

AN ASSESSMENT OF PHYSICAL EDUCATION AND SPORTS PROGRAM AT ESTACA INTEGRATED SCHOOL

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ABSTRACT

The purpose of this research was to evaluate the Physical Education (PE) and Sports Program of Estaca Integrated School in Compostela, Cebu for SY 2024–2025 as a starting point for physical education and sports improvement. Particularly, it attempted to identify how much different factors contribute to the impact of the program, with emphasis on process variables like infrastructure and facilities and school administration and community support; a process variable of teacher competency and training; and an output variable of student engagement and participation. The research investigated the relationship between student engagement and participation and the input and process variables. With a quantitative correlational research design, data were collected using structured questionnaires from student participants. Descriptive statistics were employed in determining the impact of each factor, and correlation analysis was utilized to explore the interrelationship among identified variables. Results indicated that all the major factors significantly impacted the success of the PE and sports program. Of these, teacher training and competency and student participation and engagement were found to be the strongest. Both of these variables were strongly and positively related, and this reflects that better facilities, administrative and community support, and teaching standards significantly contribute to student involvement in sports and PE. On the basis of these conclusions, an improvement program can be formulated to improve areas of identified gaps, enhance the implementation of the program, and make physical education a valuable contributor to students' overall development.

Keywords: *physical education, sports program effectiveness, teacher competency, student engagement, school support, infrastructure, correlation, Estaca Integrated School*

INTRODUCTION

An important aspect of a student's holistic development is Physical Education (PE). Aside from promoting physical well-being, it teaches virtues such as self-control, persistence, and teamwork. As the Junior High School Sports and Cultural Coordinator at Estaca Integrated School, I have directly observed how physical education nurtures students' emotional strength and sense of responsibility. Through sports, they form positive peer relationships, learn to solve problems, and work toward meaningful goals. My aim as a teacher is to assist them not only in becoming active learners but also in growing into solid, good-natured individuals.

Even though physical education is required by Republic Act No. 5108, which prioritizes sports and fitness in basic education, many schools still have difficulty putting these programs into practice. Delivery is still impacted by elements like inadequate facilities, a shortage of skilled workers, and inadequate equipment. For instance, the lack of specialized sporting equipment like air bikes and training supplies at Estaca Integrated School emphasizes the practicality of budgetary and logistical limitations. This is reflected in national studies. The K–12 PE curriculum was evaluated by Almanon et al. (2024), who discovered both implementation flaws and strengths.

Although students valued the increased awareness and physical activity, obstacles such as scarce resources hindered the best possible results. Campo et al. (2024) also looked at the use of technology in physical education and found that it improved student engagement, but they also identified infrastructure, teacher training, and adaptability issues. Additionally, Palma et al. (2024) affirmed that school-based fitness programs improve students' health, but they emphasized the necessity of more frequent evaluations and improved program customization. These difficulties are not unique to our school. Only 40% of regions had sports facilities in public schools that complied with standard requirements, according to the Philippine Institute for Development Studies (PIDS, 2021). In addition, Parantar (2019) underlined the necessity of addressing social barriers, gender equality, and inclusivity in physical education programs throughout Asia, including the Philippines.

Through community-supported fundraising events, I, as a physical education teacher, have taken steps to maintain the motivation of student-athletes. These initiatives, however, draw attention to a more significant problem: program success frequently hinges on individual initiative rather than a long-lasting system. The purpose of this study was to

assess the present condition of the sports and physical education programs at Estaca Integrated School, pinpoint any weaknesses, and offer data-driven insights to improve the way physical education is delivered in our setting.

Theoretical Framework

This research is grounded on three major educational and motivational theories that complement each other in order to justify the evaluation and improvement of the Physical Education (PE) and Sports Program of Estaca Integrated School for the school year 2024–2025.

These theories serve as the point of departure in comprehending how the different factors categorized as input, process, and output variables interact to determine the effectiveness of PE and sports programs. Initially, Siedentop's Sport Education Model (SEM, 1994) is the first model and ultimate framework for organizing physical education to replicate real-life sports experiences. SEM focuses on the use of organized seasons, student roles (such as players, coaches, and referees), and authentic competition to enhance motivation, skill, and active participation. This corroborates the process and output variables of the research by affirming the position of teacher competence and education in presenting interactive programs and facilitating learner participation and interest. Second, Kolb's Experiential Learning Theory (1984) describes how learners best learn through a cyclical model of concrete experiences, reflective observation, abstract conceptualization, and active experimentation.

For PE, learners are involved in physical activities (concrete experience), observe their performance (observation), conceptualize strategies for improvement (conceptualization), and test these strategies in subsequent activities (experimentation). The theory is congruent with the teaching function of providing reflective and skills-based learning, as well as with the learners' active participation as a core product of the program. Third, Self-Determination Theory (Deci & Ryan, 1985) emphasizes the satisfaction of three fundamental psychological needs: autonomy, competence, and relatedness to enable intrinsic motivation to flourish. Where students receive quality facilities (input: infrastructure and resources), directed by competent teachers (process: teacher competence), and nurtured by their school and community (input: administration and community involvement), they are likely to experience autonomy, competence, and social connection. These intrinsic motivators lead to higher levels of engagement and longer-term participation in PE and sport activities. Furthermore, Hellison's Teaching Personal and Social Responsibility (TPSR) Model (1995) informs the enhancement of character, leadership, and teamwork in physical education.

The model assists the output variable of student engagement by promoting students to be responsible for their behavior, work in teams, and lead others essential components in an effective PE setting. To complement the independent variables of the study: Infrastructure and Facilities, Teacher Competency and Training, and School Administration and Community Support, this model shows how enhancements in these categories positively influence the dependent variable: Student Engagement and Participation. The theoretical frameworks also guide the development of an exemplary enhancement program that could potentially comprise the following: (1) Facility Improvement Programs through collaborations with local stakeholders; (2) Teacher Training Workshops on coaching, pedagogy, and motivation techniques; (3) Community Sports Participation through inter-school tournaments and festivals; (4) Student Leadership in PE through peer mentoring and event management; and (5) Technology Integration through the use of fitness tracking devices and educational apps. By situating the research within these sound theories, this study not only seeks to quantify program effectiveness but also to provide sound solutions that work within students' learning needs, motivational levels, and long-term development in physical education.

