International Journal of Research in Education Humanities and Commerce

Volume 07, Issue 01 "January - February 2026"

ISSN 2583-0333

A TRIANGULATED NEEDS ASSESSMENT OF FOOTBALL INSTRUCTION IN PHYSICAL EDUCATION TEACHER EDUCATION: EVIDENCE TO INFORM CURRICULUM IMPROVEMENT

JINGXIA GUO & ZULEZWAN BIN AB MALIK*

Faculty of Sport Science and Coaching, University Pendidikan Sultan Idris, Malaysia

https://doi.org/10.37602/IJREHC.2025.7115

ABSTRACT

This study conducted a triangulated needs assessment to diagnose learning challenges and instructional gaps in football instruction within Physical Education Teacher Education (PETE) programmes. Data were collected from 38 PETE students and 10 football instructors using complementary diagnostic surveys combining quantitative and qualitative items. Descriptive statistics and thematic content analysis were employed to characterise learner backgrounds, perceived difficulties, and preferred instructional approaches. Findings revealed that the predominant learning bottlenecks were not technical but tactical–cognitive, including limited decision-making competence, weak tactical understanding, and poor transfer from drills to authentic game play. Social and affective challenges—such as limited cooperation, role awareness, and reduced engagement—were also prominent. Students expressed strong preferences for game-based, tactically oriented, and cooperative learning experiences, while instructors corroborated the need for improved decision-making and teamwork. The analysis identified four interrelated domains of need (physical, cognitive, social, and affective) and translated them into six design requirements (DR1–DR6) for instructional innovation. These results support a shift from technique-centred to hybrid, game-centred pedagogies (e.g., SE–TGfU combinations) that integrate tactical learning, social participation, and motivational support within representative football environments. The findings provide evidence-based guidance for curriculum improvement and pedagogical reform in PETE football courses.

Keywords: needs analysis, PETE, football instruction, TGfU, Sport Education, hybrid pedagogy, decision-making, curriculum improvement

1.0 INTRODUCTION

Across recent reforms in Chinese physical education (PE), university-based physical education teacher education (PETE) programmes have been urged to move beyond technique-dominant instruction and to cultivate game understanding, decision-making, cooperation, and learner engagement (Yang, 2025; Kirk, 2013). However, football teaching in many higher education contexts remains characterised by mechanical skill repetition and limited opportunities for tactical learning and pedagogical innovation—features often associated with traditional, sport-technique-centred PE (Kirk, 2013; Casey & MacPhail, 2018). This mismatch may weaken pre-service teachers' ability to transfer football competence to authentic game contexts and, importantly, to meet contemporary school PE expectations that emphasise learner-centred pedagogy and holistic development (Harvey & Jarrett, 2014; Yang, 2025).

Current reform agendas highlight the need to integrate motor performance with instructional capacity, often framed through pedagogical content knowledge (PCK) and related approaches that support teachers in transforming subject matter into meaningful learning experiences (Shulman, 1986, 1987). In football, this implies teaching that situates technical execution within game contexts, promotes communication and cooperation, and develops decision-making under dynamic constraints—priorities that are consistent with game-centred approaches and the broader literature on tactical learning in invasion games (Bunker & Thorpe, 1982; Harvey & Jarrett, 2014; Memmert, 2010). Such priorities also align with national health agendas that emphasise sustained participation in physical activity, including the "Healthy China 2030" framework (Wu, 2016; World Health Organization, n.d.).

Despite these policy and pedagogical expectations, empirical evidence describing what pre-service PE teachers actually experience in university football courses—and what they perceive they need—remains limited. Reviews of game-centred approaches have repeatedly highlighted implementation challenges and the need for clearer, context-sensitive evidence about learners' tactical development, decision-making, and engagement (Harvey & Jarrett, 2014). Without systematic, context-specific needs data, it is difficult to justify and design instructional innovation that is both culturally relevant and practically feasible within PETE programmes (Dick, Carey, & Carey, 2015; Reiser & Dempsey, 2017).

To address this gap, the present study conducted a diagnostic needs assessment to characterise learner backgrounds, perceived learning difficulties, instructional experiences, and preferred learning strategies in PETE football instruction, and to triangulate these findings with instructors' observations. Two survey instruments were used: (a) a Student Football Learning Needs Survey and (b) a Football Teaching Observation and Instructional Needs Survey (Instructor Version). These instruments were designed as fact-finding tools for instructional planning rather than psychometric measurement scales; therefore, they comprised single-choice, multiple-choice, and open-ended items aimed at producing descriptive and contextual information (Dick et al., 2015; Reiser & Dempsey, 2017).

