program or individualized learning plan and fall under the criteria outlined by the Individual with Disabilities Education Act (IDEA). Some of these include autism, deaf-blindness, hearing impairments, intellectual disabilities, orthopedic impairments, serious emotional disturbance, specific learning disabilities, traumatic brain injury and visual impairments. I will focus on orthopedic impairments as that is more specific to adaptive physical education.

Thomas C. Weiss (2017) defines orthopedic impairment as “impairments caused by congenital anomalies such as absence of a member, clubfoot, impairments caused by disease such as bone tuberculosis, poliomyelitis, or impairments for other causes to include amputations, fractures, cerebral palsy, burns, or fractures”. This falls in line with IDEA’s definition which is an orthopedic impairment is a severe impairment that adversely affects a child’s educational performance. These are physical disabilities that impair a child's movement and ability to participate in normal activities their peers may handle well. These disabilities range in causation. Some are born with physical limitations, some are developed with time and some happen from accidents or other traumatic events. Either way, it is my job to understand these impairments and how they relate to a physical education classroom. These impairments are not like other learning disabilities where a teacher, parent or professional look for warning signs, collect data, and determine that a student has a disability that falls under IDEA’s guidelines. Orthopedic impairments are usually seen and understood right away. Students may

be in a wheelchair, have other supports for movement, may be missing limbs, have imbalances in their movement and so on.

As mentioned above, there are a wide variety of disorders. Project Ideal Online, which is an extension of IDEA's guidelines, (Projectidealonline.org, 2013) divides orthopedic impairments into three main categories. Neuromotor impairments, degenerative diseases, and musculoskeletal disorders. A neuromotor impairment is an abnormality or damage to the brain, spinal cord or nervous system (Projectidealonline.org, 2013). These impairments usually happen at or before birth and can affect multiple body systems. These include limited limb movement, loss of urinary control and improper spine alignment. The most common forms of neuromotor impairments are cerebral palsy and spina bifida. People with cerebral palsy have involuntary and usually uncoordinated motor movements. The four most common types of cerebral palsy are spastic, athetoid, ataxic and mixed (Projectidealonline.org, 2013). Spastic involves very tight muscle groups that cause stiff, uncoordinated movements. Athetoid is contorted, abnormal and purposeless movements. Ataxia is poor equilibrium and balance as well as uncoordinated voluntary movements. Mixed is a combination of the three types. Cerebral palsy is further classified by which limbs are affected. Hemiplegia is left or right side, diplegia means legs are affected more than arms, paraplegia means only the legs are affected and quadriplegia means all four limbs are affected.

Spina bifida is a developmental defect of the spinal column. It is characterized by an opening in the spinal column that usually involves some paralysis of various parts of the body (Weiss, 2017). Spina bifida may or may not affect one's intellectual ability. Forms include occulta which is a milder form of spina bifida, and cystica which is more serious.

Degenerative diseases are various diseases that affect motor development. According to projectidealonline.org (2013), the most common type found in the school population is

muscular dystrophy. Muscular dystrophy is a group of inherited diseases characterized by progressive muscle weakness from the degeneration of muscle fibers. In other words, the student is losing muscle mass and progressively gets weaker. Musculoskeletal disorders are various conditions that can cause various levels of physical limitations. Examples are juvenile rheumatoid arthritis and limb deficiency (Projectidealonline.org, 2013).

As is stated above, children might be born with these impairments, acquire them over time, or maybe have been in some sort of accident or traumatic event. “The U.S. Department of Education reports 5,971,495 students receiving special education services in the 2003-2004 school year. Of that number, roughly 1.1%, or 68,188 students, received special education services based on a classification of orthopedic impairments” (Weiss, 2017). These students usually do not have any cognitive or learning impairments unless some form of brain trauma is involved.

I am excited to research strategies, accommodations and modifications I can use as a P.E. teacher to help these students. I understand there is a limited population of students who fall under these impairments in a school setting compared to other learning disabilities, but it is still important. Even if one child is affected, there should be someone qualified to help the student in every way possible.

References

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