VMC ANALYTIKS

OPEN ACCESS

Pedagogical Practices and Teaching Performance in Physical Activity Towards Health and Fitness 1 (PATHFit1) Leading to a Strategic Teaching Plan

Kazel Marquez Dantes

Doctor of Philosophy in Education, Adamson University, City of Manila, Philippines

Abstract

Physical Activity Towards and Health and Fitness 1 (PATHFit1): Movement Competency Training aims to restore the basic movement pattern, which is made up of both locomotor and non-locomotor skills. The focus will be on exercise progression and regression to improve fitness and adapt movement skills to pursuit of independent physical activity. The purpose of the paper is to correlate the pedagogical practices and teaching performance in PATHFit1 in the Local Universities and Colleges in the National Capital Region (NCR). This study used a descriptive comparative-correlational research design utilizing stratified random sampling. Slovin's formula was used to derive the teacher samples. Out of 116, 90 PATHFit1 teachers were employed as respondents including all 33 Physical Education Supervisors from Local Universities and Colleges in NCR. The study concluded that most of the teacher-respondents have advanced degrees and have participated in numerous professional trainings and seminars. Nearly half have over 11 years of teaching experience. Classroom management and student engagement are the strengths for pedagogical practices. However, teaching modalities, particularly for student motivation and engagement, need to be improved. Instructional delivery engages students well, but there is a need for more support in planning and design. Enhancing multimedia tool usage and inclusive engagement strategies can further improve instruction quality and create a more dynamic learning environment for all students. Higher educational attainment and tailored professional development is crucial for continuous growth, and ongoing support is essential regardless of teachers' tenure. Teachers and supervisors share a common perspective in their evaluations of pedagogical practices and teaching performance, due to shared criteria, common teaching objectives, a collaborative environment, joint professional development, and objective assessment measures. Teachers excelling in pedagogical practices also perform better in their teaching roles. This correlation emphasizes the importance of continuous improvement and professional development to enhance overall teaching quality.

Keywords: Pedagogical Practices, Teaching Performance, PATHFit1

INTRODUCTION

Pedagogical practices in teaching physical education play a crucial role in shaping students' physical, mental, and social well-being. For students to acquire a favorable attitude toward physical exercise, establish lifelong fitness habits, and promote general health and well-being, effective pedagogical practices in physical education instruction are crucial. PE teachers can create engaging and powerful learning experiences by focusing on skill development, utilizing technology, adopting student-centered techniques, and making sure all students are included. In order to address the different needs of students and adjust to changing educational settings, it is imperative that professionals engage in ongoing reflection and professional growth.

The Commission on Higher Education (CHED) Memorandum Order No. 39, Series of 2021, Policies, Standards, and Guidelines on the Implementation of Tertiary Physical Education: Physical Activity Towards Health and Fitness (PATHFit) Courses served as the cornerstone of physical activity promotion efforts for health, wellness and overall quality of life. Moreover, The Tertiary Physical Education Program is the cornerstone of initiatives to promote physical activity for health, wellbeing, and general quality of life. It expands upon the K–12 PE Curriculum. It is more extensive since it includes opportunities for children to learn through physical exercise both within and outside of the classroom, as well as planned opportunities for them to participate in regular physical activity.

Physical Education teachers tend to vary their pedagogical approach depending on the content they are working on and the positive effects they are looking for in the motor, affective–emotional, and social domains of the students. The researcher intent to propose a strategic plan with greater clarity of these to facilitate their application in the field of PATHFit 1.

The teacher's profile has a considerable impact on the success of pedagogical approaches in physical education. Factors such as highest educational attainment, attendance at appropriate trainings and seminars, and years of teaching experience all influence how students interact with and respond to various teaching approaches. Understanding these demographic variables enables educators to adjust their instructional techniques to their students' different needs and preferences, ensuring that physical education is accessible, inclusive, and effective. The purpose of this study is to investigate how differences in student demographics influence the implementation and success of various pedagogical strategies in physical education, thereby providing insights into how educators can optimize their teaching practices to improve student learning outcomes and promote a lifelong commitment to health and fitness.

The research gap is glaringly obvious. A number of studies have shown that teaching physical education with a drastically different approach will pose significant challenges for all physical education teachers, who are accustomed in using the face–to–face method. However, due to unforeseen events, the conventional approach of teaching physical education is no longer viable and practical. To facilitate teaching and learning, all educators must adjust how they use technology.

In addition, the researcher believed that there was a need to examine the teaching methods which would best enhance the achievement of the objectives, taking factors such as the content and context of the lesson, as well as the needs of the learner. Teaching means sharing, guiding, changing behavior, impressing, disciplining, counseling, directing, and inspiring.

Emphasizing that an effective teacher was likely to switch and mix new approaches to suit the objectives of the unit of work or lesson. As objectives varied within a lesson, the effective teacher moved between different teaching approaches or methods. The teacher began by deciding what he or she wished to achieve and then chose the most appropriate method of realizing those objectives. By injecting pedagogical approach to teaching, students could have a better chance and could engage to PATHFit 1.

Furthermore, this study identified the pedagogical practices and teaching performance in PATHFit 1. The researcher conducted this study to investigate both the Pedagogical practices in teaching PATHFit 1 as regards to the classroom management, student learning engagement, teaching modality, performance assessment and feedback and evaluation; and the teaching performance of the respondents as regards to content mastery and expertise, instructional planning and design, instructional delivery, and instructional assessment. This paved the way to a strategic teaching plan. The results of this study were utilized to address and potentially solve the academic issues identified in the research. The findings provided valuable insights into the pedagogical practices and teaching performance in Physical Activity towards Health and Fitness 1 (PATHFit1). By understanding these factors, educational institutions could develop more effective teaching strategies, thereby enhancing the overall health and fitness education of students. This, in turn, contributed to better health outcomes and promote a more active and healthier lifestyle among the youth.

LITERATURES

Guttierez et al. (2023) emphasized that PE teachers faced substantial obstacles with online instruction, including technology issues, difficulties in assessing physical activities, and ensuring student engagement and participation. The sudden shift to remote teaching required teachers to develop new strategies and tools to effectively conduct their classes online.

Additionally, Mercier et al. (2021) mentioned that the experiences of PE teachers during the pandemic found that while many teachers felt unprepared for the shift to virtual learning, those who engaged in professional development and adapted their instructional methods were able to maintain a level of effectiveness comparable to traditional face-to-face teaching. This underscores the importance of ongoing support and resources for teachers to facilitate the transition to new teaching modalities.

It was explained by the Commission on Higher Education (2021) from CHED Memorandum Order No. 39, Series of 2021, Policies, Standards, and Guidelines on the Implementation of Tertiary Physical Education: Physical Activity Towards Health and Fitness (PATHFit) Courses. Combined Purposes of General, Higher, and Physical Education; one of the aims of general education, as expressed by the Commission on Higher Education, is "to help improve the Filipino quality of life." This clearly explains the Tertiary Physical Education Program's goal. Physical Education is more direct than any other subject in the curriculum. It is a subject that is directly important and pertinent to a learner's life in the classroom, as well as beyond the classroom. Because the activities and tasks require physical effort, the student might become more disciplined through PE.

