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PEER-ASSISTED LEARNING STRATEGY IN TEACHING TINIKLING AMONG BACHELOR OF PHYSICAL EDUCATION STUDENTS

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ABSTRACT

This study examined the effectiveness of the Peer-Assisted Learning Strategy (PALS) in teaching Tinikling among Bachelor of Physical Education (BPED) students at Colegio de San Antonio de Padua during the first semester of Academic Year 2026–2027. It assessed the students' performance in executing the five basic steps of Tinikling—the Touch or Dip Step, Hop Step, Cross Step, Turn Step, and Double Step—before and after the implementation of the strategy, and it explored the students' experiences, insights, and recommendations regarding the use of peer-assisted learning in dance instruction. The study employed a sequential explanatory mixed-methods design, using a one-group pre-test and post-test approach in the quantitative phase, followed by a qualitative inquiry to explain the quantitative findings further. Participants were selected through universal sampling. The quantitative data were gathered using a validated, researcher-developed performance assessment rubric and were analyzed through descriptive statistics and the paired-samples *t*-test, while the qualitative data were collected through interviews and analyzed thematically. Students performed significantly better on all five basic steps after the application of PALS, although varying degrees of competence persisted across steps; further training and proper teacher demonstration therefore remain necessary. The findings showed that students were better able to understand the dance and develop their skills through a more positive, collaborative experience that boosted their confidence. Through peer-assisted learning, students gained an understanding of the concepts and technical skills required by the dance and developed positive attitudes toward the learning environment. Student recommendations included assigning learning partners and providing appropriate demonstrations; students also felt that more time for learning through demonstration and instructor critique, an understanding of the culture from which the dance originated, and additional resources for further study were necessary. Based on the results, an Enhanced Lesson Exemplar on Tinikling incorporating Peer-Assisted Learning was developed. PALS may serve as an innovative teaching approach in Physical Education, particularly for helping students master dance skills and develop a stronger appreciation of Filipino folk dance.

Keywords: *Peer-Assisted Learning Strategy, Tinikling, Dance Instruction, Physical Education, Dance Performance, Philippine Folk Dance*

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INTRODUCTION

Background of the Study

Physical Education (PE) has changed considerably over the years. Once concerned mainly with physical fitness and sports participation, it has become a broader educational field that develops learners' cognitive, psychomotor, affective, and social competencies. Contemporary PE generally relies on learner-centered teaching methods in which students are not only encouraged but also expected to participate actively, think critically, be creative, collaborate, and sustain a long-term commitment to movement and physical activity. In Philippine higher education institutions, these ideas are reflected in the Physical Activity Towards Health and Fitness (PATHFIT) curriculum mandated under Commission on Higher Education (CHED) Memorandum Order (CMO) No. 39, series of 2021. The framework emphasizes outcomes-based instruction and authentic assessment in order to form graduates who are physically literate, health-aware, and socially responsible, even when their academic programs are not directly connected to Physical Education.

Within PATHFIT, Philippine folk dances hold a distinct place because they simultaneously promote physical well-being, cultural preservation, historical appreciation, and national identity. These dances reflect the diverse traditions and indigenous roots of the country and help students make sense of Filipino culture through movement rather than through reading alone. Many higher education institutions therefore include Philippine folk dances in PATHFIT for students in non-education programs, while Bachelor of Physical Education (BPED) students follow a more extensive learning pathway in major subjects such as Philippine Folk Dances. In these courses, they are expected to dance proficiently and to attend to the technicalities of various folk dances, and they are also expected to demonstrate pedagogical competence in teaching the same dances.

Among Philippine folk dances, Tinikling remains one of the most iconic and internationally recognized. It is said to have originated in Leyte, and it imitates the quick, agile movements of the tikling bird as it avoids the bamboo traps that farmers set to protect their rice fields. The dance is characterized by intricate footwork between bamboo poles that are moved in a steady pattern and clapped rhythmically. Performing Tinikling therefore requires far more than stepping in sequence: it demands precise timing, agility, coordination, balance, lower-body muscular endurance, spatial awareness, and, above all, synchronization with the music and with other dance partners. Unlike ordinary locomotor activities, Tinikling calls for the integration of several psychomotor skills with rhythmic intelligence and interpersonal coordination. These features make it an ideal instructional activity for building movement competence while helping to preserve Filipino cultural heritage.

Despite its educational value, teaching Tinikling presents considerable pedagogical difficulties. Many students feel anxious when performing between the moving bamboo poles, which leads to hesitation, poor timing, inconsistent rhythm, reduced confidence, and, in the worst cases, injury when the feet are struck by the poles. Many learners also find it difficult to match their movements to the musical tempo while coordinating with their partners and the bamboo clappers. Because class periods are limited, instructors often spend considerable time on teacher demonstrations and repeated explanations, leaving less time for individualized coaching, deliberate practice, peer collaboration, and formative feedback. Students may consequently rely mostly on repeated imitation rather than on a conceptual understanding of the movement mechanics and rhythmic patterns that lead to skilled performance.

