



Co-funded by
the European Union



INCLUSION AND DISABILITIES IN AND THROUGH SPORT

Best Practice #1 - France

INSEI - Institut national supérieur de formation
et de recherche pour l'éducation inclusive

No. 101089892 – IDI4Sport – ERASMUS-SPORT-2022-SCP



Adapted table tennis

Key words that describe this best practice in France

1. Adapted table tennis ; 2. "Table tennis with support" variant ; 3. "Pushing table tennis" variant ; 4. "Table tennis on the floor" variant ; 5. Universal accessibility

1. Type of Disability

This sport is adapted to all publics through its 3 variants and complementary adaptations: this sport is universally accessible. It was originally designed for pupils with mild to severe motor disabilities and pupils with no disabilities or mild neurodevelopmental disorders (part 1-B).

2. Organization & Reference

The EREA Toulouse-Lautrec High School is located in Vaucresson, near Paris (<http://www.lyc-erea-toulouse-lautrec-vaucresson.ac-versailles.fr/>). The practice is presented by Charlotte Duthu and Sonia Duval, specialized teachers in this high school and university teachers (part 1-A).

3. Formal/Informal

This sport is part of the French education system (part 1-A).

4. Practice summary

Table tennis is adapted in 3 variants, with more and more adaptations to meet the growing needs of pupils standing or in wheelchairs:

1. A "Table tennis with support" variant and adapted equipment can meet many needs with few changes to the initial practice.

2. A "Pushing table tennis" variant simplifies the gesture by doing away with the net, using the hand and preventing the ball from going sideways

with foam bars. It is accessible to a wide audience who need a slower, less precise game.

3. A "Table tennis on the floor" variant enlarges the space, the equipment and slows down the game even more, so that it can be played without hands in an electric wheelchair or with little standing precision. This variant is particularly suited to pupils with severe disabilities and is therefore accessible to all (part 3-A).

5. Variations implemented

Variations on the practice allow adaptations to be made to suit the specific needs of the pupils. However, each variant can also be proposed to a heterogeneous pairing for a more inclusive approach. The last item in the detailed table for each variant (part 3-A-2) suggests ways of ensuring universal accessibility, so that everyone can play together.

6. People involved

The detailed table of this practice also presents the people involved (part 3-A) and the adaptation approach (parts 1-B, and 1-C-2).

7. National guidelines adopted

They are presented above in the main methodology section. These practices are in line with the obligation for all pupils to take part in sports and to be assessed (part 1-C-1), unless they have a medical certificate exempting them from doing so.

8. Implications for teachers/practitioners etc.

The conceptualization of a preventive and reactive "securing practices" protocol addresses these issues (part 4-A). Some elements of co-teaching are part of the safeguarding system (part 2-C).

9. Innovative resources, materials, methods etc. used

The detailed presentation proposes an innovative conceptualization of the adaptation approach by group of needs, by reverse or inclusive inclusion (part 2, parts 3-A-1, 3-B-1 and 3-C-1). The detailed presentation proposes the conceptualization of universal accessibility of practices through needs analysis (part 1-C-2, part 3 end of tables and part 4-B). Materials are proposed and imagined for universal accessibility (part 4-C).

10. Communication and collaboration strategies

Strategies are linked to co-teaching, co-intervention or co-presence to animate, differentiate and provide assistance in sessions (part 2-C).

11. Evaluation and/or reflection methods

The assessment enables pupils to situate themselves on their scale of progression. Very detailed grids are systematically produced for each skill profile. They are too long to include in this document. The detailed presentation proposes only the main academic skills (part 1-C-1).

12. Training pathway for teachers for integrating this good practice

The tips are grouped into 3 themes: objectives, participants' skills and adaptation methods (part 1-B).

"Three sports practices with three adaptation approaches for the inclusion of all"

Detailed presentation of the 3 sports

Introduction and keywords

A set of three sports practices adapt duel or collective confrontations for all:

1. **"Adapted table tennis"** with 4 variants (part 3 A),
2. **"Inclusive volleyball"** (part 3 B)
3. **"Inclusive Tèque"**, a kind of inclusive baseball (part 3 C).

- **Participants with heterogeneous needs and skills:** motor skills can range from very limited to very high (part 1),
- **Three adaptation approaches:** they clarify the notion of inclusive practice (part 2),
- **Universal accessibility: adaptations** are devised for the most disadvantaged pupils in a heterogeneous group. This process facilitates access to practices for all (part 3),
- **Analysis of special educational needs:** needs and adaptations are often common to different types of disability (part 4).

Part 1: Origins of sporting practices and the adaptation approach

1-A. Origin of these practices: the EREA Toulouse-Lautrec High School

This practice originates from the Toulouse-Lautrec EREA High School. This specialized school (Ministry of Education) includes a care and rehabilitation center (Ministry of Health and Prevention). Pupils with disabilities are educated from elementary school through to High School. Teaching follows school curricula and prepares pupils for national examinations. Pupils are

guided towards all possible studies in higher education. The school can therefore be open to pupils with no disabilities or with motor disabilities. They attend the school by personal choice, and account for a third of the pupil body. This highly heterogeneous pupil body is an exception in France. This is a specialized school offering a model of "reverse inclusion".