The student survey examined four areas: (1) football learning background and participation patterns, (2) perceived learning difficulties across technical, tactical, and game-related contexts, (3) learning experiences and commonly used instructional approaches, and (4) perceived needs and preferred instructional strategies. The instructor survey was administered to provide complementary evidence on observed student difficulties, teaching constraints, and perceived gaps in current practice. In line with a learner-centred orientation and models-based practice scholarship, student responses served as the primary data source, with instructor responses used for triangulation and contextual interpretation (Casey & MacPhail, 2018; Kirk, 2013).

Purpose of the study. This study aimed to (a) describe pre-service teachers' football learning backgrounds, perceived difficulties, and preferred learning strategies in PETE football courses, and (b) triangulate student-reported needs with instructors' observations to identify actionable priorities for instructional improvement.

2.0 METHODS

2.1 Study design

Volume 07, Issue 01 "January - February 2026"

ISSN 2583-0333

This study employed a diagnostic needs assessment design to describe learner backgrounds, perceived learning difficulties, instructional experiences, and preferred instructional approaches in a Physical Education Teacher Education (PETE) football course. The assessment was decision-oriented and intended to inform curriculum improvement and instructional planning; therefore, the study did not test hypotheses or evaluate learning outcomes.

2.2 Participants and setting

A purposive sample was used in a PETE football course context. Participants included 38 undergraduate PETE students (male = 28, female = 10; M age = 20.1 years) and 10 football instructors with teaching experience in PETE programmes. Student responses served as the primary source of learner-centred needs, while instructor responses were used to triangulate and contextualise student-reported findings.

2.3 Instruments

Two diagnostic survey instruments were administered:

Student Football Learning Needs Survey (student version).

The student survey examined four areas: (a) football learning background and participation patterns, (b) perceived learning difficulties in technical, tactical, and game-related contexts, (c) instructional experiences and commonly used teaching approaches, and (d) perceived learning needs and preferred instructional formats (e.g., small-sided games, tactical problem-solving, reflection, instructor feedback, and integrated fitness).

Football Teaching Observation and Instructional Needs Survey (instructor version).

The instructor survey captured practitioner observations of student learning difficulties and instructional gaps (e.g., tactical understanding, decision-making, transfer from drills to match play, teamwork/communication, role awareness, and engagement), as well as perceived priorities for instructional improvement.

Both instruments were designed as fact-finding tools for instructional planning rather than psychometric measurement scales. Accordingly, items were presented in single-choice, multiple-choice, and open-ended formats to obtain descriptive and contextual information.

2.4 Data collection procedure

Data were collected online. Students typically completed the questionnaire within approximately 2 minutes, while instructors completed the survey in approximately 3–5 minutes. Participation was voluntary and anonymous, and respondents were informed that the data would be used for research and curriculum improvement.

2.5 Data analysis

Data were analysed using descriptive and exploratory approaches appropriate for diagnostic survey results.

Closed-response items. For single-choice and multiple-choice items, frequencies and percentages were calculated to summarise students' learning backgrounds, perceived learning difficulties, instructional experiences, and learning preferences, as well as instructors' observations of student difficulties and instructional priorities. Descriptive summaries were used to identify dominant trends and areas of convergence across respondents.

Open-ended responses. Open-ended responses from both surveys were analysed using qualitative content analysis. Responses were reviewed and coded by identifying theme words/keywords and grouping them into recurring themes reflecting key dimensions of football learning and teaching (e.g., technical, tactical/cognitive, social/teamwork, affective/engagement, and instructional conditions). The qualitative findings were used to contextualise and elaborate the patterns observed in the closed-response results.

The purpose of the analysis was to characterise the current instructional context and prioritise actionable needs for course improvement, rather than to estimate latent constructs or test causal relationships. Consequently, results were used to inform subsequent instructional planning decisions (e.g., focus areas, learning tasks, and pedagogical strategies) consistent with an instructional design approach.

