

Table Soccer At School:

Compendium of good practices on table soccer and its social benefits.

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Introduction

Table soccer has been recognised as a tool with multiple social, physical and cognitive benefits. Its use in schools, institutes, and non-formal education settings allows for the development of key skills such as cooperation, decision-making, respect for rules, teamwork, communication, and emotional management. Its simplicity, accessibility and ability to generate interaction make it an innovative, accessible, and effective educational resource.

In the context of European educational priorities, which promote active, inclusive methods aimed at the holistic development of students, table soccer offers a playful and motivating approach that facilitates social and emotional learning. Its format promotes values such as fair play, respect for others, perseverance and personal growth (European Parliament, 2024).

Table soccer helps to develop cognitive skills such as concentration and decision-making. In addition, its use in the classroom or school environment promotes positive interaction among students, improves the school climate and serves as a bridge between students of different ages, cultures or ability levels (Abdallah, 2024).

Table soccer has also been incorporated into inclusive education programmes, as it allows for adaptation of dynamics for students with disabilities, facilitates their participation and promotes self-esteem and a sense of belonging (Cañón & López, 2020).

It also has many physical benefits, such as contributing to the development of physical skills, stimulating muscle tone in the hands and arms, improving reflexes, and improving hand-eye coordination and coordination between players (Hornung y Zhang, 2008).

Table soccer constitutes a cultural phenomenon that has captured the attention and enthusiasm of several generations. Its evolution from an informal game to an internationally recognised discipline demonstrates its permanence as a significant element within contemporary popular culture. It has acted as a bridge between generations and cultures (Abdallah, 2024).

The aim of this document is to identify best practice and the main benefits of table soccer in different areas and offer a comprehensive overview of good practices in table soccer.

Main benefits of table soccer

Peripheral vision

Peripheral vision plays a key role in dynamic sports such as table soccer, where quick perception and reaction are essential. This visual ability enables individuals to detect stimuli beyond the central visual field, allowing for ongoing monitoring of the playing area. In the context of table soccer, players must simultaneously follow the ball's movement, manage the positioning of their own figures, and anticipate the opponent's actions. This complex visual demand engages the peripheral visual field and fosters spatial awareness—both crucial for improving anticipation and decision-making under pressure (Weigel et al., 2004).

Studies developed with robotic systems applied to table soccer (e.g., the KiRo project), highlight the importance of a wide and efficient visual field for successful performance, as it allows players to quickly identify movement and positioning patterns without losing accuracy (Weigel & Nebel, 2003). Integrating table soccer into educational settings can support the development of key perceptual and cognitive skills. These include distributed attention, spatial orientation, and visual-motor coordination—abilities that are not only vital for performance in various sports but also beneficial for everyday tasks that require fast and accurate responses. In this sense, table soccer offers a valuable pedagogical tool for promoting holistic motor and perceptual development in educational contexts.

Reflex response

Table soccer is characterized by its rapid pace and the high speed at which the ball moves, requiring players to react with precision in extremely short timeframes. This constant demand promotes the development of both visual and manual reflexes, which are essential for executing actions such as intercepting the ball, making quick passes, or shooting on goal effectively (Aguinda & Zabala, 2023).

According to the International Table Soccer Federation (2014), reflexes are among the most highly valued skills in this sport, as they enable players to perform technical actions swiftly and efficiently. Actions such as shooting at goal, passing between figures, and defending against opponents' plays rely on a strong foundation of coordination and well-developed visual-manual reflexes (ITSF, 2014).

This sensorimotor dimension of table soccer has also been explored in the field of sports robotics. Studies involving the KiRo system have shown that competitive performance against human players is only feasible when visual processing and mechanical responses are executed in under 30 milliseconds (Weigel et al., 2004; Zhang & Nebel, 2007), underscoring the sport's high sensory and cognitive

demands. Given these characteristics, table soccer presents itself as a powerful pedagogical tool within physical education. Its structured yet playful nature provides an ideal environment for developing reflexes and improving visual-motor coordination, particularly among students with motor or sensory processing challenges.