These challenges become more evident in higher education as institutions adopt outcomes-based education, in which learners are expected to show measurable learning results rather than merely complete a dance routine. Contemporary PE no longer focuses solely on finishing dance routines; students are expected to demonstrate skill development, movement quality, rhythmic alignment, performance self-belief, cooperative learning, and reflective practice. All of this calls for teaching methods that increase opportunities for hands-on participation while accommodating different learning preferences and personal learning tempos.

Teaching and assessing Tinikling poses additional challenges. Unlike purely theoretical classroom tasks, Tinikling requires students to demonstrate movement competencies in real time. The teacher must attend simultaneously to

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footwork, body positioning, coordination, timing, rhythm, interaction with partners, and adherence to the movement sequence. Moreover, the bamboo poles create a dynamic environment in which movement errors may occur rapidly and may be difficult for the teacher to identify and correct immediately. Students also differ considerably in their previous dance experience, physical confidence, rhythm perception, coordination, and willingness to participate. Teacher-led assessment brings its own difficulties, including limited classroom time and large class sizes. As a result, teachers cannot give individualized feedback to all students, and some students lack the opportunity to make the necessary corrections and repeat the task. Instructional strategies must address this problem without compromising the quality of instruction.

One possible solution is the use of a peer-assisted strategy. Feedback from peers, gained through observation, demonstration, practice, and encouragement, is helpful when properly structured. A student who observes a partner may recognize movement errors that the performer cannot easily perceive, and explaining a movement to another learner may reinforce the explainer's own understanding of the movement pattern. Peer interaction may thus transform students from passive recipients of instruction into active participants in the learning process.

One aspect of the Peer-Assisted Learning Strategy (PALS) worth examining is its influence on skill acquisition, rhythmic synchronization, and learning engagement. In this study, skill acquisition refers to students' perceived mastery of the required Tinikling movements; rhythmic synchronization is the learner's ability to coordinate bodily movements with the rhythm of the music and with dance partners, including the bamboo poles; and learning engagement is the degree of students' active, emotional, and cognitive participation. Although these outcomes are linked, they are also distinct. Learning the sequence of Tinikling steps does not guarantee that a student can coordinate the body with the rhythm of the music, the bamboo poles, and a dance partner. Likewise, limited physical ability does not by itself explain poor engagement. Active engagement, in turn, can create more opportunities to learn skills and can result in a more active and constructive experience in the dance learning setting. This framework provides a clear overview of the instructional method within a dance-learning context.

Although collaborative and peer-assisted learning has received increasing attention in education, it remains considerably neglected in PE. Peer-assisted learning has been evaluated in classroom-based subjects such as science, mathematics, and language, but it has not been sufficiently explored in movement-based learning, especially in Philippine folk dance. There is insufficient research on how structured peer assistance affects students' engagement, synchronization, and acquisition of Tinikling skills in college PE courses. This gap is important because instructional approaches that are effective in predominantly cognitive classroom settings cannot automatically be assumed to produce the same outcomes in movement-based learning. PE involves embodied learning, in which knowledge is expressed through movement and requires repeated practice, observation, feedback, timing, and physical interaction. Tinikling adds another layer of complexity because successful performance requires students to coordinate movement with both external rhythmic stimuli and other performers.

For these reasons, research on peer-assisted learning in college-level Tinikling is warranted. This study does not seek to establish whether peer-assisted learning is effective as a general approach; rather, it examines how peer-assisted learning relates to different outcomes associated with Tinikling participation and performance.

Several international, national, regional, and local studies point to the value of this teaching strategy. Internationally, Hsia et al. (2016) examined the effects of different online peer-feedback approaches on dance students' performance, self-efficacy, and learning motivation. One hundred college students took part in a 12-week study in which they used one of three peer-feedback methods: comments alone, ratings alone, or a combination of ratings and comments. All methods supported students' development in dance, but the approach that combined ratings and comments produced greater benefits for individual students' performance. The researchers emphasized the value of structured peer feedback in performance-based learning, in which students evaluate their own performance and receive feedback for corrections.

Like other dance forms, Tinikling demands accuracy of movement, which is developed through observation, practice, and corrective feedback. Hsia et al. (2016), however, focused on online peer feedback in general dance

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education rather than on Philippine folk dance or on the use of bamboo poles, and they did not examine movement acquisition, rhythm, and learning engagement together. The present study builds on that work by examining structured peer feedback in Tinikling classes among college students.

In the Philippine context, Edrada (2022) developed Step Buddy: A Scheme to Enhance the Dance Skills of the SHS Students, which employed peer tutoring to help Senior High School students develop dance skills. High-achieving peer tutors assisted peers who were struggling in dance, and changes in students' performance-task grades between the first and second quarters were measured. The results showed a statistically significant change and supported peer tutoring as a viable option for Philippine PE classes. Edrada (2022) also offered an implementation plan for using peer tutoring as an intervention in teaching dance in Philippine schools. However, because the study concentrated on grades in the performance domain, it did not examine students' learning engagement and participation beyond performance. Unlike Edrada's study, the present research addresses this broader domain through rhythmic synchronization and students' behavioral, emotional, and cognitive engagement in the context of a Philippine folk dance, specifically Tinikling.