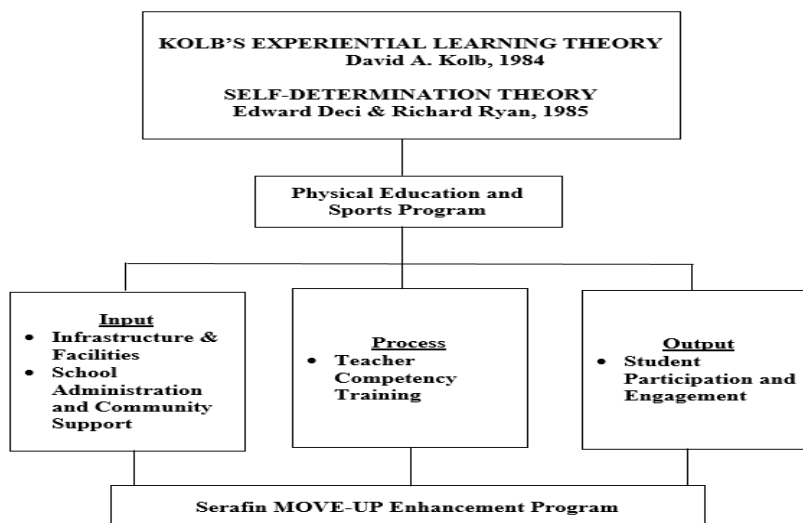
This theory integrates Kolb's Experiential Learning Theory (1984) and Self-Determination Theory by Deci and Ryan (1985) as the foundational theories guiding the development of the Physical Education and Sports Program. Kolb's theory emphasizes learning through experience, reflection, and active engagement, while Self-Determination Theory highlights the importance of intrinsic motivation driven by autonomy, competence, and relatedness. At the core of the framework is the Physical Education and Sports Program, which is designed to create an engaging and motivating environment for students based on these theories. The program relies on two key inputs: infrastructure and facilities, which provide the necessary physical resources and environment for sports activities, and school administration and community support, which offer the organizational and leadership backing essential for the program's sustainability and success. The process component focuses on teacher competency training, ensuring that educators are equipped with the skills and professional development needed to effectively deliver the program. The ultimate output is the Serafin MOVE-UP Enhancement Program, a targeted initiative aimed at improving students' physical education outcomes through enhanced skills, motivation, and engagement. Overall, the diagram demonstrates how educational and motivational theories inform the program's design, relying on critical inputs and processes to achieve its enhancement goals.

Infrastructure and facilities play a crucial role in shaping students' motivation in physical education. Access to well-maintained equipment and safe, accessible training areas directly influences students' feelings of competence and autonomy, which are key to fostering intrinsic motivation. When sports equipment is readily available, students feel more capable of improving their skills and more connected to their personal fitness goals, enhancing their identified regulation. Conversely, poor facility conditions can diminish enjoyment and motivation, even posing safety risks,

while clean and safe environments encourage students to internalize exercise as part of their identity through integrated regulation. The accessibility of training spaces further supports autonomy by allowing students the freedom to practice at their own pace and time, strengthening long-term participation.

Figure 1.

Schematic Diagram of the Theoretical Framework of the Study



Teacher competency and ongoing training significantly affect students' motivational levels. Qualified and enthusiastic PE teachers who specialize in the field are better equipped to design developmentally appropriate activities that build students' competence motivation. Frequent professional development keeps teachers updated on engaging instructional strategies that foster social motivation and relatedness, encouraging group participation. Instructional approaches that emphasize student choice, enjoyment, goal setting, and skill tracking nurture autonomy and identified regulation, motivating students to stay active because they value the outcomes.

Student participation and engagement are closely tied to how well their psychological needs for relatedness, competence, and autonomy are met. Programs that foster these needs encourage regular involvement and prevent a motivation. Students with high interest in PE tend to see it as enjoyable and meaningful rather than obligatory. Participation in school-organized sports is further influenced by social dynamics, where peer acceptance and encouragement boost relatedness and social motivation. However, barriers such as lack of equipment, health issues, or past negative experiences can undermine motivation unless addressed through targeted efforts that restore students' sense of competence and connectedness.

Support from school administration and the community acts as a vital external motivator that can lead to the internalization of physical activity as part of students' identities. School policies that allocate time, funding, and recognition for sports programs strengthen extrinsic motivation but also pave the way for intrinsic motivation when students find personal meaning in participation. Parental and community involvement enhances relatedness, sustaining student engagement by creating a sense of belonging. Financial and logistical support, such as providing transportation and uniforms, increases autonomy by removing barriers and allowing students to choose participation freely.

There is a clear correlation between student engagement and the quality of infrastructure and facilities, teacher competency and training, and the level of support from school administration and the community. A well-equipped environment satisfies the need for competence, qualified teachers foster intrinsic motivation through personalized support, and a supportive environment fulfills students' need for relatedness, all contributing to higher engagement in PE and sports activities. Based on these findings and grounded in Self-Determination Theory principles, the proposed enhancement program "MOVE-UP: Motivated, Organized, Valuable Engagement for Upgrading PE and Sports Programs" aims to promote autonomy, competence, and relatedness among students. Its objectives include involving students in choosing sports clubs and setting fitness goals, enhancing skills through workshops and competitions, and fostering community-inclusive activities. Key components involve regular SDT-informed training for PE teachers, phased facility improvements, student leadership roles in sports, active parental and local government unit participation, and the use of student reflection journals to internalize motivation. This

comprehensive approach is designed to sustain long-term student engagement in physical education and sports by addressing their motivational needs holistically.

The study assumes that the input and process variables influence the output variables. The result of the study is the basis of an enhancement physical education and sports program which was titled "MOVE-UP."

