

Physical Education Inclusion

I: Introduction:

The creation of a physically educated person results from a summation of knowledge, skills, and attitude.

BUT.....when the physical component in skill development is overly included in consideration,the impairment results in a disability which may lead to a handicap

*(see handout.. 'examples to illustrate the differences among the')

II: HOW?

A: Modifications can occur on a number of fronts. These include:

- i) Equipment modification
- ii) Skill level modification
- iii) Rule modification
- or iv) Distance/Space modification

*(see handout)

B: Personal participation has a full range. This may include:

- i) Full participation
- ii) Special active
- iii) Active parallel
- iv) Passive
- v) Educated observer or coach

*(see handout)

III: How many ways can P.E. be adapted to include students with multiple severe challenges (primary/intermediate grades)

IV: Specific games and sports

Taken from Moving To Inclusion.
 Active Living Through Physical Education:
 Maximizing Opportunities For Students With A Disability
 Introduction

Equipment Modification	
Description	Effect
Lighter, softer, larger ball	<ul style="list-style-type: none"> • Slows game and allows more time to prepare for and execute skill
Shorter, lighter, striking implement	<ul style="list-style-type: none"> • Allows greater control for weaker and less skilled player
Larger striking implement, larger goal or target area	<ul style="list-style-type: none"> • Reduces number of misses and increases opportunity for success
Lighter, softer, smaller balls	<ul style="list-style-type: none"> • More easily caught and retained
Bean bags substituted for balls	<ul style="list-style-type: none"> • Not as elusive as balls and may be easier to throw for student with poor hand function
Partially deflated balls for dribbling and kicking activities	<ul style="list-style-type: none"> • Slows movement of the ball and allows more time to prepare and execute the skill

Skill Level Modification	
Description	Effect
Skills such as wheeling substituted for running, rolling a ball off a lap for kicking, striking a soccer ball with a floor hockey stick instead of the foot	<ul style="list-style-type: none"> • Increases success and opportunity to be involved in game play
Tasks simplified for example, drop and catch the ball rather than bounce it consecutively	<ul style="list-style-type: none"> • Increases success and opportunity to be involved in class activity
Props used to enhance skills: for example, a towel extends the reach for tag games	<ul style="list-style-type: none"> • Increases level of success and motivation for participation

Rule Modification

Description	Effect
No direct challenge when ball comes within 2 metres of player	<ul style="list-style-type: none"> • More time to prepare for and execute skill
differential scoring system allowing points for specific behaviours; for example, passing, touching ball	<ul style="list-style-type: none"> • Recognizes effort, learning and success
Only essential rules used	<ul style="list-style-type: none"> • Reduces game complexity
Complete end line used as goal	<ul style="list-style-type: none"> • Allows more frequent scoring opportunities and use of multiple goalkeepers
Unlimited number of contacts with ball before crossing net or centre line	<ul style="list-style-type: none"> • Increases opportunity to make contact with ball
Unequal numbers in team groupings	<ul style="list-style-type: none"> • Matches teams
Number of trials increased: for example, unlimited number of attempts to strike ball	<ul style="list-style-type: none"> • Increases level of success and opportunity to practice emerging skills

Distance/Space Modification

Description	Effect
Smaller playing area used	<ul style="list-style-type: none"> • Increases opportunity for application of skill and participation in flow of game
Target lowered or moved closer	<ul style="list-style-type: none"> • Reduces number of misses and increases opportunity for success
Start or finish line moved; for example, next runner in relay starts when student reaches halfway point	<ul style="list-style-type: none"> • Increases level of success and opportunity to be involved in game play
Designated position/function assigned to reduce area to be traveled; for example, designated pitcher, goalie or foul shooter	<ul style="list-style-type: none"> • Increases successful participation in the game

RANGE OF PARTICIPATION

Full Participation

- student participates in class activity with no modifications; e.g., student with mild cerebral palsy who is ambulatory participates in the game of frozen tag.

Special Active

- student participates in the class activity with modifications made to the equipment, rules, distances or complexity of the skill; e.g., student with a visual impairment uses a high contrast ball to learn and practice kicking skills.