In addition to this, the Commission on Higher Education (2021) from CHED Memorandum Order No. 39, Series of 2021, Policies, Standards, and Guidelines on the Implementation of Tertiary Physical Education: Physical Activity Towards Health and Fitness (PATHFit) Courses mentioned that the learner gets self-mastery when he engages in physical activities on his own because he recognizes the advantages of genuinely concerned for and nurturing one's health. This self-mastery, combined with confidence in oneself, allows the learner to become more socially engaged. This is not to argue that those who are unable to exercise or participate in physical activities are denied of having a complete life; rather, those who are physically fit and healthy are more likely to live a lifestyle that is of service to others.

To grasp and understand physical education, cooperative learning, teaching games or gamification and Sports Education is widely used that correlates with Giráldez; Rodríguez; Álvarez; and Patón (2023) as they stated that The field of pedagogical approaches utilized in school physical education has seen a proliferation of study. The rate of expansion is so rapid that it is necessary to quickly assess the models that are now in use and those that are in the process of emerging and developing. Nineteen instructional approaches in all documents scientific proof associated with their use in the classroom. Additionally, teachers are urged to alter their pedagogical strategies in accordance with the subjects they are teaching and the desired outcomes they hope to achieve for their students' motor, psychological, social, and affective-emotional domains.

However, technologies and other modern instruments and tools may develop improvement in pedagogical approaches in Physical Education. Raj (2018) explained that "iGeneration" term used for children born in the first decade of the millennium as mentioned by Rosen, (2015). These people have access to technological advancements that were unimaginable just twenty years ago. They never experienced a world without texting, video game consoles, data-connected cell phones, or wireless high-speed internet access. Because they frequently use social media and applications, most of them are very accustomed to using technological interfaces. The effects of these significant shifts in young people's access to technology ought to be seen in every subject area. Applications in physical education and health pedagogy are accessible and can be used to improve and extend courses in most educational environments. There are plenty of readily available electronic applications that aim to encourage physical exercise and fitness.

However, new practices and competencies for teachers and students will be needed because of the application of diverse technologies. Creating a conducive learning environment is important in teacher's strategies, it is emphasized in the study of Alojacin & Tantiado (2023) which finds that the well-established

learning environment has good rules and procedures however, disciplinary interventions still need continuous improvement; by setting clear guidelines and procedures it promotes greater number of students participation and learning inside the classroom that may be used by the students as a basis on their behavior. One of the students also stated that the classroom management of teachers is influenced by the student's social interaction, fitness, maturation and characteristics, how teachers manage the classroom has a big influence in students' development how they think, learn, and make connections socially.

Additionally, Sohil et al. (2023) discussed that the key components of effective classroom management is one of the needs for teachers to have this kind of training, focusing on various classroom management strategies and factors including the proactive classroom management, lesson planning, discipline and the use of verbal and nonverbal communication These strategies are essential to classroom management during lesson plan practical and have an impact on the performance of both teachers and students.

Asiegbu et al. (2022) revealed that teachers' management practices influence student academic performance, emphasizing the necessity for ongoing professional development to enhance classroom management skills. Teachers' classroom management strategies influence students' academic achievement. Even though they are highly prepared to teach, some teachers are nonetheless unable to run a classroom efficiently. It has been noticed that there is a communication gap between teachers and students, which has a negative impact on students' academic achievement. In order to equip instructors with the skills and techniques needed to manage the classroom effectively, the research suggested holding seminars and workshops. These efforts will help to improve students' academic performance.

Sangco (2022) explained that teaching methodologies and strategies play an important role in delivering the competencies in PE. To improve academic performance of students in physical education classes, physical education teachers use a variety of instructional Techniques and methodologies. Furthermore, teachers are considered skilled, expert, and competent enough in their modifications which are keenly sensed, observed, and acknowledged by the students. However, only interactive instruction becomes vital, pertinent, and helpful in encouraging and supporting students to achieve excellent academic success in physical education.

Domfeh (2018) stressed that role of instructional materials should not be overemphasized in the teaching/learning process. The objective of teaching was negated by lack of use of instructional materials or inadequate use of materials during teaching/learning situations. The government should regularly supply standardized instructional materials as a matter of policy implementation.

Odoom (2018) found that equipment was a critical component of a quality physical education program, not only because instructional instrument is needed so students could participate, but also because equipment can be used to differentiate instruction, increase the levels of participation and their enjoyment during physical activity, and build self-confidence and self- efficacy individually".

Traditional online teaching techniques (e.g., Zoom, MS Team) offer benefits and drawbacks. Basic online education's key drawbacks are emphasized as being unsuitable for more dependent learners, having less in-person connection with teachers, reducing opportunities for physical engagement with classmates and group members, and losing the feel of a campus (Kalya et al., 2022). A hybrid (cyber-physical) approach to teaching and learning can help to mitigate some of the issues and drawbacks. It suggests that to enhance the quality of online teaching methods and engage students effectively, training on virtual engagement and digital tool utilization is essential. In addition, Song (2023) discussed that the swift advancement of information technology has led to a shift in the way

education is offered, with platforms like WeChat, MOOC, and Ding Talk being utilized in classrooms more frequently. But as online learning has become more popular, some issues have emerged that have reduced its efficacy. The issues include a lack of excellent teaching resources, insufficient learning platform functionality, insufficient network service capacity to enable large-scale online learning, and poor online learning habits among instructors and students. Reliable technology and internet access are crucial for improving virtual learning experiences, highlighting the need for schools to bridge the digital divide by providing additional support and resources.

Furthermore, Cesari et al. (2021) discussed that integrating virtual learning with traditional in-person teaching through blended learning can leverage the strengths of both modalities, offering flexibility and diverse learning experiences, ultimately enhancing the overall educational experience for students. Parry (2022) discussed that the abrupt shift to virtual instruction in the spring of 2020 compelled educators all around the world to swiftly embrace pedagogies, technology, and remote learning philosophies. With the gradual acceptance of virtual learning tools, a previously unheard-of number of educators adopted new techniques for giving students feedback. Teachers and Supervisor should address technical and pedagogical challenges in implementing feedback strategies in a virtual learning environment, such as automatic feedback, peer feedback, and tutor-led feedback.

Additionally, Iqbal et al. (2022) mentioned that technical proficiency limits pedagogical advancements in the virtual learning environment (VLE) and affects online learning delivery and design, including the use of a variety of feedback techniques. Additionally, it acknowledges how critical it is for educators to advance their technical knowledge in order to develop their VLEs and improve student learning and connections through feedback. Encouraging innovation in virtual teaching practices, like gamification and interactive

digital tools, can enhance student engagement and learning outcomes in online education.