Since the 1980s, this establishment has developed national expertise in the adaptation of sports and handisport practices. These practices have been filmed and commented on by the school's teachers since the 90s (Philippe Normand and Hervé Dizien): <https://video.toutatice.fr/video/18066-une-demarche-inclusive-en-eps-au-lycee-toulouse-lautrec-de-vaucresson/>.

There are numerous accessible facilities and areas (gymnasium with climbing wall, swimming pool, asphalted outdoor areas, nearby woods). A wide range of equipment is available, including numerous sports chairs, table tennis tables, all kinds of balls and rackets, foam mats and bars, bows, blowpipes and more. A workshop can even make field edges or ramps if the materials are simple.

Here are the contact details for the establishment, to be quoted for any future reference to these 3 practices:

Lycée EREA Toulouse-Lautrec
 131 av de la Celle-Saint-Cloud
 92420 Vaucresson
ce.0921935D@ac-versailles.fr
<http://www.lyc-erea-toulouse-lautrec-vaucresson.ac-versailles.fr/>

The EREA Toulouse-Lautrec High School PE team is represented by Charlotte Duthu, a specialist PE teacher at EREA Toulouse-Lautrec. She is also a trainer in Adapted Physical Activities at the university (Paris-Saclay). She brings her expertise to these 3 practices. Their presentation is written with Sonia Duval. She was formerly a specialized teacher at EREA Toulouse-Lautrec and a trainer at the university (CYU and Paris-Saclay). She is now working at INSEI to train in inclusive education (sonia.duval@inshea.fr).

1-B. Origins of the Toulouse-Lautrec EREA High School's adaptation approach

The school caters for almost 300 pupils aged from 6 to 20, with a wide range of skills and motor abilities:

- Pupils with all types of motor disorders,
- Pupils with neurodevelopmental disorders (DSM-5 / CMI-11) without severe intellectual development disorders,
- Pupils with mild sensory disorders,
- Pupils with mild psychological disorders (anxiety, depression).
- Pupils with no disabilities.

The proposed practices must meet the following constraints:

- Be adapted to each pupil, from the most disabled to the most mobile,
- Be quick and modular to install,
- Can be practiced simultaneously in the same indoor (gymnasium) or outdoor (tarmac) area,
- Be practiced in teams or pairs with heterogeneous abilities,
- Be supervised by several teachers (2 minimum),
- Can be assessed using skill grids adapted to each individual.

These constraints have enabled teachers to develop their creativity in adapting sports practice in an inclusive way. Each practice must :

- Always be adapted to the greatest motor limitation,
- Provide for variations in each of the pupils' motor skills, including the mode of locomotion (wheelchairs),
- Offer varying degrees of difficulty for each skill (speed, precision, complexity), from high performance to severe limitation.

The activities and their adaptations are thought out in a continuum, from the greatest possible compensation of the activity to the expression of great performance.

By taking all these constraints into account, each activity can be adapted simultaneously to all types of disability, by varying just a few parameters.

1-C. Origins of the possible extension of the 3 sports practices to all participant profiles for social inclusion

The practices are already adapted to a wide range of disabilities, even the most severe. The school has not tested its day-to-day practices for all disability profiles, and in particular for severe sensory deficits such as deafness without hearing aids and blindness. At the end of the tables for each activity (part 3), additional adaptations will be proposed to help these practices evolve towards universal accessibility.

1-C-1. Practices limited to specific pupil profiles and evaluated according to specific criteria...

The teachers at EREA Toulouse-Lautrec High School make a point of carefully assessing each pupil's skills according to a specific profile. They ensure the skills are equivalent in both individual and team matches. Evaluation criteria are set for each practice.

The aim of the assessment is to identify and report on each individual's performance. This enables them to situate themselves and progress on a personalized scale. It also prepares pupils for the "baccalauréat" assessment. Here are the 5 major disciplinary competencies that frame the evaluation criteria for Physical Education and Sport:

- Acquire a sporting culture;
- Acquire methods and tools through sport;
- Share rules, assume roles and responsibilities;
- Learn to maintain good health;
- Develop motor skills and learn to express themselves using their bodies

1-C-2. ...towards extending these practices to all.

Universal accessibility will be achieved by:

1. Identifying the special educational needs common to different disability situations,
2. Suggesting variations on the activity to broaden the participants' specificities.



3. Reducing the notion of sporting performance in favor of the pleasure of sharing a physical activity together. The practice of sport becomes a leisure activity that gives priority to physical activity, the playful dimension of the game and encounters with others. The equivalence of skills between participants becomes secondary, allowing for a wide variety of participant profiles, including those without disabilities.

The main aim of universal accessibility is social inclusion. This means enabling everyone to take part in sporting activities at school, among friends and, in particular, within the family.

Part 2: A common approach to adapting a practice in an inclusive way

To think about an inclusive practice, there could be three types of recommendations:

2-A. Objectives

- Consider sporting activity as a sensory-motor and psychosocial experience between participants with very different skills.
- Think of physical activity in terms of the acquisition of knowledge and skills, rather than pure performance.
- Emphasize the playful dimension of the activity, both in its conception and implementation.
- Design inclusive collective confrontations that highlight the heterogeneity of participants' abilities.
- Evaluate skills by enabling pupils to situate themselves on a motivational progression curve with adapted objectives.

2-B. Participants' skills

- Group adaptations by special educational needs rather than by disability.
- Think in terms of abilities rather than inabilities.
- Imagine the complementary skills of each team member.

