

Developing Soft Skills for Sustainable Development in Secondary Education: A Didactic Proposal Based on the Sport Education Model.

Desarrollando habilidades blandas para el desarrollo sostenible en Educación Secundaria: una propuesta didáctica basada en el Modelo de Educación Deportiva.

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Abstract. This paper presents a didactic proposal for Physical Education based on the Sport Education Model (SEM) to promote soft skills linked to sustainable development in secondary education. Rather than being organised as a conventional research article, the text reformulates the original experience as a practical and transferable teaching framework that teachers can adapt to real school contexts. The proposal is illustrated through a 16-session basketball season structured into four phases, directed practice, autonomous practice, competition, and celebration, in which students assume rotating roles such as coach, referee, scorer, community manager, and fair-play officer. The educational rationale, the sequence of sessions, the pedagogical value of student roles, and a formative assessment system are described in an integrated way. Special attention is given to collaboration, communication, shared leadership, responsibility, conflict management, inclusion, and group cohesion as key competences for both school life and education for sustainable development. The manuscript also incorporates a concise ad hoc rubric and practical guidelines for implementation, so that teachers can identify observable indicators of learning and document the educational value of the model in everyday practice.

Key Words: Sport Education; Physical Education; Soft skills; Collaboration; Sustainability

Resumen. Este trabajo presenta una propuesta didáctica de Educación Física basada en el Modelo de Educación Deportiva (MED) para promover habilidades blandas vinculadas al desarrollo sostenible en Educación Secundaria. En lugar de organizarse como un artículo científico convencional, el texto reformula la experiencia original como un marco práctico y transferible que el profesorado puede adaptar a contextos escolares reales. La propuesta se ilustra mediante una temporada de baloncesto de 16 sesiones estructurada en cuatro fases (práctica dirigida, práctica autónoma, competición y celebración) en la que el alumnado asume roles rotatorios como entrenador, árbitro, anotador, community manager y responsable de juego limpio. Se describen de manera integrada la fundamentación educativa, la secuencia de sesiones, el valor pedagógico de los roles y un sistema de evaluación formativa. Se presta especial atención a la colaboración, la comunicación, el liderazgo compartido, la responsabilidad, la gestión de conflictos, la inclusión y la cohesión grupal como competencias clave para la vida escolar y para la educación para el desarrollo sostenible. El manuscrito incorpora además una rúbrica ad hoc resumida y orientaciones prácticas de aplicación para que el profesorado pueda identificar indicadores observables de aprendizaje y documentar el valor educativo del modelo en la práctica cotidiana.

Palabras Clave: Modelo de Educación Deportiva; Educación Física; Habilidades blandas; Colaboración; Sostenibilidad

Introduction

The development of transversal competences, usually referred to as soft skills, has become a central priority in contemporary education because students are expected not only to acquire knowledge, but also to communicate effectively, collaborate with others, assume responsibility, and respond constructively to real-life challenges (García-Fuentes & Navarro-Granados, 2024; Tokunova et al., 2023). These competences are increasingly valued in academic, social, and professional contexts, where technical knowledge alone is no longer sufficient to guarantee meaningful participation. Within this broad framework, Physical Education (PE) offers a particularly valuable context for cultivating soft skills because students must continuously interact, negotiate, make decisions, and coordinate their actions with others in authentic and dynamic situations (Baena-Morales et al., 2021; Cañon & Villarreal, 2021). Unlike other curricular areas in which cooperation may remain at the level of discourse, PE places students in embodied, visible, and shared learning experiences where communication, leadership, empathy, and collective responsibility become necessary conditions for task success. This article therefore reframes the original manuscript as a didactic and divulgative proposal rather than as a conventional research paper. The aim is to present an organised, pedagogically grounded, and classroom-oriented framework through which PE teachers can use the Sport Education Model (SEM) to foster collaboration, teamwork, leadership, and social responsibility in secondary education. In doing so, the text retains the academic basis of the initial manuscript while giving greater prominence to transferability, educational design, and formative assessment.