3.0 RESULTS

This needs assessment examined learning backgrounds, perceived difficulties, and preferred instructional approaches in a PETE football course. Data were collected via diagnostic surveys from 38 undergraduate PETE students and 10 football instructors. Student responses served as the primary evidence of learner-perceived needs, while instructor responses and open-ended comments were used to triangulate and contextualise the student findings.

3.1 Student Learning Backgrounds (n=38)

Table 1 Student Participants' Football Learning Backgrounds (n = 38)

Learning background	n	%
University football courses	22	57.9
School PE before university	14	36.8
Informal play with peers	18	47.4
Club or extracurricular training	6	15.8
Almost no formal football experience	5	13.2

Note: Percentages are calculated based on the total number of student participants (n = 38). Multiple responses were allowed.

Table 1 presents students' football learning backgrounds. University football courses were the most frequently reported learning source (57.9%), indicating that university teaching represents the main pathway for football learning for many PETE students. Prior to university, fewer students reported learning through school PE (36.8%) or club/extracurricular training (15.8%). Nearly half reported informal play with peers (47.4%), and 13.2% indicated almost no formal football experience. Overall, the cohort demonstrated uneven and heterogeneous entry experiences, suggesting that instruction should accommodate varied starting levels.

3.2 Student-Perceived Learning Difficulties

Table 2 Student-Reported Football Learning Difficulties (Multiple Responses Allowed, n = 38)

Learning difficulty	n	%
Ball control under pressure	12	31.6
Passing and receiving during games	15	39.5
Shooting in match situations	14	36.8
Understanding when and where to move	21	55.3
Decision-making during gameplay	24	63.2
Cooperation with teammates	17	44.7
Transferring drills to real matches	19	50.0

Note, Students were allowed to select more than one option; therefore, percentages may exceed 100%.

As shown in Table 2, students reported difficulties that were predominantly tactical, cognitive, and game-contextual, rather than purely technical. The most frequently endorsed difficulty was decision-making during gameplay (63.2%), followed by understanding when and where to move (55.3%) and transferring drills to real match situations (50.0%). Social-interactional challenges were also common, with cooperation with teammates reported by 44.7%. Technical difficulties were present but less frequently endorsed: passing/receiving during games (39.5%), shooting in match situations (36.8%), and ball control under pressure (31.6%). These patterns suggest that many learners struggle most when required to apply skills under dynamic game constraints.

3.3 Student Learning Needs and Preferences

Table 3 Student-Perceived Learning Needs and Preferred Instructional Approaches (Multiple Responses Allowed, n = 38)

Learning need / instructional perference	n	%
More tactical explanation	23	60.5
More game-based learning opportunities	26	68.4
More opportunities for decision-making	22	57.9
More instructor feedback	20	52.6
More cooperation and team learning	24	63.2
More enjoyable and engaging activities	25	65.8
Small-sided games	27	71.1
Tactical problem-solving tasks	21	55.3
Match-based learning	23	60.5
Group discussion and reflection	18	47.4
Integrated fitness + football learning	19	50.0

Note. Percentages are based on the total number of student respondents (n = 38). Multiple responses were permitted.

Students expressed strong preferences for game-based and tactically oriented learning experiences (Table 3). The most endorsed preference was small-sided games (71.1%), followed by more game-based learning opportunities (68.4%) and more enjoyable and engaging activities (65.8%). Learners also emphasised cooperation and team learning (63.2%) and

requested more tactical explanation (60.5%) and match-based learning (60.5%). More than half reported a need for decision-making opportunities (57.9%) and tactical problem-solving tasks (55.3%). In addition, students requested more instructor feedback (52.6%) and integrated fitness within football learning (50.0%). Overall, students' responses indicate a clear demand for instruction that integrates tactical learning, decision-making, cooperation, engagement, and fitness within authentic game environments.

3.4 Instructor Observations of Learning Difficulties (n=10)

Table 4.4 Instructor-Observed Learning Difficulties and Instructional Gaps (n = 10)

Observed issue	n/10
Insufficient tactical understanding	8
Weak decision-making in game situations	7
Limited transfer from drills to matches	7
Poor cooperation and teamwork	6
Communication difficulties	6
Limited role awareness and responsibility	5
Low learning engagement or initiative	4

Note. Values represent the number of instructors (out of 10) who identified each issue.

