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# INCLUSION AND DISABILITIES IN AND THROUGH SPORT

## Best Practice #2 - Spain

EsM – Instituto España se Mueve

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## Polybat

**Key words.** Please insert 3 to 5 key words that best describe the best practice

Polybat and motor disability; inclusive; ability

### 1. Type of Disability

Please describe the type of disability that this practice is focused. If there is an official definition of the disability in European or National documents please provide it.

Specially developed for Motor Disability (MD), although it can be played by all people, with or without disabilities.

### 2. Organization & Reference

If applicable: Official data of organization, school, club etc. (name, address, email). Please give references such as internet source, homepage etc.

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Polybat is a modality, which in Portugal, is under the tutelage of PCAND - Parálisis Cerebral, National Sports Association. Rua Nova do Casal dos Vagares nº 42 3030-141 Coimbra Telephone: +351 239 780 436; Fax: +351 239 780 437; Telemóvel: +351 969 661 488 Email (Serviços Administrativos): [geral@pcand.pt](mailto:geral@pcand.pt) [www.pcand.pt](http://www.pcand.pt)

### 3. Formal/Informal

Please state if the setting refers to formal or informal education (sport clubs etc.).

Polybat is not part of formal education. It can be taught in clubs as well as in schools, and even on a recreational level only.

Polybat aims to respond mainly to the sporting needs of people with disabilities. It contributes to the development of conditional and coordination skills such as strength, speed, endurance, reaction capacity, adaptability and motor learning ability, among others. - It appeared in the mid-1980s, at Nottingham Trent University (England);

- Based on table tennis, Polybat was created by a Physical Education teacher and a group of students from the Adapted Sport discipline.

### 4. Practice summary

Describe what and how was done (regulations of the sport/game/competition/physical activity), please state the specific context of the practice and the sport(s)/game/competition involved.

Polybat is a table tennis-like game designed specifically for individuals with disabilities, including those with mobility impairments. The game incorporates adaptations and modifications to ensure inclusivity and accessibility. Here are the rules, adaptations, and features of Polybat:

#### 1. Court and Equipment:

- Polybat is preferably played on a table tennis table without a central net.
- Tables are placed on the sides of the table with a height of 10 cm to prevent the ball from going out of bounds.
- Players use a rectangular racket designed specifically for Polybat to push or hit the ball from one side of the table to the other.

#### 2. Goals:

- The objective is to score 11 or 21 points by preventing the ball from crossing the end line on your side.
- A point is scored when the ball exceeds the top of the table on the opponent's side or in the case of an opponent's infringement.

### **3. Rules of Sporting Discipline:**

- Depending on the type of competition, games may be best of three or best of five halves.
- Each set can be played until one of the players or pairs reaches 11 points (short game) or 21 points (long game) without the need for a difference of two points to determine the winner.
- A coin toss is conducted before play begins to determine the first serve and sides for the first half. Subsequent halves follow an alternating order determined by the toss. In case of a tie, a new draw is made.
- Individual players serve two consecutive serves, regardless of who wins the previous point. In pairs, each player serves once, starting with the player on the right side of the table. The serve must be made from the center of the service line.
- The ball must hit one of the side tables before the opponent returns it during the serve (except in class 1).
- The ball must remain in contact with the table during play.
- Players are only allowed to touch the ball with the racket.
- Players may block or manipulate the ball with the racket, but stopping it is not allowed. The ball must touch one of the sides on the return.
- Points are scored in various situations, including when the ball legally crosses the opponent's end line, the opponent intentionally contacts or handles the ball, the opponent returns the ball in front of the service line, the ball reaches a height of more than 10 cm (height of the side tables), the ball bounces back to the opponent's side after being played, the opponent makes more than three consecutive touches, the opponent serves without the ball touching the side tables (except in Class 1), the opponent returns the ball directly without it touching the side tables (except in Classes 1 and 2), or the

opponent completely immobilizes the ball with the racket during a rally.

- Time deductions are not allowed during an end, except in cases where medical assistance is required.
- A 1-minute interval is given between each end, during which athletes may receive instructions from coaches.

Polybat incorporates these adaptations and modifications to create an inclusive and engaging game for individuals with disabilities, allowing them to actively participate in a sport that suits their abilities.

### **YOUTUBE VIDEO**

<https://www.youtube.com/watch?v=IxsWLOPA1Gk&pp=ygUQcG9seWJhdCBwb3J0dWdhdA%3D%3D>

[manual de polybat - projeto inr 2021.pdf \(pcand.pt\)](#)

## **5. Variations implemented**

Please state any kind of useful variations (e.g., concerning settings, age of participants, types of disabilities and adaptations to other sports) of the practice.