2-C. Adaptation methods

- Analyze an activity by its internal logic rather than by its modalities, which will have to be arranged in a multitude of ways.
- Rethink the way physical and sports education sessions are supervised, so that several teachers are present for the same session. This enables teachers to respond more closely to pupils' needs, by working in co-teaching (for the same group) or co-intervention (in different groups). This involves aligning several classes of the same level in the same time

slot. At EREA Toulouse-Lautrec High School, 3 teachers line up their 3 classes for a total maximum of 40 pupils per session.

- Imagine optional variations in the case of a pupil's highly specific educational needs.
- Adapt with 3 distinct adaptation approach (from EREA Toulouse-Lautrec High School):

1. "Needs group" approach: Plan for several activities or variations of an activity to take place in the same place, to make it easier for teachers to supervise them and for pupils to move smoothly from one activity to another.

2. Reverse inclusion" approach: Determine the lowest common denominator between participants in a sporting activity, i.e. a type of locomotion, gesture or skill accessible to all. Then adapt part or all of the activity to this common denominator, by homogenizing the skills of each participant. For example, standing participants may have to take part in the activity in a wheelchair.

3. "Inclusive" approach: Design a group activity with different spaces, motor skills and roles for each member of a heterogeneous team.

Part 3: The 3 steps to adapt 3 practices to all participants

This methodology proposes 3 distinct adaptation typologies and approaches. It gives a logic to adaptations and facilitates exploration for the benefit of all pupil profiles.

3-A. "Adapted table tennis" with 3 variants

3-A-1. A "needs group" adaptation approach


This approach adapts a pre-existing activity, inaccessible in its original form. The logic of the original sporting activity is always preserved.

The activity is adapted for a homogeneous group of pupils with similar needs and disabilities. Several groups of pupils with different needs will practice the activity at the same time. It is adapted differently each time, in terms of the “course level”, equipment or playing methods. At least one teacher supervises each variant. The teachers can work together on the same variant from time to time, to meet the needs of certain pupils, leaving one group free to play on its own.

This approach makes it possible to precisely analyze the needs and logic of the activity, and to explore adaptations that are as close as possible to the participants’ potential. The adaptations are then original and varied. This is the logic behind the sports disciplines approved for Parasport.

3-A-2. Rules for the 3 variants of “Adapted table tennis”

Variant 1 and variant 2 “Pushing table tennis” Comparative presentation for a designated audience, then in universal accessibility	
Participant s’ profile	Variant 1 is suitable for mild disorders, variant 2 for slightly more severe disorders: <ul style="list-style-type: none"> - Mild sensory-motor disorders of all 4 limbs (difficulty stabilizing in standing position) - Severe motor disorders of the lower limbs (playing in a manual wheelchair or chair) - Coordination development disorders (difficulty following the ball, coordinating movements) - Neurodevelopmental disorders (compatible with speed of play and facing an opponent) - For other participant profiles: “universal accessibility” item at the end of the table.
Supervision	One teacher supervises each variant, making a total of 3 teachers for the session.

	Variant 1: Table tennis "with support"	Variant 2: "Pushing table tennis" (Innovation from EREA Toulouse-Lautrec High School)
The players	These table tennis variants are played 1 vs 1 or 2 vs 2.	
Play area	Players compete on a classic table tennis table with net.	Players compete on a table tennis table without a net
Equipment used	<ul style="list-style-type: none"> - Possibility of playing with a large ball to slow down the game - Possibility of playing with a coloured ball to make it easier to follow the trajectory.  <p>Illustration of "Pushing table tennis" at EREA Toulouse-Lautrec High School</p>	<ul style="list-style-type: none"> - Foam bars are fitted to the side edges to prevent the ball from coming out to the sides. The side foam bars allow players to play indirectly (changing the direction of the ball by playing on the foam bars) as well as directly (sending the ball directly to the back of the opponent's table). - The ball used can be of different colors and sizes to facilitate play. - The player can play by hand, with a racket or with another device to facilitate the delivery.
Scoring points	The player wins his match if he manages to win 2 sets of 11 points (with a two-point difference). The player scores a point, either by causing his opponent to foul (fault), or if his opponent does not touch the ball.	The player wins his match if he manages to win 11 points (with a two-point difference). The player scores a point either by sending the ball behind his opponent's baseline or by provoking a foul.
Start of the game	The game begins with a serve. The server behind his table sends the ball to the opponent's table by	The game begins with a serve. The server pushes the ball into the


	<p>throwing it over his table and then bouncing it off his table before it bounces off the opponent's table (see official rules).</p> <p>If the service rule is too difficult, the player may:</p> <ul style="list-style-type: none"> - send the ball directly to the opponent's table without passing through his table, - be above the table, not behind it, at the moment of engagement, - not throw the ball at the moment of delivery. 	<p>opponent's court, either through the side foam bar or directly.</p>
Rotation	Service changes every two points.	
Fouls (faults)	<p>Various fouls can result in a point being awarded to the opposing player. Among the most common faults are:</p> <ul style="list-style-type: none"> - Reaching into the opponent's court with the hand or racket when hitting the ball - Touching the net - Moving the table - Letting the ball bounce more than once on the table - Volley the ball back over the table (no bounce) - Touch the ball several times in succession - Touch the ball with your free hand 	<p>Various fouls can result in a point being awarded to the opposing player. Among the most common fouls are:</p> <ul style="list-style-type: none"> - Touching the ball twice in succession - Returning the ball to the opponent's court after first touching a side foam bar in the player's own playing area. - Bouncing the ball. - Penetrate the opponent's court with hand or racket. - Send the ball into the opponent's half before it has fully entered the player's court. - Stop the ball.
Additional rules	<p>Leaning on the table is allowed:</p> <ul style="list-style-type: none"> - The player may place one hand on the table during the game. - The player may stick to the table. 	
Universal accessibility with a	<ul style="list-style-type: none"> - The able-bodied player applies the table tennis rules (without adaptations) in variant 1 (with net). In variant 2 (without net), he pushes the ball with a racket. 	