Why connect soft skills, sustainability, and Physical Education?

Education for sustainable development cannot be reduced to teaching isolated concepts about the Sustainable Development Goals. It also requires educational experiences that help students live and practise values such as inclusion, participation, co-responsibility, fairness, and commitment to the common good (Baena-Morales et al., 2021; OECD, 2019). From this perspective, sustainable development involves social learning: students must learn how to work with others, listen to different viewpoints, manage disagreement, and contribute to collective well-being. Soft skills such as communication, teamwork, conflict resolution, empathy, and situational leadership are therefore closely linked to sustainability education because they help students participate in democratic, inclusive, and socially responsible communities (Dmitrievna et al., 2022; Villalobos-Tovar et al., 2023). In school settings, these competences should not be treated as secondary outcomes or informal by-products; instead, they should be intentionally planned, taught, observed, and assessed. PE is especially suitable for this purpose because movement-based tasks naturally generate interdependence, shared objectives, changing roles, and visible consequences of individual decisions for group functioning. For that reason, when PE is organised through active pedagogies, it can become an educational space where sustainability-related values are not only discussed but enacted in practice through cooperation, respect, and joint responsibility.

Why the Sport Education Model is an appropriate pedagogical pathway

SEM has been widely recognised as one of the most robust pedagogical models in PE because it recreates the key features of authentic sport seasons (stable teams, formal competition, student roles, record keeping, festivity, and affiliation) within an educationally oriented framework (Bessa et al., 2021; Pill & Hastie, 2016). This structure modifies the traditional teacher-centred lesson by giving students a more active, participatory, and responsible role in the learning process. The literature suggests that SEM can improve motivation, belonging, autonomy, and social interaction, while also supporting the learning of tactical and technical content (Kao, 2019;

Manninen & Campbell, 2022). More importantly for the present proposal, SEM creates repeated opportunities for students to communicate, make decisions together, organise tasks, resolve disagreements, and rotate through different responsibilities, all of which are essential for soft skills development (Li et al., 2024; Ming et al., 2024).

In addition, the model is compatible with current educational approaches that prioritise active learning, participation, and student-centred pedagogy (Giménez-Meseguer et al., 2022; Juárez-Pulido et al., 2019). Because each student is expected to contribute to the team beyond motor performance alone, SEM also offers a more inclusive framework in which different forms of competence can be recognised and valued. This is particularly relevant in secondary school, where disengagement in PE may increase when lessons are organised solely around performance, repetition, or direct instruction. Recent practice-oriented contributions published in *Logía, educación física y deporte* also reinforce the value of innovative, inclusive, and motivating approaches in Physical Education and teacher education. Recent work has highlighted the cognitive and interdisciplinary potential of macro board games, the positive educational climate associated with flipped learning in Physical Education teacher education, the inclusive possibilities of alternative sports such as Jail-Survival, the relevance of contextual design variables such as playground type and gender patterns in participation, and the motivational implications of emerging pedagogical models in secondary Physical Education (Arancón-Gómez, 2022; Barranca-Martínez et al., 2023; Hernández-González et al., 2024; López-Urán et al., 2022; Zapatero-Ayuso et al., 2025). Taken together, these contributions reinforce the need to present transferable didactic proposals that move beyond technical sport instruction alone and connect methodology, inclusion, motivation, participation, and broader educational development.

A didactic proposal for secondary education.

The proposal presented here is illustrated through a basketball season designed for Compulsory Secondary Education. Although the sequence can be adapted to other sports, levels, or school conditions, basketball offers a useful example because it requires permanent communication, coordinated movement, tactical cooperation, and quick collective decision-making. The unit is designed for 16 sessions of 60 minutes (see table 1). Its main educational purpose is not limited to improving sport performance. Rather, the season is organised so that students learn to collaborate effectively, take responsibility within the group, exercise shared leadership, respect common rules, and understand that each member contributes to collective success in a different but meaningful way. At the curricular level, the proposal can be aligned with competence-based PE teaching because it integrates motor learning with social, civic, and personal development. At the methodological level, it translates abstract educational goals into concrete classroom routines: stable teams, rotating roles, shared planning, reflection tasks, fair-play criteria, and a final celebration of learning. This progression is educationally relevant because it moves students from dependence on teacher direction towards increasingly autonomous, reflective, and socially coordinated participation. In other words, the sport season is not only a content organiser; it is the pedagogical mechanism through which responsibility and collaboration are gradually learned.

