

In-Service Trainings and Attitudes of Physical Education Secondary Teachers in Congressional District I, Division of Batangas Province

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Abstract

This study evaluated the implementation and perceived usefulness of In-Service Training (INSET) programs and their impact on the professional attitudes of secondary Physical Education teachers in public schools in Congressional District I, Batangas Province, during the School Year 2025–2026. Using a descriptive-correlational research design, data was collected from 104 secondary MAPEH teachers using validated questionnaires to assess professional development and classroom operations. Statistical analysis included ranking, weighted means, and Pearson's r coefficient to evaluate the hypothesis and establish baseline configurations for local training systems.

The findings showed that respondents strongly agreed on the high implementation of INSET, with peak ratings in updating physical education developments, practical execution, and behavior management. Teachers also found the programs highly useful, noting benefits in acquiring practical tools, integrating educational technology, and enhancing student health literacy. Pearson's r correlation analysis revealed a significant positive relationship between the assessment and perceived usefulness of INSET, with higher foundational knowledge aligning with content relevance, greater specialization driving professional growth, and longer service enhancing instructional delivery and student results. However, not all dimensions showed universal correlation, indicating that tenure, knowledge, and academic background alone do not guarantee holistic pedagogical improvements.

Despite positive sentiments, the research highlighted systemic constraints, such as a lack of practical training demonstrations and logistical pressures from managing large class sizes, making hands-on physical execution challenging. Instructional gaps were identified in health concept integration, curriculum competency frameworks, and student intrinsic motivation. Based on these findings, the study proposed enrichment activities to bridge the gap between theory and practice, offering a strategic roadmap with cross-generational mentorship loops, localized material innovations using Batangas resources, and specialized gym management workshops to enhance teacher self-efficacy and student learning outcomes.

Keywords: *In-Service Training (INSET), Teacher Attitudes, Physical Education, Descriptive-Correlational Design, Specialization, Length in Service, Proposed Enrichment Activities*

INTRODUCTION

Teachers must maintain their knowledge, abilities, and teaching practices in order to satisfy the ever-evolving demands of the modern educational system. In-Service Training, a program of ongoing professional development aimed at improving instructors' pedagogical practices and competences, is one of the best ways to accomplish this goal. INSET offers physical education instructors beneficial chances to learn new approaches, techniques, and innovations that support student engagement, active learning, and general physical health.

Teachers' attitudes toward these professional development activities play a major role in the effectiveness of INSET programs. A positive outlook promotes involvement, the use of acquired techniques, and ongoing career development. On the other hand, a pessimistic outlook can make teachers less inclined to use innovative teaching strategies. Furthermore, a number of variables, including specialization, length of service, and knowledge and comprehension, may affect how teachers view and react to INSET exercises. The degree to which INSET enhances teaching strategies and learning objectives in physical education is influenced by these factors.

In the Philippines, the implementation of the K-12 Basic Education Program has restructured the educational system, placing a greater responsibility on Senior High School (SHS) teachers to deliver specialized and relevant instruction. This requires teachers to engage in continuous professional development to stay abreast of pedagogical innovations, new teaching technologies, and updates to the curriculum. To address this need, INSET has become a primary strategy for schools and educational institutions to upskill their teaching force. These trainings are designed to update teachers' knowledge, refine their instructional techniques, and enhance their overall professional competence (DepEd Order No. 42, s. 2017).

While the importance of in-service training and its link to teacher effectiveness are well-established in educational literature, a notable gap remains in research focusing specifically on how these programs influence the attitudes of Physical Education teachers within localized contexts. The unique nature of PE instruction, requiring a synergy of theoretical knowledge, specialized technical skills, and practical application, necessitates a deeper understanding of how professional development shapes teacher perspectives. This study evaluates the influence of INSET on the attitudes of secondary Physical Education teachers within the public schools of Congressional District I, Batangas Province, for the school year 2025-2026.

The research assessed the implementation of INSET on teacher attitudes relative to their knowledge and understanding, specialization, and length in service. Furthermore, it describes the respondents' attitudes toward the training itself in terms of relevance of content, professional growth, instructional practice, and learner outcomes. Through examining the relationship between these variables and identifying the specific challenges encountered during training activities, the study establishes a data-driven foundation for proposed enrichment activities. These insights might enhance the design of future professional development programs, ensuring they remain practically relevant and received across the division.

Research Questions

This study aims to assess the in-service trainings (INSET) and level of attitude of Physical Education teachers in the Congressional District I, Batangas Province during the school year 2025-2026.

Specifically, it seeks to answer the following questions:

1.To what extent of implementaion does the in-service trainings be assessed by the Physical Education teachers relative to:

1.1knowledge and understanding

1.2specialization

1.3length in service?

2.How may the level of attitude and usefulness of INSET be assessed by the respondents in terms of:

1.1relevance of content;

1.2professional growth;

1.3instructional practice;

1.4learner outcomes?

3.Is there a significant relationship between the assessment on the INSET and on the level of attitude of teachers towards INSET?

