

Spinal cord injuries in adapted physical education essay sample



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Imagine what a class of third graders would look like during their PE class at school. You might see one child outrunning all of the rest in a 50-yard dash, or maybe a group of children partaking in a game of hopscotch. But what about the child in a wheelchair who suffers from a spinal cord injury?

Approximately 25% of children in the public school system suffer from orthopedic impairments (“Fast Facts”). What can they do? How can they participate? How can the physical education program advance their daily dose of physical activity and improve their health? These key questions all work together to help include these children in physical education classes and to improve their quality of life. Typically, spinal cord injuries result in paralysis or incomplete paralysis of the arms, trunk, legs, or any combination of the three. Depending on the location of the damage, loss of sensation is also possible. The spinal cord and nerves are sheltered in the spinal, or vertebral column, and pass down into the segments of the spinal column.

Spinal cord injury distresses the innervation of muscle, therefore, the higher up the level of injury to the spinal cord, the more limited the range of motion of the body. Individuals with spinal cord injuries are mostly indicated to be paraplegics, or tetraplegics (quadriplegics). A paraplegic is an individual that is paralyzed in his/her legs. A quadriplegic experiences paralysis in both the arms and the legs (Auxter, David). “There are 11, 000 new cases of spinal cord injury in the United States every year. Fifty-five percent of spinal cord injuries occur among individuals in the 16-to-30-year age range; males outnumber females four to one (Auxter, David, 494).” “The physical education program for persons with spinal cord injury should be based on a well-rounded program of exercise for all the usable body parts, including

activities to develop strength, flexibility, muscular endurance, cardiovascular endurance, and coordination (Auxter, David, 495).” It goes without saying that physical activity is important for anyone at any age. However, it is particularly important for those who suffer from spinal cord injury due to that the leading cause of death of persons with spinal cord injury is cardiovascular disease.

Because of this, children need to get a head start on promoting their cardiovascular fitness. Along with strengthening the cardiovascular system, physical activity will also enrich a child’s active freedom, self-confidence, and quality of life (Auxter, David). Spina bifida is one example of a spinal cord injury that might be found in a child because it is a common birth defect. Impairments that commonly occur in spina bifida are loss of sensation, paralysis of muscle groups, problems with bladder and bowel function, and orthopedic problems. Most PE teachers are aware of the importance of a productive physical education program for a child with spina bifida as it will assist in keeping the child fit, building stronger bones, and developing better bowel function. Aside from the physical benefits this can provide, the child will also learn how to be a part of a team through sports and games and hopefully develop a habit of regular physical activity throughout their life (Sandler, Adrian). One of the first things a child with a spinal cord injury should learn is how to use their wheelchairs effectively and efficiently in all surroundings and should be exhorted to intermingle with their wandering classmates (Auxter, David).

These skills can be easily transitioned into useful social skills (by working with classmates) and work skills later in life. “ In addition to wheelchair <https://assignbuster.com/spinal-cord-injuries-in-adapted-physical-education-essay-sample/>

mobility, younger children should also be taught fundamental motor skills such as throwing, hitting, and catching. Once these skills are mastered, games that incorporate these skills can be played (Auxter, David, 497).” The more games and events children with a spinal cord injuries can participate in, the more they will feel accepted among their teachers and peers. Many adaptations can be made to include children with disabilities in PE.

Equipment such as balls, frisbees, bats, etc., can be substituted or the rules of a game can be somewhat altered to acclimate special needs. In some cases, the playing area can be condensed or the surface can be modified. The PE teacher should always aim to keep the nature of the game or sport the same for each student, disabled or not. Safety is another important factor to consider. The child with spina bifida, for example, has no sensation in their feet and should be wearing protective footwear such as socks or diving booties (Sandler, Adrian).

In any games that involve accelerated motion or sudden stopping, proper wheelchair strapping or buckling precautions should be taken. Also as an extra safety provision, the PE teacher should ensure that the rest of the class is mindful of the rule and safety exceptions made for the disabled student as they play. Some more specific adaptations can be made depending on the sport or game being taught. When teaching bowling, several changes can be made; the number of steps can be reduced, students can use two hands instead of one, a ramp and/or a partner, and give each other verbal cues. Softball can be adjusted by using velcro balls and mitts, larger or smaller bats, and a batting tee. Base distances and the pitching distance can also be reduced. If an individual is in a wheelchair, they can be allowed to push the

ball of a ramp, off of their lap, or off of the tee. In tennis, larger and/or lighter balls, and shorter and/or lighter racquets can be used. Lowering the net or not using a net at all is an option, along with hitting brightly colored balls off of a tee. Although soccer would be a tougher sport to adapt, it can be done by having well defined boundaries, reducing the play area, allowing a wheelchair-ridden student to hold the ball on his/her lap while pushing the wheelchair.

Deflated balls, nerf balls, beeper balls, or brightly colored balls would work just as well as a soccer ball and will ensure safety of the students. When covering volleyball, use larger, lighter, softer, or brightly colored balls. Allow students to catch the ball instead of hitting or volleying, self toss and set ball, and/or stand closer to the net on a serve. This is another sport where there is the option of lowering the net or not using one at all. There are several ways to modify basketball. Use various size balls, allow traveling and double-dribbling, use a larger goal or lower the regulation size goal.

Basketball is another opportunity for a student in a wheelchair to hold the ball on his/her lap while pushing the wheelchair (“ PE Central: Adapted Physical Education Web Sites.”).

All of these adaptations can be made for the disabled student. Revising rules and regulations of a game to accommodate a disabled student also opens the door for non-disabled children to learn the importance of teamwork and helping others in need. If these skills are learned appropriately, all students will develop physical, developmental, and social skills that will benefit them throughout the rest of their life. “ The purpose of the Adapted Physical

Education National Standards (APENS) project was to ensure that physical
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education for children with disabilities would be delivered by a qualified Adapted Physical Educator (“ 15 Standards of Specialized Knowledge.”).

This is a set of 15 standards that symbolize the content a qualified Adapted Physical Educator needs to know in order to properly provide physical education to children with disabilities. The standards are as follows: Standard 1: Human Development

Standard 2: Motor Behavior

Standard 3: Exercise Science

Standard 4: Measurement and Evaluation

Standard 5: History and Philosophy

Standard 6: Unique Attributes of Learning

Standard 7: Curriculum Theory and Development

Standard 8: Assessment

Standard 9: Instructional Design and Planning

Standard 10: Teaching

Standard 11: Consultation and Staff Development

Standard 12: Student and Program Evaluation

Standard 13: Continuing Education

Standard 14: Ethics

Standard 15: Communication (“ 15 Standards of Specialized Knowledge.”)

There is enough evidence to show that Adapted Physical Education is a much needed subject area in school systems. Without proper physical education for all students, including the disabled, children cannot learn the appropriate physical, developmental, and social skills necessary to maintain a healthy lifestyle and well-being. This is particularly crucial to the group of students <https://assignbuster.com/spinal-cord-injuries-in-adapted-physical-education-essay-sample/>

who are disabled with spinal cord injuries. Their conditions make it extremely difficult to gain proper physical fitness but with caring and determined Adapted Physical Educators it certainly does not make it impossible.