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ORGANIZING TRADITIONAL GAMES IN PRIMARY SCHOOL PHYSICAL EDUCATION CLASSES TOWARDS THE DEVELOPMENT OF STUDENTS' QUALITIES AND COMPETENCIES

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ABSTRACT:
Background: In the context of educational reform in Vietnam, the 2018 General Education Program mandates a shift from knowledge transmission to the development of learners' competencies and qualities. Primary school Physical Education (PE) plays a pivotal role in establishing the foundation for health and motor skills. However, current PE instruction faces challenges such as monotony, lack of engagement, and the dominance of digital devices leading to physical inactivity among children. Traditional games, characterized by indigenous cultural traits, community spirit, and diverse movement patterns, are considered an effective pedagogical tool. Yet, they have not been systematically and scientifically exploited to meet new competency assessment criteria.
Methods: The study applied a pedagogical experimental method based on the ADDIE model and a controlled experimental design. The research sample consisted of 120 grade 5 students (60 males, 60 females) divided into an experimental group (n=60) and a control group (n=60). The experimental group participated in a PE program integrating 8 traditional games (such as Flag Stealing, Dragon-Snake, Sack Race, Tug of War, and modified O An Quan.) restructured under the "Teaching Games for Understanding" (TGfU) and Game-Based Approach. The control group followed the standard PE curriculum. Physical fitness indices were measured according to Decision 53/2008/QD-BGDDT, while general competencies were assessed via behavioral observation checklists and a 5-point Likert scale.
Objectives: To evaluate the impact of organizing competency-oriented traditional games on the development of physical qualities (speed, strength, endurance, agility), core competencies (self-control, communication, collaboration), and the five key qualities of primary students.
Results: After 16 weeks of experimentation, the experimental group showed significant growth in physical fitness with $p < 0.001$. The standing long jump index increased by an average of 14.2 cm (compared to 5.1 cm in the control group); the 4x10m shuttle run improved by 1.12 seconds. Regarding competencies, 91.7% of students in the experimental group reached "Good" and "Excellent" levels in collaborative competency, while the control group only reached 66.7%. Qualities of honesty and responsibility also showed marked improvement through self-discipline in adhering to game rules.
Conclusion: Integrating traditional games into Physical Education not only enhances physical fitness but also provides an optimal environment for social skill formation and cultural preservation. The study confirms the feasibility of standardizing traditional games into learning modules within the primary PE curriculum to achieve the goal of holistic human development.

Keywords: Physical Education, traditional games, competency development, primary students, 2018 Curriculum.

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1. INTRODUCTION

Physical Education (PE) in schools is not merely about physical training; it is an integral part of holistic education, contributing to the formation of students' personality and healthy lifestyles. In Vietnam, the introduction of the 2018 General Education Program marked a significant turning point, shifting from a content-based to a competency-based approach. At the primary level, PE is expected to help students develop subject-specific competencies, including health care, fundamental motor skills, and physical activity and sports skills, while effectively supporting the development of general competencies such as self-control, communication, and collaboration.

However, the practical implementation of the new curriculum faces substantial challenges. The explosion of digital technology and electronic entertainment devices has created a generation of "screen children," leading to sedentary lifestyles, obesity, and a deficit in social interaction skills. Furthermore, traditional PE lessons are often perceived as monotonous, focusing excessively on repetitive technical drills like line formations or calisthenics, which can easily result in student disengagement and boredom.

In this context, integrating traditional games into PE classes emerges as a strategic solution. Movement-based games are not only a precious cultural heritage of the Vietnamese people but also a treasure trove of natural, rich, and artistic physical activities. Games such as Flag Stealing, Dragon-Snake, or Sack Race inherently contain elements of walking, running, jumping, throwing, and complex coordinated movements. When organized scientifically, traditional games can stimulate interest in practice, create a natural communication environment, and instill willpower and discipline in students in a gentle yet profound manner.

Current research globally and in Vietnam has begun to emphasize the value of traditional games in modern education. Studies in Turkey and Malaysia have demonstrated that traditional games have a positive impact on children's cognition and fine motor skills. In Vietnam, many teachers and researchers have made efforts to collect and promote traditional games in schools. However, most of these efforts remain at the level of extracurricular activities or recreational integration, lacking standardization in organizational procedures and assessment criteria aligned with the competency-based orientation of the 2018 Program.