Reaction time

As discussed in previous sections, the fast-paced nature of table soccer demands a high level of reaction capacity, as players must respond almost automatically to visual and motion stimuli that occur within fractions of a second. Given that the ball can reach speeds of up to 10 m/s (Zhang & Nebel, 2007), timely reactions require not only quick reflexes but also well-developed anticipatory skills and fine motor coordination (Hornung & Zhang, 2008; Tacke et al., 2004).

From an educational perspective—particularly within school-based physical education—table soccer offers an engaging means to enhance core executive functions. These include sustained attention, impulse control, rapid decision-making, and visual information processing. Such cognitive abilities are fundamental not only for athletic performance but also for academic success and daily activities requiring fast processing and precise hand-eye coordination. In this regard, table soccer serves as a versatile pedagogical resource, supporting the holistic development of students by integrating cognitive and motor skill training in a dynamic, motivating, and accessible format.

Strategy

Strategy is crucial in table soccer for several reasons: it improves game control by planning your moves and anticipating the opponent's actions; enhances offensive and defensive play by knowing when to attack and when to defend, making a significant difference in performance; increases winning chances by helping to exploit your opponent's weaknesses and capitalize on your strengths; reduces predictability by varying your moves and keeping your opponent guessing; and builds confidence, as having a plan can reduce anxiety.

Scientific literature suggests that strategy in team sports is crucial for team resilience, optimizing through data-driven decision-making, and improving performance, though data driven decision making or dynamic adjustments during play (Gréhaigne et al., 2001).

Adaptation to context

Adaptation to context in table soccer is essential because it improves performance; by being flexible and responsive, you can make better decisions and execute more effective plays. It enhances strategic play, allowing you to refine your strategy; increases resilience in the face of unexpected changes; and promotes skill development, encouraging continuous learning and skill development.

Adaptation to the context in team sports is crucial for enhancing team coordination, performance, competitiveness and effectiveness, as it involves overcoming cultural and environmental constraints, utilizing appropriate coordination processes, and developing psychosocial skills to navigate transitions and challenges. Players who show high potential in adapting to varied contexts could be considered more valuable than players with limited adaptability (He et al., 2023). Playing table soccer can help improve adaptation to various contexts by requiring rapid decision-making in response to the fast-paced nature of the game. It enhances strategic thinking through the adjustment of tactics based on the opponent's movements and aids in stress management.

Shooting techniques

Shooting techniques in table soccer are crucial for scoring goals, game control, versatility, confidence, and skill development. Increasing the ability to score from different positions and angles will help the player master shooting techniques. By being able to execute precise and powerful shots, the player can maintain game control and possession of the ball. Different shooting techniques will give the player versatility in gameplay, making it harder for the opponent to defend and predict the moves. As the player becomes more proficient, they will find it easier to execute complex plays and adapt to different game situations, as previously shown in scientific research papers (Clemente et al., 2021). For example, professional players can perform the complex action sequence “slide-kick”, which includes a “pass” and a “kick” to attack the goal, within 0.3 seconds, ending with the ball in the goal (Zhang and Nebel, 2007).

Decision-Making

Playing table soccer requires quick, skillful actions and reactions, as well as precise movements arising from either ongoing play situations or initial scenarios with the ball at rest—for instance, during the execution of sequences such as the *slide-kick* (Zhang & Nebel, 2007). Although table soccer is a simpler activity than real football, it presents similar challenges in terms of sensory interpretation and the selection of actions under uncertainty (Tacke et al., 2004). The need to adjust one’s strategy involves

identifying the opponent's play patterns and categorizing them based on their playing style and attack-defense capabilities (Weigel et al., 2005).

If we understand the game as being guided by three basic intentions—blocking, dribbling, and attacking—the player must dynamically identify these intentions through decision-making processes. These decision rules are grounded in knowledge of *spatial relations* and *action duration* within the game, all while under environmental pressure (Zhang & Nebel, 2005).