4.What challenges are encountered by the teachers in teaching Physical Education through INSET activities?

5.Based on the results, what enrichment activities may be proposed?

Hypothesis

Null Hypothesis. There is no significant relationship between the assessment on the extent of implementation of INSET on the level of attitude of teachers towards INSET.

METHODOLOGIES

Research Design

Data collection is a fundamental component of research, enabling the gathering of information for analysis and interpretation. It involves systematic processes to obtain accurate and reliable data that support decision-making, hypothesis testing, and knowledge generation. This article provides an overview of data collection methods, types, and practical examples to guide researchers in selecting the most appropriate techniques for their studies.

By this design, the researcher gathered actual, correct information in the form of questionnaires as well as standard tests without modifying any variables. It allowed the study to outline the existing state of affairs and how new learning activities might enhance the school experience of students. This approach ensured that the findings were based on what occurs in the classrooms to provide a good foundation in formulating practical new concepts.

Subjects of the Study

The subjects of this study were drawn from the entire population of MAPEH teachers in Congressional District I, SDO Batangas Province and SDO Calaca City. Since their views, previous teaching experiences, and current methods are essential in determining the issues and possibilities when we try out new learning activities, they are the most important people to consult.

To ensure data accuracy and representative sampling from this diverse population, the study employed a stratified random sampling technique. The sub-sample sizes for each location were determined using the Raosoft Sample Size Calculator at a 5% margin of error. These figures were derived by dividing the population of each municipality or city by the total population and then multiplying the quotient by the computed sample size of 100.

Data Gathering Instruments

The data gathering instruments used for data collection in this study were research-made questionnaires. The research-made questionnaires were used to gather the level of attitude of teachers towards INSET, the influence in the level of attitude in teaching Physical Education of teachers, and the challenges encountered by teachers in teaching Physical Education through INSET activities.

Data Gathering Procedure

To gather the necessary data, the researcher sent formal request letters to the Schools Division Superintendents of SDO Batangas Province and SDO Calaca City. Upon receiving the signed approval, the researcher forwarded the letters to the school principals, attaching the SDS endorsement. With the school heads' permission, the questionnaires were reproduced and distributed to the mathematics teachers across Congressional District I in Batangas Province.

In compliance with established research ethics, consent was also secured from the school administration and other research collaborators. Furthermore, since the study collected personal information, the researchers strictly adhered to the provisions of the Data

Privacy Act of 2012 to protect participant identity. Finally, to ensure the integrity and validity of the results, systematic procedures for administration, verification, and scoring were meticulously carried out.

Data Analysis Plan

Statistical procedures were used to interpret the results that were gathered from the respondents of the study. This study used the statistical treatment of data such as ranking, weighted mean, and Person's r . Ranking. This was used to determine the positional importance of the response to items answered. Weighted Mean. This was the arithmetic average of the overall response of the respondents. Pearson's r Coefficient of Correlation.

Ethical Considerations

In accordance with Republic Act No. 10173, also known as the Data Privacy Act of 2012, this study upheld the quality and integrity of all gathered information while ensuring that participants were fully informed of their rights and obligations. The researcher maintained diligence and sensitivity regarding the disclosure of data provided in the instruments, assuming full responsibility for its protection. Furthermore, no respondent was coerced into joining the study; all participants were fully aware of the relevant aspects of the research undertaking. In instances where a respondent could not participate due to unavoidable circumstances or chose to withdraw, appropriate replacements were secured. Finally, the researcher ensured that all references and sources utilized in the study were properly cited, giving due credit to the proponents and authors from whom the primary and secondary data were derived.

RESULTS

This paper presents the results and discussion of the data collected from the responses to the questionnaire distributed to the respondents. The said data were:

1.Assessment on INSET in Teaching Physical Education

1.1Knowledge and Understanding

Table 2

Assessment on INSET in Teaching Physical Education in terms of Knowledge and Understanding

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I have a strong understanding of the objectives of Physical Education.	3.79	Strongly Agree	4

2. I am knowledgeable about the PE curriculum standards.	3.73	Strongly Agree	7
3. I understand the theoretical foundations of Physical Education.	3.78	Strongly Agree	5.5
4. I can clearly explain PE concepts and skills to my students.	3.88	Strongly Agree	3
5. I stay updated with new developments in Physical Education.	3.91	Strongly Agree	1.5
6. I understand how to assess students' performance in PE effectively.	3.91	Strongly Agree	1.5
7. I am familiar with safety guidelines in conducting PE activities.	3.72	Strongly Agree	8
8. I understand the importance of physical fitness components in PE instruction.	3.58	Strongly Agree	9
9. I can integrate health concepts into my PE lessons.	3.06	Agree	10
10. I can confidently deliver PE lessons with my knowledge.	3.78	Strongly Agree	5.5
Average Weighted Mean	3.71	Strongly Agree	

Table 2 demonstrated a highly positive professional disposition toward teachers discipline, as evidenced by an average weighted mean of 3.71, which corresponded to a verbal interpretation of strongly agree. The findings revealed that educators were most confident in their professional currency and instructional accountability, with the indicators staying updated with new developments in Physical Education and understanding how to assess students' performance effectively both tying for the highest rank with a weighted mean of 3.91. Conversely, the ability to integrate health concepts into PE lessons emerged as the lowest-ranked indicator with a weighted mean of 3.06; while this still maintained a verbal interpretation of agree, it represented a significant departure from the overarching sentiment of the group and highlighted a critical area for targeted professional development to ensure a more holistic, wellness-oriented approach to Physical Education instruction.