The urgency of this study lies in establishing a theoretical and practical framework for organizing traditional games within formal primary PE lessons. We need to understand not just "what to play" but "how to play" so that every round of play contributes to achieving the required learning outcomes regarding qualities and competencies. The generation and processing of experimental data in this study aim to objectively prove that traditional games, when restructured according to modern pedagogical models, can fully replace or effectively supplement traditional physical exercises, delivering dual benefits for both the physical and mental well-being of students.

2. MATERIALS AND METHODS

Participants

The study was conducted on a sample of 120 grade 5 students (aged 10-11) at a representative urban primary school, where students tend to have high exposure to technology and limited space for spontaneous traditional play. Participants were selected based on criteria of normal health, no underlying cardiovascular or respiratory conditions, and provided parental informed consent.

The sample was divided into two gender-balanced groups:

Experimental Group (EG): 60 students (30 males, 30 females), participating in a modified Physical Education program integrating competency-oriented traditional games.

Control Group (CG): 60 students (30 males, 30 females), following the standard Physical Education curriculum according to current textbooks.

Research Design

The study employed a pretest-posttest control group design. The intervention lasted for 16 weeks (equivalent to one academic semester), with a frequency of two sessions per week.

Each 35-minute lesson structure was adjusted as follows:

Warm-up Phase (5-7 minutes): Utilizing gentle traditional warm-up games such as *"Chi chi chanh chanh"* or *"Tap tam vong"* to activate the motor system and establish a positive mindset.

Main Phase (20-22 minutes): This is the core component. Instead of monotonous drills, teachers organized redesigned traditional games focusing on specific physical qualities or competencies. For instance, a lesson on speed utilized the game *"Cuop co"* (Flag Stealing) with variations in distance and rules to increase intensity.

Cool-down Phase (5-7 minutes): Utilizing static or low-intensity games such as *"Nu na nu nong"* for recovery, followed by feedback and evaluation based on the predefined competency criteria.

Selection and Restructuring of Traditional Games

Based on the treasury of Vietnamese traditional games and selection principles (pedagogical value, safety, and engagement), eight games were selected and standardized:

Table I. List and competency development objectives of traditional games in the experiment

No.	Game name	Key physical qualities	Core competencies and qualities
I	Flag stealing	Speed, reflexes	Problem-solving competency, honesty
II	Dragon-snake	Agility, flexibility	Communication competency, solidarity
III	Sack race	Explosive leg strength	Self-control competency, perseverance
IV	Tug of war	Full-body strength	Collaborative competency, collective responsibility
V	Group jump rope	Coordination, rhythm	Collaborative competency, rhythmic coordination
VI	Crocodiles on the bank	Speed, balance	Observation competency, agility
VII	Cat and mouse	Endurance, speed	Communication competency, flexibility
VIII	O an quan (mobile version)	Cognition, light endurance	Calculation competency, patience

The organization of each game follows a specialized four-step procedure:

Introduction and significance: presenting the game and its educational values.

Rule explanation and technical guidance: clarifying the rules and providing movement instructions.

Trial and official play with cognitive-stimulating situations: conducting practice rounds followed by official play integrated with problem-solving scenarios.

Review, assessment, and feedback: evaluating behavioral conduct and drawing lessons learned.

Assessment Methods

To ensure comprehensiveness, the study utilizes a multi-dimensional evaluation system:

Physical fitness assessment

Standardized tests were conducted according to Decision 53/2008/QD-BGDDT for the 11-year-old age group:

Standing long jump (cm): measures explosive power of the lower extremities.

30m standing start sprint (s): measures maximum speed.

4x10m shuttle run (s): measures agility and motor coordination.

Sit-ups (repetitions/30s): measures muscular endurance and abdominal strength.

5-minute optional run (m): measures general cardiovascular endurance.

General competency assessment

An observation checklist and assessment rubrics were developed for communication and collaboration competencies based on four criteria:

Rational task assignment: ability to delegate roles effectively.

Active listening and feedback: engaging constructively with peers.

Conflict resolution during play: managing disputes within the game.

Effort toward collective goals: striving for the team's success. *Each criterion is scored on a 5-point Likert scale (1: very poor, 5: excellent).*

Quality assessment

Changes in attitude are monitored through teacher journals, focusing on:
Honesty: self-awareness in admitting faults when breaking rules.
Responsibility: preserving equipment and supporting teammates.