Concentration

Table soccer is a physical activity that demands concentration and focused attention (ITSF, 2014). According to Zhang and Nebel (2007), after analyzing recordings of professional players, they conclude that the different actions a player may perform—such as *stopping*, when controlling the ball; *dribbling*, to reposition the ball into a comfortable attacking stance; or *attacking*, which involves a sequence of actions ending in a shot on goal—require a high level of sustained attention to motor details and environmental cues during play.

These actions unfold in milliseconds, with the ball often reaching speeds of up to 10 m/s, making any distraction potentially costly in both defensive and offensive phases. Additionally, the player's perceptual system must continuously filter out irrelevant information in order to focus on essential stimuli—a core function of concentration.

Inclusion

Table soccer has remarkable potential as a tool to promote social inclusion in different contexts. In a study on leisure spaces and equipment: reflections on school recreation time, table soccer was highlighted as a good inclusion space for all students (Luiz & Marinho, 2021). In another study conducted with a child with ASD, one of the activities introduced into his routine was the practice of table soccer, along with other activities such as soccer and mini golf. After its introduction, improvements were observed in verbal responses to commands, following instructions, and turn taking (Alós & Carnerero, 2005).

In terms of physical disability, a human table soccer experience was conducted by constructing a scaled stadium to replicate traditional table soccer. A student with a physical disability participated in this activity (Bustos, Chancusig, Pérez & Maqueira, 2024).

Therefore, table soccer is considered an activity in which everyone can participate. In each tournament, there are numerous categories that consider inclusion and allow participation regardless of gender, age or physical condition (Cañón & López, 2020).

Sometimes people with disabilities do not have the opportunity to participate in other physical sports activities with their peers due to the technical, tactical or strategic complexity of many of these activities. However, table soccer allows students with disabilities to feel capable, as it is an activity that can be easily adapted to allow all types of students to participate. Table soccer becomes a space of inclusion, which is particularly valuable in school settings, social settings with cultural diversity or special educational needs (Crivello, Camfield & Porter, 2010).

Team Spirit and teamwork

Table soccer requires cooperation and collaboration among team members to coordinate movements, cover areas of the field, and make joint decisions. This builds trust, cooperation, and a sense of belonging within the team (Cekaite, 2013).

Table soccer, which is typically played in pairs (two against two), requires constant coordination between team members. This dynamic creates a privileged space for the development of teamwork, understood not only as the joint execution of a task but also as a form of relationship based on cooperation, mutual trust, and the complementarity of skills (Abdallah, 2024).

During the game, each participant must take on a role (defender or attacker) and adapt to the decisions of his teammate, which involves:

- Sharing responsibilities: Knowing when to intervene and when to let your teammate take the lead.
- Emotional support: Encouraging each other, tolerating mistakes and celebrating joint successes.
- Dynamic adaptation: Adapting to changes in the game in a synchronized way.

These characteristics make table soccer a tool for developing essential socio-emotional skills for school, work and personal life, such as cooperation, empathy, group resilience and shared decision-making.

As Johnson & Johnson (2009) point out, cooperative learning has positive effects on self-esteem, achievement and attitudes towards learning, aspects that can also be observed in informal contexts

such as games. In this sense, table soccer allows students to practice in a non-academic environment many of the skills they will need in future situations of professional or civic cooperation.

In addition, the game strengthens the sense of belonging to the group, as the achievement of the goal (scoring goals and winning) depends on a joint effort rather than individual effort. These types of experiences strengthen group commitment and a sense of positive interdependence, which is essential for building cohesive school or social communities (Slavin, 2014).

Communication

Table soccer facilitates both non-verbal communication (gestures, looks) and verbal communication between team members, especially when developing joint plays or motivating each other. Players need to communicate constantly to coordinate their movements and strategies. This constant interaction promotes the development of communication skills, as players need to express their ideas and listen to their team-mates. Therefore, expressive and active listening skills are stimulated.

Table soccer requires players to work together to overcome challenges. This involves discussing tactics, making quick decisions and adjusting strategies in real time, which enhances players' ability to communicate effectively under pressure.