Instructor responses largely corroborated student-reported needs (Table 4). The most frequently identified issue was insufficient tactical understanding (8/10). Weak decision-making in game situations and limited transfer from drills to matches were each reported by 7/10 instructors. Social-interactional issues were also prominent, including poor cooperation/teamwork (6/10) and communication difficulties (6/10). Instructors additionally noted limited role awareness and responsibility (5/10) and low learning engagement/initiative (4/10). Overall, instructors described multifaceted learning constraints spanning tactical-cognitive, transfer, teamwork, and engagement domains.

3.5 Themes from Open-ended Responses

Thematic content analysis of open-ended responses from students and instructors reinforced the closed-response patterns and provided additional contextual detail. Five recurring themes were identified: (1) a gap between technical drills and game application; (2) insufficient tactical guidance and limited structured opportunities for decision-making; (3) limited cooperation, communication, and role awareness; (4) reduced engagement and enjoyment in drill-heavy formats; and (5) expectations for instructional innovation that integrates game-based learning, discussion/reflection, and embedded fitness development.

Taken together, quantitative and qualitative findings converged on a consistent needs profile: PETE football instruction should prioritise tactical understanding, decision-making, transfer to authentic play, teamwork/communication, and learner engagement, supported through game-centred and integrated instructional approaches.

4.0 DISCUSSION

This needs assessment provides a triangulated diagnosis of key learning difficulties and instructional gaps in PETE football instruction. Across student and instructor data, the most

salient challenges were concentrated in tactical understanding, decision-making under game constraints, and transfer from drills to authentic play, accompanied by social (cooperation/communication) and affective (engagement/enjoyment) needs. These findings suggest that technique-dominant instructional routines may be insufficient to support the holistic learning outcomes expected in contemporary PETE settings, and they point to specific design priorities for course improvement.

4.1 Needs and Instructional Challenges in Current PETE Football Instruction

The needs analysis offers a triangulated diagnosis of learner profiles, contextual constraints, and multidimensional learning demands that should be addressed by any instructional improvement effort. Drawing on student questionnaires, instructor surveys, and open-ended responses, the evidence indicates that the core challenge is not isolated technical weakness, but a systemic mismatch between multidimensional learning goals and prevailing technique-dominant instructional structures. This interpretation aligns with recent models-based practice scholarship highlighting the need to organise PE learning around coherent pedagogical models and authentic task designs rather than isolated technique routines.

4.2 Key Perceived Difficulties in Current PETE Football Instruction

Across data sources, the most consistently reported difficulties extended beyond basic technique execution. Although variation in prior football experience suggests that some learners may indeed struggle with fundamental skills, the dominant bottlenecks were concentrated in tactical understanding, game-based decision-making, and learning transfer. Students frequently reported difficulties in knowing where and when to move, making decisions under game pressure, and applying practised skills effectively in real match situations. These perceptions were corroborated by instructors, who similarly identified weak tactical awareness, limited decision-making competence, and poor transfer from drills to games as recurring problems in instruction.

In addition, both students and instructors reported challenges related to cooperation, communication, and role awareness in team-based learning and game contexts. Learners also expressed strong preferences for more engaging and enjoyable instructional experiences, suggesting that motivational and participation issues are relevant conditions shaping learning quality and persistence. Collectively, these patterns indicate that the current instructional environment may provide insufficient opportunities for learners to engage in authentic, interactive, and cognitively demanding football learning experiences, even when practice time is available. This profile is consistent with recent evidence showing that game-centred approaches (including TGfU and hybrid TGfU–SE configurations) are associated with improvements in decision-making, broader learning outcomes, and learner experiences compared with direct or technique-dominant formats.

4.3 Implications Across Learning Domains: Physical, Cognitive, Social, and Affective

To translate needs analysis into actionable design logic, the identified difficulties can be meaningfully mapped onto four interrelated learning domains:

Volume 07, Issue 01 "January - February 2026"

ISSN 2583-0333

Physical domain. Learner heterogeneity indicates uneven technical and physical readiness. While technique practice remains necessary, the findings imply that physical preparation should be functionally integrated with football tasks so that learners can sustain performance quality under game constraints rather than only perform skills in isolated drills. Recent small-sided games (SSGs) research and reviews show that manipulating constraints (e.g., player numbers, pitch size, effective playing time) can shape physical demands while simultaneously engaging technical and tactical behaviours.

