Adaptations for students with special needs in Physical Education and Sport.

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Introduction

Everyone likes to feel they belong. Individual and team sports can integrate and unite able-bodied and physically challenged children. Acceptance and companionship are basic needs. Sports, games and recreational activities can help all children develop fitness, strength and social skills.

In the past, physically challenged children had limited opportunities to be with other children in physical activities and sport. Now, as physically challenged children are mainstreamed into regular physical education classes, teachers need to enhance their curriculums with activities that can be enjoyed by all students, able-bodied and physically challenged. These activities will serve to reinforce learned skills and at the same time add new and exciting challenges. Activities that foster team spirit help to eliminate feelings of isolation and exclusion. Emphasis is placed upon abilities and similarities as opposed to disabilities and differences.

The activities and materials presented will provide valuable information about adapted activities and sports. Teachers, coaches, volunteers and parents who wish to work, or are involved, with children, young adults, in a mainstreamed educational setting, will benefit in using the presented information.

Educators are always seeking to create opportunities for the physical, mental and social development of all children. Integration, participation and cooperation are important and attainable educational goals.
MOTOR DYSFUNCTION

Definition:
A disadvantage or deficiency, especially a physical or mental impairment that interferes with or prevents normal achievement in a particular area.

Characteristics:
- Primitive reflexes are still evident
- Slow to develop postural reflexes
- May have the following:
  - Mental retardation
  - Convulsions
  - Speech problems
  - Oculomotor defects
  - Hearing and vision loss

Teaching Strategies:
- Work on muscle stretching
- Develop range of motion
- Develop postural alignments
- Use ramp climbing
- Work on gait training

SuperBall

A New Dimension In "BIG TIME" Fun

Take a VB-Trainer®, make it really big (16" big), and you have a VB-XL SuperBall - a ball designed to provide mega fun.

Introduction

It's a volleyball trainer, only bigger. The Sportime VB-XL is easier to see, it's lightweight and fun to play with. Its true flight makes it the best choice for groups of multiple ages and skill levels. For just teaching eye-hand coordination or teaching volleyball skills this is
THE BALL! This guide is designed to help you and your students get the most from your VB-XL in an adapted environment.

As physical educators and group leaders providing skill development and fun in a group setting can be challenging. The Sportime VB-XL's larger size, lighter weight and true flight will improve opportunity for skill development for some at the same time providing a fun level of participation and team cooperation.

**Target Volleyball**

The purpose of this game is to encourage good teamwork in using volleyball skills to get the ball over net.

**Equipment:** 2 volleyballs, 2 volleyball nets, 6 hula-hoops and two 4 x 8' mats.

There are 3 to 10 players per team. Set up the nets about 20' apart, parallel to each other. Within the "alley" formed by the nets stand mats on edge, connecting them to form a box and scatter the hula-hoops. Put each team (of 2) on the outside of each net. After players find designated spots, each team will get volleyball. To start play, the server bumps the ball to a teammate, who will then set the ball to another teammate. The third hit can be either a bump or set over the net. The goal is to get the ball over the net in three hits and score 1 point. If the ball goes over the net in three (3) hits and lands on or in a hula-hoop, that team gets 2 points. If the ball goes over in three hits and lands inside the box, that team gets 3 points.

**Note:**

- Lower the net; use variety of balls (volleyballs, beach balls, etc.).
- Allow students who cannot bump or set to catch and throw ball to another player.
- Require only 2 hits.
- Allow the ball 1 bounce before student catches, bumps or sets ball.
- Use 3 mats for "box" or more hula-hoops.
**VISUALLY IMPAIRED**

**Definition:**
An impairment, which, even when corrected, adversely affects a child’s educational performance. The term includes both partially sighted and blind children. Not every child with a visual loss needs special education; special services are required only when the visual loss interferes with learning. There are at least three methods of classification to describe the remaining vision of people with visual impairments.

A. Classification based on ability to read print.
B. Classification based on visual loss after correction.
C. Classification for sport competition.