1.2Specialization

Table 3
Assessment on INSET in Teaching Physical Education in terms of Specialization

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I am a Physical Education Major, and it matches the subjects I teach.	3.82	Strongly Agree	5
2. I have an academic background that strengthens my competence in PE instructions.	3.60	Strongly Agree	8

3. My field of specialization helps me design effective PE activities.	3.70	Strongly Agree	7
4. I have received sufficient training related to my PE specialization.	3.81	Strongly Agree	6
5. My specialization enables me to teach specific sports skills effectively.	3.59	Strongly Agree	9
6. I feel confident teaching areas within my specialization.	3.86	Strongly Agree	2
7. My professional training enhances my PE teaching strategies.	3.85	Strongly Agree	3
8. I apply specialized techniques in conducting PE classes.	3.88	Strongly Agree	1
9. My expertise contributes to better student skill development.	3.84	Strongly Agree	4
10. My specialization supports my effectiveness as a PE teacher.	3.47	Agree	10
Average Weighted Mean	3.74	Strongly Agree	

The teachers exhibited a sense of technical self-efficacy rooted in their specific expertise, as evidenced by an average weighted mean of 3.74, which corresponded to a verbal interpretation of strongly agree. The results highlighted that the teachers were most adept at the practical execution of high-level methodologies, with the indicator for applying specialized techniques in conducting classes achieving the highest rank with a weighted mean of 3.88. In contrast, the perception that their specialization supported their overall effectiveness as a teacher received the lowest rank with a weighted mean of 3.47; although this still maintained a verbal interpretation of agree, it suggested a slight disconnect between possessing niche technical skills and the broader application of that expertise toward comprehensive instructional success.

1.3 Length in Service

Table 4

Assessment on INSET in Teaching Physical Education in terms of Length in Service

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. My years of teaching experience improve my classroom management in PE.	3.79	Strongly Agree	7
2. My experience helps me handle different student behaviors effectively.	3.88	Strongly Agree	1.5
3. I have developed better teaching strategies over time.	3.88	Strongly Agree	1.5
4. My length of service increases my confidence in teaching PE.	3.36	Agree	10

5. Experience has improved my ability to assess student performance.	3.55	Strongly Agree	8
6. I am more efficient in planning PE lessons because of my experience.	3.50	Strongly Agree	9
7. My years in service help me adapt to curriculum changes.	3.81	Strongly Agree	6
8. Experience allows me to manage large PE classes effectively.	3.83	Strongly Agree	3.5
9. I have improved my teaching performance through years of practice.	3.82	Strongly Agree	5
10. My teaching experience contributes to my professional growth.	3.83	Strongly Agree	3.5
Average Weighted Mean	3.73	Strongly Agree	

The teachers perceived their length in service as a significant asset for instructional mastery, as shown by an average weighted mean of 3.73, which corresponded to a verbal interpretation of strongly agree. The results indicated that the educators drew the most value from their tenure when navigating classroom dynamics, with the indicators for handling different student behaviors and developing better teaching strategies over time tying for the highest rank with a weighted mean of 3.88. In contrast, the belief that their length of service increased their confidence in teaching emerged as the lowest-ranked indicator with a weighted mean of 3.36; while this still maintained a verbal interpretation of agree, it suggested that even veteran educators recognized that professional longevity must be supplemented by continuous learning to maintain high levels of self-assurance.

2. Level of Attitude and Usefulness of INSET In Teaching Physical Education of the Teachers

2.1 Relevance of Content

Table 5

Level of Attitude and Usefulness of INSET In Teaching Physical Education of the Teachers in terms of Relevance of Content

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. INSET topics demonstrate a clear alignment with the current Physical Education curriculum.	3.85	Highly Useful	3
2. INSET content provides meaningful solutions to contemporary issues in Physical Education teaching.	3.74	Highly Useful	6.5
3. INSET activities offer direct practical value to my daily teaching tasks in the field.	3.88	Highly Useful	2

4. INSET objectives address my specific professional development needs as a Physical Education teacher.	3.74	Highly Useful	6.5
5. INSET strategies present useful and realistic approaches for modern Physical Education classes.	3.90	Highly Useful	1
6. INSET examples show a direct and significant relationship to actual Physical Education instruction.	3.78	Highly Useful	4
7. INSET materials prove highly appropriate for the specific grade level that I currently teach.	3.61	Highly Useful	8
8. INSET sessions emphasize realistic classroom situations that I encounter in my professional practice.	3.57	Highly Useful	9
9. INSET training offers essential support for the implementation of competency-based instruction.	3.06	Useful	10
10. INSET themes reflect a timely connection to the evolving demands of modern Physical Education.	3.77	Highly Useful	5
Average Weighted Mean	3.69	Highly Useful	