<p>heterogeneous duo</p>	<ul style="list-style-type: none"> - Participants with a different disability profile can choose to play standing up or in a wheelchair. In variant 1, he can play quickly (net and racket). In variant 2, they can choose to play more slowly by pushing the ball (hand and side foam bars). - Adaptations related to the items "Understand rules, instructions and playing areas" and "Benefit from breaks to rest" will be offered to all, even those without neurodevelopmental disorders (see part 4B). - Participants with autism spectrum disorders can benefit from a table set apart from the rest of the group in an area with fewer sensory stimuli. A foam ball reduces noise when moving. - Blind participants should choose variant 2, in which case 2 additional small foam bars are placed at the back of the table. The space where the ball exits the table is reduced to just in front of the player.
---------------------------------	--

Variant 3: "Table tennis on the floor" (Innovation from Lycée EREA Toulouse-Lautrec)

Presentation for a designated audience, then universal accessibility

<p>Participants' profile</p>	<p>This variant is adapted to severe disorders, thus facilitating universal accessibility:</p> <ul style="list-style-type: none"> - Severe motor disorders of all 4 limbs (play in an electric wheelchair) - All other motor disorders with their various locomotor functions - All other disorders, including severe ones: "universal accessibility" item at the end of the table.
<p>Supervision</p>	<p>One teacher supervises each variant, making a total of 3 teachers for the session.</p>
<p>The players</p>	<p>Table tennis on the floor is played 1 vs. 1 or 2 vs. 2.</p>
<p>Play area</p>	<p>Players compete on a badminton court (double lines) with a median line delimiting the two camps.</p>
<p>Equipment used</p>	<ul style="list-style-type: none"> - Wooden ledges are fitted to the side edges to prevent the ball going out to the sides. They allow players to use indirect play (changing the direction of the ball by playing on the edges) as well as direct play (sending the ball directly to the back of the court).

	<ul style="list-style-type: none"> - The ball used is a swiss-ball with a diameter of between 75 cm and 90 cm. - Players can be fitted with bumper pads (foam pool frit) to prevent the ball coming into contact with the leg, in case of fragility or pain. 
<p>Scoring points</p>	<p>The player wins the game if he manages to score 11 points (with a two-point difference).</p> <p>The player scores a point either by sending the ball behind the opponent's baseline, or by provoking a foul.</p>
<p>Start of the game</p>	<p>The game begins with a serve. The server hits the ball by rolling it into the opponent's court, either over the rim or directly.</p>
<p>Rotation</p>	<p>Service changes every two points.</p>
<p>Fouls (faults)</p>	<p>Various fouls can result in a point being awarded to the opposing player. Among the most common fouls are:</p> <ul style="list-style-type: none"> - Touching the ball twice in succession - Throwing the ball back into the opponent's court after first touching a rim in the opponent's court. - Bouncing the ball - Enter the opposing team's half with the wheelchair - Put one foot on the ground or get up from your chair - Send the ball into the opponent's half before it has fully entered the player's half. - Stop the ball
<p>Universal accessibility with a heterogeneous duo</p>	<p>This variant is particularly suitable for all severe disorders, as the game is slow and simple. The ball is much larger to spot or handle. It can be hit directly with the leg or the hand.</p> <ul style="list-style-type: none"> - Participants without disabilities can play in a manual wheelchair.

	<ul style="list-style-type: none"> - Participants with other disabilities may choose to play standing up or in a manual chair, depending on their motor skills and wishes. - Participants with neurodevelopmental disorders will be able to benefit from adaptations linked to the need to “understand rules”. - Adaptations linked to the items “Understanding rules, instructions and playing areas” and “Taking breaks to rest” will be offered to all, even those without neurodevelopmental disorders (see part 4B). - Blind participants will play standing up. The pitch can have sensory markers on the ground. Alternatively, a pupil tutor can use his or her voice to indicate the boundaries of the pitch or obstacles to ensure safe movement (see adaptations linked to the need to “Find one’s bearings in space”, part 4B). The swiss-ball can be fitted with a sound system, or replaced by a smaller sound ball with a bell (see adaptations linked to the need “To follow the movements of the ball”, part 4B). The participant will have to team up with another standing player if the game is 2 vs. 2, to avoid collisions with an electric wheelchair in his field.
--	--

3-B. “Inclusive volleyball”

3-B-1. A “reverse inclusion” adaptation approach

It enables an activity adapted to pupils with limited sporting possibilities to be shared with more mobile or more active pupils, including those with no disability at all.