### **RANKING**

Sport classification is the division of athletes eligible for a particular competition into classes or divisions according to their functional ability. This procedure helps to provide fair practice for all. **SPORTS CLASSES**

#### **CLASS 1:**

Wheelchair players with very reduced range of motion, difficulty in regaining midpoint after hitting the ball. Non-functional lower limbs. Difficulty covering the full width of the table, anticipating the movement of the ball and orienting the racket on the table. Essentially defensive players, who need to control the ball with one or two touches before returning it to the opponent;

**CLASS 2**

Players in wheelchairs or who require mobility aids such as walkers or Canadians. Upper limbs with severe to moderate limitation. Sufficient range of motion to cover the full width of the table, but slow. Incomplete grip. Able to anticipate movement and recover mid-point. Controls the orientation of the racket in relation to the table. Able to perform defensive and offensive actions;

**CLASS 3**

Players in wheelchairs or standing, if functionality permits. Range of motion to cover the full width of the table, as well as forward displacement. Able to anticipate ball movement and recover vertical position, may have to use the table for support. Can perform quick gestures to return the ball;

**CLASS 4**

Players who walk without walking aids. They have dynamic balance difficulties and may have to use the table for support. They have some limitations in arm movement control, good grip. They anticipate and perform fast movements with intentional changes of direction. This class is mainly for children and young people with Special Educational Needs and intellectual disabilities.

*NOTE: In school terms, pupils with other types of disability may also participate and will be integrated into the class that best suits their characteristics. Whenever a player plays in a wheelchair, his opponent must also play seated, even if he is not a wheelchair user.*

**6. People involved**

Please state organizations and people involved, provide types of disabilities participated in this specific good/best practice. If applicable, be concrete about the different roles of the people involved.

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**7. National guidelines adopted**

Please refer to the national guidelines that are met through the practice. Give basic legislation frameworks that can help teachers understand their legal-driven responsibilities towards their students.

Article 79 of the Constitution of the Portuguese Republic of 1976 enshrines the right to physical culture and sport for all, an aspect reinforced by article 1 of Law 30/2004 of 21 July 2004 - Fundamental Law of Sport - which assumes sport as an indispensable factor in the formation of the individual and in the development of society, dealing in particular with the practice of sport by disabled citizens, as can be seen from the provisions contained in articles 5, 26, 32, 70 and 82.

Similarly, Act No. 38/2004 of 18 August 2004, the Basic Act on the Prevention, Rehabilitation and Integration of Persons with Disabilities, refers to the value of sport for citizens with disabilities, in particular with regard to sport and recreation as habilitation and rehabilitation measures (Article 25). Furthermore, it states that "it is incumbent upon the State to take the necessary specific measures to ensure access by persons with disabilities to sport and leisure activities" (Article 38), including access to high-level sport (Article 39).

Furthermore, the Resolution of the Assembly of the Republic No. 56/2009 approving the Convention on the Rights of Persons with Disabilities, adopted in New York on 30 March 2007

**Article 30- Participation in cultural life, recreation, leisure and sport**

5 - With a view to enabling persons with disabilities to participate on an equal basis with others in recreational, leisure and sporting activities, States Parties shall take appropriate measures to:

- (a) Encourage and promote the participation, to the maximum extent possible, of persons with disabilities in mainstream sporting activities at all levels;
- (b) Ensure that persons with disabilities have the opportunity to organize, develop and participate in disability-specific sporting and recreational activities and, to this end, encourage the provision, on an equal basis with others, of appropriate instruction, training and resources;
- (c) To ensure that persons with disabilities have access to sporting, recreational and tourism facilities;
- (d) To ensure that children with disabilities have equal access with other children to participation in play, recreation, leisure and sporting activities, including activities in the school system;
- (e) To ensure that persons with disabilities have access to the services of those involved in the organization of recreational, tourism, leisure and sporting activities..

### **8. Implications for teachers/practitioners etc.**

Please write any useful implications (what teachers/coaches/physical educators should take into account: safety considerations, equipment needed, support needed) that the practice might have. This may include focal points of the types of disabilities included and how these points were addressed, in terms of the participation in sports.

#### **Material resources required**

Facilities: To be practised in a place with no obstacles to the carrying out of the movements - the ideal measurements for the competition should guarantee a free area of 3.00 metres counted from each top of the table and 2.00 metres counted from each side face.