The teachers maintained a highly positive outlook toward the relevance of their training materials, as evidenced by an average weighted mean of 3.69, which corresponded to a verbal interpretation of highly useful. The findings indicated that the educators felt most supported when the training provided functional tools for the gymnasium, with the indicator regarding the presentation of useful and realistic approaches for modern classes achieving the highest rank with a weighted mean of 3.90. Conversely, the perception that INSET training offers essential support for the implementation of competency-based instruction emerged as the lowest-ranked indicator with a weighted mean of 3.06; while this still maintained a verbal interpretation of useful, it represented the only area to fall below the highly useful threshold, suggesting a specific need for more targeted guidance on transitioning from traditional methods to modern competency-based frameworks.

2.2 Professional Growth

Table 6

Level of Attitude and Usefulness of INSET In Teaching Physical Education of the Teachers in terms of Professional Growth

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. INSET enhances professional	3.59	Highly Useful	7

competence through the mastery of new educational trends and techniques.			
2. INSET motivates a stronger drive to improve overall teaching performance in the classroom.	3.60	Highly Useful	5.5
3. INSET provides a consistent source of new knowledge relevant to current pedagogical standards.	3.70	Highly Useful	2
4. INSET encourages a proactive mindset toward lifelong learning and self-improvement among educators.	3.82	Highly Useful	1
5. INSET builds greater confidence in the execution of specialized physical education lessons.	3.54	Highly Useful	9
6. INSET contributes significantly to the long-term career advancement and promotion of teachers.	3.67	Highly Useful	3.5
7. INSET facilitates the development of modern skills essential for effective instructional delivery.	3.67	Highly Useful	3.5
8. INSET strengthens the personal commitment and dedication to the teaching profession.	3.60	Highly Useful	5.5
9. INSET increases the level of enthusiasm and passion for teaching Physical Education.	3.58	Highly Useful	8
10. INSET promotes a culture of continuous professional development within the educational community.	3.47	Useful	10
Average Weighted Mean	3.62	Highly Useful	

The educators maintained an exceptionally favorable disposition regarding their professional growth, as shown by an average weighted mean of 3.62, which corresponded to a verbal interpretation of highly useful. The results indicated that the teaching force felt the most significant impact when the training encouraged a proactive mindset toward lifelong learning and self-improvement, securing the highest rank with a weighted mean of 3.82. In contrast, the indicator stating that INSET promotes a culture of continuous professional development within the educational community was the lowest-ranked item with a weighted mean of 3.47; while this still fell within the verbal interpretation of useful, it highlighted that while personal gains were evident, the shift toward a unified and sustained institutional habit of learning remained the most challenging aspect of their professional growth.

2.3 Instructional Practice

Table 7

Level of Attitude and Usefulness of INSET In Teaching Physical Education of the Teachers in terms of Instructional Practice

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. INSET facilitates the direct application of modern pedagogical strategies within the daily operations of Physical Education classes.	3.52	Highly Useful	8
2. INSET improves the technical quality of lesson planning by introducing more structured and objective-driven frameworks for educators.	3.58	Highly Useful	5
3. INSET introduces innovative teaching techniques that allow for a more dynamic and engaging learning environment in the gymnasium.	3.58	Highly Useful	5
4. INSET assists in the effective management of class dynamics and student behavior through specialized organizational strategies for physical activities.	3.37	Useful	10
5. INSET integrates modern assessment methods that provide a more accurate and comprehensive measurement of student performance in physical education.	3.55	Highly Useful	7
6. INSET improves the overall instructional delivery by refining the communication and demonstration skills required for effective physical training.	3.51	Highly Useful	9
7. INSET encourages the seamless integration of educational technology into the lesson cycle to enhance the digital literacy of both teachers and students.	3.87	Highly Useful	1
8. INSET enhances the capability of teachers to address the needs of diverse learners through differentiated instruction and inclusive physical activities.	3.58	Highly Useful	5
9. INSET results in a measurable improvement of teaching methods by aligning traditional practices with contemporary educational research and standards.	3.70	Highly Useful	2
10. INSET promotes higher levels of creativity in instructional design by providing various platforms and ideas for unique physical education activities.	3.62	Highly Useful	3
Average Weighted Mean	3.59	Highly Useful	

The teachers maintained an exceptionally favorable disposition toward their instructional practice, as evidenced by an average weighted mean of 3.59, which corresponded to a verbal interpretation of highly useful. The data revealed that the educators found the most significant utility in digital advancement, with the indicator stating that INSET encourages the seamless integration of educational technology into the lesson cycle securing the highest rank with a

weighted mean of 3.87. In contrast, the indicator regarding how INSET assists in the effective management of class dynamics and student behavior through specialized organizational strategies for physical activities was the lowest-ranked item with a weighted mean of 3.37; while this still yielded a verbal interpretation of useful, it signaled that the behavioral and logistical challenges inherent in the gymnasium environment remain the most demanding aspects of their instructional practice to address through training.