This reverse inclusion approach homogenizes the skills of the participants to harmonize the skills of the team. Some of the abilities of more mobile pupils are reduced, to bring them closer to those of more limited pupils. In this practice, the ability to walk is eliminated for wheelchair locomotion, generalized to all participants. The common denominator between these participants is their ability to catch a ball with their hands. **This approach homogenizes a heterogeneous group around the lowest common denominator among participants.**

Note: There will always be skill differences between participants. There will always be differences in the agility and power of the upper limbs, or in the ability to bend over. The equivalence of skills is less strict in a collective confrontation than in an individual one. It's only a question of seeking an equivalence of skills at the level of each team and not of each participant.

In this process of homogenization, a little heterogeneity in the skills of a team is necessary to energize the game. The modalities of the activity and the strategies within the team will even exploit the different potentialities of the participants. The inclusive approach (approach n°3 with the "Inclusive Library") develops this heterogeneity lever even further.

3-B-2. The rules of inclusive volleyball

"Inclusive volleyball" (Innovation from EREA Toulouse-Lautrec High School)	
Presentation for a designated audience, then universal accessibility	
Participants' profile	All participant profiles can play in the team, with all motor skills. Wheelchair motor skills are preferred, even if not necessary. Additional adaptations may be proposed to pupils (see the "universal accessibility" item at the end of the table) with: <ul style="list-style-type: none"> - a severe impairment in the development of coordination, - severe visual impairment (blindness), - autism spectrum disorders - intellectual development disorders
Supervision	At least 2 or 3 teachers supervise the activity to ensure the safety of the teams. Several matches take place simultaneously.
The teams	Inclusive volleyball is played between two teams, each consisting of 4 players, 3 on the court and one substitute.
Type of locomotion	All players are in manual or electric wheelchairs, depending on their motor profile. The standing pupil will play in a manual chair.
Court	The game is played on a rectangular pitch divided by a net/elastic under which the ball passes. The pitch is 18 meters long and 9 meters wide. A central line divides the field into two equal halves. A 3-meter zone is marked in each half, as in volleyball.

<p>Equipment used</p>	<ul style="list-style-type: none"> - The net or elastic band is placed 90cm to 1.05m high, depending on the ball (15cm between the diameter of the ball and the bottom of the net). The net or elastic band is attached to posts located 9 m apart. - The ball used is a swiss-ball with a diameter of between 75 cm and 90 cm. 
<p>Scoring points</p>	<p>A team scores a point if it manages to get the ball out of play or if an opponent commits a foul.</p> <p>The first team to reach 15 points with a minimum lead of two points wins the match.</p>
<p>Start of game</p>	<p>The game begins with a serve. The server hits the ball into his court behind the three-meter line. He tries to send the ball directly into the opponent's court. The serve must cross the net and roll into the opponent's court under the elastic/net to be valid.</p>
<p>Rally</p>	<p>After the serve, the teams have three touches to send the ball back under the net. Strikes are generally made by a combination of players. Each player may not hit the ball twice in succession.</p>
<p>Rotation</p>	<p>Players change positions clockwise when their team wins the serve. This gives each player a chance to serve and avoid any positional advantage.</p>
<p>Net play</p>	<p>Players can counter the opponent's ball directly by standing still at the moment of the counter. The counter must be sideways (wheel in contact with the ball). The counter can be made even if the ball has not completely crossed the net. Be careful not to interfere with an</p>

	<p>opponent's attempt to play the ball. It is forbidden to touch the net during play or to enter the opponent's playing area.</p> <p>Apart from on the counter, the player is not allowed to send the ball directly (on the 1st touch) into the opponent's half if he is initially located within the 3-meter zone.</p>
Fouls (faults)	<p>Various fouls can result in a point being awarded to the opposing team. Among the most common fouls are:</p> <ul style="list-style-type: none"> - Touching the ball twice in succession, - More than 3 touches per team to send the ball back to the opposing team, - Throwing the ball directly back into the opponent's half from the 3m zone (with the exception of counter-attacks), - Carrying, lifting or bouncing the ball, - Place one foot on the ground or lift the buttocks off the chair when the ball is struck, - Reach into the opponent's half (front wheels or footrest) during or after the shot, - Touching the post, elastic band or any external element, - Send the ball into the opponent's half before it has completely crossed the net.
Replacements	<p>Substitutions can be made freely, with players entering and leaving the game as they please, respecting the procedures.</p>
Additional rules	<p>If the ball is released by a partner, it can be recovered and put back into play.</p>
Universal accessibility for a heterogeneous team	<ul style="list-style-type: none"> - For pupils in wheelchairs, a foam fry can be positioned to act as a bumper, protecting legs and knees. - Participants with other disabilities play in a manual or electric wheelchair, depending on the motor skills of their upper limbs. - Adaptations linked to the items "Understanding rules, instructions and playing areas" and "Taking breaks to rest" will be offered to all, even those without neurodevelopmental disorders (see part 4B).