At the regional level, Berlas and Buot (2026) examined the process of learning dance in the PATHFIT 1 and 2 courses through 12 qualitative, in-depth interviews with college students. This phenomenological study explored students' perceptions of peer tutoring in performance-based PE courses. Five themes were identified, including an improved ability to understand and learn steps through peer teaching, supportive and cooperative learning environments, greater self-confidence and a new sense of responsibility, and the need for some form of instructor supervision; the study also found that peer teaching provided a meaningful and enjoyable learning opportunity. These findings support the use of peer tutoring for movement-skill instruction in collegiate PE classes and suggest that future research examine peer tutoring as a means of enhancing students' engagement in movement and motivating them to participate actively. More importantly, peer teaching and instruction must be well organized and structured, with defined roles for tutors, performance criteria for students, and consistent, structured feedback on performance. The studies cited earlier provide some justification for these recommendations.

Although useful, the study of Berlas and Buot (2026) used a qualitative approach and examined students' perspectives rather than measurable improvements in specific learning outcomes. It did not independently quantify skill acquisition, rhythmic synchronization, and learning engagement in Tinikling. Moreover, although it was conducted in the Visayas, it was not conducted in Cebu. These distinctions create an opportunity for the present study to examine the three outcomes systematically among college students learning Tinikling.

At the local level, Taborada and Sanchez (2020) examined the Peer-Assisted Learning Strategy as a tool for teaching the mole concept to Grade 9 students at a night school in Cebu City, Philippines. Using a quasi-experimental approach, they compared a group taught through peer assistance with a group taught through the traditional method and found greater progress in the PALS group in Chemistry. They presented local data supporting peer-assisted learning for knowledge and skill acquisition. Although the study was conducted in Chemistry, it remains relevant because both studies involve a pedagogical intervention intended to improve measurable learning. In teaching Tinikling, peer-assisted learning may allow students to observe, perform, and give and receive constructive criticism more often. However, a method found effective in one subject cannot be assumed to work in the same way in a learning environment focused on movement. The present study therefore seeks to extend the local evidence by examining peer-assisted instruction in Tinikling, with particular attention to skill acquisition, rhythmic synchronization, and learning engagement among college students.

This research also aims to contribute to three United Nations Sustainable Development Goals (SDGs): SDG 4 (Quality Education), SDG 3 (Good Health and Well-being), and SDG 11 (Sustainable Cities and Communities). SDG 4 addresses the provision of inclusive, lifelong, and high-quality education. This study has the potential to help college PE teachers develop pedagogical techniques that better suit students' movement skills and involvement while remaining constructive and participatory. By examining how skilled and how involved students are, teachers can identify, refine, and make more appropriate teaching decisions.

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SDG 3 addresses health and well-being. Tinikling offers the benefits of movement and active participation, such as improved coordination and balance, and it may increase students' engagement in physical activities within the classroom. Through positive interaction, students are likely to experience greater cooperation and confidence while participating in activities. Although the study does not directly measure health, it informs instructional practices that are likely to support students' active participation in physical activity, which in turn contributes positively to their health and well-being. The findings can also support the recognition and protection of cultural heritage in connection with SDG 11. Tinikling is an opportunity to sustain appreciation and awareness of Filipino heritage among younger generations. By studying how PE can be taught through active and collaborative methods, this research may help make traditional Philippine dances more engaging to college students; enhancing the pedagogy of traditional movement can contribute to cultural preservation. In relation to these three goals, the main contribution of this research is to provide data on the effects of peer-assisted teaching methods on Tinikling learning goals. The study can inform teaching methodology in Philippine PE, especially in folk dance, and can point to future directions for research of this nature.

This research examines the impact of Peer-Assisted Instruction (PAI) on skill acquisition, rhythmic coordination, and participation in learning to perform Tinikling among BPED students. It aims to investigate whether a more formalized structure of PAI is associated with students' ability to learn and master Tinikling movements and how it affects the coordination of movements with music and partners. It also attempts to provide evidence-based instructional strategies in PE by analyzing participation in its behavioral, emotional, and cognitive dimensions. The results should enhance the pedagogy of dance teaching in higher education and aid in creating quality programming that focuses on positive and active engagement. Furthermore, the results advocate the preservation of cultural heritage by providing a structure that facilitates appreciative participation, and they further support institutions that offer these courses.

Theoretical Background and Conceptual Framework

The benefits of the peer-assisted learning strategy in teaching can be anchored on several theories. This study draws on Constructivist Learning Theory, Experiential Learning Theory, and Self-Determination Theory.

According to the Constructivist Learning Theory of Bruner (1961), students do not merely absorb information; they actively construct meaning and knowledge from relevant, meaningful experiences instead of passively receiving it. Learners do not simply take in new information from teachers but build understanding by linking new material to what they have previously experienced. From a constructivist view, learning occurs when students are active participants in the process, through exploration, reflection, collaboration with others, and real problem-solving. The teacher serves as a guide or "facilitator" who designs learning moments so that students can construct their own understanding instead of being told everything.

The study is also anchored on the Experiential Learning Theory of Kolb (1984), which stresses that learning occurs through a complete cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation, a cycle that appears readily in dance instruction. According to Kolb, learners acquire knowledge by transforming experience into understanding, mostly through reflection and through its application in real-life practice. In this sense, PE closely matches experiential learning, since students build movement competence through active participation rather than as passive observers. In dance instruction, especially Tinikling, students often repeat the same movement patterns, analyze what they did, observe how it landed, receive corrective feedback, and later refine it. This continuous practice makes the process more lived than memorized.