Cognitive domain. The most salient difficulties—tactical understanding, decision-making, and transfer—are fundamentally cognitive in nature. They reflect limitations in perceiving relevant cues, interpreting game situations, selecting appropriate actions, and executing techniques adaptively in dynamic contexts. Contemporary game-centred PE research continues to emphasise that tactical learning and decision-making improve when learners repeatedly experience representative game problems and are supported to reflect on tactical solutions.

Social domain. Reported problems in cooperation, communication, and role awareness indicate that team coordination is underdeveloped when instruction does not structure collaborative participation. Recent Sport Education research and reviews highlight the role of stable team affiliation, roles, and responsibility systems in supporting social participation and positive learning experiences in PE.

Affective domain. Strong preferences for engaging, enjoyable learning experiences indicate that motivational quality is a critical condition for sustained participation and effort. Recent reviews and interventions in PE grounded in Self-Determination Theory indicate that teaching strategies supporting autonomy, competence, and relatedness are associated with improved motivation-related outcomes and engagement.

This domain mapping clarifies that the needs analysis identifies a multidimensional learning problem rather than a single-skill deficit, thereby setting explicit requirements for a pedagogical solution capable of addressing physical, cognitive, social, and affective outcomes in an integrated manner.

4.4 Theoretical Interpretation: SDT and Situated Learning Mechanisms

From the perspective of SDT, the diagnosed challenges can be interpreted as potential constraints on the satisfaction of learners' basic psychological needs. Persistent difficulty transferring skills to authentic game contexts may undermine perceived competence; limited decision-making opportunities may restrict autonomy; and challenges in cooperation and role awareness may reflect limited support for relatedness if instruction does not cultivate stable interactions and shared responsibility. Recent PE-focused SDT syntheses and intervention work support the relevance of these mechanisms in shaping engagement and motivational quality.

From the perspective of Situated Learning, football competence develops through participation in authentic, socially organised practice contexts. When instruction relies heavily on decontextualised drills with limited representative gameplay, learners may accumulate technique without developing the tacit understanding needed for reading play, coordinating with teammates, and adapting to opponents. Recent situated-learning–informed PE work and

TGfU scholarship similarly argue for learning designs that embed tactical meaning-making in authentic game participation and structured reflection.

4.5 Why Technique-Centred Instruction is Insufficient and the Rationale for a Hybrid Design

Taken together, the needs analysis indicates that technique-centred instruction may support basic execution, but it struggles to simultaneously cultivate tactical understanding, decision-making transfer, cooperative functioning, and motivational quality. This is because traditional instructional structures often separate technique rehearsal from the contextual, social, and cognitive demands of gameplay, thereby limiting the conditions under which multidimensional outcomes can develop together. Recent evidence on TGfU, Sport Education, and TGfU–SE combinations supports the value of representative play, decision-making, affiliation, and role-based participation for broader learning outcomes.

Accordingly, the implications of these findings extend beyond identifying "what students want." The needs analysis supports an evidence- and mechanism-oriented rationale for instructional design: the core contradiction in PETE football instruction is not a single technical deficiency, but a mismatch between multidimensional learning goals and traditional instructional structures. Therefore, an integrated (hybrid) design logic—combining representative game-centred learning, tactical problem solving, structured cooperation, and functionally embedded fitness—appears better aligned with the diagnosed needs and with realistic instructional constraints.

4.6 Design Implications: Translating Needs into Design Requirements

The purpose of the needs analysis is not only to describe perceived difficulties in PETE football instruction, but also to translate these findings into explicit, designable requirements that can guide pedagogical decision-making. Triangulated evidence indicates four convergent needs: (a) heterogeneous entry readiness and uneven prior football experience; (b) a dominant tactical–cognitive bottleneck characterised by weak decision-making and a persistent practice–game transfer gap; (c) underdeveloped social coordination, including cooperation, communication, and role awareness; and (d) strong affective demands for engagement, enjoyment, and sustained participation. These patterns also imply a structural limitation of technique-centred instruction. Recent reviews of hybrid pedagogical models and model-based practices provide supportive evidence for specifying integrated design requirements that address multiple learning domains concurrently.

DR1 (Differentiation for heterogeneous readiness). Instruction should accommodate uneven prior experience by implementing adjustable task constraints and tiered progressions. This includes systematic manipulation of space, player numbers, rules, ball-touch conditions, defensive pressure, and task complexity. Contemporary constraints-led/game-based pedagogy research indicates that constraint manipulation is central to differentiating challenge and shaping learning opportunities.