Capunitan (2020) emphasized shortage of educational seminars, workshops and training opportunities has not improved the teaching performance of faculty members teaching basic physical education courses in the Philippines, and their academic and professional preparation falls short of what is needed to further improve both the quality of instruction and the quality of learning that students should acquire. Moreover, Al'adawi (2017) compelling evidence of significant improvements in various aspects of teaching practices. Seminars were found to provide a platform for teachers to develop their knowledge, expertise, and ability to deliver high-quality education to their students. The collaborative nature of seminars facilitated the exchange of best practices, the exploration of innovative teaching techniques, and the cultivation of a supportive professional network.

Seminars and trainings play a pivotal role in equipping teachers with new experiences and knowledge (Akpokiniovo et al., (2023). These opportunities offer educators a platform to explore emerging pedagogical trends, engage in interactive learning sessions, and collaborate with peers to exchange best practices. By broadening teachers' horizons and fostering a culture of continuous learning, seminars and training contribute significantly to enhancing teaching competence and facilitating the implementation of innovative instructional strategies in the classroom. Moreover,

In Addition, Marie (2021) demonstrated that a blended learning approach, combining face-to-face and online instruction, significantly improves student teachers' performance and pedagogical skills by using online platforms for a rotational model of teaching. This could be due to a lack of familiarity with technology, insufficient training, or a perception that these methods are less effective. This suggests that professional development programs should focus on integrating technology in assessment practices and training teachers to effectively use mobile apps and virtual tools. In order to

improve the teaching and learning process at the teacher education level, it is advised that education stakeholders embrace novel teaching techniques like blended learning and arrange seminars for instructors. The effective learning environment and encouragement of self-learning that come from this technology integration raise the pedagogical performance level of teachers.

Furthermore, the researcher is looking forward to formulating a strategic teaching plan where the development to improve learning process will be sphere headed by strategic and well-prepared educators rather than constructing an intervention program for learners

METHODOLOGY

Research Design. This quantitative research utilized descriptive comparative-correlational research design. The study described the profile of respondents in terms of highest educational attainment, number of professional training and years of teaching experience. Then, the comparative research design determines the differences among the pedagogical practices and teaching performance assessed by the Teachers and PE Supervisors. Moreover, correlational research describes the relationship between two or more variables without making any causal claims. It involves gathering and analyzing data on at least two variables to determine if there is a relationship between the pedagogical practice and teaching performance in PATHFit 1.

Sampling. The study utilized stratified random sampling using Slovin's formula that involved 90 out of 116 Physical Education Teachers teaching PATHFit1 A.Y. 2023–2024 and total population of 33 Physical Education Supervisor which composed of PE Dean, PE Program Chair, PE Department Head, PE Director, and PE Coordinator A.Y. 2023–2024 in all Local Colleges and Universities in the National Capital Region.

Instrumentation. The researcher employed a researcher-made questionnaire as tool to collect relevant data for this study. It was anchored from several readings in the literatures and studies. Data were analyzed and interpreted through descriptive statistics that were used to describe the findings for the demographic profile such as Highest Educational Attainment, Number of relevant professional trainings, and Years of Teaching Experience of the respondents. Further statistical analyses were performed to determine the significant difference and relationship among the variables of the study. Weighted Mean was used in treating the respondents' responses on the pedagogical practices and teaching performance in PATHFit1. To determine the right statistical tool for the comparative analysis, the Shapiro-Wilk test of normality was run. It resulted in a sig value = .000, which meant that the data were not normally distributed. Thus, Kruskal-Wallis, Mann-Whitney U, and Spearman's rho were used. The responses to each item were analyzed according to the following scoring protocol:

1	Range Value	Verbal Description	Interpretation
4	3.51 – 4.00	Strongly Agree	Highly Evident (HE).
3	2.51 – 3.50	Agree	Moderately Evident (ME).
2	1.51 – 2.50	Disagree	Fairly Evident (FE).
1	1.00 – 1.50	Strongly Disagree	Not Evident (NE).

A 4-point likert scale was used to specify the level of agreement: Highly Evident (HE), Moderately Evident (ME), Evident (FE), Not Evident (NE) of the respondents to the statements in part II and part III.

RESULTS

Table 1

Frequency and Percentage Distribution of Respondents in terms of Educational Attainment, Trainings, and Years of Teaching

Highest Educational Attainment		
	Frequency	Percentage
Bachelor's Degree	11	12%
Master of Arts (on-going)	31	34%
Master of Arts Degree	25	28%
Doctoral (on-going)	6	7%
Doctorate Degree	17	19%
Total	90	100%
Number of Relevant Professional Trainings/Seminars		
	Frequency	Percentage
1-3	35	39%
4-6	19	21%
7-9	8	9%
10 or more	28	31%
Total	90	100%
Years of Teaching		
	Frequency	Percentage
0-3 years	8	9%
4-6 years	16	18%
7-10 years	23	26%
11 years and above	43	47%
Total	90	100%

The educational attainments of the respondents were outlined, offering insights into their academic background. Among the teacher-respondents, 11 out of 90 held bachelor's degrees, indicating a foundational level of education in the field. A significant portion, 31 out of 90, were currently pursuing a Master of Arts degree, suggesting a commitment to furthering their expertise. Additionally, 25 out of 90 teacher-respondents had already obtained a Master of Arts degree, reflecting a considerable number of educators with advanced qualifications. A smaller yet notable group of 6 out of 90 were in the process of pursuing doctoral studies, demonstrating a dedication to scholarly advancement. Finally, 17 out of 90 teacher-respondents possessed Doctorate degrees, representing a cohort of highly educated individuals within the PE teaching profession. This distribution of educational backgrounds among the teacher-respondents provided valuable context for understanding the potential depth of knowledge and expertise influencing their pedagogical practices and teaching performance within the context of PATHFit1.

In terms of the number of relevant professional training or seminars they had attended, offering insights into the professional development efforts. Among the teacher-respondents, the majority (39%) had participated in 1 to 3 relevant professional training or seminars, indicating a foundational level of engagement with continuing education in the field. A significant portion (21%), had attended 4 to 6 such events, reflecting a commitment to furthering their knowledge and skills. Additionally, 9% of all the teacher-respondents had engaged in 7 to 9 relevant professional training or seminars, demonstrating a higher level of investment in ongoing professional development. Notably, 31% of the teacher-respondents had participated in 10 or more such events, highlighting a subgroup of educators who had dedicated significant time and effort to enhancing their expertise through continuous learning opportunities.