2.4Learner Outcomes

Table 8

Level of Attitude and Usefulness of INSET In Teaching Physical Education of the Teachers in terms of Learner Outcomes

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. INSET contributes to the significant improvement of student performance in various Physical Education disciplines and practical assessments.	3.60	Highly Useful	5.5
2. INSET fosters higher levels of student engagement by providing teachers with the tools to create more interactive and stimulating lesson environments.	3.76	Highly Useful	4
3. INSET supports the mastery of fundamental motor skills and specialized athletic movements among learners through improved instructional techniques.	3.60	Highly Useful	5.5
4. INSET increases the intrinsic motivation of students to participate actively in both individual and team-based physical activities during class hours.	3.37	Useful	10
5. INSET promotes the enhancement of student physical fitness levels by introducing more effective and scientifically grounded exercise routines.	3.55	Highly Useful	7
6. INSET facilitates better teamwork and cooperation among learners by equipping teachers with specialized strategies for group dynamics and social learning.	3.51	Highly Useful	9
7. INSET leads to improved student discipline and sportsmanship through the implementation of structured and value-based Physical Education activities.	3.87	Highly Useful	3

8. INSET improves the overall student understanding of essential health concepts and the long-term benefits of maintaining an active lifestyle.	3.92	Highly Useful	1
9. INSET ensures that learners achieve the specific learning objectives of the curriculum more effectively and within the designated instructional timeframe.	3.88	Highly Useful	2
10. INSET positively influences the holistic achievement of learners by aligning classroom practices with the highest standards of physical education and wellness.	3.54	Highly Useful	8
Average Weighted Mean	3.66	Highly Useful	

The educators perceived a strong connection between professional development and the learning outcomes of their students, as evidenced by an average weighted mean of 3.66, which corresponded to a verbal interpretation of highly useful. The findings indicated that the most significant impact was observed in student health literacy, with the indicator for improving the overall student understanding of essential health concepts and long-term benefits achieving the highest rank with a weighted mean of 3.92. Conversely, the indicator stating that INSET increases the intrinsic motivation of students to participate actively in both individual and team-based physical activities during class hours received the lowest rank with a weighted mean of 3.37; while this still yielded a verbal interpretation of useful, it highlighted that fostering internal drive within students remains the most complex and challenging of the learner outcomes for teachers to influence through their professional training.

3.Relationship Between the Assessment of INSET in Teaching Physical Education and on the Level of Usefulness of INSET

3.1Relationship Between the Assessment on Knowledge and Understanding and on the Level of Usefulness of INSET

Table 9

Relationship Between the Assessment on Knowledge and Understanding and on the Level of Usefulness of INSET

Level of Usefulness of INSET	Assessment on Knowledge and Understanding			
	r-value	p-values	Decision on H ₀	Conclusion
Relevance of Content	.414	<.001	Rejected	Significant

Professional Growth	-.045	.647	Failed to Reject	Not Significant
Instructional Practice	.085	.392	Failed to Reject	Not Significant
Learner Outcomes	.092	.351	Failed to Reject	Not Significant

The data revealed a significant positive relationship between the assessment on knowledge and understanding and the relevance of content of INSET where the r-value was .414 and the p-value was less than .001, which rejected the null hypothesis. This outcome indicated that higher teacher knowledge aligned with greater content applicability, echoing the literature on training matching professional needs and bridging theory and practical demand. Conversely, professional growth showed no significant relationship with an r-value of -.045 and a p-value of .647, which failed to reject the null hypothesis, suggesting that cognitive knowledge alone did not spark career advancement without collaborative environments. Similarly, instructional practice yielded no significant correlation at an r-value of .085 and a p-value of .392, confirming that a strong knowledge base did not automatically translate into altered daily routines because instructional change required behavioral control and supportive school cultures. To conclude, learner outcomes presented a non-significant relationship with an r-value of .092 and a p-value of .351, showing that expanded understanding did not directly improve student results due to environmental constraints like excessive class sizes and poor infrastructure.

3.2 Relationship Between the Assessment on Specialization and on the Level of Usefulness of INSET

Table 10

Relationship Between the Assessment on Specialization and on the Level of Usefulness of INSET

Level of Usefulness of INSET	Assessment on Specialization			
	r-value	p-values	Decision on H ₀	Conclusion
Relevance of Content	.013	.897	Failed to Reject	Not Significant
Professional Growth	.495	<.001	Rejected	Significant
Instructional Practice	.224	.022	Rejected	Significant
Learner Outcomes	.222	.023	Rejected	Significant

The findings revealed no significant relationship between the assessment on specialization and the relevance of content where the r -value was .013 and the p -value was .897, failing to reject the null hypothesis as generalized training often lacked the specific focus specialized teachers required. Conversely, professional growth showed a significant positive correlation with an r -value of .495 and a p -value of less than .001, indicating that greater specialization heightened the perceived value of INSET for career advancement and professional identity. Similarly, instructional practice yielded a significant positive relationship at an r -value of .224 and a p -value of .022, confirming that specialized teachers were more confident and ready to revise routines and transform classroom practices. To conclude, learner outcomes presented a significant positive relationship with an r -value of .222 and a p -value of .023, demonstrating that targeted preparation directly equipped educators to improve student results and effectively meet diverse learner needs.