DR2 (Representative learning environments to reduce the practice–game gap). Representative game forms—especially small-sided games—should function as the central learning environment rather than a brief end-of-lesson application. Recent SSG research and systematic

Volume 07, Issue 01 "January - February 2026"

ISSN 2583-0333

reviews demonstrate how SSG constraints can support technical–tactical behaviours alongside game-relevant decision demands.

DR3 (Systematic tactical scaffolding and decision-making opportunities). Lessons should include a repeated cycle of play–questioning–reflection–replay, treating tactical learning as an explicit mechanism. Recent TGfU and game-based PE studies continue to emphasise tactical questioning, reflection, and decision-making as pathways to improved game understanding and performance.

DR4 (Cooperative structures and role-based participation). Instruction should incorporate stable team organisation, explicit role allocation, and shared responsibilities. Recent Sport Education reviews and TGfU–SE hybrid studies highlight role-based participation and team affiliation as mechanisms supporting cooperation, communication, and engagement.

DR5 (Motivationally supportive climate for sustained engagement). The instructional solution should support high-quality motivation through meaningful tasks, progressive challenge, choice/agency, and peer belonging. Recent SDT-in-PE syntheses and intervention studies support the link between autonomy/competence/relatedness-supportive practices and motivation-related outcomes.

DR6 (Functional integration of fitness within football learning). Fitness components should be embedded coherently within football learning tasks, often through intensity-managed game forms and movement demands tied to tactical goals. Recent SSG studies and reviews provide a practical evidence base for using game forms to shape physical demands while preserving tactical and technical engagement.

Taken together, these design requirements define what an effective instructional solution must accomplish to address the multidimensional needs identified in this study.

5.0 CONCLUSION

These triangulated needs assessment offers a comprehensive diagnosis of the multidimensional challenges in PETE football instruction. The results demonstrate that current technique-centred teaching formats insufficiently address the tactical, cognitive, social, and motivational dimensions essential to holistic learning. The core problem lies in a structural misalignment between modern pedagogical goals and traditional instructional practices. Both student and instructor data consistently pointed to weak tactical understanding, limited decision-making, and poor transfer of learning, accompanied by underdeveloped cooperation and low engagement.

By mapping these difficulties across physical, cognitive, social, and affective domains, the study specifies six design requirements (DR1–DR6) that collectively define what effective football instruction should achieve—differentiation for readiness, representative learning environments, tactical scaffolding, cooperative structures, motivational support, and functional fitness integration. These requirements justify the adoption of hybrid pedagogical designs, such as the SE–TGfU model, which combine the cognitive depth of tactical inquiry with the social structure and motivational continuity of season-based learning.

Ultimately, the study underscores that reforming PETE football instruction is not a matter of adding new content but of restructuring learning architecture. Instructional design must intentionally align representative gameplay, tactical reasoning, cooperative participation, and affective engagement within feasible course constraints. The framework derived from this study offers a practical foundation for developing, implementing, and evaluating hybrid football teaching models that prepare future PE teachers to deliver integrated, student-centred, and contextually authentic learning experiences.

5.1 Ethical Statement

This study was conducted in accordance with the ethical standards of Universiti Pendidikan Sultan Idris and was approved by the Institutional Review Board (Approval No. 2025-0799-01).