In terms of years of teaching experience, it provided valuable insights into their level of expertise and tenure. Among the teacher-respondents, a small portion (9%), had between 0 to 3 years of teaching experience, indicating a group of relatively new educators entering the field. A slightly larger proportion, 18% of the teacher-respondents had accrued 4 to 6 years of teaching experience, suggesting a growing cohort of teachers who had gained some level of classroom familiarity. Additionally, 26% of the teacher-respondents had taught for 7 to 10 years, representing a significant portion of educators with a moderate level of tenure and likely a deeper understanding of teaching practices and student engagement. Notably, the largest segment of teacher-respondents, 43 out of 90 or 47%, had 11 years of teaching experience or more, indicating a substantial group of seasoned professionals who brought extensive knowledge and expertise to their roles.

This distribution underscored the varied levels of engagement with professional development activities among PE teachers involved in PATHFit 1, which likely influenced their pedagogical approaches and teaching effectiveness within the context of the new curriculum. This distribution highlighted the diverse range of teaching experience among the PE teachers, which can greatly influence their pedagogical approaches and instructional

effectiveness within the framework of the new curriculum.

This result was supported by the study of Al'adawi in 2017 that seminars were effectively evident in the improvements seen in teachers' teaching strategies, pedagogy, and overall competence. Seminars can help teachers develop their knowledge, expertise, and ability to provide high-quality education to their students. It also revealed compelling evidence of significant improvements in various aspects of teaching practices. Seminars were found to provide a platform for teachers to develop their knowledge, expertise, and ability to deliver high-quality education to their students. Moreover, Doane and Boyd (2016) elaborated those seminars and trainings had been found to be effective in improving teachers' pedagogical approaches and overall teaching competence. These professional development opportunities provided teachers with new experiences and knowledge.

Table 2
Mean Distribution of Pedagogical Practices

Pedagogical Practices	Teachers				Supervisors			
	Mean	SD	Verbal Description	Interpretation	Mean	SD	Verbal Description	Interpretation
Classroom Management	3.29	.50	Agree	Moderately Evident	3.34	.28	Agree	Moderately Evident
Student Learning Engagement	3.25	.44	Agree	Moderately Evident	3.37	.31	Agree	Moderately Evident
Teaching Modality	2.80	.48	Agree	Moderately Evident	2.84	.24	Agree	Moderately Evident
Performance Assessment	3.09	.67	Agree	Moderately Evident	3.20	.30	Agree	Moderately Evident
Feedback and Evaluation	3.09	.47	Agree	Moderately Evident	3.34	.58	Agree	Moderately Evident
Average	3.10	.51	Agree	Moderately Evident	3.22	.34	Agree	Moderately Evident

Legend: 4.00-3.51, Strongly Agree, 3.50-2.51, Agree, 2.50-1.51, Disagree, 1.50-1.00, Strongly Disagree

This table demonstrated the mean scores of the pedagogical practices of the respondents in terms of classroom management, student learning engagement, teaching modality, performance assessment and feedback and evaluation. It showed that from the teachers' responses, the classroom management had the highest mean of 3.29, suggesting they generally felt confident in managing their classrooms, and had a standard deviation of .50, indicating a moderate level of agreement among respondents. On the other hand, the student learning engagement had a mean score of 3.25,

indicating that they felt they were effective in engaging students in learning activities, with a low standard deviation of 0.44, suggesting a consistent perception among respondents. Meanwhile, the teaching modality had the least mean score of 2.80, indicating a moderate level of agreement with the statement, "Moderately Evident," regarding their teaching methods, with a standard deviation of 0.48, indicating some variability in perceptions among respondents. This suggested that they might have identified areas within their teaching methods that they felt less confident about or might need improvement. This could have stemmed from a variety of factors, such as limited exposure to diverse teaching strategies, lack of training or professional development opportunities in pedagogical techniques, or challenges in implementing effective instructional methods. Additionally, teachers might have had varying levels of comfort or familiarity with different teaching modalities, leading to discrepancies in their self-assessments.

The teachers also rated themselves with respect to their performance assessment and obtained a mean score of 3.09, indicating a moderate level of agreement with the statement regarding their ability to assess student performance, with a standard deviation of 0.67, suggesting some variability in perceptions among respondents. Lastly, the teachers' feedback and evaluation obtained a mean score of 3.09, indicating a moderate level of agreement with the statement regarding their ability to provide feedback and evaluation, with a standard deviation of 0.47, suggesting some variability in perceptions among respondents.

In contrast, supervisors generally agreed with teachers' proficiency levels. They rated teachers higher in classroom management and student learning engagement, indicating a strong consensus among supervisors. They also agreed with teachers' performance in performance assessment and feedback and evaluation, though with slightly more variability in the latter aspect. However, they rated teachers slightly lower in teaching modality (mean: 2.84).

This suggested a potential discrepancy or misalignment in how teachers perceived their own teaching methods compared to how supervisors viewed them. This could have stemmed from differing perspectives on effective teaching strategies, possible ambiguities in the curriculum guidelines, or a need for professional development in this area.

Overall, these findings collectively suggested a generally positive perception of teaching practices within the PATHFit1 curriculum. While teachers generally viewed their own capabilities favorably, supervisors' evaluations reflected a consistently higher level of agreement with the effectiveness of teachers' pedagogical practices. This alignment between self-assessments and external evaluations underscored a sense of confidence and proficiency among educators within PATHFit 1, while also indicating areas of potential focus for ongoing professional development and refinement of teaching strategies.

Laska, Limaj, and Shala (2023) found that self-assessment processes can significantly enhance teachers' commitment to their profession and their work with students, indicating a positive impact on their confidence levels. Similarly, Barana, Boetti, and Marchisio (2022) demonstrated that accurate self-assessments in mathematical problem-solving skills correlate well with external evaluations, further supporting the idea that self-assessment can be a reliable tool for professional growth. Additionally, Johnsen (2019) highlighted that when teachers receive frequent feedback through both internal and external evaluations, it leads to improvements in instructional practices and boosts their confidence.

Table 3
Mean Distribution of Teaching Performance

Teaching Performance	Teachers				Supervisors			
	Mean	SD	Verbal Description	Interpretation	Mean	SD	Verbal Description	Interpretation
Content Mastery and Expertise	3.18	.38	Agree	Moderately Evident	3.27	.34	Agree	Moderately Evident
Instructional Planning and Design	3.14	.44	Agree	Moderately Evident	3.24	.29	Agree	Moderately Evident
Instructional Delivery	3.21	.41	Agree	Moderately Evident	3.33	.32	Agree	Moderately Evident
Instructional Assessment	3.16	.41	Agree	Moderately Evident	3.30	.35	Agree	Moderately Evident
Average	3.17	.41	Agree	Moderately Evident	3.29	.33	Agree	Moderately Evident

Note: 4.00-3.51, Strongly Agree, 3.50-2.51, Agree, 2.50-1.51, Disagree, 1.50-1.00, Strongly Disagree

This table showed the teaching performance of the teachers in terms of content mastery and expertise, instructional planning and design, instructional delivery and instructional assessment.