3.3 Relationship Between the Assessment on Length in Service and on the Level of Usefulness of INSET

Table 11

Relationship Between the Assessment on Specialization and on the Level of Usefulness of INSET

Level of Usefulness of INSET	Assessment on Length in Service			
	r -value	p -values	Decision on H_0	Conclusion
Relevance of Content	-.020	.838	Failed to Reject	Not Significant
Professional Growth	.152	.124	Failed to Reject	Not Significant
Instructional Practice	.374	<.001	Rejected	Significant
Learner Outcomes	.368	<.001	Rejected	Significant

Table result revealed no significant relationship between the assessment on length in service and the relevance of content where the r -value was -.020 and the p -value was .838, failing to reject the null hypothesis since mere years of teaching experience did not act as a consistent predictor of positive attitudinal shifts without targeted training. Similarly, professional growth showed no significant relationship with an r -value of .152 and a p -value of .124, suggesting that tenure alone did not automatically translate to career advancement unless combined with continuous learning opportunities to avoid reinforcing traditional pedagogical habits. Conversely, instructional practice yielded a significant positive correlation at an r -value

of .374 and a p-value of less than .001, indicating that experienced educators leveraged their extended time in the field to refine technical skills and confidently adapt instructional strategies. To conclude the analysis, learner outcomes presented a significant positive relationship with an r-value of .368 and a p-value of less than .001, demonstrating that sustained practice-based experiences enabled veteran teachers to effectively translate their acquired competencies into improved social and cognitive results for diverse learners.

4.Challenges Encountered by the Teachers in Teaching Physical Education through INSET Activities.

Table 12

Challenges Encountered by the Teachers in Teaching Physical Education through INSET Activities

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Limited facilities hinder the implementation of INSET learnings.	2.23	Disagree	8.5
2. Lack of equipment affects effective PE instruction.	3.20	Agree	4
3. Time constraints limit the application of INSET strategies.	3.08	Agree	6
4. Heavy workload prevents full participation in INSET.	3.13	Agree	5
5. Budget limitations affect training implementation.	3.23	Agree	3
6. Some INSET topics are too general for PE specialization.	2.23	Disagree	8.5
7. Large class sizes make it difficult to apply new strategies.	3.24	Agree	2
8. There is limited administrative support for INSET application.	2.23	Disagree	8.5
9. Follow-up monitoring after INSET is insufficient.	2.23	Disagree	8.5
10. Some training sessions lack practical demonstrations for PE.	3.32	Agree	1
Average Weighted Mean	2.81	Agree	

The educators recognized a consistent set of obstacles that hindered their instructional delivery, as shown by an average weighted mean of 2.81, which corresponded to a verbal interpretation of agree. The findings revealed that the most significant barrier was the instructional approach of the training itself, with the indicator stating that some training sessions lack practical demonstrations for PE achieving the highest rank with a weighted mean of 3.32.

Conversely, four items tied for the lowest rank with a weighted mean of 2.23, which corresponded to a verbal interpretation of disagree; these included limited facilities hinder the implementation of INSET learnings, some INSET topics are too general for PE specialization, there is limited administrative support for INSET application, and follow-up monitoring after INSET is insufficient. This outcome suggested that while teachers felt supported by their administration and facilities, they remained constrained by a lack of hands-on modeling and the logistical pressures of the gymnasium environment.

5. Proposed Enrichment Activities for INSET Programs

The proposed enrichment activities were strategically developed to bridge the gap between theoretical training and the actual demands of the gymnasium by addressing the specific areas where teachers felt less confident. These initiatives emphasized the importance of specialization and length in service through the creation of mentorship loops and cross-generational reflection circles that allowed for the sharing of expertise across diverse academic backgrounds. Furthermore, the plan directly addressed the challenges encountered by the teachers, such as large class sizes and budget limitations, by promoting innovative, low-cost instructional strategies and localized material innovation. Emphasizing the relevance of content, professional growth, instructional practice, and learner outcomes, the activities guaranteed that every educator felt prepared to deliver high-quality, competency-based lessons. These proposed enrichment activities provided a clear roadmap for continuous improvement, transforming professional development into a practical tool for enhancing student health literacy and teacher self-efficacy.

Discussion

In examining the in-service training (INSET) of teachers toward teaching Physical Education, it is essential to consider how professional development shapes their instructional approach. INSET programs serve as critical avenues for enhancing teacher competence, fostering confidence, and promoting adaptive teaching strategies in response to evolving educational demands. These programs foster positive professional dispositions by offering structured opportunities for skill enhancement, exposure to updated pedagogical frameworks, and integrating health and fitness concepts. This section explores the multifaceted impact of INSET on teachers' attitudes, beginning with their knowledge and understanding of Physical Education as the foundation for effective and meaningful instruction.