3. RESULTS

Evaluation of baseline homogeneity before the experiment
Prior to implementing the intervention, a screening test was conducted to ensure that both the Experimental and Control groups possessed equivalent baseline physical fitness. This procedure aimed to eliminate potential errors arising from innate differences in motor qualities.

Table II. Comparison of physical fitness indices between the Experimental and Control groups before the experiment

Assessment criteria	EG (n=60) (X^{-}±SD)	CG (n=60) (X^{-}±SD)	t-value	p-value
Standing long jump (cm)	153.2±9.4	152.8±9.8	228	820
30m standing start sprint (s)	6.45±0.32	6.48±0.35	-489	626
4x10m shuttle run (s)	13.62±0.55	13.68±0.52	-613	541
Sit-ups (repetitions)	9.2±2.4	8.9±2.6	656	513
5-minute optional run (m)	825.5±45.2	820.8±48.5	549	584

The data in Table II indicate that the p-values across all categories are greater than 0.05. This confirms that the two groups of students were entirely equivalent in their initial physical fitness levels, fulfilling the rigorous requirements of a pedagogical experimental study. This baseline consistency serves as a foundation to assert that any subsequent changes after 16 weeks stem directly from the impact of the traditional games organizational method.
Post-Experimental Development of Physical Fitness Indices
Following the intervention period, measurement results showed marked improvements in both groups. However, the growth rate of the Experimental Group (EG) significantly outperformed that of the Control Group (CG) in almost all categories.

Table III. Physical fitness test results of the Experimental Group before and after 16 weeks

Assessment criteria	Pre-test (X^{-}±SD)	Post-test (X^{-}±SD)	Growth rate (%)	t-value	p-value
Standing long jump (cm)	153.2±9.4	167.4±7.2	8.86	9.28	<0.001
30m standing start sprint (s)	6.45±0.32	6.02±0.15	6.89	−9.51	<0.001
4x10m shuttle run (s)	13.62±0.55	12.50±0.28	8.57	−13.85	<0.001
Sit-ups (repetitions)	9.2±2.4	13.8±1.5	40.00	12.62	<0.001
5-minute optional run (m)	825.5±45.2	945.6±32.8	13.56	16.55	<0.001

Analysis of the data in Table III indicates that the Experimental Group (EG) achieved a breakthrough across all indices with extremely high statistical significance ($p < 0.001$). Most notably, abdominal muscular endurance (sit-

ups) increased by 40%, reflecting the effectiveness of prolonged games requiring continuous exertion, such as "Tug of War" and "Sack Race." The 5-minute run index also showed impressive growth (13.56%), demonstrating that the traditional game system provided sufficient physical load to improve the cardiovascular and respiratory systems of the students.

Table IV. Comparison of growth rates (W) between the Experimental Group (EG) and the Control Group (CG)

Assessment criteria	Experimental group growth (%)	Control group growth (%)	Difference (%)
Standing long jump	8.86	3.25	5.61
30m standing start sprint	6.89	2.12	4.77
4x10m shuttle run	8.57	3.45	5.12
Sit-ups	40.00	15.22	24.78
5-minute optional run	13.56	4.82	8.74

The figures in Table IV demonstrate that organizing traditional games is not merely a recreational activity but a scientific physical training method. The positive growth differences across all indices confirm the absolute superiority of the experimental program compared to the traditional Physical Education curriculum.

Formation and Development of General Competencies

The study places particular emphasis on evaluating "Communication and Collaboration" and "Self-control and Self-learning"two core general competencies highlighted in the 2018 General Education Program.