According to teachers' self-assessments, they generally perceived themselves as proficient across all dimensions, with mean scores ranging from 3.14 to 3.21. This indicated a moderate to high level of agreement with the statement "Moderately Evident" regarding their abilities in content mastery, instructional planning, delivery, and assessment. The standard deviations, ranging from 0.38 to 0.44, suggested a relatively consistent perception among teachers, with some variability in evident levels across different aspects of teaching performance. Instructional delivery had the highest mean of 3.21, indicating a slightly higher level of agreement compared to the other components. This suggested that teachers felt proficient in delivering instruction and engaging students in learning activities within the PATHFit1 curriculum. On the other hand, instructional planning and design had the lowest mean of 3.14.

This indicated that teachers perceived themselves as slightly less proficient in this area compared to other aspects of teaching performance within the PATHFit1 curriculum. While the mean score suggested a moderate level of agreement with the statement "Moderately Evident," the lower rating relative to other dimensions might have indicated a potential area for improvement or further development among teachers. This implied that some teachers might have felt less confident or

effective in their ability to plan and design instructional activities within the curriculum. Munir, Manzoor, Mughal, and Akhtar (2022) found that teachers often reported lower self-efficacy in instructional planning and classroom management compared to other teaching competencies, highlighting the need for targeted professional development in these areas.

Supervisors, on the other hand, provided evaluations that generally aligned with teachers' self-assessments, albeit with slightly higher mean scores ranging from 3.24 to 3.33. This suggested a slightly more favorable perception of teachers' performance from the perspective of supervisors, who rated teachers' abilities as "Moderately Evident" in all dimensions. The standard deviations accompanying supervisors' ratings were relatively low, ranging from 0.29 to 0.35, indicating a high level of consensus among supervisors in their evaluations of teachers' teaching performance.

Overall, these findings indicated a positive perception of teaching performance within the PATHFit1 curriculum, both from the perspective of teachers themselves and their supervisors. The alignment between self-assessments and external evaluations suggested a shared understanding of teachers' competencies in content mastery, instructional planning, delivery, and assessment. This consensus underscored the effectiveness of teaching practices within PATHFit1, while also highlighting areas of strength and potential areas for continued growth and development. Salvadores Merino (2019) found that when teachers' self-assessments closely matched external evaluations, it indicated strong alignment and validation of their instructional practices and professional competencies.

Table 4
Differences between Pedagogical Practices according to Highest Educational Attainment

	Classroom Management	Student Learning Engagement	Teaching Modality	Performance Assessment	Feedback and Evaluation
Kruskal-Wallis H	13.961	6.226	7.153	10.053	7.334
Df	4	4	4	4	4
Asymp. Sig.	.007	.183	.128	.040	.119
Result	Significant	Not Significant	Not Significant	Significant	Not Significant

Note: This table demonstrates the significant difference of pedagogical practices when teacher-respondents are grouped according to their highest educational attainment.

Using the Kruskal-Wallis test, it showed that indicators Classroom Management and Performance Assessment of teachers were significantly different when grouped according to their highest educational attainment. With an H-test value of 13.961 and p-value of .007 in classroom management and an H-test value of 10.053 and p-value of .040 in performance assessment respectively, the null hypothesis was rejected in favor of the research hypothesis. This meant that there was a significant difference between the classroom management and performance assessment of teachers when grouped according to their highest educational attainment in physical activity towards health and fitness 1.

This suggested that higher levels of educational attainment might have contributed to enhanced skills, knowledge, and expertise in these areas, ultimately influencing teaching effectiveness and student outcomes. Therefore, providing opportunities for ongoing professional development and support tailored to teachers' educational backgrounds could help ensure that all educators were equipped with the necessary tools and strategies to effectively manage their classrooms and assess student performance within the PATHFit1 curriculum.

Since the result showed significant differences, pairwise comparison was administered. It showed that Master of Arts degree holders and Doctorate degree holders were significantly different when it came to Pedagogical Practices (p = 0.0178). This suggested notable disparities in teaching approaches and strategies within the PATHFit1 curriculum. Perhaps doctorate degree holders likely possessed a deeper understanding of pedagogy, instructional

design, and educational theory, potentially leading to the incorporation of more sophisticated and research-based teaching methodologies compared to MA degree holders. Additionally, their advanced education and expertise might have positioned them to take on leadership roles, provide mentorship to colleagues, and contribute to the development of innovative teaching practices.

This finding underscored the study of Taysum (2013), which found that educational leaders with doctoral qualifications often engaged in transformational leadership, using evidence-based approaches to improve student participation and educational outcomes. This supported the potential impact of higher educational attainment on teaching effectiveness. Johnson and Marck (2021) recognized the importance of considering educators' educational backgrounds and qualifications when designing professional development initiatives and supporting teaching excellence, ultimately contributing to improved student outcomes in physical activity towards health and fitness education.

Table 5
Differences between Pedagogical Practices according to Number of Relevant Professional Training/Seminars Attended

	Classroom Management	Student Learning Engagement	Teaching Modality	Performance Assessment	Feedback and Evaluation
Kuskal-Wallis H	18.668	27.334	26.397	9.838	13.959
df	3	3	3	3	3
Asymp. Sig.	.000	.000	.000	.020	-
Result	Significant	Significant	Significant	Significant	Significant

Note: This table indicated the significant difference of Pedagogical Practices when teacher-respondents are grouped according to the number of relevant professional training/seminars attended.

It showed that all indicators were significantly different with p-values less than 0.05. Therefore, there was a significant difference between the pedagogical practices and the number of relevant trainings attended by the teachers. This suggested that the extent of teachers' participation in relevant professional development activities had a notable impact on their pedagogical approaches and practices within the PATHFit1 curriculum. This finding underscored the importance of ongoing professional development and training for educators, as it directly influenced their teaching effectiveness and instructional quality. As a result, they might have demonstrated greater proficiency in areas such as classroom management, engagement, modality, assessment, and feedback and evaluation.

Moreover, pairwise comparison was used to identify the number of attended training and seminars that affected the pedagogical practices of teachers. Results showed that the minimum of one to three relevant training/seminars attended and a maximum of ten or more relevant training/seminars were significantly different when it came to the teachers' pedagogical practices. This suggested that the extent of teachers' participation in professional development activities significantly influenced their teaching approaches and practices within the PATHFit1 curriculum.

Specifically, this finding implied that teachers who had attended a greater number of relevant training/seminars demonstrated significantly different pedagogical practices compared to those who had attended fewer sessions. It suggested that the depth and breadth of exposure to professional development opportunities had a substantial impact on teachers' pedagogical practices within the PATHFit1 framework.

The study by Krulatz et al. (2022) found that comprehensive and sustained professional development significantly enhanced teachers' instructional methods and their ability to adapt to diverse classroom needs, underscoring the importance of varied and continuous training. Garcia and Lee (2018) implied that teachers who had participated in a higher number of relevant training/seminars might have acquired a more diverse set of skills, knowledge, and resources, enabling them to implement more innovative teaching approaches. They might have demonstrated greater confidence in their ability to engage students, design effective instructional plans, assess learning outcomes, and provide meaningful feedback.

