

ADAPTING WEIGHT TRAINING INSTRUCTION: INCLUDING STUDENTS WITH DISABILITIES IN PHYSICAL EDUCATION



Weight training is an activity that encompasses many different aspects of exercise. Weight training is used to promote muscular strength and muscular endurance. This allows the student to have an advantage at living a healthy lifestyle. The skills that are learned in weight training are lifelong skills and can be very helpful in preventing disease.

Weight training is an activity that needs to be taught to everyone. This means that each and every student should be able to know how to exercise to achieve his/her personal fitness goals. Moreover, it is extremely important for individuals with disabilities because they may not receive the same amount of strength training that everyone else receives through basic daily activities.

It is vital that students with disabilities are taught adaptations to meet their personal fitness needs. They deserve just as much, if not more, special instruction when it comes to weight training that can lead to an active and healthy lifestyle.

Assessment

Evaluate each individual's present levels of muscular strength, muscular endurance, and basic knowledge of weight training. Assessment of previous experience and attitude towards participating in weight training is necessary.

Safety Considerations

1. Follow all general rules of weight training while in the fitness center.
2. All students should be under close supervision.
3. All students participating in weight training **MUST** have a partner as a spotter.
4. The weight training equipment should be inspected often to make sure it is not broken and is safe for the individual to use.
5. Know proper safety precautions in case an accident occurs.
6. If the student complains about pain, immediately stop exercising and check with licensed professional.

Instructional Adaptations

The following ideas are designed to facilitate the inclusion of students with disabilities into general physical education during instruction in weight training. Successful participation for some students requires equipment which has 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. Providing pictures of correct lifting techniques.
2. Employ the buddy system to support classmates.
3. Circuit train on simple machines to avoid potential injury of using free weights.

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. Use many visual aids such as pictures, videos, or demonstration of proper technique.
2. Allow for the buddy system to play into affect. Let the student use a partner he/she feels comfortable with and can understand.
3. Be careful when the student is lifting with many people around. Hand signals or cues could be very helpful to prevent accidents.

Mental Retardation

1. Present proper technique slowly and clearly.
2. Teach lifting techniques in separate sections, so it may become easier to understand.
3. Focus on the individual intently to make sure he/she is using the correct technique and are not in danger of injuring themselves.
4. Fitness levels may be extremely low at the beginning of the program, so make sure to monitor increases in resistance closely.
5. Incentives are very useful in challenge the individual to increase fitness. Offer t-shirts, clubs, or other goals to achieve.

Visual Impairment

1. Allow the student to use a partner they feel comfortable working with.
2. Take advantage to the use of machine lifting. This way the individual will be able to feel the direction of the lift.
3. In the case of free weights, allow the student to use lighter weights to start and guide their body to teach proper technique.

Affective Disabilities

Emotional Disturbance

1. Allow individual to lift with a friend that he/she is familiar with.
2. Teach student to focus on breathing techniques to keep self calm and relaxed.
3. Don't force heavy lifting or allow the individual to become frustrated if unable to finish a set.

Psychomotor Disabilities

Orthopedic Impairment

1. Don't let students with cerebral palsy move the resistance too ballistically; concentrate on a full range of motion.
2. Make sure that a student using a wheelchair has brakes properly locked, so there isn't a chance of movement.
3. Students with spinal cord injuries should be examined and checked to determine range of motion ability.
4. Wrist weights, sand bags, and homemade equipment is a great adaptation ideas.

One Arm Involvement

1. Most lifts should still be possible. Use dumbbells as an alternative.
2. Make sure there is a spotter to help in balancing the weight.
3. Use a machine to do the lift with one arm compared to using free weights.

One Leg Involvement

1. Modify the standing lifts so the individual is allowed to lay down or be seated for support.
2. Make sure when doing leg lifts that they are using machine equipment instead of free weights.
3. One-legged squats are possible with the use of a SMITH machine. This allows the bar to travel vertically without traveling horizontally and can be locked into place at any point to avoid injury.

Other Health Impairment

Asthma

1. Students should be able to participate in all weight training activities if intensity is monitored.
2. Make sure that the student's inhaler is close by in case of an asthma attack.
3. Allow the individual to take breaks when he/she feels it necessary.
4. Since almost all weight training is done inside, make sure the temperature is at normal room temperature.

Cardiovascular Condition

1. Allow the student to monitor intensity and do as many lifts as possible comfortably.

2. Don't allow heavy powerlifting that creates a full range of body motion causing the student to move up and down rapidly (i.e., squat, power clean, power snatch).
3. Make sure the student understands his/her own tolerance and doesn't push self to overexertion.
4. Use a training program of higher repetitions and lower weights.

Barriers to participation in weight training and other physical activities by individuals with disabilities are decreasing. More than ever, physical education teachers must endeavor to read professional journals, attend conferences and workshops, and join professional organizations to avail themselves of information on how to teach specific sport activities to their students of varying skill levels. Being an informed professional is half the battle in allowing students with disabilities to gain access to lifetime physical activities like weight training.

Resources

Dunn, J. M., Leitschuh, C. A. (2006). *Special physical education* (8th ed.). Dubuque, IA: Kendall/Hunt.

Nieman, D. C. (2007). *Exercise testing and prescription: A health-related approach* (6th ed.). New York: McGraw-Hill.

Schmottlach, N., & McManama, J. L. (2006). *The physical education activities handbook* (11th ed.). San Fransisco: Benjamin Cummings.

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