Table 1. Overview of the 16-session didactic sequence.			
Phase	Sessions	Main purpose	Representative actions
Directed practice	1-2	Introduce SEM routines, team identity, and tactical basics.	Presentation of the season, team creation, explanation of roles, cooperative warm-ups, and guided tactical tasks.
Autonomous practice	3-8	Promote co-responsibility, planning, and progressive autonomy.	Teams organise tasks, rotate internal responsibilities, run short practices, and receive feedback from peers and teacher.
Competition	9-14	Apply learning in meaningful game situations while preserving educational goals.	Formal matches, refereeing, record keeping, fair-play monitoring, team meetings, and collective decision-making.
Celebration and closure	15-16	Consolidate learning, reflect on experience, and recognise contributions.	Final festival, team presentations, collective reflection, self-assessment, and recognition of commitment, progress, and fair play.

Student roles and their pedagogical value.

One of the defining features of SEM is that students do not participate only as players. They also assume roles that make the functioning of the season possible. This is a key pedagogical decision because it broadens participation and gives educational value to organizational, communicative, ethical, and reflective tasks. Rotating roles is especially important in secondary education. When responsibility circulates within the team, leadership becomes shared rather than concentrated in a few students, and a wider range of learners can experience competence and recognition. The roles below are illustrative and can be adapted to class size, available time, and teacher priorities (see table 2).

Table 2. Student roles and their contribution to soft skills development.		
Role	Main responsibility	Soft skills especially promoted
Coach	Helps organise tasks, encourages peers, and contributes to team planning.	Communication, encouragement, situational leadership.
Captain	Represents the team, supports decision-making, and mediates in game situations.	Leadership, responsibility, negotiation.
Referee	Applies rules and promotes respectful behaviour during play.	Fairness, assertiveness, conflict management.
Scorer/record keeper	Registers results, participation, and fair-play indicators.	Accuracy, responsibility, attention to detail.
Community manager/journalist	Documents the season and communicates team progress.	Expression, creativity, collective identity.
Fair-play officer	Observes attitudes, respect, and support within and across teams.	Empathy, ethical awareness, inclusion.
Equipment manager	Prepares and returns materials needed for practice and competition.	Organisation, reliability, service to the group.

Assessment proposal: formative, visible, and sustainable

Assessment in this proposal (see table 3) is conceived as a formative process that helps students become more aware of how they participate in the group and how their decisions affect others. If the educational goal is to promote soft skills, then evaluation cannot be limited to technical execution or final scores. It must include observable social behaviours and structured moments of reflection. For that reason, the proposal combines four complementary sources of evidence: teacher observation, student reflective journals, short team self-assessments, and a final group conversation. This triangulation allows the teacher to document learning processes in a more complete and educationally meaningful way. It also helps avoid the common problem of speaking about teamwork or leadership without actually defining what these constructs look like in practice.

The rubric should not be used as a punitive instrument. Its purpose is to make expectations explicit, guide feedback, and support students' progressive improvement. In practice, the teacher can focus on one or two criteria per session, provide brief written or oral feedback, and revisit the indicators at key moments of the season. This makes assessment manageable and pedagogically coherent. Reflective journals can be completed at the end of each week through short prompts such as: What did I contribute to my team this week? What role was most difficult for me? How did we solve disagreements? What should we improve in the next session? These questions help students connect action with reflection and move from simple participation to conscious learning.

Table 3. Summary of the ad hoc formative rubric used during the season.