Literature Review

Encompassing the physical, mental and social well-being of students, physical education (PE) and sports programs are essential in the holistic development of students. PE is identified in Republic Act No. 5708 (Congress of the Philippines, 1969) as significant in every school in the Philippines for it aims to develop lifelong fitness habits and sportsmanship among the students. However, it's important to assess the effectiveness of these programs, given the differences in resources, teacher experience, and student participation from school to school. The resulting Senate Bill on Schools Physical Education and Sports Development Act of 1969 ordered the Department of Education to prepare and carry out a nationwide PE and sports program in all schools in the Philippines. This legislation emphasizes the importance of PE as not only contributing to a balanced approach to physical and mental development, but instilling values of discipline and athletic success as well.

As a teacher at Estaca Integrated School, I have been trying to remind my students that it is their health status that determines their eligibility to participate in physical activities. That's why we calculate their Body Mass Index (BMI) before immersing them in physical routines, ensuring they are physically sound. The law lists a number of initiatives, including daily exercise sessions, competitive sports for elementary and secondary students, and organized intramural and interscholastic competitions. It also creates a commission for the development of a Physical Education and Sports Centre to implement the program and to provide coordination of activities across institutions while also providing training for teachers and coaches through a structured five-year development plan. The act prescribes financial mechanisms that include annual appropriations from the National Treasury, compulsory athletic fees from students in colleges and universities, and funding for the establishment of provincial sports centers over a ten-year period.

The centers will function as training grounds, containing world-class workout facilities for athletes. The commission is tasked with identifying priority construction projects and making sure that funds are used to improve PE and sports programs across the country. In addition, promote support from local governments and private organizations for regional and national sports events, enhancing the participation and investment in sports development. This aims to adjust and implement sustainable physical education and sports system with adequate funding in the Philippine schools. Research on PE programs at a national level has shown both achievements and hurdles. At Estaca Integrated School, not having a budget for student-athlete training is major stumbling block. But, thanks to proactive measures by the school administration, solutions are being implemented that will facilitate students' growth as athletes.

For example, a study in Taytay, Rizal, found that physical education programs were generally aligned with national curriculum standards, but there were issues with infrastructure and teaching resources (Academia. edu, n.d.). Likewise, the National Capital Region Sports Track Program for Senior High School was assessed in which alarming gaps were identified in relation to student engagement and program enhancement that warrants constant monitoring and adaptation as highlighted by this study (Academia. edu, n.d.). From my working experience, I have seen that the direct involvement of students in training needs good mentorship from their assigned coaches. Children who are given support and encouragement are much more likely to succeed in sports. Specialized programs for student-athletes at the secondary level have been shown to yield positive results. According to a study conducted in Nueva Ecija, students belonging to the Special Program in Sports (SPS) had higher chances of winning in competitions because of organized training and formal support from their schools (Academia. edu, n.d.). This illustrates the need for systematic evaluations to improve physical education programs and guarantee equal opportunities for all students regardless of skill. However, despite the existence of policies in favor of PE and sports promotion, our findings confirm that there are various barriers, such as lack of infrastructure, and teacher training and funding, that prevent proper implementation of these policies (Tech4E. D. Orion, n.d.). In response to these issues, Department of Education (2019) released the K to 12 PE Curriculum, which incorporates movement education, fitness training, and lifelong sports skills into the school curriculum. The efficacy of such efforts still needs to be studied.

METHODOLOGY

Design

This study utilized a descriptive-correlational method to assess the current physical activity initiatives implemented in the school. T such as the *Zumba for a Cause* event, Compostela District Meet, and Cebu Provincial Meet. The descriptive-correlational approach is ideal for examining the relationship between these school-led programs and

their influence on students' physical and social development. By utilizing surveys, observations, and document analysis, the study aims to gather real-time data on how these activities contribute to student growth. This design offers valuable insight into how such initiatives align with the Department of Education's goals and supports the school's ongoing commitment to fostering the holistic development of its learners through effective PE and sports programming.

Participants and Environment

The research study took place at the Estaca Integrated School, Estaca, Compostela, Cebu, a public school with an Urban large school in Compostela, Cebu. The participants of this study were the *Students (Grades 8-9)*: All the students of Grade 8 comprising of 70 students and 9 comprising of 85 students, a total of 155 students. Which guarantees that you get voters from different grade levels and from different levels of sports involvement will evaluate the management and implementation of the school's PE and sports programs. *Sample Size and Sampling Technique*. A quota sample of 155 students were considered as the participants of the study with equal allocation of 70 students in grade 8 and 85 students in grade 9. To effectively gather the participants, simple random sampling was used provided that they were qualified as participants based on the criteria set for the study (see table 1).

Table 1
Distribution of the Respondents Among Grade 8 and Grade 9 students.

Participant	No. of Respondents	Percentage
Grade 8 Students	70	45.16%
Grade 9 Students	85	54.84%
Total	155	100%

Inclusion Criteria. The participants were selected based on the following criteria: 1) they were either Grade 8 or Grade 9 students; 2) they were directly involved in or had knowledge of the school's physical activity initiatives, such as the *Zumba for a Cause* event, the Compostela District Meet, and the Cebu Provincial Meet; 3) they were present and available during the data collection period; 4) they expressed willingness to participate in the study; and 5) they signed an informed consent form or were given parental/guardian consent in the case of student respondents.

Exclusion Criteria. Participants who were not directly involved in or knowledgeable about the school's physical activities, as well as those who declined to participate or did not provide consent, were excluded from the study.