**Characteristics:**
- Physical fitness is below those of sighted peers
- Balance development is impaired
- Fundamental motor patterns and skills are delayed
- Physical growth and maturation may be impaired
- Wide variation in residual vision

**Teaching Strategies:**
- Use other sensory modalities for providing information
- Use games for social development
- Use a beeper, constant sound source, etc.
- Place students where they can best hear instructions
- Use contrasts between figure and background
- Increase or decrease the grade to indicate play boundaries
- Begin new game in slower motion

**Sportime® DuraBeep Module And Ball**

*Opens Audio-Guided Movement Possibilities*

DuraBeep Modules are designed as self-contained units, completely enclosed in a plastic cylinder with screen-protected beeper and encapsulated circuit board. Just remove the button cap to replace the battery. You should get up to 170 hours on one replaceable 9V alkaline battery, a half-year or more of play.
The Module can be hand held, placed under objects or put in pockets. With their eyes closed, sighted players can compete with the visually impaired. Play a game of tag by trying to locate the player with the beeper. Find the beeper hidden under one of many objects. Add fun and excitement by randomly turning the beeper on and off.

DuraBeep Ball is good not only for players with visual disadvantages, but it’s also good for players who need that additional auditory cueing. Wow, what a difference for some players! This guide is designed to help your students get the most from DuraBeep Ball in an adapted setting.

**Over And Under**

*(Right Side/Left Side)*

The purpose of this game is to improve teamwork and eye-hand coordination.

Break the class into teams of 4 to 8. Each team lines up (front to back) and the lead student takes DuraBeep Ball and passes it over to the next student who passes it under, etc. The ball eventually makes it to the end of the line. After alternating over and under for the length of the line the last person gets the ball and runs to the front of the team and begins again. Passing of ball can be done right/left alternating through the team.

**Variation** - blindfold team members, pass only overhead or underneath or roll ball between legs.

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**COGNITIVE IMPAIRMENT**

**Definition:**

A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems, which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.
**Characteristics:**

- Cognitive learning - area where students differ most
- Learn at slower rate
- Achieve less academically

**Social/emotional:**

- Exhibit same range but more frequently exhibit inappropriate responses to social/emotional situations.
- Do not fully comprehend what is expected of them in social situations

**Physical/motor:**

- Delayed development of physical skills
- Usually overweight because of less activity levels

**Teaching Strategies for individuals with mild retardation:**

- Put individual in less demanding sport position
- Overteach the cognitive information
- Emphasize fitness activities

**Teaching Strategies for individuals with severe retardation:**

- Emphasize range of motion exercises
- Have individual propel himself as much as possible
- Concentrate on postural righting activities
- Use resistance training with therabands
- Concentrate on vestibular activities

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**Sportime® BumpBalls™**

*Provide Loads Of Tactile Fun*

BumpBalls were designed as a low-cost alternative to our top-selling Tact-L-Balls™, considered the best ball of its type in the world. You won't get as many sensory bumps or the Tact-L-Ball's 2-year guarantee, but you will get quality, plenty of
This activity guide is presented with the adapted student in mind. These activities can be used in a one-on-one situation, as well as in a small group or integrated class setting. BumpBall can be used in place of other types of balls to provide the student with sensory input.

Activities

Rolling Exercises
While sitting, roll BumpBall with an open palm to emphasize the use of the whole hand, thumb and fingers. Have students do the following exercises:

- Roll with right hand on right side of body.
- Roll with left hand on left side of body.
- Roll with right hand crossing in front of body to left side and back.
- Roll with left hand crossing in front of body to right side and back.
- Roll with right hand reaching around back of body.
- Roll with left hand reaching around back of body.
- Begin with right hand, roll to left side, transfer ball to left hand and roll back to right side of body.
- Begin with left hand, roll to right side, transfer ball to right hand and roll back to left side of body.
- Using both hands, roll BumpBall up legs, stomach, chest, neck, face and back to the floor.
- In a long leg sit, roll BumpBall down length of leg and back, stretch as far as possible, and hold.
- In a long leg sit, roll BumpBall with right hand down length of right leg and around feet, transfer ball into left hand and roll back up left leg.
- In a long leg sit, roll BumpBall with left hand down the length of left leg and around feet. Now transfer the ball into right hand and roll the ball back up right leg.
• While laying on stomach or back, roll BumpBall with an open palm to emphasize the use of the whole hand, thumb and fingers:
  o Using the right hand, roll BumpBall on floor up and down right side of body reaching as far as possible while maintaining control of the ball.
  o Using the left hand, roll BumpBall on the floor up and down left side of body, reaching as far as possible while maintaining control of the ball.
  o Using right hand, roll BumpBall on floor up and down left side of body.
  o Using left hand, roll BumpBall on floor up and down right side of body.
  o Using right hand, roll BumpBall on right side on body (legs, stomach, chest).
  o Using left hand, roll BumpBall on left side of body (legs, stomach, chest).
  o Roll BumpBall with right hand up to the head, transfer ball to left hand and roll down left side of body.
  o Roll BumpBall with left hand up to the head, transfer ball to right hand and roll down right side of body.
• Laying face down, place BumpBall on stomach and roll body forward, backward and sideways keeping contact with ball at all times.
• Lay face down on several BumpBalls and roll so contact is on many body parts at the same time.

