# ADAPTING VOLLEYBALL INSTRUCTION: INCLUDING STUDENTS WITH DISABILITIES IN PHYSICAL EDUCATION



Volleyball is a popular recreational or competitive sport enjoyed by many people of all ages and skill levels. Volleyball can be played on a variety of playing surfaces: wood, rubber material, plastic, sand, grass, and even in pools.

Volleyball is considered one of the easiest team sports to modify for individuals with disabilities. Even for individuals who have difficulty with strenuous activity, participation is possible if the pace of the game is moderate. Individuals

with limited mobility can be successfully accommodated as well.

Volleyball is taught in physical education at various developmental levels. Each individual has the right to learn the basic skills. Some individuals will compete on school, club, or other organizational teams; however, it is also necessary that those individuals with disabilities receive the instructional opportunities as their peers so they have the opportunity to participate in the game of volleyball.

#### Assessment

Evaluate each student's present level of volleyball skill for probability of success. Assess previous experience, fitness level, motor functioning, attitude toward his/her disability, and willingness to participate.

#### **Safety Considerations**

- 1. Present activities according to the student's physical characteristics, maturity, and capabilities.
- 2. Orthopedic impairment: Be sure that the other students are aware of these classmates and supportive equipment that they require.
- 3 Asthma: Always have an inhaler in possession or in an area that is easily accessible.
- 4. Diabetes: Monitor diet and insulin, as proper attention of those can allow an individual to participate in intense activities, but be aware that there is a risk of hypoglycemia (low blood sugar). Have knowledge on how to administer assistance to an individual in case of an emergency situation.

#### **Instructional Adaptations**

The following ideas are designed to facilitate the inclusion of students with disabilities into general physical education during instruction in volleyball. Successful participation for some students requires equipment which had been adapted to their particular needs. Requests for purchase or construction of equipment can be facilitated through the Individualized Education Program (IEP). If special equipment is necessary

to help a student progress in physical education, then it should be identified at the Case Conference and included on the IEP form.

General adaptations can include:

- 1. Lower net height, but still taller that no player can reach over the top.
- 2. Increase size of teams.
- 3. Increase the number of hits allowed.
- 4. Changes in the court size and serving line.
- 5. Change the size, weight, or softness of the ball.

Specific adaptations for associated disabling conditions are listed below. The adaptations are provided in categories by disability in order to facilitate easy access to the information. However, each student with a disability is unique and capable and should not be limited within a category.

# **Cognitive and Sensory Disabilities**

# Deaf/Hearing Impairment

- 1. Make sure that there is no background noise, for example hold the balls while talking for less distraction.
- 2. Provide a visual demonstration of skills when learning.
- 3. Use flags instead of whistles.
- 4. Establish basic hand communication.

## Mental Retardation

- 1. Present instruction slow, clear, and with the use of demonstration.
- 2. Allow ball to bounce.
- 3. Catch the ball instead of volleying.
- 4. Move serving line forward.
- 5. Lower the net.
- 6. Use a lighter volleyball, balloon, or use an object bigger in size, such as a beach or foam ball.
- 7. Allow a self-toss and then a set.

# Visual Impairment

- 1. Allow the students to catch the ball and return it with a throw. Point is scored when:
  - a. The ball rolls out of bounds before it is trapped.
  - b. The ball goes into the net.
  - c. The ball is thrown and does not land in the opponent's court.
- 2. Use an audible volleyball (Aud-a-ball); bigger and brightly colored ball also could be helpful.
- 3. Have peers tell student which direction to face and pass or serve the ball.

- 4. Place a noise device in the location of the net.
- 5. Mark the floor with poly dots or other colored material pieces to help the student find floor position.
- 6. Place colored markers, streamers, or other device on the net.
- 7. Have teammates wear brightly colored pennies.
- 8. Allow student to be permitted to be all time server during the game and take part if able to see well enough.

## Affective Disabilities

#### Emotional Disturbance

- 1. Monitor student's behavior and actions.
- 2. Talk slow and use demonstrations when learning new skill.
- 3. Review skill and encourage proper technique during partner work.
- 4. Have a peer assist student and use extra verbal and physical cues.
- 5. Allow the student extra time to either pass or catch/throw the ball.
  - a. Make rule that no student can block or interfere with student's pass.

### **Psychomotor Disabilities**

#### Orthopedic Impairment

- 1. Designate an area or position for the individual.
- 2. Have a peer assist if necessary.
- 3. Allow the ball to bounce.
- 4. Catch and throw the ball.

One Arm Involvement

- 1. Toss the ball high into the air and hit with same hand.
- 2. If unable to serve, allow the individual to toss the ball into play as a serve, hit a suspended ball, or have someone else hold the ball allowing the individual to then hit it.
- 3. Pass with one hand or allow the ball to hit any part of the body above the waist.

One Leg Involvement

- 1. Allow the ball to bounce.
- 2. Play sitting volleyball.
- 3. Designate a specific area or position for the student to defend.

Two Leg Involvement

- 1. Allow the ball to bounce or be caught then thrown.
- 2. Play wally-volleyball.

- a. Ball volleyed against the wall, usually in a racquetball court.
- b. Ball is controlled with overhand pass (set) rather than the underhand, forearm pass.
- 3. Play sitting volleyball.

## Other Health Impairment

## Asthma

- 1. Play indoors.
- 2. Avoid high humidity or cold environments.
- 3. Begin with a low physical activity level and gradually increase.
- 4. Allow free substitutions for the student if tired or shortness of breath.

## Cardiovascular Condition

- 1. Monitor and be aware of the individual's condition throughout the entire activity.
- 2. Play at a lower pace or sitting volleyball.
- 3. Use warm-up and cool-down activities.
- 4. Have another student retrieve the ball if "shanked" or have extra balls available.

## Diabetes

- 1. Do not allow individual to play barefoot (beach volleyball) to avoid the risk of cuts, blisters, and other injuries.
- 2. Allow a peer, who is trained to recognize signs, to work with the student.
- 3. Play at a lower to moderate pace or allow free substitutions if individual become fatigued.

Barriers to participate in volleyball and other physical activities by individuals with disabilities are decreasing. More than ever, physical education teachers must take the responsibility to read professional journals, attend conferences, seminars, and workshops, and join professional organizations to expose themselves to the information available on how to teach specific sports and skills to all of their students, including students with disabilities.

## Resources

- Auxter, D., Pyfer, J., & Huettig, C. (2001). *Principles and methods of adapted physical education and recreation* (9<sup>th</sup> ed.). New York: McGraw-Hill.
- Block, M. E. (2007). A teacher's guide to including students with disabilities in general physical education (3<sup>rd</sup> ed.). Baltimore: Paul H. Brookes.
- Dunn, J. M., & Leitschuh, C. A. (2006). *Special physical education* (8<sup>th</sup> ed.). Dubuque, IA: Kendall/Hunt.

- Schmottlach, N., & McManama, J. (2006). *The physical education activity handbook* (11<sup>th</sup> ed.). San Francisco: Pearson.
- Winnick, J. P. (2005). Adapted physical education and sport (4<sup>th</sup> ed.). Champaign, IL: Human Kinetics.

This information was developed by Lindsey Bradtmueller, Adapted Physical Education student at Manchester College, Spring 2008. The adaptations and teaching strategies contained in the document are only suggestions. Each student must be considered individually, and in many cases, a physician's written consent must be obtained.