	<p>The strategic interest of the game lies in the heterogeneity of the participants, so we can propose even more complementarity in the team:</p> <ul style="list-style-type: none"> - If a participant can walk but is unable to manipulate the chair (due to sensory-motor or coordination development problems), he or she can play standing up, kicking the ball with his or her feet. - Blind participants can play standing up, with additional adaptations. Sensory cues on the floor, a sound ball with a bell and the help of a pupil tutor can be suggested. The tutor guides the blind participant to catch the ball without going out of bounds and avoiding collisions with others (see adaptations related to the need "Locating oneself in space" and "Following the ball's movements", part 4B). - Participants with autism spectrum disorders can play standing up, with the help of a pupil tutor for guidance and reassurance. - A pupil tutor will also help the participant with an intellectual development disorder to choose the right strategy and follow the rules.
--	--

3-C. "Inclusive Tèque", a kind of inclusive baseball

3-C-1. An inclusive approach that enables a heterogeneous group to practice together.

The aim is to enable heterogeneous abilities to coexist within the same activity. This implies adapting the activity in terms of modalities, spaces and equipment so that they are common to all.

In an inclusive individual game, **adaptations are made to reduce the skills gap** (e.g. gripping assistance for archery, or locomotion), while sharing the same action, the same space and the same equipment. In the context of a team game, **this approach exploits the heterogeneity of participants to the benefit of their complementarity, with an equivalence of skills between teams.**

Note: There may be a categorization of participant profiles within each team. These profiles then become part of the rules of the game, and even define their scope of


action. This complexity of rules brings strategic and collaborative challenges to the collective game.

Team members with more limited abilities can be given a dedicated space or a simpler route within the collective game space to balance their skills with those of the other players, or to avoid collisions.

3-C-2. The rules of the “Inclusive Tèque”

The “Inclusive Tèque” (an innovation from the EREA Toulouse-Lautrec High School) Presentation for a designated audience, then universal accessibility	
Participants’ profile	<p>All participant profiles can play in the team. All motor skills are possible, whether standing, using a walker or cane, or in a manual or electric wheelchair.</p> <p>Additional accommodations may be offered to pupils who cannot throw a ball or catch it with their hands, or to pupils with blindness, autism spectrum disorders or intellectual development disorders (see the “universal accessibility” item at the end of the table).</p>
Supervision	A minimum of 2 to 3 teachers supervise the activity, to ensure safe movement and help with throwing the ball.
The teams	<p>Tèque is played between two teams of a maximum of 11 players each.</p> <p>Motor skills can be very different.</p>
Type of locomotion	Players move around according to their motor skills (manual wheelchair, electric wheelchair, walker, standing...).
Court	The game takes place in an undefined playing area, with the exception of the rear area behind the batsman, which is considered offside.
Equipment used	<ul style="list-style-type: none"> - The ball to be sent by the attackers into the playing area is a foam ball with the diameter of a tennis ball, so that it can fit under a manual or electric wheelchair (between 6.3 and 6.6 cm in diameter). - To hit the ball, the attacker can use a bat, racket, hand or gutter.

	<ul style="list-style-type: none"> - The bases used are 1 m squares delimited by studs/cups. 2 circuits (short circuit for slow learners and long circuit for fast learners) are formed using 4 bases, one of which is common to both circuits (the one representing both the beginning and the end).
Scoring points	<p>The attacking team scores points when an attacker manages to circle all 4 bases without being eliminated by the defense.</p> <p>He scores 3 points for his team if he circles all 4 bases once, and 1 point if he does so several times.</p>
Start of the game	<p>The game begins with an attacker striking the ball into the playing area (the attacker strikes the ball sent by a throwing partner located next to him).</p>
Rallye	<ul style="list-style-type: none"> - After sending the ball, the attacker must move from one base to another until he returns to the starting point without being eliminated (he can do this on the first try: after his throw or in several stages thanks to his partners' sends). - He may return to the previous base provided it is not occupied by a partner. - In defense, players must organize themselves (receiving the ball, passing, etc.) to recover the ball and then pass it under a partner's chair in order to eliminate an attacker.
Rotation	<p>Players switch roles (attack/defend) once all attackers have passed through.</p>
Fouls (faults)	<p>The defense commits a foul if it hinders the attacker by blocking a base (defenders must not park in front of a base) or the path taken by the attacker to get to the base. If a player is blocked twice, the offending defender receives a temporary exclusion.</p>
Elimination	<p>An attacker is eliminated if:</p> <ul style="list-style-type: none"> - He fails to send the ball into the playing area after 3 attempts - A defender swallows (ball caught directly) the ball sent into the playing area by the attacker - He is touched by a defender (ball in hand) before reaching a base. - The ball comes out the back of a defender's chair before it reaches a base. Depending on the level of play, defenders will have to pass the ball under one or more pupils in wheelchairs.

	
<p>Replacements</p>	<p>Substitutions may be made freely, with players entering and leaving the game as they please, provided that the appropriate substitution procedures are followed.</p>
<p>Universal accessibility for a very diverse team</p>	<p>The strategic interest of the game lies in the heterogeneity of the participants, so we can offer even more variations of the activity and the help of a tutor:</p> <ul style="list-style-type: none"> - The able-bodied, standing participant will complete the long circuit. He or she can tutor a pupil. - To help catch the ball, the pupil can intercept it with his knees (with or without a scratch surface). If standing, he can use a scratch racket. - To help throw the ball, it can be made lighter or larger. It can also be thrown directly by hand or with a concave baseball glove or Pasaka glove (for a Basque pelota game). A tutor can also throw the ball, following the force and direction indications of a friend with upper-limb problems. - Adaptations related to the items "Understanding rules, instructions and playing areas" and "Taking breaks to rest" will be offered to all participants, even those without neurodevelopmental disorders (see part 4B). - Participants with impaired visual function will play standing with colored visual cues, sensory cues on the floor and a foam sound ball. When playing as a defender, he or she can place the caught ball on the floor, and a wheelchair user will come over to eliminate the attacker. - The blind pupil will need the help of a pupil tutor who will guide him/her by voice to catch the ball and throw it. The tutor will guide his fellow pupil by the arm to run the shortest circuit safely (see adaptations related to the need "To find one's bearings in space" and "To follow the movements of the ball", part 4B).