HEARING IMPAIRED

Definition:
A term that indicates some malfunctions of the auditory mechanism. Within the scope of hearing impairments are several types and degrees of hearing loss. Deaf and hard-of-hearing are examples of these impairments.

Characteristics:
• Balance may be affected
• Information processing time is longer
• Physical fitness may be lower
• May be a delay in social/emotional development
• Speech can range from intelligible to none
Teaching Strategies:

- Make sure the student can see your lips when you talk
- Use visual demonstrations
- Coordinate your communication method with the rest of the IEP team
- Learn basic signs and use them
- Use captioned videotapes
- Stand still when giving instructions

* Hearing Impaired students can do many of the games a regular classroom offers!* Directions need to be clearly stated and adapted for comprehension.

TargetWall™

This TargetWall is designed for the easily attainable success of its players, whether it’s set low (at 66" to the floor) for kicking, or high (to 103") for throwing.

Activity: With little verbal direction from the teacher, the student can throw and accumulate a score while throwing or kicking. The student can challenge themselves by stepping back further and increasing the difficulty.

**EMOTIONALLY DISTURBED**

Definition:
The term means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance:

A. An inability to learn which can not be explained by intellectual, sensory, or health factors;
B. An inability to build or maintain satisfactory relationships with peers and teachers;
C. Inappropriate types of behavior or feelings under normal circumstances;
D. A general pervasive mood of unhappiness or depression; or
E. A tendency to develop physical symptoms or fears associated with personal or school problems.
Characteristics:

- Poor coordination
- Refusal to practice
- Loss of emotional control
- Hostility
- Noncooperative Behavior
- Disorientation in space and time
- Destructive

Teaching Strategies:

- Remove distracting objects
- Impose limits on use of equipment and facilities
- Use games of social interaction
- Expect aggressiveness and monitor it closely
- Use activities that provide immediate feedback

NebulaTracks™

Provide A New Media For The Development Of Cooperative Group Interaction

- One set of 3 NebulaTracks (with 5 pairs of handles per each side) keeps up to 30 students busy and on the move, with endless hours of cooperative, aerobic and critical thinking activities.
- Each 4-way stretch, LYCRA® panel measures 10' x 28".
- For students K-12.
- A simple NebulaTrack activity involves 10 students (5 per long side): - Moving one or more balls from one end of the track to the other. - Passing the ball(s) off to the next NebulaTrack group. - Then running into position to retrieve the ball(s) from group three.
- The faster the ball(s) move, the faster the groups have to move.
Development Of Cooperation And Leadership

- One of the important benefits of NebulaTrack activities is group interaction and the dynamics that such an interaction produces.
- You'll see the emergence of "team leaders" "generals," "captains" and "lieutenants." It is rare for a team to function as one cohesive entity, though it happens on occasion.
- A valuable educational benefit NebulaTracks brings to your students is full interaction through participation and their experience of feeling success.

Track Race Activity

Equipment: NebulaTrack(s), balls and a finish line.

Object Of The Game: The object of the game is to see which teams cooperate the best and the quickest by being the first to cross the finish line. Skills gained are communicating, teamwork, running and crawling.

Divide the class into 2 groups. You can do coed or split the sexes for a "battle of the sexes." Number the students at each mat in the order as they are standing around the NebulaTrack. 1, 2, 3, 4, 5, 6, 7, etc. The Track can never touch the ground during this race. When you signal start, teams begin to move down the area toward the finish line. This might not sound like a challenge. However, they have a task to complete first.

Before a team can successfully cross the finish line, all of the team members must, in order, let go of the Track and run under the Track and back to their original place on the Track. This must be done one at a time. (The easiest way to accomplish this is if all the students crossing under the Track and back to their spot is to actually stand still and, one at a time, go as fast as possible, after everyone has gone, sprint to the finish line). The first team to cross successfully wins.
**Variation:** You can add to the fun by placing objects on the NebulaTrack™ that has to stay on it while performing the task. Add the number of items still on the track to a score to add to the fun.

**Adaptations:** Special populations are often our best thinkers. They can be a team leader and give direction. Depending on limitations, most impairments can successfully complete the task barring the sprint at the end.