Active Parallel

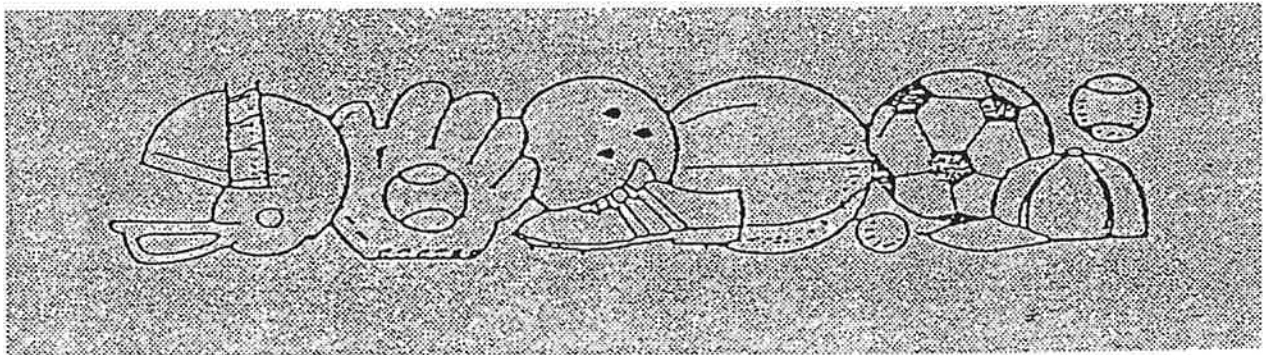
- student participates in the class activity, but at his or her own skill level; e.g., student with cerebral palsy attends the swimming program with the grade four class but works on water orientation with the program aide, while the class receives instruction from the pool staff.

Passive *time keeper, score keeper*

- student attends the class and takes on a non-participatory role; e.g., student in a power wheelchair records the finish times of runners at the conclusion of the cross country run course.

Educated Observer *or Coach*

- student attends the class and observes the activities of the class so as to be knowledgeable about the activity; e.g., student in a wheelchair watches his or her classmates perform their gymnastics routines at the conclusion of the grade 8 unit.



HOW MANY WAYS CAN P. E. BE ADAPTED TO INCLUDE STUDENTS WITH MULTIPLE SEVERE CHALLENGES? (Primary Grades)

GENERAL IDEAS

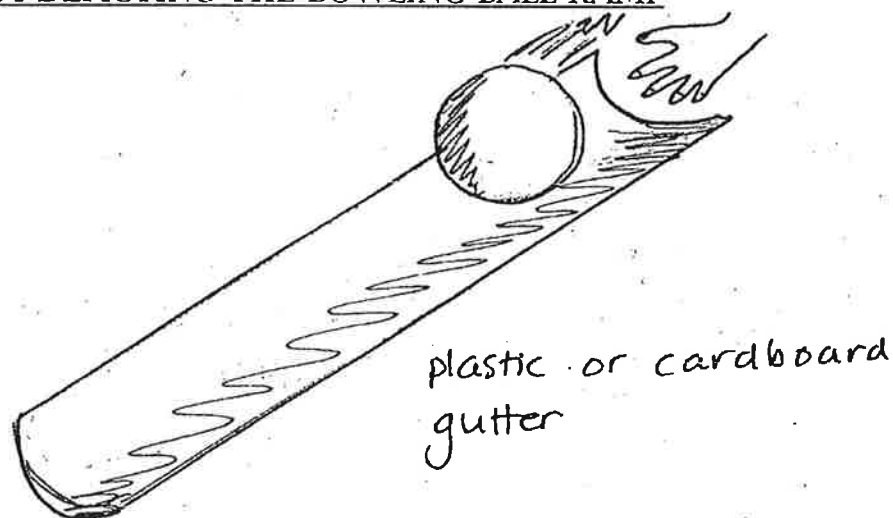
- The student helps give out and put away equipment.
- The student chooses a peer to accompany him/her or to help with an activity.
- The student presses a switch or rings a bell or buzzer at important times during a game (e.g. when play starts, when a classmate scores, for a time-out, foul or offside calls).
- The student activates a BIGmack or Step-by-Step Communicator with cheers or a cheer song.
- The student uses a switch to activate a lite-brite board with the score on it during intervals. A buddy could change the scores when needed.
- The student gives pre-recorded instructions or directions for movements on a BIGmack or Step-by-Step.
- Classmates could rotate as partners for the student.