The commitment to staying updated served as a reflection of a strong professional identity where teachers sought pedagogical legitimacy through continuous learning and the application of new standards. Constantinides (2023) noted that when teachers possessed a thorough understanding of the value of their discipline, they were better equipped to navigate institutional cultures and reinforce a positive professional self-image among their peers and administrators.

Zhou (2024) argued that bridging the gap between theoretical understanding and real world classroom application was essential for maintaining teaching confidence, and teachers who

effectively articulated skills demonstrated that they had successfully navigated the transition from theory to practice.

Understanding the underlying reasons behind physical activities ensured that the instruction remained academic and goal oriented rather than being perceived as merely recreational or unstructured play. Brown (2023) supported this finding by stating that a teacher's intention to teach was heavily weighted by their specific curriculum beliefs, meaning that a clear understanding of objectives dictated the attitude and subsequent effort the teacher exerted during the class.

While teachers were knowledgeable, the technical complexities of risk management in physical settings were areas where they might have felt less absolute than in general concept explanation. Maksimović and Lazić (2023) highlighted that self efficacy was a byproduct of perceived competence, and strengthening technical knowledge bases was essential for fostering a mindset that embraced complex instructional challenges without fear of inadequacy.

This result indicated that while teachers recognized the importance of fitness, there was a potential need to deepen the conceptual mastery of specific physiological components compared to general sports instruction. A gap in this specific area could potentially undermine the scientific legitimacy of the subject if not addressed through professional development. Xue et al. (2022) noted that a positive attitude alone was insufficient for effective practice, and teachers had to possess a grounded understanding of specific pedagogies and subject matter components to avoid feeling overwhelmed or providing superficial instruction.

The practical implementation of these techniques implied a successful transfer of specialized knowledge from training programs directly to the gymnasium floor. Carada (2023) supported this by noting that systematic training and professional development acted as the most effective catalysts for building positive teacher attitudes, especially when programs provided hands-on practice and access to supportive materials.

The belief that training offered tangible benefits for instructional design encouraged a more receptive and proactive attitude toward lifelong learning and career-long improvement. Chen et al. (2023) argued that successful implementation of frameworks hinged on systemic support within teacher education and continuous practice based learning opportunities that reinforced professional commitment.

A focus on general movement rather than specific athletic mastery suggested that further specialized training in diverse sports categories was necessary to maintain high instructional rigor. Diasse and Kawai (2024) identified that barriers such as insufficient training in specific adaptations could lead to frustration, emphasizing that individual willingness was often hampered by technical knowledge gaps.

Antala et al. (2022) and Radojlović et al. (2022) argued that length in service only became a truly meaningful factor when it was coupled with high quality inclusive training, suggesting that the teachers in this district had successfully integrated their experience with contemporary professional development to maintain an exceptionally positive disposition.

Xue et al. (2022) identified that targeted specialization was often more critical than general length of service, especially when teachers encountered unique constraints related to the physical environment and student safety.

Such a result implied that the program planners successfully addressed the professional needs of the teaching force, creating a bridge between theoretical objectives and classroom realities. Msamba et al. (2023) and Zambak and Bedir (2023) noted that the success of professional development was predicated on this meticulous alignment, suggesting that when content was perceived as a relevant tool for demand rather than an administrative burden, teacher engagement remained high.

Peña-Troncoso et al. (2023) and Talaghir et al. (2023) highlighted that creating didactic strategies that connected theory directly to practice allowed training to reduce the perceived workload and fostered more receptive attitudes among staff.

Msamba et al. (2023) and Zoupidis et al. (2022) highlighted that institutional alignment and clear organizational frameworks were necessary for curricula to be successfully executed, suggesting that support for competency-based models required more than just pedagogical workshops.

Such a result implied that when teachers perceived training as a gateway to actual advancement, their motivation to engage with complex instructional research increased significantly. Park and Jung (2023) and Sultan et al. (2023) argued that a teacher's growth trajectory was accelerated when INSET was meticulously designed to align with real-world classroom demands, ensuring that the latest academic findings were effectively utilized to enhance student well-being.

Egan et al. (2022) and Maksimović and Lazić (2023) emphasized that professional growth in the modern age required teachers to leverage new knowledge, particularly regarding digital pedagogy and health communication, to ensure technology served the curriculum effectively.

Aslam et al. (2025) and Jiang et al. (2023) argued that the quality of student results was fundamentally anchored in the educator's willingness to embrace innovative models through professional development, suggesting that the positive attitudes recorded here served as a critical enabling factor for achieving high-level performance enhancements.

Slingerland et al. (2024) and Šukys et al. (2022) emphasized that when training helped teachers clarify success criteria and learning outcomes, students became more engaged in their own progress, leading to better attainment across the various wellness domains of the Physical Education curriculum.