Lastly, the Self-Determination Theory of Deci and Ryan (1985) identifies autonomy, competence, and relatedness as major drivers of intrinsic motivation, which peer-assisted learning environments often strengthen even when students work independently. Autonomy refers to learners' ability to regulate their own learning process; competence involves learners' perception of successfully performing tasks; and relatedness emphasizes meaningful social interaction with peers and instructors.

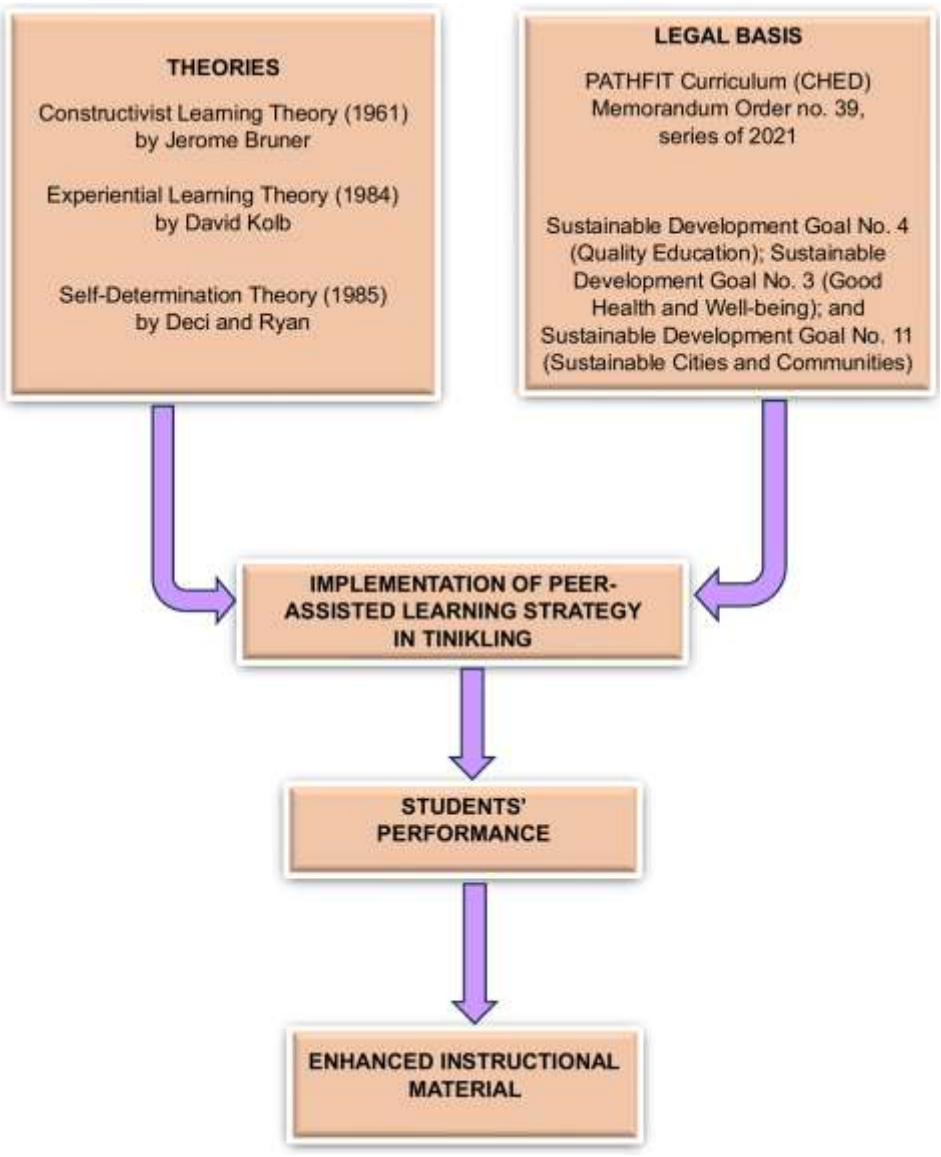
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These theories serve as the foundation for strengthening the learning of college students in Tinikling. The study covers perceived skill acquisition, rhythmic synchronization, and learning engagement, and the theories help support the study in relation to the skills that students must acquire and in transforming knowledge into new skills.

The conceptual framework is presented in Figure 1. By examining students' performance under the Peer-Assisted Learning Strategy, the framework shows a learner-centered pedagogy that can support more meaningful learning when teaching Tinikling to BPED students enrolled in PATHFIT 3 – Philippine Folk Dances. It is based on Bruner's (1961) Constructivist Learning Theory, which holds that learners build knowledge themselves through meaningful experiences and active involvement; on Kolb's (1984) Experiential Learning Theory, which explains that learning moves in a continuous loop that begins with concrete experience, then proceeds to reflective observation, abstract conceptualization, and finally active experimentation; and on Deci and Ryan's (1985) Self-Determination Theory, which stresses the value of autonomy, competence, and relatedness because these support students' intrinsic motivation and sustained engagement. Together, these ideas provide the teaching base for using peer-assisted instruction as a newer approach in which pairs of students perform a structured set of activities and use class time for guided practice, teamwork, feedback, and step-by-step performance adjustment.