GAME AND BALL SKILLS

- During a game, the student could move with a peer buddy.
- The student moves anywhere in the gym when the game is on, but when the whistle blows the student must freeze/stop and resume moving when the signal is given to commence the game.
- The student holds a stick horizontally with two hands to hit a large, soft ball back to a partner.
- The student practices moving a beanbag, ball or puck with a stick around a series of posts.
- The student presses a switch to activate a song for friends when skipping. Classmates could pre-record some of their favourite skipping chants and songs.

- The student bats a balloon or a small, bright coloured nerf ball and keeps it in the air with a partner. The student begins with his/her hands and then progresses to using a racquet. A racket with a shorter handle will be easier to use.
- Attach a balloon or light ball to a tether ball stand. The student hits the ball/balloon with hands or a racket.
- Variations on tag (e.g. North Wind/South Wind – 2 or more students are north winds and “freeze” students and 2 are south and “unfreeze” them. Peers will call for the student with special needs to come and “unfreeze” them.)
- Place a cardboard or plastic gutter so that one end is on the student’s wheelchair tray and the other end on the floor. Roll a ball down the gutter directed towards lightweight plastic bowling pins.

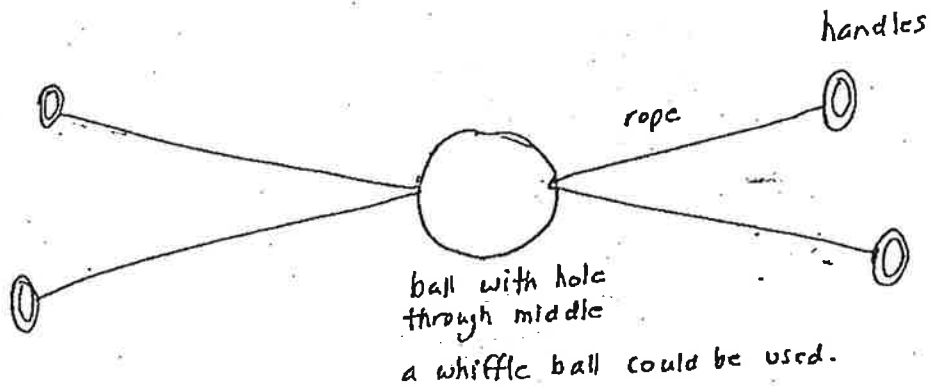
DIAGRAM DEPICTING THE BOWLING BALL RAMP



- Rolling a Ball between Two Goal Posts: Use a bowling ball ramp and balls that are brightly coloured to provide contrast. The student rolls the ball between two goal posts to score. You can have a large goal or a small one. This activity may be enjoyed by the whole class as a short gym activity or by a small group of peers.

- **Snapp'r or Zoom Ball:** The student holds onto the handles and moves his/her arms apart to make the ball move along the cord toward a peer. The peer returns the ball by moving his/her arms apart. This activity may replace throwing and catching activities.

DIAGRAM DEPICTING THE SNAPP'R OR ZOOM BALL



HOW MANY WAYS CAN P. E. BE ADAPTED TO INCLUDE STUDENTS WITH MULTIPLE SEVERE CHALLENGES? (Intermediate Grades)