REFERENCES

1. Arantes, D. (2025). Comparison between TGfU and Direct Instruction model in physical education: Effects on students' learning outcomes. Education Sciences, 15(3), 305.
2. Assessing physical, technical, and tactical performance in youth football small-sided games: A systematic review. (2025). Human Movement Science, 96, 103175.
3. Barbosa Cano, D., Pérez-Ordás, R., Valero-Valenzuela, A., & Méndez-Giménez, A. (2025). Self-determination theory-based interventions to promote motivation in physical education: A review. Education Sciences, 15(2), 256. https://doi.org/10.3390/educsci15020256
4. Bobrownicki, R., Cushion, C., & Partington, M. (2023). Constraints of the constraints-led approach in American football. Sports Coaching Review, 12(1), 45–63.
5. Bunker, D., & Thorpe, R. (1982). A model for the teaching of games in secondary schools. Bulletin of Physical Education, 18(1), 5–8.
6. Casey, A., & MacPhail, A. (2018). Adopting a models-based approach to teaching physical education. Physical Education and Sport Pedagogy, 23(3), 294–310.
7. de Joode, T., Raab, M., & Memmert, D. (2023). Examining the effect of task constraints on the emergence of creative actions in football small-sided games. Human Movement Science, 92, 103090.
8. Dick, W., Carey, L., & Carey, J. O. (2015). The systematic design of instruction (8th ed.). Pearson.
9. Flaat, L. K., Ingebrigtsen, J., & Dyrstad, S. M. (2025). A multi-model approach to models-based practice in physical education. European Physical Education Review. Advance online publication.
10. González-Valero, G., Zurita-Ortega, F., Padial-Ruz, R., & Ubago-Jiménez, J. L. (2024). Application of the Teaching Games for Understanding model to enhance decision-making in physical education: A systematic review. Education Sciences, 14(1), 97. https://doi.org/10.3390/educsci14010097
11. Harvey, S. (2025). Making learning happen in Teaching Games for Understanding: Pedagogical models and practical implications. Education Sciences, 15(5), 631.

12. Harvey, S., & Jarrett, K. (2014). A review of the game-centred approaches to teaching and coaching literature since 2006. Physical Education and Sport Pedagogy, 19(3), 278–300.
13. Hoyo-Guillot, A., Sánchez-Miguel, P. A., & Leo, F. M. (2025). Effects of Sport Education Model–derived active approaches on students' motivation and engagement. Frontiers in Psychology, 16, 1409857.
14. Kennedy, A. (2024). Adding texture to the art of constraints-led coaching: A reflective analysis. Sports Coaching Review, 13(1), 15–30.
15. Kirk, D. (2013). Educational value and models-based practice in physical education. Educational Philosophy and Theory, 45(9), 973–986.
16. Li, B. Y., Tan, W. K., & Chen, S. (2023). Situated Game Teaching through Set Plays: A situated learning–guided curricular model for football instruction. Journal of Teaching in Physical Education, 42(1), 95–108.
17. Memmert, D. (2010). Testing of tactical performance in youth elite soccer. Journal of Sports Science and Medicine, 9(2), 199–205.
18. Nazari, S., Kordi, M. R., & Soltani, H. (2025). Combined TGfU plus Sport Education in physical education: Effects on motivation and engagement. Acta Psychologica, 248, 104926.
19. Pan, Y. H., Huang, C. H., & Hsu, W. T. (2023). A comparison of the learning effects between TGfU–SE and TGfU on learning motivation, sport enjoyment, responsibility, and game performance in physical education. Frontiers in Psychology, 14, 1165064. https://doi.org/10.3389/fpsyg.2023.1165064
20. Reiser, R. A., & Dempsey, J. V. (Eds.). (2017). Trends and issues in instructional design and technology (4th ed.). Pearson.
21. Richardson, S. J., Smith, M., & Partington, M. (2023). Coaches' and teachers' perceptions and application of game-based and constraints-led pedagogy: A qualitative meta-study. Physical Education and Sport Pedagogy, 28(2), 173–188.
22. Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. Educational Researcher, 15(2), 4–14.
23. Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. Harvard Educational Review, 57(1), 1–22.
24. Toivonen, R. M., Matos, S., Gonçalves, B., & Sampaio, J. (2025). The impact of varying small-sided games' pitch sizes on physical and tactical behavior in youth football. Science and Medicine in Football. Advance online publication.
25. White, R. L., Bennie, A., & Lonsdale, C. (2021). Self-determination theory in physical education: A systematic review of qualitative evidence. Teaching and Teacher Education, 102, 103342.
26. World Health Organization. (n.d.). Healthy China 2030: From vision to action. World Health Organization. https://www.who.int/china/healthy-china-2030
27. Wu, S. (2016). Building a healthy China by enhancing physical activity. Journal of Sport and Health Science, 5(3), 235–240.
28. Yang, D., Wang, J., & Zhang, L. (2025). The effects of small vs. large-sided games on physical adaptations and tactical behavior in football players: A systematic review. Frontiers in Sports and Active Living, 7, 1459823.
29. Yang, J. (2025). Physical education and health curriculum reform in China: Policy and practice perspectives. Sport, Education and Society, 30(2), 123–138.