Figure 1. Theoretical Conceptual Framework of the Study



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The framework is further supported by the PATHFIT curriculum under CMO No. 39, series of 2021, which encourages outcomes-based, learner-centered, and technology-supported instruction so that students can build movement competence and maintain physical activity as a life habit. It is also anchored on SDG 4: Quality Education, which aims to equip the youth with the skills and knowledge to address development issues, especially by improving technical and vocational skills and increasing the number of learners with those skills. Dance is also useful in meeting the targets of SDG 3: Good Health and Well-being. The third goal, SDG 11, focuses on safeguarding and valuing heritage; for most Filipinos, Tinikling is not only a traditional dance but also an important means of safeguarding and passing on cultural traditions. Tinikling involves physical movement, coordination, balance, and active participation, which may contribute to students' engagement in physical activity within an educational setting. With these theoretical and legal bases, the framework suggests that applying the Peer-Assisted Learning Strategy in PATHFIT 3 – Philippine Folk Dance (Tinikling) affects students' performance in skill acquisition, rhythmic synchronization, and learning engagement in general. Overall, the results of the study serve as a stepping stone for crafting a proposed program that can strengthen the integration of peer-assisted pedagogy in PE instruction, improve students' learning experiences, and support the continuing refinement of the teaching of Philippine folk dances in higher education institutions.

Statement of the Problem

This research determined the effectiveness of using the Peer-Assisted Learning Strategy in teaching Tinikling on the performance of BPED students of Colegio de San Antonio de Padua during the first semester of Academic Year 2026–2027, as a basis for crafting an enhanced lesson exemplar. Specifically, it sought to answer the following questions:

1. What is the level of students' performance skills before the implementation of the peer-assisted learning strategy in the following common Tinikling dance steps: 1.1 touch or dip step; 1.2 hop step; 1.3 cross step; 1.4 turn step; and 1.5 double step?
2. What is the level of students' performance after the implementation of the peer-assisted learning strategy in the following common Tinikling dance steps: 2.1 touch or dip step; 2.2 hop step; 2.3 cross step; 2.4 turn step; and 2.5 double step?
3. Is there a significant difference in the level of students' performance in the above-mentioned Tinikling dance steps before and after the implementation of the peer-assisted learning strategy?
4. What are the students' experiences during the use of the peer-assisted strategy in learning and performing the five basic steps of Tinikling?
5. Based on the findings of the study, what enhanced teaching plan can be presented?

Statement of the Hypothesis

The following hypotheses were tested at the 0.05 level of significance:

H0: There is no significant difference in the level of students' performance in the above-mentioned Tinikling dance steps before and after the implementation of peer-assisted instruction.

Ha: There is a significant difference in the level of students' performance in the abovementioned Tinikling dance steps before and after the implementation of peer-assisted instruction.

Assumptions of the Study

It was assumed that the students, as respondents, would consistently follow along and take part in the learning activities to acquire and apply the skills, and that they would participate and give their insights throughout the study. It was also assumed that they would answer the questions honestly, objectively, and to the best of their knowledge and experience after being exposed to the peer-assisted learning strategy in learning Tinikling. Furthermore, it was assumed that the adapted and researcher-developed instruments were valid and reliable measures of the variables under investigation, namely peer-assisted instruction, skill acquisition, rhythmic synchronization, and learning engagement. Finally, it was assumed that the implementation of peer-assisted

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instruction would give students enough opportunities to participate in pre-class learning and in-class practical activities so that they could meaningfully present their perceived learning experiences connected to Tinikling.

Significance of the Study

This study, "Peer-Assisted Learning Strategy in Teaching Tinikling among Bachelor of Physical Education Students," is expected to contribute to the improvement of curriculum guides in Physical Education, particularly in teaching Philippine folk dances through peer-assisted instruction. It may also benefit the following groups.

BPED students. The study can help BPED students develop greater competence in performing Tinikling through improved skill acquisition, rhythmic synchronization, and active participation during learning activities.

Physical Education teachers. The study may provide teachers with empirical evidence on the effectiveness of peer-assisted instruction in teaching performance-based activities such as Tinikling.

BPED students and pre-service teachers. The study may offer practical insights into integrating peer-assisted pedagogy in PE instruction. The findings may strengthen their pedagogical knowledge and instructional competence by demonstrating how a peer-assisted strategy can improve movement learning, classroom participation, and learner engagement in teaching Philippine folk dances and other performance-based activities.

Higher education institutions (HEIs). HEIs may use the findings to strengthen the implementation of learner-centered instructional practices within PE courses. The results may serve as a reference for curriculum enhancement, faculty development programs, and instructional innovation initiatives that aim to improve the quality of teaching and learning in keeping with outcomes-based education and the goals of the PATHFIT curriculum.

Curriculum developers and academic program coordinators. The study may provide research-based evidence for designing instructional frameworks and learning experiences that effectively integrate peer-assisted learning into PE.

