

Improving Physical Fitness Through Classroom-Based Physical Activities in Elementary Schools

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Abstract

Physical inactivity among school-aged children has become a growing concern, especially with the rise of sedentary lifestyles among the alpha generation. This study aimed to improve physical fitness outcomes through classroom-based physical activities in elementary schools. Specifically, it examined the activities implemented by teachers, strategies employed, technical assistance provided by school heads, and challenges encountered in implementation.

A descriptive research design was utilized involving 30 elementary teachers from Irosin District I, Sorsogon. Data were collected using a researcher-made questionnaire and analyzed through frequency count, percentage, and rank.

Findings revealed that flexibility and mobility activities (75%) and cardiovascular exercises (70%) were the most implemented. Demonstration (97%) and game-based learning (93%) were the most frequently used strategies. School heads primarily provided technical assistance through health monitoring and safety awareness. Major challenges included limited time (27), lack of equipment (26), and inadequate classroom space (23).

The study concludes that classroom-based physical activities significantly contribute to improving pupils' physical fitness but require adequate resources, time allocation, and teacher training. A classroom-based intervention module is proposed to enhance implementation.

Keywords: *physical fitness, classroom-based activities, elementary education, physical education, teaching strategies*

INTRODUCTION

Physical inactivity among children has significantly increased due to technological advancements and sedentary lifestyles. Reports indicate that a large percentage of children aged 11–17 do not meet the recommended daily physical activity levels. This situation has resulted in adverse health outcomes and reduced social interaction.

Physical education (PE) plays a crucial role in promoting holistic development. It enhances not only physical fitness but also social skills, teamwork, discipline, and emotional well-being. Early exposure to physical activities helps develop lifelong healthy habits and supports cognitive and social growth.



In the Philippine context, the Department of Education emphasizes the importance of PE through policies and programs aimed at strengthening sports and physical fitness among learners. However, in elementary settings, teachers are often generalists with limited training in PE, which poses challenges in implementation.

This study focuses on classroom-based physical activities as an alternative approach to improve physical fitness among pupils, particularly in situations where space, time, and resources are limited.

Objectives of the Study

This study aimed to:

1. Identify physical fitness activities implemented by teachers
2. Determine strategies used in classroom-based activities
3. Examine technical assistance provided by school heads
4. Identify challenges encountered by teachers
5. Propose intervention activities

MATERIALS AND METHODS

Research Design

This study employed a **descriptive research design** to analyze the implementation of classroom-based physical fitness activities.

Participants

The respondents were **30 public elementary teachers** from Irosin District I, Sorsogon, selected through purposive sampling.

Instruments

A **self-made questionnaire checklist** was used, consisting of four parts:

- Activities implemented
- Teaching strategies
- Technical assistance
- Challenges encountered



Procedure

Permission was secured from school authorities. Questionnaires were distributed and retrieved after one week. Data were then organized and analyzed.

Data Analysis

The data were analyzed using:

- Frequency count
- Percentage
- Ranking

RESULTS

Activities Implemented

| Classification | Average % | Rank |
|------------------------|-----------|------|
| Flexibility & Mobility | 75% | 1 |
| Cardiovascular | 70% | 2 |
| Strength & Resistance | 35% | 3 |
| Sports Recreational | 31% | 4 |
| Balance & Coordination | 6.5% | 5 |

Most teachers implemented **stretching, dancing, jumping, walking, and jogging**.

Strategies Employed

| Strategy | Frequency | Rank |
|------------------------|-----------|------|
| Demonstration | 29 | 1 |
| Game-Based Learning | 28 | 2 |
| Small Group Activities | 25 | 3.5 |
| Technology Integration | 25 | 3.5 |

Demonstration and game-based learning were the most effective and widely used strategies.



Technical Assistance

Top support provided by school heads:

- Awareness of learners' health conditions (26)
- Guidance on age-appropriate activities (23)
- First aid readiness (23)

Challenges Encountered

| Challenge | Frequency Rank | |
|-----------------------|----------------|---|
| Limited Time | 27 | 1 |
| Lack of Equipment | 26 | 2 |
| Small Classroom Space | 23 | 3 |

Other challenges included weather conditions, teacher expertise, and student behavior.

DISCUSSION

The findings indicate that teachers prioritize **simple, accessible activities** such as stretching and dancing due to limited resources. This aligns with existing studies emphasizing low-cost physical activities in schools.

The dominance of **demonstration and game-based learning** suggests that learners respond better to interactive and engaging approaches. These strategies enhance participation and motivation among pupils.

However, challenges such as **time constraints, lack of equipment, and limited space** hinder effective implementation. These findings are consistent with previous research highlighting resource limitations in public schools.

The role of school heads is critical in providing **technical assistance**, particularly in ensuring safety and appropriate activity selection. However, there is a need for more training programs to enhance teacher competence in PE.

Conclusion

Classroom-based physical activities significantly contribute to improving pupils' physical fitness and engagement. Teachers commonly use simple and accessible activities supported by interactive teaching strategies.

However, effective implementation is limited by insufficient time, lack of equipment, and inadequate facilities. Strengthening support systems and providing teacher training are essential for improving outcomes.

Recommendations

1. Incorporate diverse physical activities including strength and coordination exercises
2. Provide training and workshops for teachers
3. Allocate sufficient time and resources for PE activities
4. Improve classroom and school facilities
5. Implement the proposed intervention module
6. Conduct further studies on PE teaching strategies and learner development

References

- World Health Organization. (2024). *Physical activity*. <https://www.who.int>
- Cagas, J., et al. (2022). Results from the Philippines' report card on physical activity. *Journal of Exercise Science and Fitness*.
- Latino, F., & Tafuri, G. (2023). Physical activity and academic performance. *Sustainability*, 15(8).
- Bacon, P., & Lord, R. (2021). Physically active learning in schools. *Health Education Research*, 36(3), 362–373.
- DepEd. (2015). *Special program in sports (DO 25, s. 2015)*.
- Jaekel, J. (2024). Physical activity and academic achievement. *Pediatric Research*.