30. Zhang, J. (2024). The effect of the Sport Education Model in physical education on students' learning attitudes: A systematic review. BMC Public Health, 24(1), 1395.
31. Zhang, J., Soh, K. G., Bai, X., Anuar, M. A. M., & Xiao, W. (2024). Optimizing learning outcomes in physical education: A systematic review of hybrid pedagogical models integrated with Sport Education. PLOS ONE, 19(12), e0311957. https://doi.org/10.1371/journal.pone.0311957

APPENDIX A

Student Football Learning Needs Survey
Purpose: To identify current learning conditions, difficulties, and instructional needs.

Section A: Football learning background

1. Your prior football experience mainly comes from: (Multiple choice)
☐ University football courses
☐ School football classes before university
☐ Club or extracurricular training
☐ Informal play with friends
☐ Almost no formal football experience

2. How often do you currently participate in football activities? (Single choice)
☐ Never
☐ Less than once per week
☐ 1–2 times per week
☐ 3 or more times per week

Section B: Perceived Learning Difficulties

3. During football learning, which aspects do you find most difficult? (Multiple choice)
☐ Ball control under pressure
☐ Passing and receiving during games
☐ Shooting in match situations
☐ Understanding when and where to move
☐ Making decisions during gameplay
☐ Cooperating with teammates
☐ Applying drills to real matches

Section C: Learning Experience & Engagement

4. How would you describe your overall football learning experience so far?
☐ Very negative
☐ Somewhat negative

☐ Neutral
☐ Somewhat positive
☐ Very positive

5. Which teaching methods are most commonly used in your football classes? (Multiple choice)
☐ Isolated technical drills
☐ Repetitive skill practice
☐ Small-sided games
☐ Full matches
☐ Tactical discussions
☐ Video analysis

Section D: Learning Needs

6. What do you feel is currently lacking in football lessons? (Multiple choice)
☐ Tactical explanation
☐ Game-based learning opportunities
☐ Opportunities to make decisions
☐ Feedback from instructors
☐ Cooperation and team learning
☐ Enjoyable and engaging activities

7. Which learning approaches would you like to experience more? (Multiple choice)
☐ Small-sided games
☐ Tactical problem-solving tasks
☐ Match-based learning
☐ Group discussion and reflection
☐ Integrated fitness + football learning

Section E: Open-ended Questions

8. What is the biggest difficulty you face when learning football? (Open-ended)
9. What changes would you like to see in future football courses? (Open-ended)

APPENDIX B

Football Teaching Observation and Instructional Needs Survey (Instructor Version)
Section A: Observed Student Learning Difficulties

1. Based on your teaching experience, what are the main learning difficulties students face in football learning?
☐ Technical execution (e.g., ball control, passing, shooting)
☐ Tactical understanding (e.g., positioning, attacking/defensive principles)

☐ Decision-making during gameplay
☐ Transferring skills from drills to matches
☐ Cooperation and teamwork during games
☐ Communication with teammates
☐ Understanding and fulfilling team roles
☐ Responsibility and commitment during learning tasks
☐ Adhering to rules and tactical discipline
☐ Motivation and learning initiative
☐ Confidence in match situations

Section B: Current Teaching Practices
(Multiple choice)

2. Which teaching approaches are most commonly used in your football courses?
☐ Isolated technical drills
☐ Repetitive skill practice
☐ Small-sided games
☐ Full matches
☐ Tactical explanation and questioning
☐ Group discussion or reflection
☐ Fitness-focused football activities

Section C: Perceived Instructional Gaps
(Multiple choice)

3. Which aspects of current football teaching need the most improvement?
☐ Integration of technique and tactics
☐ Students' game understanding
☐ Decision-making opportunities
☐ Student cooperation and teamwork
☐ Student responsibility and role awareness
☐ Learning motivation and engagement
☐ Transfer of learning to real matches

Section D: Need for Instructional Innovation
(Single choice)

4. In your opinion, is there a need to reform the current football teaching approach?
☐ No clear need
☐ Some need
☐ Moderate need
☐ Strong need
☐ Very strong need

Volume 07, Issue 01 "January - February 2026"

ISSN 2583-0333

Section E: Open-ended Questions

5. What are the main challenges you encounter when teaching football to pre-service PE students?

6. In your opinion, how could football teaching be improved to better support students' learning and professional development?