Commission on Higher Education (CHED). The findings may provide CHED with empirical information on the implementation of innovative teaching strategies that support the objectives of the PATHFIT curriculum under outcomes-based education. They may also serve as a reference in formulating future policy recommendations, instructional guidelines, and faculty development initiatives that promote peer-assisted methods, active learning, and authentic assessment in higher education PE programs.

Future researchers. The study may offer ideas and information that future researchers can draw on in conducting related research.

Definition of Terms

The following terms are defined according to their operational use in this study.

Peer-Assisted Learning Strategy (PALS). The teaching strategy in which pairs or teams are formed among students to facilitate the learning of Tinikling. Through this technique, peers help their teammates by demonstrating, offering feedback and suggestions, giving guidance, and assisting with various dance steps and movements.

Bachelor of Physical Education (BPED) students. Second-year and third-year BPED students of Colegio de San Antonio de Padua who are enrolled in PATHFIT 3: Dances and the major course BPED 108 Philippine Folk Dances, both of which include Tinikling as subject matter, and who met the inclusion criteria established by the researcher.

Tinikling. A dance from the Philippines taught as part of Physical Education, specifically in the PATHFIT and Philippine Folk Dance courses. In this study, peer-assisted teaching was used to teach students five common steps of the dance, and students' ability to execute each of these steps was measured: the touch or dip step, hop step, cross step, turn step, and double step.

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Touch or Dip Step. One of the five Tinikling steps in this research, in which a dance performer steps on or touches the foot to the floor in a bamboo-related movement and pattern that aligns with the rhythm of the bamboo. In the performance evaluation rubric, each student's performance of the touch or dip step is assessed before and after the intervention.

Hop Step. A controlled jump with coordination between the feet, in time with the bamboo beat and rhythm. It is another Tinikling step, performed in a set sequence with the others, and is graded using the dance rubric both before and after the teaching intervention.

Cross Step. The dance step in which one foot is crossed over or in front of the other and must follow a specific sequence. Students' movement, coordination, balance, control, and timing in this step are graded using the performance assessment rubric.

Turn Step. The Tinikling step that involves turning and requires a specific bamboo-pole rhythm. Like the other steps, it is graded on students' control, balance, coordination, and timing in both the pre-test and the post-test.

Double Step. A dance step that is repeated twice. Students' performance of the double step is assessed through the performance assessment rubric, both before and after the peer-assisted instruction.

Philippine Folk Dance. The traditional dances that originate from the Philippines. In this research, Philippine Folk Dance serves as the setting for the teaching of Tinikling, which gives students the opportunity to practice and learn the execution and timing of the steps that make up Philippine folk dances.

Physical Activity Towards Health and Fitness (PATHFIT). The Physical Education course in higher education institutions in which Tinikling is incorporated as part of the movement competency or dance learning outcomes and which serves as one of the instructional contexts of the study.

METHODS

This section presents how the data were gathered, who the respondents were, and the procedures followed in the study.

Research Design

This study employed an explanatory sequential mixed-methods research design that integrated quantitative and qualitative approaches to determine the effectiveness of the implementation of the Peer-Assisted Learning Strategy (PALS) in teaching Tinikling to BPED students of Colegio de San Antonio de Padua during the first semester of Academic Year 2026–2027. The design was appropriate because the study sought to assess students' performance quantitatively before and after the implementation of the instructional strategy and to explore their experiences during the learning process qualitatively.

The quantitative component used a one-group pre-test–post-test quasi-experimental design to determine the students' performance skills in the five common Tinikling dance steps, namely the touch or dip step, hop step, cross step, turn step, and double step. The students first underwent a pre-test to assess their initial performance skills before the implementation of PALS. After the pre-test, they participated in instructional sessions employing the peer-assisted learning strategy, in which they worked collaboratively with classmates or partners to practice, demonstrate, and improve their execution of the identified dance steps. After the intervention, a post-test was administered using the same performance assessment rubric to determine the students' level of performance and to examine whether a significant difference existed between their pre-test and post-test scores.

For the qualitative component, the study employed a descriptive qualitative approach to explore the students' experiences during the implementation of PALS. Using an interview guide questionnaire, the researcher examined how students perceived peer-assisted learning in terms of learning the common dance steps, receiving assistance and feedback from peers, developing confidence, engaging in collaborative practice, and overcoming difficulties in performing Tinikling. The qualitative findings provided a deeper understanding of the students' experiences and complemented the quantitative results.

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The quantitative and qualitative findings were integrated during the interpretation of the results to provide a comprehensive understanding of the effectiveness of PALS in teaching Tinikling. The results served as the basis for developing an enhanced lesson exemplar that incorporates the identified instructional needs, performance improvements, and students' experiences in learning the five basic Tinikling dance steps.

Flow of the Study

The study followed a structured methodology organized into input, process, and output phases, as shown in Figure 2.

Input. The input stage covers the study's framework. The theories on collaboration, interaction, and learning from others, as well as CMO No. 39, series of 2021, are among the key pillars of the study. Learning from others through a peer-assisted strategy has been identified as an effective teaching method in which students perform Tinikling and teach one another: peers offer suggestions, practice the basic dance movements, exchange feedback, and assist one another in developing Tinikling performance skills. The assessment covered five common steps of the dance: the hop step, cross step, turn step, touch or dip step, and double step. The instruments included a performance assessment rubric, which provided the pre-test and post-test grading scale, and an interview protocol that explored students' perspectives on the teaching approach.