GENERAL IDEAS

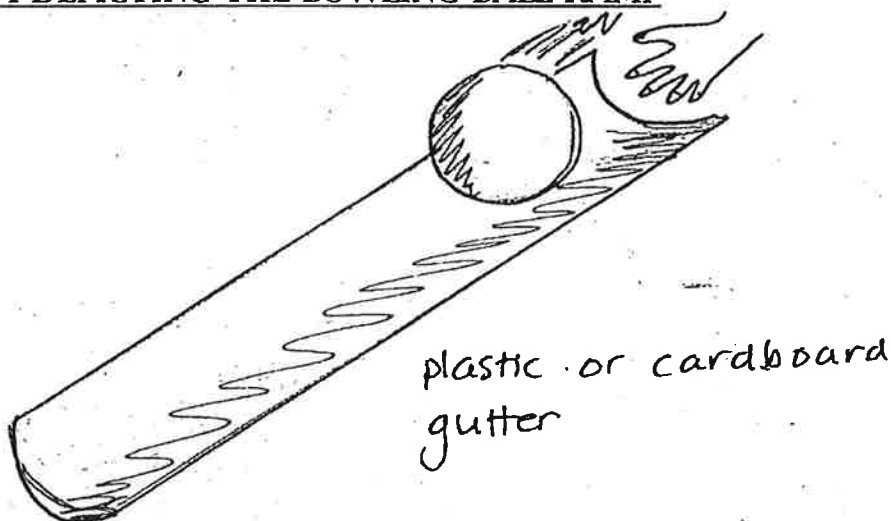
- The student helps give out and put away equipment.
- The student chooses a peer to accompany him/her or to help with an activity.
- The student presses a switch or rings a bell or buzzer at important times during a game (e.g. when play starts, when a classmate scores, for a time-out, foul or offside calls).
- The student activates a BIGmack or Step-by-Step Communicator with cheers or a cheer song.
- The student uses a switch to activate a lite-brite board with the score on it during intervals. A buddy could change the scores when needed.
- The student gives pre-recorded instructions or directions for movements on a BIGmack or Step-by-Step.
- Classmates could rotate as partners for the student.

GAMES AND BALL ACTIVITIES – GENERAL

- During a game, the student could move in various directions with a buddy.
- The student moves anywhere in the gym when the game is on, but when the whistle blows the student must freeze/ stop and resume moving when the signal is given to commence the game.
- The student holds a stick horizontally with two hands to hit a large, soft ball back to a partner.
- The student practices bowling with classmates using lightweight plastic floor pins or 2 litre pop bottles. The student participates in rolling the ball as well as setting up the pins.
- Variations on tag (e.g. North Wind/South Wind – 2 or more students are north winds and “freeze” students and 2 are south and “unfreeze” them. Peers will call for the student with special needs to come and “unfreeze” them.)

- Place a cardboard or plastic gutter so that one end is on the student's wheelchair tray and the other end on the floor. Roll a ball down the gutter directed towards lightweight plastic bowling pins.

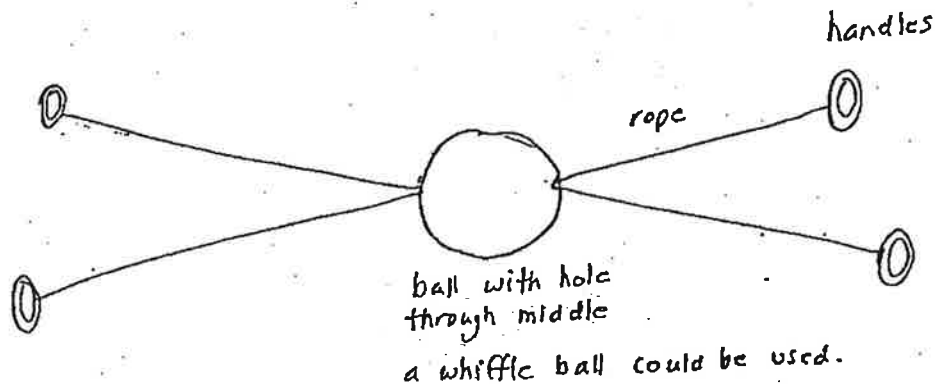
DIAGRAM DEPICTING THE BOWLING BALL RAMP



- Rolling a Ball between Two Goal Posts: Use a bowling ball ramp and balls that are brightly coloured to provide contrast. The student rolls the ball between two goal posts to score. You can have a large goal or a small one. This activity may be enjoyed by the whole class as a short gym activity or by a small group of peers. It may be considered a parallel game for floor hockey/ soccer etc. NOTE!! Peers can play while waiting on the sidelines to be included in the class hockey or soccer game.

- **Snapp'r or Zoom Ball:** The student holds onto the handles and moves his/her arms apart to make the ball move along the cord toward a peer. The peer returns the ball by moving his/her arms apart. This activity may replace throwing and catching activities.