From the perspective of sociolinguistics and game pedagogy, authors such as Cekaite (2013) have shown that competitive games such as table soccer become spaces where children use their communication skills to negotiate their place in the group. They also explore ways of forming alliances and using language not only to communicate but also as a tool for social positioning. During the game, each participant has to take on a role (defence or attack) and adapt to the decisions of his or her teammate, which requires the development of effective communication (looks, gestures, short comments on strategies).

Socialisation

The interactions that take place around table soccer make it a powerful tool for socialisation, both at school and in leisure time. It is an accessible and participatory activity with a cooperative/competitive structure, intergenerational and suitable for everyone.

Participation in table soccer allows players to develop skills such as

- Negotiating roles (who defends, who attacks).

- Respecting turns and shared rules.
- Recognising others as teammates or competitors.
- Resolving minor conflicts, such as disagreements about a play or following the rules.
- It teaches mutual respect and develops team spirit (ITSF, 2014).

In addition, in educational or social intervention contexts, table soccer has been shown to be useful for involving students who have difficulties with adjustment or socialisation. For example, students with low self-esteem, a history of social exclusion or difficulties integrating into group dynamics (Luiz & Marinho, 2021). Indeed, a study carried out in Colombia, in which 148 people were asked to complete a questionnaire on various aspects of table soccer, 74.63% of them stated that they considered table soccer to be a space for socialising (Cañón & López, 2020).

In this sense, table soccer contributes to the development of empathy, tolerance and self-affirmation through shared experiences that allow participants to connect beyond words. It thus becomes a highly valuable pedagogical and social tool, especially in educational leisure programmes, schoolyard activities, extracurricular activities or community interventions.

A comprehensive overview of good practices in table soccer

Table soccer is not only a popular recreational activity but also a valuable tool for promoting physical, mental, and social well-being. To conclude this report, we present a comprehensive overview of good practices in table soccer, highlighting initiatives that enhance skill development, community engagement, inclusivity, and educational integration.

1. **Promoting Fair Play:** ensuring all players are familiar with and follow the official rules set by the International Table Soccer Federation (ITSF), and encouraging respect for opponents, teammates, referees, and equipment.
2. **Skill Enhancement Programs:** such as organizing workshops and training camps to help players improve their skills and learn advanced techniques and pairing experienced players with beginners to provide guidance and support, are essential.
3. **Community Engagement:** is fostered through hosting local tournaments to encourage participation and camaraderie and using table soccer events to raise funds for local charities and community projects.

4. **Inclusivity Initiatives:** providing adaptive equipment for players with disabilities to ensure everyone can participate and creating programs specifically for youth to promote physical activity and social interaction.
5. **Educational Integration:** involves establishing table soccer clubs in schools to promote teamwork and strategic thinking and incorporating table soccer into physical education curricula to enhance motor skills and cognitive development.

These practices not only improve the quality of play but also enhance the social and educational benefits of table soccer. By implementing these initiatives, communities can foster a more inclusive, engaging, and healthy environment for all participants.

To illustrate the implementation of good practices in table soccer, we will now present an example through the "[100 Football Tables for Schools](#)" initiative. Launched by the ITSF, this project aims to provide schools with free foosball tables. Its objective is to develop the practice of the sport among young people. The Federation aims to make this practice accessible to all by proposing tables adapted for disabled people and for all ages. The idea behind the project is to highlight the educational values of table soccer:

- Respect to have fun: rules, equipment, partners, opponents, referees.
- Focus to progress: self-control, stress, gesture accuracy.
- Analyse to adapt: strategies, control of strengths and weaknesses.
- Socialise to learn how to share: team spirit, accessibility for all, diversity, sociability.
- Have fun to build self-confidence: adaptation, success, self-esteem.

This innovative programme is also a good way of creating a network for companies and building bridges between sport, school and the workplace. This project, launched in the Nantes area (France) for the 2022 World Championship & World Cup, was a success with more than 150 tables installed in different schools.

These kinds of initiatives are crucial for fostering a healthier, more inclusive, and engaged community. The positive impact of such initiatives extends beyond the immediate benefits of the game, contributing to the overall well-being and cohesion of the community. Supporting and expanding these efforts is vital for nurturing future generations and ensuring a vibrant, supportive environment for everyone.

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