	<ul style="list-style-type: none">- A pupil tutor will also help the participant with an intellectual development disorder to choose the right strategy and follow the rules.
--	---

Part 4: Protocols for the medical and special educational needs of all pupils

4-A. From medical needs to a “preventive sports safety protocol”

A “preventive sports safety protocol” is based on medical recommendations (medical certificate) linked to pupils’ disorders. To help teachers, **we have grouped the medical recommendations into 8 needs related to sports practice.**

A proposal for a “Preventive sports safety protocol”:

- 1. Move around with locomotion adapted to the nature of the activity** (type of movement preferred or occasional movement);
- 2. Limit the risks associated** with:
 - physical mobilization and friction (pain of all kinds, including headaches, skin fragility),
 - shocks (bone fragility, risk of haemorrhage, fragility or loss of medical equipment, loss of wheelchair control),
 - sudden or violent movements (joint fragility, balance problems),
 - sustained exertion (respiratory problems, blood sugar problems, allergies),
 - outdoor activity (sensitivity to cold);
 - swimming pool activities (risk of drowning due to lack of strength or coordination, allergies).
- 3. Facilitating prehension with customizable devices** (motor disorders of the upper limbs) ;
- 4. Enhance sensory perception** (visual, auditory, sensitivity and balance disorders);
- 5. Helping to understand instructions** (cognitive difficulties, including attention and memory);
- 6. Provide additional spatial references** (visual-spatial difficulties);
- 7. Help with task maintenance by allowing breaks, a change of activity or tutoring by a peer** (fatigue, attentional difficulties, autism spectrum disorders);

8. Take individual charge of the consequences of a specific contraindication.

Note: All these needs are present in the 3 proposed practices, except those related to the risks associated with outdoor and pool activities.

The reactive sports safety protocol

Rapid, even urgent, medical attention is needed in the event of an accident or illness: injury, anaphylaxis, blood sugar or endocrine problems, heart problems or pain.

Ideally, there should be medical and paramedical staff nearby with the necessary emergency equipment. Failing that, a complete emergency kit and an automatic external defibrillator are needed nearby. With specific training and the necessary authorisations, you can also have a manual mucus aspirator, or even a BAVU (self-filling balloon with one-way valve) insufflator.

A wired telephone in the gymnasium is safer. In all cases, at least two supervisors must be present throughout the activity. They will take it in turns to ensure safety during practice. They will also be able to take turns in the event of an accident, to deal with the emergency and ensure the safety of all the participants.

4-B. From special educational needs to an adaptation protocol for all pupils

4-B-1. To establish the universal accessibility of practices, we need to define the disorders concerned and give them an acronym:

Disability Disorders	/ Description of disorders	Acronym
-----------------------------	-----------------------------------	----------------

Motor disorders	From lack of balance and precision to paralysis of all 4 limbs, swallowing and breathing.	MD
Visual impairment	From sensitivity to light, limitation of visual precision or visual field, to blindness	VI
Hearing impairment	from limited perception (some frequencies) to deafness, with or without hearing aids	HI
Neurodevelopmental disorders	Coordination acquisition disorders Specific language and learning disorders (written language disorders, logical-mathematical disorders) Oral language disorders Attention deficit disorder without (ADD) or with hyperactivity (ADHD) Autism spectrum disorders Intellectual development disorders (mild to severe)	CAD SLLD OLD ADD- ADHD ASD IDD
Other mental disorders	Anxiety, depressive, bipolar, addictive, bipolar, schizophrenic, post-traumatic disorders, etc.	OMD

4-B-2. Protocol for adapting sports activities to all pupils

We now propose a grid that takes these medical needs and develops them into special educational needs.

The table shows that a particular educational need can correspond to several disabilities. The same adaptation can help a variety of pupil profiles.

Note: Each special educational need is matched by an adaptation for sporting activities:

1 "table tennis", 2 "inclusive volleyball" or 3 "inclusive Tèque".

Pupils with ASD have a wide range of needs and can benefit from all the adaptations mentioned.