DIAGRAM DEPICTING THE SNAPP'R OR ZOOM BALL



SPECIFIC GAMES AND SPORTS

BADMINTON

- Bat a balloon or a small, bright coloured nerf ball and keep it in the air with a partner. Classmates could rotate as partners. Begin with hands and then progress to using a racquet. A racket with a shorter handle will be easier to use.
- Attach a balloon or light ball to a tether ball stand. The student hits the balloon with hands or a racket.
- Use a lower net.
- Play in a smaller designated area.

BASEBALL

Change the rules:

- Students have to throw two or three times before they throw the student out when he/she is wheeling or being pushed around the bases.
- Shorten the distance between the bases.
- Put more players on the student's team.

Adapt the activity

- The student uses a designated runner.
- The student uses a designated hitter.
- The student runs with another student when they hit the ball.
- Move the pitcher closer to home base.
- Roll the ball to the student.
- Put more players on the student's team.
- The student gets the bat and give it to the next person up to bat.
- The student practices catching and throwing a nerf ball or balloon with a partner.
- The student holds the bat or stick horizontally with two hands.

Change the equipment

- Use a shorter, lighter bat (e.g., plastic or foam). Mark clearly on the bat where to place hands.
- Use a large, lighter or brightly coloured ball (beach or nerf ball).
- Use a T-ball stand to bat from rather than a pitcher.
- Practice throwing and catching with a beanbag and catcher's mitt.

BASKETBALL

Change the rules:

- The student may bounce the ball with two hands.
- The student has a particular role on the team (e.g. guarding the hoop).
- Let the student carry the ball while wheeling, or being pushed. The ball cannot be taken from the student but they must throw or pass to another student to throw into the basket.
- Reduce the size of the playing court.
- Reduce the playing time.
- Alter the number of players on a team.

Adapt the activity:

- The student bounces a ball off a gym wall.
- The student works on chest passes with two or three other students.
- The student practices bouncing a ball with a classmate.

Change the equipment:

- The student throws a ball or beanbag into a garbage can or a low hoop.
- Modify the size and/or weight of the ball.
- Use beanbags, towels tied into knots, foam blocks or other objects that don't bounce.
- Lower the hoop.
- Connect a net to a hoop to make an improvised ball return.

FLOOR HOCKEY

Change the rules:

- Place two goalies at each net. Let the student be one of them.
- Pass the ball to several or every team member before counting as a goal.

Adapt the activity:

- The student works on repetitive hitting of the ball into a corner. Place a hockey net behind the student to catch the balls returning off the wall.
- The student pairs up with one or two other students for a passing game. Start with the students close to one another and gradually move them further apart.
- Pair the student with a peer to move with them, with or without a hockey stick.

Change the equipment:

- Attach a hockey stick to the front of the wheelchair. A classmate could move the student around.
- Place a large board in front of the student's feet on the wheelchair or at the base of the standing frame. The student plays goalie and stands guard at the net.

- Use a semi-inflated ball rather than a puck. Vary the size and weight.
- Enlarge the blade of the stick and make it brightly coloured.
- Vary the size of the goal.

GYMNASTICS

General:

- Have a separate centre, with a variety of music, for the student that all the students can use.
- Encourage the student to get out of the wheelchair as much as possible.
- The student moves through obstacle courses with changes in speed and direction.
- Attach streamers or a flag to the student's wheelchair and use the speed of movement to keep it flying.
- The student moves his/her arms while holding short streamers while sitting in the wheelchair, or on a bench, chair or mat.

Trampoline

- The student lies on the trampoline, while a classmate gently jumps to one side.
- The student does a variety of arm and body movements when sitting, kneeling or standing on the trampoline. Practice a routine to music.
- The student maintains sitting or standing balance while another student walks or jumps beside him/her on the trampoline.

Mat

- The student rolls on the mat in a variety of directions.
- The student rolls down an incline.
- The student does a movement routine on a mat that involves changes of speed, direction or levels (lying, sitting, standing). Pair up with another student to do a movement routine to music.

SKATING

- Try "sit skating". The student sits in a sled like shell while being pulled around by classmates. These are available at some

regional centers. (*Check with Child Development Center or C.P. Sports for availability of equipment.)