Table 6

Differences between Pedagogical Practices according to Years of Teaching Experience

	Classroom Management	Student Learning Engagement	Teaching Modality	Performance Assessment	Feedback and Evaluation
Kruskal-Wallis H	11.479	10.293	13.789	9.672	8.754
Df	3	3	3	3	3
Asymp. S	.009	.016	.003	.022	.033
Result	Significant	Significant	Significant	Significant	Significant

Note: This table showed the significant difference of Pedagogical Practices when teacher-respondents are grouped according to the years of teaching experience.

It indicated that all indicators were significantly different. Therefore, there was a significant difference among the pedagogical practices of teacher-respondents when grouped according to years of experience. This implied that teachers with varying levels of experience demonstrated notably different pedagogical strategies. More experienced teachers might have leveraged their years of practice to refine their practices, potentially resulting in more effective teaching practices. Conversely, less experienced teachers might have still been in the process of developing and honing these skills.

This finding underscored the importance of recognizing and supporting teachers at different stages of their careers, as well as providing targeted professional development opportunities tailored to the specific needs and experiences of educators within the PATHFit1 curriculum.

Moreover, using pairwise comparison, it showed that teachers with four to six years of teaching experience had significantly different pedagogical practices than those with 11 years and above of teaching experience. Specifically, teachers with four to six years of experience exhibited significantly different pedagogical practices compared to their more experienced counterparts with 11 years and above of teaching experience. This suggested that there might have been distinct teaching styles, strategies, or levels of expertise associated with different stages of a teacher's career.

Ying-fang and Rong (2004) found significant differences in teaching strategies among novice, proficient, and expert teachers, highlighting how experience and career stage influenced pedagogical approaches and effectiveness. Garcia and Lee (2019) mentioned that teachers with greater years of experience exhibited significantly different pedagogical practices compared to their more experienced counterparts with more than 10 years of teaching experience.

Table 7

Differences between Teaching Performance according to Highest Educational Attainment

	Mastery and Expertise	Instructional Planning and Design	Instructional Delivery	Instructional Assessment
Kruskal-Wallis H	7.170	6.529	5.247	4.715
df	4	4	4	4
Asymp. Sig.	.127	.163	.263	.318
Result	Not Significant	Not Significant	Not Significant	Not Significant

Note: This table demonstrated the significant difference of Teaching Performance when teacher-respondents are grouped according to their highest educational attainment.

It showed that there was no significant difference in the teaching performance of teacher-respondents when grouped according to their highest educational attainment. This indicated that the teacher-respondents had similar teaching performance regardless of their highest educational attainment.

As anchored to the study of Jordan (2022), advanced education might have provided teachers with specialized knowledge, research skills, and theoretical insights relevant to their field, yet it might not have necessarily translated into superior teaching performance in practice. Instead, the quality of teaching appeared to be influenced more significantly by factors such as instructional strategies, classroom management techniques, and student-centered approaches, which could be developed through practical experience. Moreover, Fatmawati (2023) found that teacher performance positively influenced student achievement and was not significantly affected by the teacher's level of educational attainment, suggesting that factors other than formal education might have played a larger role in effective teaching.

Table 8
Differences between Teaching Performance according to the Number of Relevant Professional Training/Seminars Attended

	Mastery and Expertise	Instructional Planning and Design	Instructional Delivery	Instructional Assessment
Kruskal-Wallis H	12.162	14.691	21.652	18.699
df	3	3	3	3
Asymp. Sig.	.007	.002	.000	.000
Result	Significant	Significant	Significant	Significant

Note: This table showed the significant difference of Teaching Performance when teacher-respondents are grouped according to the relevant professional training/seminars attended.

It indicated that the extent of teachers' participation in professional development activities significantly influenced their effectiveness in teaching roles within the PATHFit1 curriculum. This suggested that teachers who had attended a greater number of relevant training/seminars exhibited higher levels of mastery, expertise, and proficiency across various dimensions of teaching performance, including instructional planning and design, delivery, and assessment. Conversely, teachers who had fewer opportunities for professional development demonstrated lower levels of effectiveness in these areas.

Moreover, pairwise comparison revealed that teacher-respondents' teaching performance with one to three relevant professional training/seminars significantly differed from those with seven to nine relevant professional training/seminars, and also from those with 10 or more relevant professional training/seminars. This implied that the extent of teachers' participation in professional development activities significantly impacted their effectiveness in the classroom within the PATHFit1 curriculum. Teachers who had participated in a greater number of training seminars showcased significantly elevated levels of mastery, expertise, and proficiency across multiple facets of teaching performance, such as instructional planning, delivery, and assessment, when compared with their counterparts who had fewer training opportunities.

Park and Xu (2022) found that active learning professional development training significantly improved teaching quality and student outcomes, underscoring the critical role of ongoing professional development in enhancing instructional effectiveness. Lee (2020) discussed that teachers who actively partook in training seminars were exposed to a diverse array of pedagogical approaches, instructional strategies, and educational technologies that enriched their instructional toolkit. By immersing themselves in these learning experiences, educators acquired a deeper understanding of effective teaching practices and gained practical insights into their implementation.

Table 9
Differences between Teaching Performance according to the Years of Teaching Experience

	Mastery and Expertise	Instructional Planning and Design	Instructional Delivery	Instructional Assessment
Kruskal-Wallis H	3.274	4.652	5.312	7.270
df	3	3	3	3
Asymp. Sig.	.351	.199	.150	.064
Result	Not Significant	Not Significant	Not Significant	Not Significant

Note: This table demonstrated the significant difference of Teaching Performance when teacher-respondents are grouped according to the years of teaching experience.

It showed that the result was not significant in all the indicators of teaching performance when grouped according to the highest educational attainment. This suggested that the duration of teachers' tenure did not significantly impact their effectiveness in teaching roles within the PATHFit1 curriculum.

As discussed in the study by Phillips (2009), no significant relationship was found between a teacher's tenure status and classroom performance, indicating that tenure alone did not necessarily correlate with higher teaching effectiveness.

Using Spearman's rho correlation, the correlation coefficient of .730 was interpreted as a high positive correlation and was significant at the 5% level of significance. Therefore, there was a significant relationship between Pedagogical Practices and Teaching Performance of all respondents in PATHFit 1. It suggested that teachers who exhibited strong pedagogical practices tended to have higher

teaching performance, and vice versa. This likely stemmed from shared professional standards, training, and oversight within the PATHFit 1 program.

Table 10
Relationship between the Pedagogical Practices and Teaching Performance of the Teachers and Supervisors

	Pedagogical Practices	Teaching Performance
Pedagogical Practices		
Correlation Coefficient	1.000	.730**
Sig. (2-tailed)	.	.000
Result		Significant
Teaching Performance		
Correlation Coefficient	.730**	1.000
Sig. (2-tailed)	.000	.
Result	Significant	.