Data Instrument

The main instrument used in this study were the adapted and revised standardized questionnaire for assessment of physical education and sports programs at Estaca Integrated School from Development and validation of a questionnaire to assess the implementation of physical education programs in Chinese junior high schools by He, Liu et.al. Each student will be evaluated based on the following scale:

Table 2.
Instrument Parameter Scale

Scale	Response	Ranges of Mean	Interpretation
5	Strongly Agree	4.21 – 5.00	Very Much
4	Agree	3.41 – 4.20	Considerable
3	Neutral	2.61 – 3.40	Moderate
2	Disagree	1.81 – 2.60	Very Little
1	Strongly Disagree	1.00 – 1.80	Not at All

The questionnaire used in this study was adapted and revised from a standardized tool. To ensure appropriateness for the local context, the instrument underwent validity and reliability testing. For face and content validity, the instrument was evaluated using the Good and Scates validation instrument. Three jurors with doctoral degrees assessed the content, resulting in an overall score of 4.78, which falls within the range of 4.21–5.00, and was interpreted as "Very Much", indicating an excellent level of validity (see Table 2). For reliability, the Cronbach's Alpha formula was applied. The results were as follows: Motivational factors: $\alpha = 0.90$ and 0.91 , both interpreted as "Very Much" in terms of internal consistency, Level of motivation to exercise: α scores of 0.91 , 0.90 , 0.91 , 0.90 , and 0.91

for its respective sub-variables, all interpreted as "Very Much", Level of exercise engagement: $\alpha = 0.90$, likewise interpreted as "Very Much". These results confirm that the tool was both valid and reliable for assessing the participants' motivation and engagement in school-based physical activities.

The demographic profile section was designed as a fill-in questionnaire to collect relevant data such as grade level and participant role. To assess the level of motivation and identify the motivational factors related to participation in physical activities (e.g., *Zumba for a Cause*, Compostela District Meet, Cebu Provincial Meet), a checklist-style questionnaire with indicators was administered to all qualified participants. The response scale and interpretation followed the Instrument Parameter Scale shown in Table 2.

Data Gathering Procedures

This part contains discussion of the data procedures for pre-data gathering, actual gathering, and post-data gathering.

Pre-Data Gathering. In preparation for data collection, the researcher followed a series of systematic procedures. Initially, addressed the comments and suggestions provided by the panelists during the design hearing. Following this feedback, the researcher sought ethical approval from the Research Ethics Committee (REC). After all necessary approvals was obtained, the REC reviewed the ethical considerations of the study before granting a Notice to Proceed (NTP). With the NTP in hand, the researcher submitted a formal letter to the College Deans of the University of the Visayas for approval.

Actual Data Gathering. During the actual data collection period, the researcher used different methods based on the participants' roles: For Grade 8 and Grade 9 students, a printed hard copy of the survey questionnaire was distributed. The researcher personally went to each class and explained the purpose and mechanics of the study in clear, student-friendly language to ensure understanding. Students were asked to answer the questionnaire during their available time, and their responses were collected immediately afterward. For teachers/coaches and the school administrator, the questionnaire was transposed into a Google Form for convenient online access. The link was sent to them after they expressed willingness to participate. The survey took approximately five (5) minutes to complete. Their responses were automatically recorded and stored securely in a password-protected Google Drive. The data collection process was conducted over a period of three weeks, ensuring minimal disruption to regular school activities by gathering responses during participants' free time.

Post Data Gathering. After all responses were collected, the data was compiled, tallied, and tabulated for analysis. Statistical treatments were then applied based on the study's objectives. All data were encoded and stored on a secure, password-protected computer, with access restricted to the researcher only. The data will be retained until the study is published in an accredited journal or for a maximum of one year, after which it will be permanently disposed of to ensure confidentiality and ethical compliance.

Data Analysis

The data was analyzed through statistical tools, specifically the IBM SPSS (Statistical Package for Social Sciences). Descriptive statistics were employed to summarize and describe the basic features of the data collected from the students, teachers, coaches, and school administrator. The following specific analyses were conducted: Frequency Counts and Percentages were used to describe the demographic profile of the student respondents, including grade level and gender, Mean and Standard Deviation were used to determine: The level of student engagement and participation in PE and sports activities. The extent to which the following factors influence the effectiveness of PE and sports programs: Infrastructure and Facilities, Teacher Competence and Training, School Administration and Community Support. Interpretation of mean scores was based on a five-point Likert scale, To determine the strength and direction of the relationship between selected independent variables and student engagement in PE and sports programs, the Pearson Product-Moment Correlation Coefficient (Pearson r) was applied. This test was used to assess whether there is a statistically significant correlation between: Infrastructure and Facilities and Student Engagement, Teacher Competency and Training and Student Engagement School Administration and Community Support and Student Engagement.

Ethical Considerations

This study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki and followed the approved protocol of the Research and Ethics Committee (REC) of the University of the Visayas, with Reference No. 2025-003 dated May 21, 2025. Prior to data collection, informed consent was obtained from all participants. For student respondents (Grades 8 and 9), parental or guardian consent was secured through signed forms. The purpose

of the study, voluntary nature of participation, and assurance of confidentiality were clearly explained in a cover letter attached to the printed questionnaire. Students were informed that their participation would not affect their grades or school standing in any way. For teachers, coaches, and the school administrator, consent was implied through the completion and submission of the online Google Form survey, which included an introductory statement detailing the study's objectives, ethical safeguards, and voluntary participation clause.

Participation was entirely voluntary, and no financial or academic incentives were provided. All collected data were kept confidential and stored in a password-protected digital system, accessible only to the researcher. Names or identifying information were not included in any published results.

The researchers declare no conflict of interest related to the conduct of this study.

RESULTS AND DISCUSSIONS

This section contains the presentation, analysis, and interpretation of the data on the assessment of the Physical Education and Sports programs at Estaca Integrated School.

Factors that Influence the Effectiveness PE and Sports Program

This refers to the information of the respondents used in the study. The table below shows the Factors that Influence the Effectiveness PE and Sports Program.