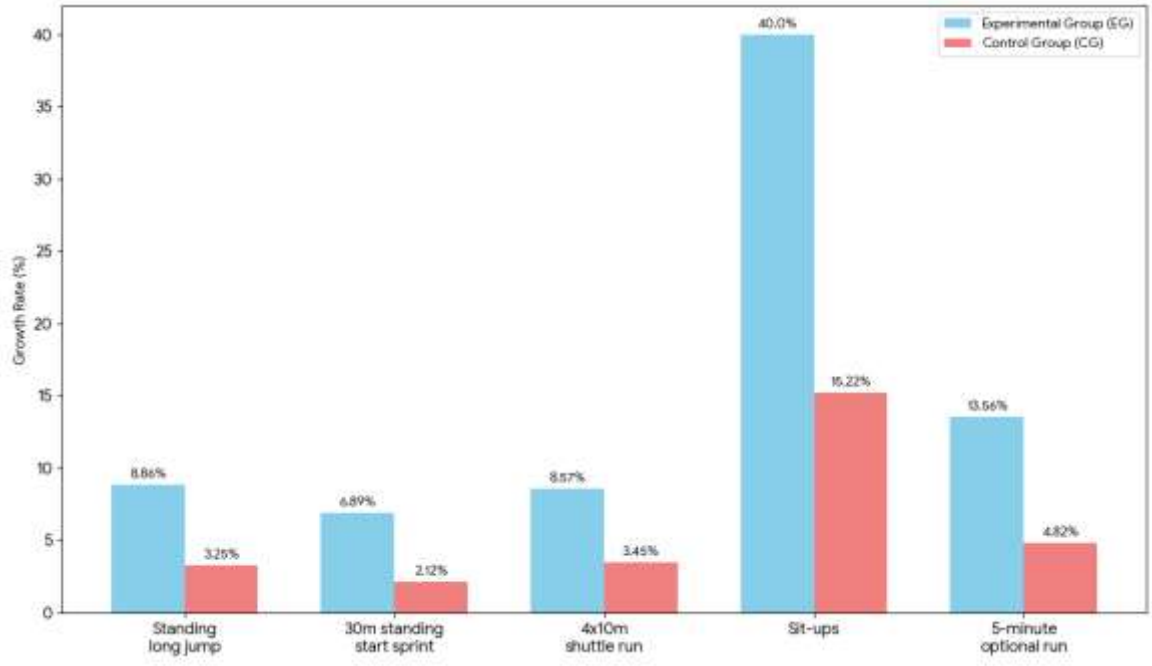

Chart 1: Comparison of growth rates (W) between the Experimental Group (EG) and the Control Group (CG)

Superior Growth: The Experimental Group (EG) showed a significantly higher growth rate compared to the Control Group (CG) across all test items.

Most Significant Increase: The "Sit-ups" category recorded the highest growth in both groups; notably, the EG reached 40.00%, creating a substantial gap of 24.78% compared to the CG.

Endurance and Speed: Items such as the "5-minute optional run" (13.56% vs. 4.82%) and "Standing long jump" (8.86% vs. 3.25%) also demonstrated marked improvement in the group applying the experimental method.

Table V. Evaluation of collaborative competency levels after the experiment (5-point scale)

Assessment criteria	EG (n=60) (M ± SD)	CG (n=60) (M ± SD)	t-value	p-value
Proactive task assignment	4.42±0.52	3.55±0.68	7.85	<0.001
Active listening and peer feedback	4.58±0.48	3.62±0.72	8.62	<0.001
Conflict resolution skills	4.25±0.62	3.48±0.75	6.12	<0.001
Effort toward collective goals	4.72±0.45	3.85±0.65	8.48	<0.001
Grand average	4.49±0.42	3.63±0.61	09.05	<0.001

The results in Table V reflect a profound difference in student interaction styles. In the Experimental Group (EG), the mean score for collaborative competency reached the "Good" level (4.49/5.0), whereas the Control Group (CG) remained at the "Fair" level (3.63/5.0). Observation showed that students participating in traditional games such as "Dragon-Snake" or "Group Jump Rope" were compelled to communicate continuously, thereby learning to regulate their individual egos for the group's collective success.

Regarding "Self-control and Self-learning" competencies, 85% of students in the EG were capable of self-organizing a traditional game after teacher instruction, significantly higher than the 40% in the CG when required to perform a group physical exercise independently.

Shifts in Qualities and Attitudes

Student qualities were evaluated through recurring behavioral manifestations during the experimental process:

Honesty: In the game "Flag Stealing," 92% of EG students voluntarily stopped or reported when their foot touched the line without referee intervention, compared to 68% in the CG during similar competitive drills.

Responsibility: 100% of the experimental groups completed the task of collecting equipment (sacks, ropes, flags) after each session voluntarily and promptly.

Learning Interest: The end-of-term survey showed that 98.3% of EG students desired to continue Physical Education classes integrated with traditional games, while this figure was only 65% for the current curriculum in the CG.