Note: This table shows the significant relationship between the Pedagogical Practices and Teaching Performance of all the respondents in PATHFit 1.

Moreover, improved teaching performance resulting from better pedagogical practices was likely to enhance student learning outcomes. Therefore, efforts to improve teaching practices would not only benefit teachers but would also positively affect student achievement and engagement. The significant positive correlation between pedagogical practices and teaching performance emphasized the critical role that effective teaching strategies played in improving educational outcomes. By focusing on improving these practices, educational institutions could foster a more effective and engaging learning environment, ultimately leading to better performance among both teachers and students.

This was anchored in the study of Marianne J., & Bryan, A. (2018) that implied that a culture of collaboration and continuous improvement might have existed within the program, fostering the exchange of best practices and mutual support between teachers and supervisors, further reinforcing the positive correlation between their pedagogical practices and teaching performance. In addition, Moriera et al. (2022) had found that comprehensive pedagogical competences significantly enhanced teaching performance in higher education, underscoring the importance of

well-defined teaching standards and continuous professional development.

DISCUSSION

Conclusions. In light of the findings, the following conclusions are drawn:

1. The demographic profile of the teacher-respondents showed a highly qualified and experienced group. Many had advanced degrees and had participated in numerous professional trainings and seminars, demonstrating a strong commitment to continuous professional development. Nearly half had over 11 years of teaching experience, highlighting their dedication to professional growth and excellence in teaching.

2. Pedagogical practices in the PATHFit1 highlighted classroom management and student engagement as strengths. However, both groups saw a need for improvement in teaching modalities, particularly for student motivation and engagement. Key challenges included maintaining interest, offering hands-on activities, and creating a dynamic online learning environment. Addressing these areas were essential for enhancing overall effectiveness.

3. Teachers and supervisors viewed teaching performance within the PATHFit1 as moderately proficient in content mastery, instructional planning, delivery, and assessment. Instructional delivery engaged students well, but there was a need for more support in planning and design. Enhancing multimedia tool usage and inclusive engagement strategies could further improve instruction quality and create a more dynamic learning environment for all students.

4. Higher educational attainment, especially doctorates, enhanced teachers' skills in the PATHFit1 curriculum, enabling advanced teaching methods and leadership roles. Tailored professional development improved

pedagogical approaches, with engaged teachers showing greater proficiency and crucial for continuous growth, and ongoing support was essential regardless of teachers' tenure.

5. Teachers and PE supervisors shared a common perspective on pedagogical practices and teaching performance, especially in content mastery, instructional planning, delivery, and assessment. This alignment underscored a unified understanding of teaching standards and expectations, fostering a consistent and effective educational approach.

6. Teachers excelling in pedagogical practices also performed better in their teaching roles, as confirmed by supervisors' assessments. This correlation emphasized the importance of continuous improvement and professional development to enhance overall teaching quality.

Recommendations. Based on the findings of the study, the following recommendations are made.

1. *Enhanced Professional Development Programs.* Schools should invest in comprehensive and ongoing professional development programs tailored to the needs of teachers. Emphasis should be placed on contemporary pedagogical strategies, effective classroom management, and innovative teaching modalities and to improve familiarity and competence with virtual or online modality learning engagement, dynamic online environment, virtual forms of assessment and mobile applications. to ensure continuous improvement in teaching practices.

2. Personalized Professional Development with integration of technology. Develop and implement personalized professional development (PD) programs tailored to the individual needs, strengths, and goals of teachers and Integrate technology to

enhance learning opportunities and accessibility.

3. *Collaborative Professional Learning Communities (PLCs).* Foster the development of Professional Learning Communities where teachers can collaborate, share best practices, and support each other's professional growth.

4. *Comprehensive LMS Training Programs.* Develop and implement comprehensive training programs for teachers to maximize the effective use of LMS platforms. Provide initial and ongoing training sessions covering all aspects of the LMS, including course creation, content uploading, communication tools, and assessment features. Train teachers on how to create interactive and engaging content within LMS platforms, such as discussion forums, quizzes, and multimedia resources.

5. *Mobile Application Integration and Training.* Integrate mobile applications into the educational process and provide targeted training to teachers on how to effectively use these apps. Encourage teachers to incorporate mobile apps into their lesson plans and activities, emphasizing their benefits for student engagement and personalized learning.

6. *Encouraging Advanced Education.* Institutions should encourage and support teachers in pursuing higher education degrees. Offering incentives such as scholarships, grants, or paid study leave, Recognize and reward teachers who attain advanced degrees or certifications can motivate teachers to attain advanced qualifications, which in turn can enhance their teaching performance.

7. *Collaborative Teaching Workshop and Mentorship and Coaching Programs.* This will encourage collaboration among teachers through workshops and peer learning sessions to foster sharing of best practices in instructional planning and

design in terms of multimedia tools and inclusive learning engagement. This collaborative approach can help teachers to learn from each other and adopt successful strategies in their classrooms.

8. *Recognize and address the diverse needs and experiences of teachers at different stages of their careers within the PATHFit1.* It highlights the potential benefits of targeted professional development, mentorship programs, and ongoing support to help teachers continually improve and refine their pedagogical practices, ultimately contributing to enhanced teaching effectiveness and improved student outcomes.

REFERENCES

Akpokiniovo, R., & Samuel, R. (2023). Teaching Methods and Teachers Conference/Seminar Attendance: The Gateway to Quality Education in Nigeria. International Journal of Social Science and Education Research Studies, 03(04). https://doi.org/10.55677/ijssers/v03i4y2023-12

Al'Adawi, S. A. (2017). Exploring the effectiveness of implementing seminars as a teaching and an assessment method in a children's literature course. https://eric.ed.gov/?id=EJ1157953

Alojacin, G. S., & Tantiado, R. C. (2023). Classroom Management Practices and Learners' Academic Performance. International Journal of Research Publications, 126(1). https://doi.org/10.47119/ijrp1001261620224978

Arufe-Giráldez, V., Sanmiguel-Rodríguez, A., Ramos-Álvarez, O., & Navarro-Patón, R. (2023, January 31). News of the pedagogical models in physical education—A quick review. International Journal of Environmental Research and Public Health, 20(3), 2586. https://doi.org/10.3390/ijerph20032586

Asiegbu, E. C., Onuh, B. U., Umeozor, J. U., Ani, A. N. A., & Emmasiegbu, C. M. (2022). Teacher's Classroom Management Practices and Student's Academic Performance in Secondary Schools in Nnewi Education Zone. Educaţia Plus, 31(2/2022), 144–154. https://doi.org/10.24250/jpe/2/2022/eca/buo/iuu/ana/cme

Avidov-Ungar, O., Hadad, S., Shamir-Inbal, T., & Blau, I. (2023). Formal and informal professional development during different Covid-19 periods: The role of teachers' career stages. Professional Development in Education. https://doi.org/10.1080/19415257.2023.2174163

Capunitan, I. (2020). Development and Validation of Physical Education Instructional Package for Students with Visual Impairment, Manila.