Table 3

	Input: Infrastructure and Facilities	Mean	SD	Interpretation
1	Giving out sports equipment encourages students to participate and improve in physical activities.	2.86	0.86	Moderately available
2	Giving extra funds for sports equipment will improve student participation in physical activities	3.08	0.63	Moderately available
3	A lack of decent sporting equipment decreases student interest in sports and affects the school negatively.	2.55	0.93	Moderately available
4	The poor condition of sports facilities lowers students' motivation to join physical activities.	2.74	0.78	Good condition
5	Schools can still improve or maintain sports facilities even with a limited budget.	2.68	0.81	Good condition
6	The decline of sports facilities negatively affects students' physical education outcomes both in the short term and long term.	2.59	0.80	Good condition
7	Having available and accessible training areas helps students consistently improve their athletic skills.	2.95	0.75	Moderately accessible
8	Distance or limited access to training areas can negatively affect students' athletic performance, but schools can find ways to help.	2.96	0.76	Moderately accessible
9	Enhancing access to training spaces can make a school standout, even with limited opportunities for women's sports training.	2.80	0.80	Moderately accessible
	Weighted Mean	2.80	0.81	Somewhat Agree

Legend: 4.21-5.00- Strongly Agree; 3.41-4.20- Agree; 2.61-3.40 Somewhat Agree; 1.81-2.60-Disagree; 1.00-1.80- Strongly Disagree

The study findings with the average weighted score of 2.80 or "Somewhat Agree" reveal that sports facilities are somewhat available in the school but that there are various aspects that need further improvement to accommodate student involvement and athletic growth. This is in line with the research of Tannehill & Zakrajsek (1993), who highlighted that the quality and availability of sports facilities have a direct impact on the motivation and performance of students during physical education. The research also supports Kolb's Experiential Learning Theory (1984), which highlights the significance of giving learners tangible experiences and active experimentation opportunities—crucial aspects of physical education which are frequently thwarted by poor facilities. In the absence of access to clean, well-maintained, and well-equipped training grounds, students are unable to engage comprehensively in the experiential learning process, with resultant skill gaps.

Further underpinning this is Self-Determination Theory (Deci & Ryan, 1985), which states that motivation stems from satisfaction of three innate psychological needs: autonomy, competence, and relatedness. Poor infrastructure negates these requirements by restricting students' autonomy of choice in terms of when and how to rehearse

(autonomy), reducing their competence of confidently performing because they do not have required facilities (competence), and ignoring female players' inclusive needs (relatedness). Bailey et al. (2009) further observe that consistent engagement in physical activities relates to students' sense of inclusion and competence, which is affected when facilities are poor. The research also corroborates the work of Hardman and Marshall (2000), who emphasize the international problem of under-resourced school sports programs and how lack of proper facility maintenance leads to decreasing student motivation. The necessity for enhanced planning and gender-sensitive considerations is essential, as Sabo & Veliz (2008) suggest that female students tend to suffer marginalization in school sports because of insufficient resources and facilities. Thus, these findings support the need for a thorough audit, increased funding, and stakeholder coordination to make sure sports infrastructure aids in the all-around development of all students.

Table 4

Input: School Administration and Community Support				
	School policies on physical education and sports development play a significant role in shaping student engagement and fitness levels.	3.10	0.79	Moderately supportive
1	Updating school policies to ensure equal opportunities for all students in sports and physical education would promote fairness and inclusivity.	3.14	0.73	Moderately supportive
2	School administrators should integrate academics and sports development software to support all-around student development.	3.19	0.80	Moderately supportive
3	Student participation in sports is enhanced by high levels of active parental and community involvement.	2.81	0.87	Moderately encouraging
4	Involving parents and the community in student sports presents challenges, but these can be addressed through better communication and collaboration.	2.90	0.75	Moderately encouraging
5	Designing a program that promotes parent and community involvement in school athletics would improve student engagement and support.	3.01	0.70	Moderately encouraging
6	The availability of financing and logistical support significantly impacts the quality and accessibility of sports programs in high school.	2.83	0.75	Moderately adequate
7	Schools can keep sports going even without funding by seeking community partnerships, volunteer coaches, and fundraising efforts.	3.06	0.88	Moderately adequate
8	Improving the sports programs at school with a sufficient budget can increase student involvement and benefit a larger number of students.	3.18	0.72	Moderately adequate
9				
Weighted Mean		3.02	0.79	Somewhat Agree

Legend: 4.21-5.00-Strongly Agree;3.41-4.20-Agree;2.61-3.40 Somewhat Agree;1.81-2.60-Disagree; 1.00-1.80-Strongly Disagree

The result of 3.02 of the study, seen as "Somewhat Agree," indicates that school administration and community participation in supporting sports development and physical education are moderately in place but still fall short for creating enduring and inclusive results. This narrow implication is in line with Lindsey and Chapman's (2017) discovery that schools tend to lack integrated, long-term policies and partnerships that are needed to sustain physical education programs, resulting in inconsistent student experiences and support. Bailey et al.'s (2009) research equally highlights that administrative leadership is the central factor in establishing the success of sports programs, as without purposeful and intentional planning, assistance for these efforts becomes random and fragmented. In addition, Doll-Teppe and Scoretz (2001) emphasize the important part that community and parental engagement play in school-based sports, maintaining that passive or intermittent involvement fails to build an authentic, inclusive, and enduring sports culture. The present research also captures the issues identified by Casey and Eime (2015), who observe that most schools depend on ad hoc approaches like volunteerism, ad hoc fundraising, and sporadic partnerships that, although beneficial in the short run, lack the ability to support formal sports programs in the long run.

In addition, Hardman and Marshall (2000) caution that if there is not clear advocacy and regular investment from both the local government and the school authorities, physical education is devalued and under-resourced. The fairly low ratings of financial and logistical support in the current study support this assertion, uncovering a requirement

for more formal policy, additional funding, and extended community partnerships. The limited scope of stakeholders further implies underdevelopment of communication and coordination mechanisms, reinforcing the findings of Waring and Warburton (2000), which state that successful physical education programming should be complemented by lucid, continuous collaboration among school administrators, families, and neighborhood organizations. Therefore, the literature suggests that without deliberate policy guidance and proactive stakeholder participation, the potential of physical education to promote student development and well-being might not be fully achieved.