- The student uses an adapted walker in consultation with a Physiotherapist.
- Push the student's wheelchair on the ice to follow the movement of other students and/or make choices about direction, who to "skate" with.

SOCCER

Change the rules:

- Two students may share the goal position.
- The ball may be passed to several or all teammates before attempting a goal.
- The student can use his/her hands to hit or pass.
- The student can run carrying the ball.
- Reduce the size of the goal if the student is in that position.
- Shorten the distance between end lines.
- Reduce the playing time.
- Increase the number of players on the student's team.

Adapt the activity:

- The student may perform specialty roles (e.g., throwing from offside).

Change the equipment:

- Use a bowling ramp to start the soccer ball.
- Use a larger (16-18 inch diameter) or a lighter ball
- Attach a board to the student's wheelchair footrest to provide a striking surface.
- Use less air in a regulation ball to slow it down.

VOLLEYBALL

Change the rules:

- More players can be on the student's team.
- The student may stay in a position closer to the net.
- Omit the service line.
- Substitute throwing the ball to a partner for serving.

- Permit players to catch and throw the ball rather than volleying.
- Allow the ball to bounce once, especially for students with visual impairments.
- Allow an increased or unlimited number of hits.

Adapt the activity:

- Volley with a nerf or beach ball or balloon with rotating buddies:
Encourage the student to hit the ball back rather than catch the ball.
- Attach a light ball to the tether ball stand at the correct height for repetitive hitting practice.

Change the equipment:

- Lower the net.
- Use a larger, lighter ball (nerf or beach ball).

Examples to illustrate the differences among the terms "impairment," "disability," and "handicap."

1. CP example: David is a 4-yr.-old who has a form of cerebral palsy (CP) called spastic diplegia. David's CP causes his legs to be stiff, tight, and difficult to move. He cannot stand or walk.

Impairment: The inability to move the legs easily at the joints and inability to bear weight on the feet is an impairment. Without orthotics and surgery to release abnormally contracted muscles, David's level of impairment may increase as imbalanced muscle contraction over a period of time can cause hip dislocation and deformed bone growth. No treatment may be currently available to lessen David's impairment.

Disability David's inability to walk is a disability. His level of disability can be improved with physical therapy and special equipment. For example, if he learns to use a walker, with braces, his level of disability will improve considerably.

Handicap David's cerebral palsy is handicapping to the extent that it prevents him from fulfilling a normal role at home, in preschool, and in the community. His level of handicap has been only very mild in the early years as he has been well-supported to be able to play with other children, interact normally with family members and participate fully in family and community activities. As he gets older, his handicap will increase where certain sports and physical activities are considered "normal" activities for children of the same age. He has little handicap in his preschool classroom, though he needs some assistance to move about the classroom and from one activity to another outside the classroom. Appropriate services and equipment can reduce the extent to which cerebral palsy prevents David from fulfilling a normal role in the home, school and community as he grows.

2. LD example: Cindy is an 8-year-old who has extreme difficulty with reading (severe dyslexia). She has good vision and hearing and scores well on tests of intelligence. She went to an excellent preschool and several different special reading programs have been tried since early in kindergarten.

Impairment While no brain injury or malformation has been identified, some impairment is presumed to exist in how Cindy's brain puts together visual and auditory information. The impairment may be inability to associate sounds with symbols, for example.

Disability In Cindy's case, the inability to read is a disability. The disability can probably be improved by trying different teaching methods and using those which seem most effective with Cindy. If the impairment can be explained, it may be possible to dramatically improve the disability by using a method of teaching that does not require skills that are impaired (That is, if the difficulty involves learning sounds for letters, a sight-reading approach can improve her level of disability).

Handicap Cindy already experiences a handicap as compared with other children in her class at school, and she may fail third grade. Her condition will become more handicapping as she gets older if an effective approach is not found to

improve her reading or to teach her to compensate for her reading difficulties. Even if the level of disability stays severe (that is, she never learns to read well), this will be less handicapping if she learns to tape lectures and "read" books on audio tapes. Using such approaches, even in elementary school, can prevent her reading disability from interfering with her progress in other academic areas (increasing her handicap).

RETURN TO...

PARENTS