Cesari, V., Galgani, B., Gemignani, A., & Menicucci, D. (2021). Enhancing Qualities of Consciousness during Online Learning via Multisensory Interactions. Behavioral Sciences, 11(5), 57. https://doi.org/10.3390/bs11050057

Commission on Higher Education. (2021). CMO No. 39, s. 2021: Policies, standards, and guidelines on the implementation of tertiary physical education: Physical activity towards health and fitness (PATHFit) courses. https://ched.gov.ph/wp-content/uploads/CMO-No.-39-s-2021.pdf

Cotronei-Baird, V. S., Chia, A., Paladino, A., & Johnston, A. (2022). Examining the influence of professional development on tutors' teaching philosophies. Higher Education Research & Development, 42(6), 1338–1361. https://doi.org/10.1080/07294360.2022.2146060

Domfeh, C. (2018). Challenges Physical Education Teachers Encounter in Teaching alongside Coaching Sports in Senior High Schools in The Central Region of Ghana. https://core.ac.uk/download/pdf/234641665.pdf

Fadlun, F., & Fatmawati, E. (2023). The effect of teacher performance on academic achievement of elementary school. An-Nidzam: Jurnal Manajemen Pendidikan Dan Studi Islam, 10(1), 39–49. https://doi.org/10.33507/an-nidzam.v10i1.1128

Ghaffari, M., Hassanzadeh, A., Malekmakan, E., & Sharifirad, G. (2013). Effect of educational intervention on physical activity–related knowledge, attitude and behavior among first-grade students of male high schools. Journal of Education and Health Promotion, 2(1), 4. https://doi.org/10.4103/2277-9531.106642

Gutierrez, A., Tabora, A. R., & Gama, J. L. (2023). Physical education teachers in times of pandemic. Journal of Physical Education, 34(1), e-3411. https://doi.org/10.4025/jphyseduc.v34i1.3411 https://www.technoarete.org/common_abstract/pdf/IJSEM/v5/i4/Ext_91673.pdf?fbclid=IwAR0Umv8YWQpQFdoBMThk1Jm2yhT4NVH6W6UVaWrAsjPvZhwnbjgwqVbH_7A

Iqbal, A., Masood, M., Schrock, L., & Makrinov, N. (2022). Technical and pedagogical challenges for implementing feedback strategies in a virtual learning environment. https://doi.org/10.5821/conference-9788412322262.1194

Johnsen, S. K. (2018). Internal versus external teacher evaluation. Gifted Child Today Magazine, 42(1), 5. https://doi.org/10.1177/1076217518807764

Kalya, S., Lee, C. H., & Teo, T. H. (2022). Enhanced Learning Experience for Remote Students in Hybrid Class Model using 360° View Camera and Telepresence Robot. https://doi.org/10.1109/tale54877.2022.00133

Kilag, O. K. T., & Sasan, J. M. (2023). Unpacking the role of instructional leadership in teacher professional development. Advanced Qualitative Research, 1(1), 63–73. https://doi.org/10.31098/aqr.v1i1.1380

Krulatz, A., Christison, M., Lorenz, E., & Sevinç, Y. (2022). The impact of teacher professional development on teacher cognition and multilingual teaching practices. International Journal of Multilingualism, 21(2), 711–727. https://doi.org/10.1080/14790718.2022.2107648

Laska, L., Lima, D., Shala, V., Balaj, H., & Ahmeti, A. (2023). Self-assessment as a mechanism for raising the quality of educational institutions, especially evaluation of the performance of teachers. https://doi.org/10.1117/12.2675664

Lee, S. W. (2018). Pulling back the curtain: Revealing the cumulative importance of high-performing, highly qualified teachers on students' educational outcome. Educational Evaluation and Policy Analysis, 40(3), 359–381. https://doi.org/10.3102/0162373718769379

Marie, S. M. J. A. (2021). Improved pedagogical practices strengthens the performance of student teachers by a blended learning approach. Social Sciences & Humanities Open, 4(1), 100199. https://doi.org/10.1016/j.ssaho.2021.100199

Mercier, K., Centeio, E., Garn, A., Erwin, H., Marttinen, R., & Foley, J. (2021). Physical Education Teachers' Experiences with Remote Instruction During the Initial Phase of the COVID-19 Pandemic. Journal of Teaching in Physical Education, 40(2), 337–342. https://doi.org/10.1123/jtpe.2020-0272

Merino, C. L. S. (2019). Self-assessment vs. external evaluation of proficiency in English as a foreign language among student teachers. Revista ElectróNica De InvestigacióN Y Docencia Creativa. https://doi.org/10.30827/digibug.58464

Moriera, M., Arcas, B., Sanchez, T., Garcia, R., Melero, M., Cunha, N., Viana, M., & Almeida, M. (2022). Teachers' pedagogical competences in higher education: A systematic literature review. Journal of University Teaching & Learning Practice, 20(1), 90–123. https://doi.org/10.53761/1.20.01.07

Odoom, P. (2018). Challenges Physical Education Teachers Encounter in Teaching

alongside Coaching Sports in Senior High Schools in The Central Region of Ghana. https://core.ac.uk/download/pdf/234641665.pdf

Osei-Owusu, B. (2022). Impact of professional development programmes on teachers' knowledge and academic performance of senior high school students in Ghana. European Journal of Education and Pedagogy, 3(2), 60–69. https://doi.org/10.24018/ejedu.2022.3.2.276

Park, E. S., & Xu, D. (2022). The effect of active learning professional development training on college students' academic outcomes. Journal of Research on Educational Effectiveness, 17(1), 43–64. https://doi.org/10.1080/19345747.2022.2151954

Parry, M. L. (2022). Learning from supervisor experience of increased virtual supervision for educational psychologists. Educational Psychology in Practice, 39(1), 59–77. https://doi.org/10.1080/02667363.2022.2158176

Phillips, E. (2009). The effect of tenure on teacher performance in secondary education.
Raj, S. (2018). Recent trends and challenges in physical education and sports sciences. International Journal of Science, Engineering and Management, 5, 2456-1304.

Sangco, A. (2022). Emerging Physical Education Teaching Strategies and Students' Academic Performance: Basis for a Development Program. Journal of Physical Education, 4(1), 28–39. https://doi.org/10.5281/jpe.4.1.28–39

Song, D. (2023). Analysis of Problems in the Development of Online Teaching and Suggestions for Improvement. Science Insights Education Frontiers, 15(S1), 5. https://doi.org/10.15354/sief.23.s1.ab005

Taysum, A. (2013). The impact of doctoral study on educational leaders' work for students' participation in education systems and society. Educational Review, 65(4), 432–446. https://doi.org/10.1080/00131911.2012.708020

Ying-Fang, M., & Rong, L. (2004). Comparative studies on teaching strategy among novice, proficient and expert teachers.