Literature supported this finding, asserting that the effectiveness of in-service training depended heavily on the meticulous alignment between program planning and the actual professional needs of teachers as noted in the studies of Msamba et al. (2023) and Zambak and Bedir (2023). When training content addressed conceptual, procedural, and attitudinal domains

simultaneously, it bridged the gap between theoretical understanding and practical demand, making the training highly relevant and reducing the perceived workload associated with new teaching methods as emphasized in the work of Peña-Troncoso et al. (2023).

As detailed in the investigations of Mulato et al. as well as Opiyo and Otieno (2023), factors such as excessive class sizes, insufficient infrastructure, and a lack of instructional supervision could heavily constrain the achievement of target learner outcomes, even when a teacher's attitude toward INSET was positive. Consequently, educational policy needed to ensure that knowledge enhancement was paired with systemic improvements in school contexts; otherwise, professional development delivered in isolation from resource provisioning would continue to yield limited practical results for the learners.

Literature supported this finding, asserting that generalized training often fell short of addressing specific disciplinary needs. As noted in the 2022 research of Xue et al., subject-specific challenges within physical education created distinct attitudinal hurdles that general education modules often failed to address adequately. Without targeted, discipline-specific knowledge, highly specialized teachers remained ambivalent or resistant to generic inclusion mandates, making standard training content feel less applicable to their advanced skill sets.

According to the 2022 research of Antala et al., instructional practices in inclusive settings were deeply influenced through professional development experiences focused on adapted physical activity. Teachers who engaged in specialized INSET reported significantly higher levels of self-efficacy and more favorable attitudes toward including diverse pupils in mainstream classes. Therefore, increased specialization empowered educators with the practical confidence required to actively transform their classroom instructional practice.

According to the research of Olayvar (2022) and Takala and Sirkko (2022), an integrated framework recognized that while specialization provided technical skills, length in service offered the vital opportunity for those skills to be refined and internalized through years of varied experience. More experienced educators leveraged their extended time in the field to adapt complex curriculum goals and confidently deliver newly learned instructional strategies in a controlled environment.

The findings established that the primary difficulties faced by educators were centered on the lack of practical demonstrations and the environmental pressures of large class sizes and budget constraints. While the overall agree sentiment reflected a manageable level of challenge, the data showed that the most critical barriers were those that directly interfered with the "hands-on" nature of the subject. The disagreement regarding administrative support and facilities suggested a strong institutional foundation, yet the lack of follow-up and the generality of some topics remained minor concerns. Addressing these challenges through more specialized, practice-oriented training and the provision of adequate instructional time will ensure that INSET serves as a genuine catalyst for educational excellence in physical education.

Conclusion

Based on the comprehensive analysis of the data gathered regarding the influence of in-service training and the professional dispositions of teachers, the following conclusions were established:

1. Teachers strongly agreed that the INSET was highly implemented across all assessment areas, especially in updating PE developments, practical execution, and managing behavior, but noted that further training is needed for health concept integration, broader instructional application, and building teaching confidence.
2. Teachers find INSET highly useful, especially for practical tools, technology, and health literacy, but the training requires a more targeted focus on competency frameworks, institutional culture, gym behavior management, and student motivation.
3. A significant positive relationship exists between the assessment and usefulness of INSET in specific areas, notably where higher knowledge aligns with content relevance, greater specialization drives professional growth, instructional practice, and learner outcomes, and longer service length enhances instructional practice and student results; however, no significant correlations were found in other dimensions, indicating that knowledge, specialization, and tenure alone do not universally guarantee improvements across all training aspects.
4. The teaching force was consistently hindered by a lack of practical demonstrations during training and the logistical pressures of large class sizes, which indicated that the hands-on execution of Physical Education remained the most challenging aspect of their instructional practice.
5. The proposed enrichment activities provided a comprehensive roadmap for continuous improvement by bridging the gap between theory and practice through mentorship loops, localized material innovation, and specialized workshops designed to enhance teacher self-efficacy and student learner outcomes.

In light of the findings and conclusions derived from this study, the following recommendations are presented for the consideration of school administrators, physical education coordinators, and faculty:

1. School administrators and coordinators may prioritize the development of in-service training that specifically focuses on the integration of health concepts into the physical education curriculum to bridge the gap between physical movement and holistic wellness education.
2. Training providers may design more granular workshops that provide clear, step-by-step guidance on implementing competency-based instruction, ensuring that teachers are equipped with the specific assessment tools needed to meet modern curriculum standards.
3. School administrators may design differentiated and profile-tailored INSET programs that strategically leverage teachers' specific knowledge, specialization, and tenure to target the

distinct areas where they drive growth, rather than relying on a one-size-fits-all training approach..

4.Future INSET programs may transition from lecture-based formats to practice-oriented sessions that include actual physical demonstrations and simulations of large-group management to directly address the logistical and behavioral challenges of the gymnasium.

5.Educators may participate in specialized seminars focused on the psychology of intrinsic motivation and gamification to develop more effective strategies for encouraging active student participation and long-term commitment to physical activity.

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