Criterion	Initial	In progress	Achieved
Communication	Participates little or communicates only when prompted.	Shares information with some continuity but inconsistently.	Communicates clearly, listens actively, and helps the team coordinate.
Cooperation	Focuses mainly on individual action.	Collaborates in tasks but needs reminders to support peers.	Contributes actively, supports peers, and works toward shared goals.
Role responsibility	Needs frequent teacher intervention to fulfil the assigned role.	Performs most duties with occasional support.	Assumes the role autonomously and understands its value for the team.
Conflict management	Reacts impulsively or depends entirely on the teacher.	Attempts dialogue but still needs mediation in some situations.	Uses respectful dialogue and contributes to fair solutions.
Fair play and inclusion	Shows irregular respect for rules or peers.	Usually respects rules and includes peers, though not always consistently.	Demonstrates respect, fairness, and inclusive attitudes throughout the season.

Learning evidence teachers can document during implementation

Because this manuscript is now presented as a didactic proposal, the emphasis is not on reporting numerical findings but on identifying meaningful evidence that teachers can document in real practice. The following indicators (see table 4) translate broad competences into observable behaviours that may be recorded through rubrics, anecdotal notes, journals, or short group interviews.

Table 4. Examples of observable evidence linked to the educational aims of the proposal.		
Competence	Observable evidence in class	Possible source
Collaboration	Students redistribute tasks, help peers, and prioritise team functioning over individual prominence.	Observation rubric; teacher notes
Communication	Teams plan briefly before tasks, give feedback during play, and listen to one another in decision-making moments.	Observation rubric; team meetings
Leadership	Different students take initiative according to their role and support the group without dominating it.	Role records; anecdotal notes
Conflict management	Disagreements are addressed through dialogue and rule-based reasoning before teacher intervention is needed.	Teacher notes; final conversation
Belonging and inclusion	Students refer to shared goals, recognise others' efforts, and value the contribution of different roles.	Reflective journals; fair-play records

Practical recommendations for teachers

First, the teacher should introduce the model explicitly and explain why students will not participate only as players. Secondary students often understand the logic of roles better when the educational purpose is clearly communicated from the beginning: the season is designed not only to play better, but to learn how to collaborate better. Second, responsibility should be transferred progressively. If autonomy is demanded too early, some teams may reproduce passivity or depend excessively on a few students. Short routines, role cards, visual reminders, and teacher check-ins can help students assume responsibility without feeling abandoned. Third, reflection must be brief but systematic. In many school contexts, the main obstacle is not lack of educational value but lack of time. For that reason, reflection tasks should be concise, focused, and repeated. A two-minute team meeting or a short exit slip may be more sustainable than longer written tasks that are difficult to maintain. Fourth, the teacher should recognise different forms of success. A student who does not stand out technically may nevertheless contribute greatly through organisation, mediation, encouragement, or fair-play monitoring. When these contributions are made visible, the class becomes more inclusive and the educational value of PE broadens beyond performance alone. Finally, adaptation is essential. The number of roles, the length of the season, the complexity of the tasks, and the balance between practice and competition should be adjusted to the age of the students, group climate, prior experience with active pedagogies, and organisational constraints of the school.

Final considerations

Reframed as a didactic and divulgative article, this proposal shows that SEM can be used not simply as an alternative sport methodology, but as a coherent pedagogical pathway for connecting PE, soft skills development, and sustainability-oriented education. Its value lies in making students jointly responsible for learning, requiring them to communicate, decide, care for others, and contribute to the collective functioning of the group. In this sense, SEM helps PE move beyond a narrow focus on technical execution and offers a richer educational environment in which social and civic competences are intentionally cultivated. Stable teams, rotating roles, formative assessment, and collective reflection do not merely organise the unit; they create the conditions through which students experience what participation, fairness, responsibility, and cooperation actually mean.

For teachers, the proposal is both ambitious and realistic. It is ambitious because it aspires to educate the whole student, not only the performer. It is realistic because it translates those aspirations into concrete routines, observable indicators, and manageable assessment tools. This combination makes the model especially valuable for secondary education contexts seeking more meaningful, inclusive, and transferable PE experiences.

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