Table 5

Process: Teacher Competency and Training				
1	A teacher's specialization in PE positively impacts students' experiences and abilities in sports.	3.18	0.88	Moderately sufficient
2	Schools can still guarantee quality PE instruction even if the teacher does not specialize in sports education.	2.57	1.00	Moderately sufficient
3	A PE teacher's effectiveness can be improved by gaining interdisciplinary knowledge (e.g., health sciences, psychology, coaching techniques).	2.98	0.86	Moderately sufficient
4	Continuous professional development positively influences PE teachers and improves their delivery of sports education.	2.95	0.89	Moderately sufficient
5	PE teachers should focus on specific areas of training (e.g., new teaching methods, student engagement strategies) to elevate their teaching craft.	2.96	0.85	Moderately sufficient
6	Schools can find ways to increase attendance and participation in professional development programs despite challenges like limited time or budget.	2.90	0.87	Moderately sufficient
7	A PE teacher's different approach can positively affect students' motivation and skills development in various sports.	3.05	0.81	Moderately effective
8	Teaching in new ways can help empower students of all skill levels to participate in physical activities.	2.98	0.90	Moderately effective
9	Integrating technology and using new teaching practices can enhance PE lessons and improve student learning outcomes.	3.03	0.80	Moderately effective
Weighted Mean		2.95	0.89	Somewhat Agree

Legend: 4.21-5.00-Strongly Agree; 3.41-4.20-Agree; 2.61-3.40 Somewhat Agree; 1.81-2.60-Disagree; 1.00-1.80-Strongly Disagree

The result of the study's 2.95 weighted mean, gauged as "Somewhat Agree," indicates that the respondents moderately agree that teacher competency and professional growth play a crucial role in providing quality physical education. This agrees with Armour and Yelling (2004), which stresses that continuous professional growth for PE teachers is indispensable in ensuring effective, up-to-date, and inclusive teaching strategies, particularly in an ever-changing educational environment. Though most PE teachers might not have formal specialization in the field of sports education, studies indicate that non-specialist teachers can also perform well where they are adequately supported and kept under continuous training (Morgan & Hansen, 2008). The contribution of teacher knowledge in improving students' motivation and performance in PE has been emphasized by Curtner-Smith (2001), who discovered that students react more positively and are more engaged when their teachers have confidence, competence, and enthusiasm in teaching sports. In addition, Shulman's (1987) Pedagogical Content Knowledge (PCK) highlights the necessity of having not just expertise in subject matter, but also the ability to present it well a need that is particularly critical in physical education where interdisciplinarity skills like coaching, psychology, and health education come together.

The results of this study also align with Casey and Goodyear (2015), who support the incorporation of student-centered practices and innovative use of technology in PE to create greater inclusivity and motivation, particularly in students with differing abilities. Harris, Cale, and Musson (2011) also determined that innovation and reflective practice e.g., using technology and diverse instructional techniques are associated with more student engagement and perceived value in physical activity. The focus on peer mentoring and collaboration is in line with Lieberman and Houston-Wilson (2009), whose assertion is that formal mentoring programs can allow less experienced or non-specialist teachers to enhance their teaching quality and confidence. Together, the casual literature confirms that

although formal specialization in physical education is ideal, continuous professional learning, resource access, and a culture of innovation are also equally important in guaranteeing the effectiveness of PE instruction and the all-round development of students.

Table 6

Output: Student Engagement and Participation			
1	Students show different levels of interest in PE class, and teachers can respond to these differences by adapting their teaching approaches.	2.88	0.91 Moderately reasonable
2	A student's willingness to participate in PE positively impacts their overall health, both mentally and physically.	3.08	0.70 Moderately reasonable
3	Redesigning PE classes with engaging activities and varied approaches can increase student interest in physical education.	3.06	0.78 Moderately reasonable
4	Participation in school-sponsored sporting events has a positive effect on the academic success and personal development of students.	3.06	0.79 Moderately acceptable
5	Schools can promote sports as an attractive option for unmotivated students by offering incentives and making activities more engaging.	3.03	0.84 Moderately acceptable
6	Being part of an extra-curricular sports program helps build leadership and teamwork skills.	2.98	0.84 Moderately acceptable
Weighted Mean		3.02	0.82 Somewhat Agree

Legend: 4.21-5.00-Strongly Agree;3.41-4.20-Agree;2.61-3.40 Somewhat Agree;1.81-2.60-Disagree; 1.00-1.80-Strongly Disagree

The weighted mean of 3.02, which is "Somewhat Agree," suggests that student participation in physical education (PE) and sports activities in Estaca Integrated School is not so low but not also maximized to the fullest. This is consistent with Fairclough and Stratton (2005), who concluded that student participation in PE is dependent on how engaging, diverse, and well-organized the lessons are. The finding of the study that student engagement is enhanced by classes that are interesting and varied undergirds Chen and Ennis's (2004) position that student-centered, inclusive pedagogical approaches raise interest and interest, especially where learning activities are seen as significant. In addition, Ntoumanis (2005), referencing Self-Determination Theory, emphasizes that students engage more in physical activities when their psychological needs autonomy, competence, and relatedness are facilitated through the instructional strategies of the teacher. This verifies your conclusion that teaching adjustments have a positive effect on student engagement. While the development of leadership and teamwork is acknowledged through extracurricular athletics, the findings also indicate that the benefits are not yet maximized supporting Bailey et al. (2009), who state that the full educational benefit of physical activity (social and emotional development) is only obtained through regular, structured programming.

Likewise, Trudeau and Shephard (2008) highlight the connection between physical activity and good academic performance and point out that frequent involvement in school sports leads not only to improved physical health but also to better classroom behavior, cognitive function, and discipline advantages that would be left underutilized without deliberate reinforcement. In addition, Kirk (2005) contends that PE and sport curricula need to be redesigned to incorporate students of different ability and interest levels, thereby enticing those less conventionally motivated to participate. The moderate effect of rewards and challenges in the research is consistent with Deci, Koestner, and Ryan's (2001) determination that although external reward may enhance motivation in the short term, intrinsic interest needs to be fostered for long-term involvement. Hence, the literature agrees that although existing levels of student engagement hold promise, there needs to be systematic refinement in lesson planning, extracurricular activities, teacher assistance, and motivational interventions to optimize the holistic development potential of physical education.