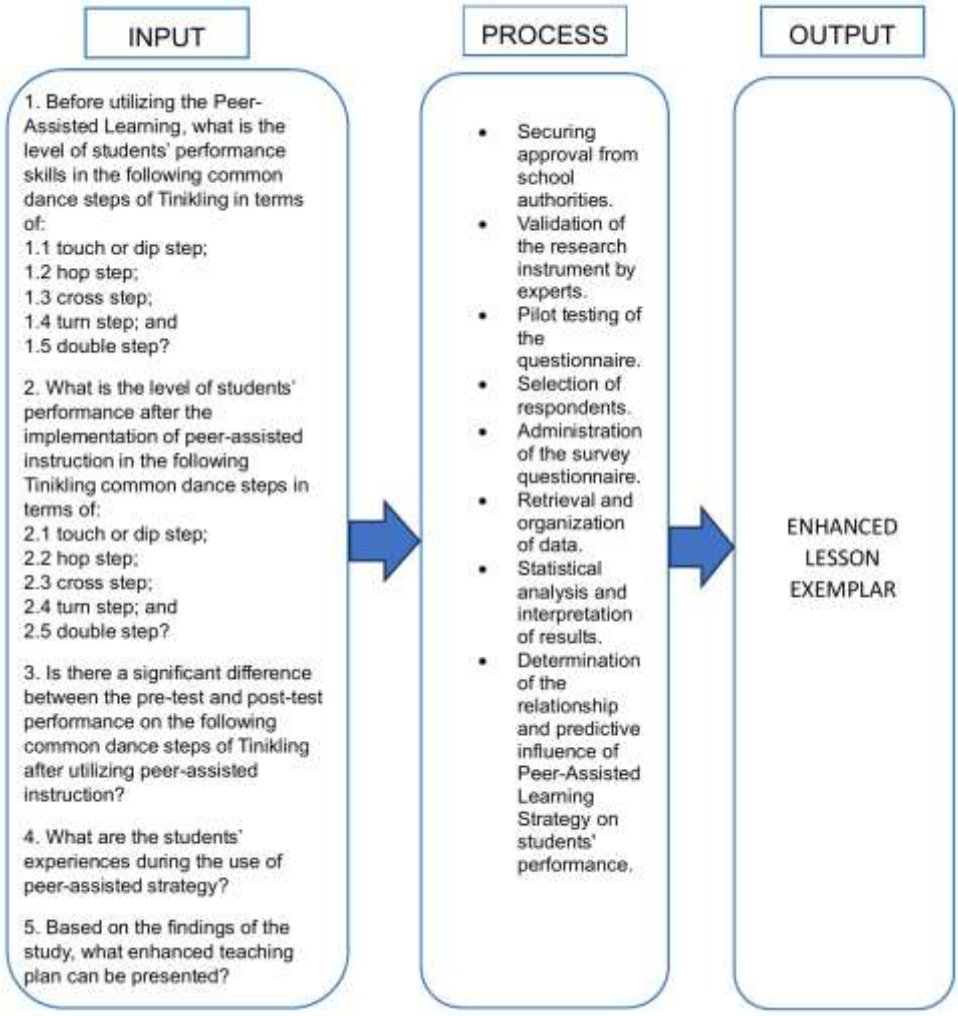
Process. This phase involved the actual implementation of the research procedures. The researcher secured permission from the school administrators before beginning the intervention and explained the purpose and procedures of the study to the participants. Participants signed consent forms, and the research instruments were evaluated by experts and, when necessary, pilot-tested. Qualified second-year and third-year BPED students were then selected through the inclusion and exclusion criteria described under Participants and Sampling Procedure. A pre-intervention test measured students' ability to perform the five selected Tinikling steps using a performance task rubric. The peer-assisted strategy was then employed after the pre-test results were obtained; it included peer demonstrations, partner or small-group practice, peer observation, the giving and receiving of constructive feedback, and teacher-led corrective movements. A post-intervention test determined whether students' performance had improved, using the same performance indicators as the pre-intervention test. The quantitative data were analyzed to determine the performance level of the students using descriptive statistics, including the mean and standard deviation, and a paired-samples *t*-test to determine whether the difference between test results was statistically significant. Qualitative data were also collected through interviews or focus group discussions.

Output. Following the results of the pre-tests, post-tests, and student reports, an enhanced lesson exemplar for teaching Tinikling using the Peer-Assisted Learning Strategy was developed. The enhanced plan breaks down the specific Tinikling dance steps and includes guided activities for both teacher and peer demonstration and instruction, constructive peer review and feedback, and movement correction. It also includes an assessment method that measures students' performance and takes student challenges into consideration so that the needs of the students are better understood. The completed plan is designed to supplement the instruction of Tinikling for all students in BPED programs, with the goal of fostering student engagement and consistent dance practice. Its purpose is to teach the dances better and to provide evidence-based research that can help shape future curricula for PE instructors and programs.