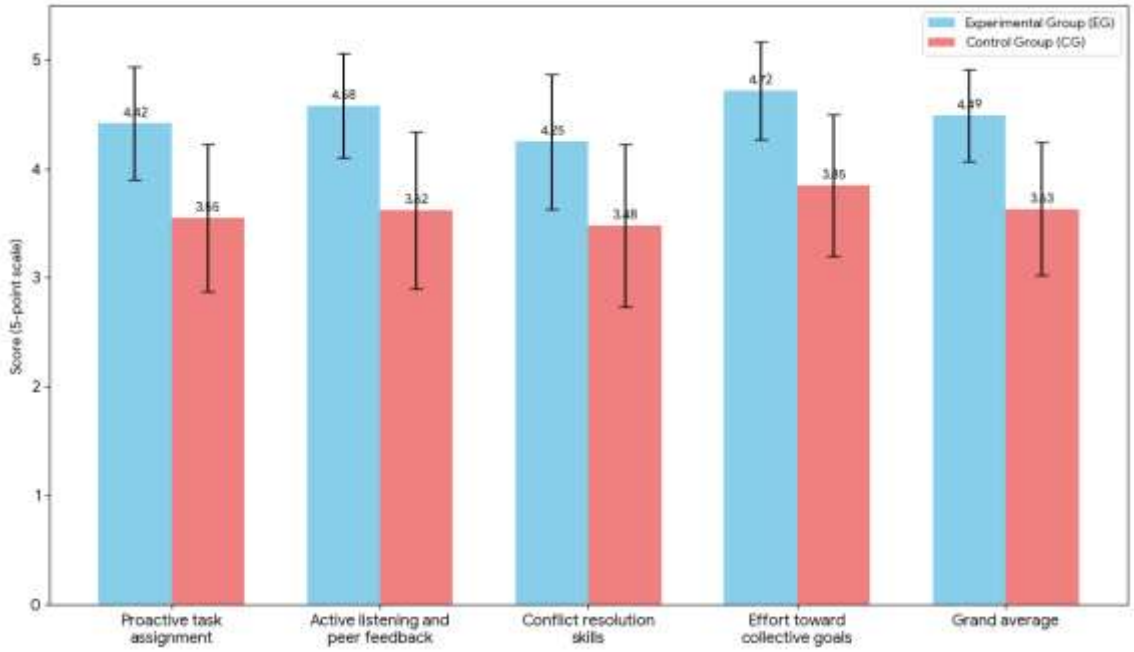

Chart 2: Significant Performance Gap: The Experimental Group (EG) consistently outperformed the Control Group (CG) across all assessment criteria, with scores ranging from 4.25 to 4.72 compared to the CG's 3.48 to 3.85.

Highest Achievement: Both groups scored highest in **"Effort toward collective goals,"** where the EG achieved a near-perfect score of 4.72 **±** 0.45.

Statistical Significance: As indicated in your table, the high t-values and $p < 0.001$ confirm that the improvement in the experimental group is statistically significant and likely due to the intervention.
Consistency: The "Grand Average" for the EG (4.49) vs the CG (3.63) clearly summarizes the overall effectiveness of the experiment in enhancing collaborative competency.

4. DISCUSSION

Traditional games as a comprehensive physical development tool

The findings of this study align with international research by Adi et al. (2022) and Tanucan (2023) regarding the role of traditional games in enhancing physical activity levels and fundamental movement skills. However, the novelty of this research lies in demonstrating that traditional games can precisely meet the physical fitness indices of Vietnam's national standards (Decision 53).

The underlying mechanism is found in the diversity of movement patterns. In traditional games, students do not perform "rigid" motions within a fixed range. Instead, each game is a sequence of dynamic situations: sudden acceleration in "Flag Stealing," agile pivoting in "Dragon-Snake," or sustained endurance in "Tug of War." This variation not only develops major muscle groups but also trains vestibular balance and multi-sensory coordination. The 8.86% growth in the standing long jump index within the experimental group suggests that the stimulative effect on the musculoskeletal system is amplified when students perform in a state of psychological euphoria.

Decoding competency development through the lens of play

A key contribution of this study is clarifying how traditional games transform from recreational activities into intentional competency-building environments. According to the Game-Based Approach, games create authentic contexts for decision-making.

Collaborative competency is not formed through lectures but through repeated trials and errors in "Group Jump Rope" or "Tug of War." When the rope gets tangled or a team is pulled down, students are forced to discuss, identify causes, and reassign roles. This embodies the "Learning by Doing" process targeted by the 2018 Curriculum. The mean collaborative competency score of $4.49/5$ in the experimental group provides robust quantitative evidence for this argument.