Table 7

Correlations			
Student Participation and Engagement	Pearson r	Sig 2 tailed	Interpretation
Infrastructure and Facilities	.772**	<.001	High correlation, Significant

Support from School Administration and Community	.908**	<.001	Very high correlation, Significant
Teacher Competency and Training	.769**	<.001	High correlation, Significant

** Correlation is significant at the 0.01 level (2-tailed)

The high and statistically significant positive relationship observed between student involvement in physical education and the variables of infrastructure and facilities, school administration and community support, and competency among teachers supports the existing literature highlighting the fact that student participation in sports is a function of multiple factors. Bailey (2006) emphasizes that proper sport infrastructure in terms of quality equipment and well-located facilities is core to promoting student involvement since it offers the physical setting for the development of skills and enjoyment. The importance of administrative and community support resonates with Lindsey and Chapman's (2017) research that leadership dedication and collective partnerships create an environment supporting long-term student engagement in physical activity. They highlight that inclusive policies, stable finance, and energetic community action produce an enabling environment that encourages students to engage.

Further, studies by Armour and Yelling (2004) highlight that teacher ability and continuous professional improvement significantly affect student motivation and performance in PE since proficient teachers develop engaging, secure, and inclusive programs that address different student needs. The correlation found between teacher preparation and student engagement validates Curtner-Smith's (2001) contention that well-trained and confident teachers notably boost students' interest and participation. These findings cumulatively imply that active student engagement can be supported best by a balanced, integrated strategy including facility upgrade, reinforced leadership and community connections, and ongoing teacher training for developing active student participation and supporting their physical, social, and affective development, as attested to by Bailey et al. (2009) and Ntoumanis (2005). Such a strategy can assist schools such as Estaca Integrated School in creating an open sports culture that optimizes the developmental gains of physical education.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Based on the findings, the Physical Education and Sports Program of Estaca Integrated School for the school year 2024–2025 is assessed as moderately effective, with areas of strength and several aspects needing improvement. Infrastructure and facilities were found to be moderately available and accessible; however, they are not yet sufficient to fully support students' athletic growth and consistent participation. The presence of equipment and designated spaces is acknowledged, but limitations in their condition and accessibility may restrict student performance and motivation. The support from the school administration and the community is recognized but not fully maximized. While there are efforts to promote sports through policies, programs, and partnerships, these are not yet fully sustained or inclusive.

A stronger and more consistent collaboration with parents, local government units, and community stakeholders is necessary to reinforce student engagement in physical activities. Teacher competency and training are seen as moderately sufficient. Many educators are committed and capable, yet some lack specialized background or consistent access to professional development. Despite this, their willingness to improve through innovative and interdisciplinary approaches is evident. Equipping teachers with more focused training and updated strategies will likely enhance their effectiveness in delivering physical education.

Student engagement and participation are present but not yet maximized. Learners show interest, especially when activities are engaging and varied, yet some remain unmotivated due to limited resources, lack of incentives, or socio-economic challenges. Participation in sports contributes positively to personal development, leadership, and teamwork, but the full potential of these benefits has yet to be reached. Strong and meaningful connections were observed between student engagement and key elements such as available facilities, school leadership and community support, and teacher readiness. These relationships suggest that improving the overall environment including infrastructure, administrative leadership, and instructional quality can significantly boost student involvement in physical education and school sports.

These results support experiential learning theories that emphasize the importance of engaging learners through reflection and active participation. They also align with motivational theories, which highlight the role of autonomy, competence, and social support in sustaining meaningful involvement. The current limitations in resources, training, and community engagement may be affecting students' inner drive to fully participate in physical activities. To address these concerns and enhance the current program, the SERAFIN MOVE-UP initiative is proposed. This enhancement plan seeks to improve physical education and sports by focusing on facility improvement, teacher capacity-building, inclusive student activities, and community involvement.

The plan is designed to foster a more encouraging, responsive, and student-centered environment where learners are not only physically involved, but also internally motivated and emotionally supported. Through this approach, Estaca Integrated School aims to elevate the quality and impact of its PE and sports program in promoting holistic student development.

Recommendations

Based on the findings of this study, it is recommended that:

Development of Educational Practices. by creating a more engaging and inclusive physical education environment that encourages all students to actively participate. This can be achieved by improving accessibility to well-maintained training spaces and ensuring PE classes and sports events are thoughtfully designed to be both enjoyable and skill-developing. Teachers should employ a variety of innovative, student-centered teaching strategies that cater to diverse interests and skill levels, such as cooperative games, personalized skill-building activities, and motivational challenges that promote teamwork and personal growth. Furthermore, continuous professional development should be prioritized to equip educators with the latest knowledge and techniques in sports education, inclusive pedagogy, and classroom management. By strengthening these educational practices, schools can foster a positive, supportive atmosphere that maximizes student engagement, nurtures physical competence, and cultivates a lifelong appreciation for health and fitness.

Development of Policies and Guidelines. To strengthen administrative and community support, it is essential to develop clear, comprehensive policies and guidelines that prioritize the improvement, maintenance, and equitable use of sports facilities and resources. These policies should establish consistent scheduling and standardization of physical education classes to ensure regularity and structure in program delivery. Guidelines encouraging active parental and community engagement, such as organizing sports clinics, open field days, and volunteer coaching initiatives, should be formalized to foster collaboration and enrich student experiences. Budgetary policies must allocate dedicated funding for PE program needs, supported by transparent processes for fundraising, local partnerships, and sponsorships to sustain program growth. Furthermore, integrated policies that align academic achievement with physical wellness objectives will promote holistic student development, ensuring that physical education is valued as an essential component of the school curriculum and community culture.

Further Research. Future research can build on this study by exploring a variety of important areas, including the impact of contextual and systemic factors on the effectiveness of physical education programs in public schools; gaining qualitative insights from students, teachers, and parents about barriers and motivators in PE participation; assessing the role of technology such as fitness apps and gamification in enhancing student engagement and performance; examining participation challenges faced by students from diverse socioeconomic backgrounds; and conducting comparative analyses of physical education and sports programs in urban versus rural public schools to identify best practices and common challenges. These research directions will deepen understanding and support the development of more effective and inclusive PE programs.