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**AUTISM**

**Definition:** Classic autism is defined as a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age 3.

**Characteristics:**

- Impairment in social interaction
- Impairment of verbal and nonverbal communication
- Restricted, repetitive, and stereotypical patterns of behavior, interests, and activities
- Impaired imitation
- Lack of awareness of the existence of feelings of others
- Absence of imaginative activity

**Teaching Strategies:**

- Use a consistent behavior modification program
- Teach in a less stimulating area
- Use an established routine with repetitive transition strategies
- Use a predictable routine
- Be consistent in use of terms, equipment, and class organization
- Use vigorous aerobic exercise to reduce self-stimulating behavior
Body Sox™

*Reinforces Spacial Awareness, Encourages Creative Movement*

Body Sox are specifically designed for spatial awareness and interaction. Each pillow-case-like sack is made from a translucent LYCRA® with a reinforced hook and loop-closed entrance.

Once inside, users find themselves in a private domain that lures them into kinesthetic exploration. As they move their shapes become art-like. They become enraptured as they begin to understand and explore the 3-dimensional space they individually occupy.

Body Sox users quickly find out how easily it is to transform space and how balance and coordination affect this transformation. Users can create dancing images such as rolling rocks, hatching eggs, moving puzzle pieces, birds of flight and more!

**Introduction**

Body Sox can provide comfortable pressure to students with special needs (especially students with autism) and can enhance tumbling, dance and creative movements for students of all abilities. Curiosity makes the student want to go in, creativity and spatial awareness abounds once they are inside and motor planning gets them out. This guide is designed to help you and your students get the most from Body Sox.

**Age Use:** For students in early childhood through high school.

**Objectives:** Spatial awareness, balance, coordination, motor planning and creative movement.

**Safety Suggestions:** Be sure that students are aware of the space around them and any obstacles before they move about while inside the Body Sox. Students may need to be prepared for what to expect once inside and reassured that they will be able to see through the fabric.
Crazy Dancer

**Set Up:** Have students stand in circles in groups of 5 or 6, all on a very large matted area. Be sure to have on hand a CD, tape or record player and plenty of great music. Suggested music: Shadow Dancing by Greg & Steve.

**The Activity:** Have students decide who will go first, second, third, etc. When the music starts, one student at a time wears the Body Sox and, in the center of the circle, dances to the music. Other students keep time to the music while jogging in place or moving in place, and enjoy the performance of the "crazy dancer." Students may be taught and encouraged to give positive feedback, like clapping or identifying a movement that they liked. If possible, videotape the performances and allow students to watch themselves (they will love this), perhaps on a day when the gym is unavailable.

LEARNING DISABILITIES

**Definition:** A disability in which the individual possesses average intelligence but is substantially delayed in academic achievement.

**Characteristics:**

- Poor spatial orientation
- Clumsiness
- Figure-background problems
- Rhythmic problems
- Problems with body awareness
- Difficulty with motor proficiency

**Teaching Strategies:**

- Work on body/space problems with action songs, games, mirrors, and tactile activities
- Work on balance and upper/lower body coordination for motor proficiency
- Work on obstacle courses for spatial orientation
- Use brightly colored objects for contrast
- Give opportunity for rhythmical problems
Buddy Walkers

Develops coordination and cooperation!

The Buddy Walker improves these skills along with communication between teammates. One pair of teammates must cooperatively step and lift the rope handles to go anywhere. Measuring 5"W x 36"L, the Buddy Walker has foam padded platform bottoms which will not scratch gym floors. Great for indoor and outdoor activities!

Walker Relay

Using Buddy Walkers, each team crosses the gym floor a specified distance and returns to the start while cooperating and coordinating their movements in relation to their teammates. The team that cooperates the best will succeed first. However, the emphasis is not necessarily on winning as much as it is on finishing the relay.

Resources


http://www.pecentral.org/adapted/adaptedwhatis.html

http://www.pecentral.org/adapted/adaptedmenu.html

http://pe.central.vt.edu/adapted/adaptedactivities.html

http://pe.central.vt.edu/adapted/adapteddisabilities.html

https://www.sportime.com/adapted/index.jsp

https://www.sportime.com/adapted/products.jsp

https://www.sportime.com/adapted/guides.jsp
When it comes to teachers checking to see if the students have grasped the essence of what has been presented, it is a good idea to remember the following.

“You should not be interested in your answers as much as they should be interested in theirs.”