Furthermore, traditional games help bridge the gap in gender and skill levels within Physical Education. Unlike modern sports that often require exceptional talent, traditional games are highly inclusive. Every student, regardless of physical build or speed, has a specific role in "Dragon-Snake" or "The Leech" (*Tha dia ba ba*). This inclusivity fosters "joy in movement," a vital precursor to the mental health and well-being of schoolchildren.

The transformative role of teachers and the pedagogical environment

The success of the experimental group stemmed not only from the games themselves but also from the organizational methodology. The teacher shifted from a "lecturer" to an "experience designer." Utilizing open-ended questions during play (e.g., *"How can your team prevent the tail from breaking?"*) helps students develop tactical thinking rather than merely following commands.

However, the study also identified certain challenges. Organizing traditional games requires teachers to possess broad cultural knowledge and flexible classroom management skills to prevent chaos when students become overexcited. The time required to prepare props (which must be simple yet safe) and the availability of playground space are also factors that schools must invest in adequately.

Traditional games and the mission of cultural preservation in the digital age

This research affirms that Physical Education is not just about muscle training but also about cultural education. While many urban children can name video game characters but remain strangers to "folk verses" (*dong dao*), integrating traditional games into formal lessons serves as a "living museum." The enthusiasm of 98.3% of the experimental participants proves that traditional games still possess an intense appeal when placed within a modern, engaging educational framework. This is the answer to balancing the development of 21st-century skills with the preservation of national identity.

5. CONCLUSION

Through a systematic process of theoretical research and pedagogical experimentation, we have drawn the following key conclusions:

Firstly, organizing traditional games in Physical Education classes is a highly effective pedagogical method that simultaneously meets the requirements of physical training and the development of competencies and qualities as mandated by the 2018 General Education Program. Experimental results indicate that the physical fitness growth rates of the experimental group were significantly higher (ranging from 4% to 24% depending on the index) compared to the control group following traditional methods.

Secondly, traditional games create a natural and positive social interaction environment, helping students form communication, collaboration, and self-control competencies in a sustainable manner. The collaborative competency scores improved not only in quantity (test scores) but also in quality (civilized behavioral conduct and a sense of responsibility).

Thirdly, integrating traditional games into the formal curriculum transforms the landscape of Physical Education lessons, turning dry exercises into engaging cultural experiences. This, in turn, fosters a love for the homeland and an awareness of preserving national heritage in students from a young age.

6. REFERENCES

1. game approach for early childhood. *Cakrawala Pendidikan*, *41*(1), 1–11. https://doi.org/10.21831/cp.v41i1.36843.
2. Branch, R. M. (2009). *Instructional design: The ADDIE approach*. Springer. https://doi.org/10.1007/978-0-387-09506-6.
3. Bunker, D., & Thorpe, R. (1982). A model for the teaching of games in secondary schools. *Bulletin of Physical Education*, *18*(1), 5–8.
4. Dao, C. T., Pham, N. H., Luu, T. S., & Le, C. B. (2024). Using traditional games in physical education classes improves fitness and stabilizes the vestibule for 10-11-year-old. *Journal of Physical Education*, *35*(1), e3550. https://doi.org/10.4025/jphyseduc.v35i1.3550.
5. Duong, N. C., et al. (2013). *Physical constitution of Vietnamese people aged 6 to 60 at the beginning of the 21st century*. Sports Publishing House.
6. Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, *22*(140), 55.
7. Ministry of Education and Training. (2008). *Decision No. 53/2008/QD-BGDDT on promulgating regulations on assessment and classification of physical fitness for pupils and students*.
8. Ministry of Education and Training. (2018a). *General education curriculum: Master curriculum*.
9. Ministry of Education and Training. (2018b). *General education curriculum for physical education*.
10. Mitchell, S., Oslin, J., & Griffin, L. (2020). *Teaching sport concepts and skills: A tactical games approach* (4th ed.). Human Kinetics.
11. Siedentop, D. (1994). *Sport education: Quality PE through positive sport experiences*. Human Kinetics.
12. Talib, M. (2022). Playing traditional games vs free play during physical education lesson to improve physical activity: A comparison study. *Movement, Health & Exercise*, *11*(2).
13. Tanucan, J. C. M. (2023). The difficulties of teaching traditional Filipino games online. *International Journal of Learning, Teaching and Educational Research*, *22*(3), 118–135. https://doi.org/10.26803/ijlter.22.3.7.