Special Educational Needs & Disabilities	Adaptations (methods, spaces, equipment)	Sports (1, 2, 3)
Handling objects MD / CAD VI / ASD	Support for holding equipment Straps for holding an object with the hand or chest	1,3
	Concave leather glove , Pasaka or Rebot (Basque pelota game) type, or baseball-type glove to catch the ball more easily.	3
	Larger or lighter equipment depending on difficulty	1, 2, 3
	Using the body rather than an object (hand, torso)	1
	Using the wheelchair rather than the arms to catch	3
	Using the chair rather than the legs to strike	2
	Side bars to prevent the ball escaping from all sides	1
Stabilising in a standing position MD / CAD / VI / ASD / IDD	Hand or hip can be supported on a stand	1
	Standing stabilisation equipment (walkers, canes)	1, 3
	Larger equipment for easier interception	1, 2, 3
	Limiting movement to prevent falls and speed up play	3
Follow the movements of the ball MD / CAD ADD-ADHD ASD IDD	Coloured or larger ball for better visibility	1, 2, 3
	Limited playing area to restrict the range of movement of the ball	1
	Slower play with soft equipment (soft racket, foam ball) to give you time to follow your movements.	1, 2
	Large swiss-ball for easier viewing, slower play and less impact on the legs	1, 2
	Sound ball with a bell to hear the ball coming towards you or go to meet it	1, 2, 3
	Guidance from a pupil tutor to locate the ball	2, 3
Flashing lights to define a space	2	
Finding your bearings in space	Areas marked out with bright, varied colours: - on the ground (coloured Gaffer tape to make lines on the ground)	1, 2, 3 2

CAD ADD-ADHD VI ASD IDD	- vertically (coloured sheets taped with Gaffer tape to the wall or hung on supports to colour one side of the pitch, the goals).	
	Spaces delimited by side bars	1
	Pedometer strips (stuck to the ground with Gaffer tape during the activity) to feel the boundaries of the pitch with your feet	2
	Identify an individual playing area with the help of a pupil tutor to identify the boundaries of the pitch and move around safely on their own	2
	Reducing the playing area or course to get a better idea of it	3
	Guidance by voice or arm from a pupil tutor to help locate the ball and the participants, to help with complex movements and reduce the risk of collisions between participants	1, 2, 3
	Slower play (soft equipment or adapted game rules)	1, 2
Move around with limited motor skills, with a stake or without leg movement MD / IDD	Limiting the play area or route to reduce travel time and motor fatigue	2, 3
	Using a walker, cane or balance bike Playing sitting on a chair Using a manual wheelchair: - standard model with anti-tilt device (to avoid falling backwards) - sports model (to turn faster)	1, 2, 3
Moving around without leg movement and little arm movement MD / CAD	Moving around in an electric wheelchair: - with a metal bumper in front of the feet as part of the Foot Fauteuil (Strike force chair) - with a protective foam bar for the knees in the event of hitting a large ball or physical contact - a remote control for the chair adapted to the motor skills of the arms (joysticks and buttons, touch pad)	1,2 1, 2 1, 2, 3
	Simple, few or fragmented instructions	1, 2, 3
	Mimed instructions, illustrated with pictograms	1, 2, 3
Understanding rules,	Instructions with illustrated words in sign language	1, 2, 3

instructions and playing areas CAD / VI / HI SLLD / OLD / ADD-ADHD ASD / IDD / OMD	Instructions explained orally and mimed with the pupil making all the movements and gestures	2, 3
	Areas marked out and identified with bright and varied colours on the ground (Gaffer tape or coloured studs)	2, 3
Benefit from breaks to rest CAD / VI / ADD-ADHD ASD / IDD / OMD	Change of role in the game (refereeing, tutoring) to take a physical, cognitive, sensory or emotional break	1, 2, 3
	Change of activity to a simpler activity for physical or cognitive rest	1, 2, 3
	A rest area on carpets in a corner away from the noise and bustle, for sensory or emotional relaxation.	1, 2, 3

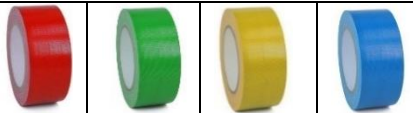

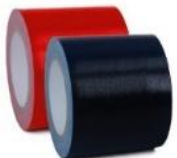
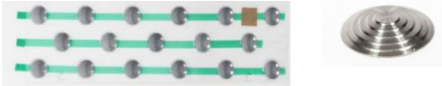
Analysing by special educational needs, not by disability, helps to design a sport that is universally accessible.





4-C. Complementary equipment to facilitate universal accessibility

The aim is to be able to use effective, mobile sensory markers to adapt quickly to activities:

- Visually identify the boundaries of the pitch with a bright colour,
- Visually identify different areas of play with colours to help understand the rules,
- Perceive the boundaries of the pitch with your feet using pedometer strips.

A ideal tool is Gaffer tape, which is easy to apply and remove, and safe (designed for the stage). Gaffer tape can be coloured and used to cover the pedometer strips, securing them in place temporarily.

<p>Coloured Gaffer tape (5 cm wide)</p>		 <p>Orientation aids in strips</p>
<p>Gaffer tape extra large (10 cm wide)</p>		 <p>Orientation aid strips in studs</p>

	<p>Bell sound balls come in all sizes. For the Tèque, you can cut a slit in a foam ball and slide in little bells enclosed in a plastic mini-box. Alternatively, small foam balls with bells (e.g. Bell foamball) or velvet toy balls are available.</p>
	<p>The PASAKA or REBOT leather glove comes from ancestral Basque sporting practices, played with a pelota. It can be made by gluing a cardboard or plastic cup to a leather glove. Alternatively, a baseball glove can be used. It can be lengthened to make it more effective.</p>
	<p>The swiss-ball doesn't make any sound, but you can manage to slip miniature balls inside. Alternatively, you can create an outer cover and slip a crumpled piece of paper inside and around it, which makes a lot of noise.</p>
	<p>Memory foam sticks/noodles can be used to create bumpers on armchairs to protect the legs.</p>