REFERENCES

- Academia.edu. (n.d.). Implementation of Physical Education Programs in Taytay, Rizal. Retrieved from https://www.academia.edu/31537985/K_to_12_Curriculum_Guide_PHYSICAL_EDUCATION
- Academia.edu. (n.d.). Studies on physical education and sports programs in Philippine schools. Retrieved from <https://www.academia.edu>
- Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., & Sandford, R. (2006). The educational benefits claimed for physical education and school sport: An academic review. *Research Papers in Education*, 21(1), 1–27. <https://doi.org/10.1080/02671520500446610>
- Bailey, R., Hillman, C., Arent, S., & Petitpas, A. (2009). Physical activity: An underestimated investment in human capital? *Journal of Physical Activity and Health*, 6(3), 269–285.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall. Retrieved from <https://psycnet.apa.org/record/1985-98423-000>
- Chen, W., Ennis, C. D., Sun, H., Zhang, X., & Donnelly, J. E. (2021). Influence of teacher expertise on student learning and motivation in physical education: A multilevel analysis. *Research Quarterly for Exercise and Sport*, 92(1), 94–103. <https://doi.org/10.1080/02701367.2020.1741490>
- Congress of the Philippines. (1969). Republic Act No. 5708: An act providing for the promotion and financing of an integrated physical education and sports development program for the schools in the Philippines. Retrieved from <https://www.officialgazette.gov.ph>
- Creswell, J. W., & Guetterman, T. C. (2019). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (6th ed.). Pearson.

- Dauenhauer, B., Keating, X. D., & Lambdin, D. (2017). The relationship between school leadership and physical education program implementation. *The Physical Educator*, 74(4), 658-681. <https://doi.org/10.18666/TPE-2017-V74-I4-7397>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer.
- Deci, E. L., & Ryan, R. M. (1985). *Self-determination theory*. University of Rochester Press. Retrieved from https://selfdeterminationtheory.org/SDT/documents/2000_RyanDeci_SDT.pdf
- Department of Education. (2019). K to 12 physical education curriculum guide. Retrieved from <https://www.deped.gov.ph/wp-content/uploads/2019/01/PE-CG.pdf>
- Garcia, J., Soriano, C., & Lopez, M. (2022). The role of safe and functional school sports facilities in promoting physical activity participation among students. *Philippine Journal of Physical Education*, 12(2), 45-56.
- Garcia, M. T., & Ramos, L. C. (2022). An assessment of student engagement in senior high school sports programs. *Journal of Physical Education Research*, 9(2), 45-58. Retrieved from <https://educ.upd.edu.ph/wp-content/uploads/2024/04/PJES-DOI-04162024.pdf>
- Hellison, D. (2003). Teaching personal and social responsibility through physical activity. *Human Kinetics*. Retrieved from https://students.aiu.edu/submissions/profiles/resources/onlineBook/a4K2x4_Teaching_Responsibility_Through_Physical_Activity.pdf
- Martin, J. J., & Kulinna, P. H. (2018). The impact of school facilities on physical education teachers' instruction. *Journal of Teaching in Physical Education*, 37(1), 28-36. <https://doi.org/10.1123/jtpe.2016-0192>
- Martinez, J. P., & Dela Cruz, R. S. (2020). Evaluating the effectiveness of the Special Program in Sports: A case study in Nueva Ecija. *Philippine Journal of Sports Science*, 7(1), 33-49. Retrieved from https://www.researchgate.net/publication/353703421_Assessment_on_the_Implementation_of_Special_Program_in_Sports_and_Student-Athletes_Performance_in_Sports_Competition
- McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, 15(4), 351-377. Retrieved from <https://europaepmc.org/article/MED/3068205>
- Ntoumanis, N., Barkoukis, V., & Thøgersen-Ntoumani, C. (2021). School physical education and student motivation: A meta-analysis. *International Journal of Behavioral Nutrition and Physical Activity*, 18(1), 88. <https://doi.org/10.1186/s12966-021-01151-w>
- Piaget, J. (1976). *The grasp of consciousness: Action and concept in the young child*. Harvard University Press. Retrieved from <https://psycnet.apa.org/record/1976-27668-000>
- Richards, K. A. R., Templin, T. J., & Gaudreault, K. L. (2020). Teacher socialization in physical education: Review and recommendations for future work. *Kinesiology Review*, 9(4), 325-334. <https://doi.org/10.1123/kr.2020-0017>
- Rosenstock, I. M. (1974). Historical origins of the health belief model. *Health Education Monographs*, 2(4), 328-335. Retrieved from <https://journals.sagepub.com/doi/abs/10.1177/109019817400200403>
- Santos, E. R., Villanueva, P. J., & Tan, R. L. (2021). Challenges in physical education program implementation: A case study in Taytay, Rizal. *Southeast Asian Journal of Physical Education*, 5(3), 60-75. Retrieved from https://www.researchgate.net/publication/378445161_Physical_Education_Teachers'_Experiences_in_Fitness_Testing
- Siedentop, D. (1994). Sport education: Quality PE through positive sport experiences. *Human Kinetics*. Retrieved from <https://www.scirp.org/reference/referencespapers?referenceid=727530>
- Tech4E.D. Orion. (n.d.). Challenges in implementing PE programs in public schools. Retrieved from <https://www.tech4ed.orion>
- Thompson, A. M., Rehman, L. A., & Humbert, M. L. (2022). Physical education safety: Ensuring injury prevention through structured programs. *Canadian Journal of Public Health*, 113(2), 231-238. <https://doi.org/10.17269/s41997-021-00564-z>
- Weiss, M. R., & Wiese-Bjornstal, D. M. (2009). Promoting positive youth development through physical activity. *President's Council on Physical Fitness and Sports Research Digest*, 10(3), 1-8.