Materials: Table with official measurements: 1.52 m wide by 2.74 m long, with sufficient height to facilitate access for a wheelchair (preferably a table tennis table without a hammock); The service line must be marked



with a tape, parallel to and 36 cm from the end line: - The table must allow for good wheelchair mobility; - Side tables are 10 cm high and may not take up more than 3.5 cm of the table width, at each edge.

Racket: - The total impact surface area may not exceed 180 cm<sup>2</sup>; - Maximum length of 30 cm including the handle; - The ends should be rounded and covered with foam to protect the table surface.

Ball: - It is proposed to use a golf starter ball; - Other alternatives are possible, and non-bouncing balls are preferred. Plastic or wooden table protectors/tables: - They should be 10 cm high and cover the sides of the table with no more than 3.5 cm on each side of the usable playing area.

*NOTE: The play area shall be reduced by changing the angle of the side tables in the following situations: In Division 1, the length of the end line is reduced by 20 cm on each side (end line with 112 cm, instead of 1.52 m); In Division 2 the length of the end line is reduced by 10 cm on each side (end line with 1.32 m instead of 1.52 m)*

## **9. Innovative resources, materials, methods etc. used**

Please refer to the resources, materials, methods etc. have been employed. Strategies for creating an inclusive environment, prioritizing accommodations for students with disabilities, forming/refining accessible facilities, equipment, and assistive technology. Please include techniques for adapting sports activities to meet the needs of students with disabilities, such as modified rules, specialized equipment and assistive devices.

### **Strategies For Initiation into The Modality**

- Promote inclusion by playing in pairs;
- Use larger racquets and balls;
- Anyone who can play on their own feet can do so by marking the playing space on the floor. In this case, the opponent, if not playing in the same way, should be someone who can sit on the floor;

- Use targets (light balls or pins), large, at short distances and very close to each other; Height of the sides: 10cm Service line marked on the table with tape 36cm from the bottom of the table. Middle line of court division
- Whoever is not playing, can operate the scoreboard; catch balls that fall to the ground, if necessary using long tongs; reposition targets in the starting position; encourage colleagues to do better; when in a group, encourage your team;
- In an inclusive environment, practitioners with greater motor skills when playing with others of lesser ability should be encouraged to hold the racket with the non-dominant hand;
- In an inclusive environment, everyone should have a task.

*NOTE: All adaptations that facilitate both accessibility to the practice of the modality and inclusion may be made. Here are some examples: - The use of sticky materials that fix the handle of the racket by hand, or the use of gloves, such as football net storage gloves, to replace the racket; - When there is no grip or possibility of using the upper limbs, small gutters can be used, which allow the ball to slide with some speed to reach the top of the board on the opponent's side*

## **10. Communication and collaboration strategies**

If applicable, describe strategies for collaborating with other educators, parents, and students to ensure that everyone is working together to create an inclusive environment.

The most effective strategies are those that promote the participation of all educational actors in the preparation and development of the game. Providing responsibilities to students, teachers and assistants, involving them in decision making seems to be effective in increasing participation, acceptance and inclusion.

### **11. Evaluation and/or reflection methods**

If applicable, state how teachers planned to know, to what extent basic goals were met. That is, give any kind of evaluation practices, self-reflection methods, forms of data collection, post-event documentations and follow-ups. Also, report any positive feedback and reinforcement given to students with and without disabilities to encourage and motivate them to continue participating in sports.

For the time being, no objective assessment procedures are carried out.

### **12. Training pathway for teachers for integrating this good practice**

Please provide 5 to 15 practical tips to teachers of sports for implementing the proposed good practice. Ensure that tips: 1. refer both to formal and informal settings 2. contribute to the awareness of educators for the needs of students with disabilities 3. Take into account the environmental/architectural and attitudinal barriers (such as inaccessible sport spaces, equipment needed, support provided), 4. provide individualized adaptations 5. Provide social and emotional support by encouraging social interaction and peer support 6. Provide positive reinforcement to motivate them to continue participating in sports and to develop their skills and abilities.

- 1.** Introduce sport in their regular activities;
- 2.** Give autonomy and responsibility to students - with or without disabilities - in the choice of balls, equipment, the space where they play;
- 3.** Create a method to evaluate teams accordingly: number of games, number of points, victories and consistency of the team;
- 4.** Organise tournaments where students can also participate in their organisation;
- 5.** Create a polybat club