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Figure 2. The Flow Chart of the Study



Research Environment

The study was conducted at Colegio de San Antonio de Padua, located at Barangay Guinsay, Danao City, Cebu, Philippines 6004, specifically within the College of Teacher Education. The institution was founded in 2004 by the late Congressman Ramon "Mano Amon" Durano Sr. and has since grown from a small college offering limited courses into a large Catholic educational institution offering pre-kindergarten, Senior High School, and various undergraduate programs, including the Bachelor of Physical Education (BPED). The institution implements the PATHFIT curriculum in compliance with CMO No. 39, series of 2021 (Figure 3).

Colegio de San Antonio de Padua was chosen as the research environment not only because it was accessible to the researcher but also because it offers PATHFIT 3: Dances for different undergraduate programs and Philippine Folk Dances for the BPED program, which together provide appropriate learning contexts for the implementation of Tinikling instruction. In addition, the accessibility of the respondents and the relevance of the courses to the study make the institution a suitable setting for the investigation.

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Figure 3. Location Map of the Research Environment



Participants and Sampling Procedure

The respondents were bona fide BPED students of Colegio de San Antonio de Padua (CSAP). More specifically, the study involved BPED second-year students enrolled in PATHFIT 3: Dances, in which Tinikling is taught as part of the course competencies, and BPED third-year students taking the major course BPED 108 Philippine Folk Dances. These groups were purposively identified, not for convenience, but because they directly undergo the teaching and learning of Tinikling through classroom instruction and are the future teachers who will handle this subject. They were therefore the most suitable respondents for examining, in a practical and grounded way, how peer-assisted instruction affects skill acquisition, rhythmic synchronization, and learning engagement.

To be included in the study, respondents had to meet the following inclusion criteria: (1) they were bona fide BPED students officially enrolled at Colegio de San Antonio de Padua while the study was being conducted; (2) they were taking either PATHFIT 3: Dances or the major course BPED 108 Philippine Folk Dances; (3) they had been given instruction in Tinikling using the peer-assisted method or had already experienced the instructional strategies used during the conduct of the study; and (4) they freely volunteered and gave their informed consent. Those who did not meet these criteria, those who were not enrolled in the said courses, and those who decided not to participate were excluded.

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Table 1 shows the distribution of the respondents. The study included forty (40) BPED students from Colegio de San Antonio de Padua during the first semester of Academic Year 2026–2027, comprising second-year and third-year students who met the inclusion requirements.

Table 1. Frequency Distribution of the Respondents

Respondents	BPED 2	BPED 3	Total	Percentage
Male	13	2	15	37.5%
Female	13	12	25	62.5%
Total	**26**	**14**	**40**	**100%**

The respondents were selected through universal sampling, also called total population sampling. Because only 40 participants were eligible, universal sampling was effective for this small, manageable group, allowing the researcher to include everyone in the target population rather than a subset. Including all eligible students also gave the researcher a greater pool of data to draw from.

Research Instruments

Two researcher-developed instruments were used to capture the quantitative and qualitative data: the Tinikling Performance Assessment Rubric, which evaluated students' performance in the five basic Tinikling steps before and after the implementation of Peer-Assisted Learning, and the Student Experience Interview Guide Questions, which examined students' perspectives on and experiences of this method of instruction.

The first instrument, the Tinikling Performance Assessment Rubric, was designed to capture students' performance in the five basic Tinikling steps: the touch or dip step, hop step, cross step, turn step, and double step. It provides the performance steps with corresponding criteria for assessing each step, including movement accuracy, rhythmic timing, balance, coordination, and safety. The rubric uses a five-point scale from 1 (Needs Improvement Skills) to 5 (Exemplary Skills). To ensure credibility and accuracy, an expert in Physical Education, specifically in Philippine folk dance, validated the rubric, especially with respect to the common steps of Tinikling. After validation, the same rubric was used in both the pre-assessment and the post-assessment to assess improvement in students' performance on each step and to ensure that the evaluation remained consistent across the two periods. The rubric was administered and completed by the teacher or by evaluators selected by the researcher, who assessed students' performance according to how they executed the dance steps.

The second instrument, the Student Experience Interview Guide Questionnaire (Appendix B), contained open-ended questions designed to examine students' experiences after being taught through the peer-assisted learning approach. The questions focused on students' views of peer-demonstrated skills, collaborative work, peer-reviewed skills, peer support, and the difficulty of Tinikling when learned through peer-led activities. Students were also asked how the collaboration influenced their learning and mastery of the five most frequent dance steps and were invited to offer recommendations for instructional improvement. The qualitative data from the interviews expanded on the performance scores and provided some understanding of what might have contributed to differences in students' scores.

To validate the researcher-developed instruments, content validation was conducted by subject matter experts in Physical Education, Philippine Folk Dance, and Research and Assessment in Education. The experts provided suggestions and recommendations to improve the instruments so that the questions addressed the objectives of the study and were appropriate for the target population. Pilot testing of the performance rubric was also conducted as part of the validation process to check the consistency of ratings and descriptors and the clarity of instructions, and multiple-assessor consistency was examined. Likewise, the interview questions were pilot tested to ensure that they were understandable, clear, and relevant to the study.

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Scoring procedure. A five-point scale was used to score the pre-test and post-test practical performance, based on the level of the respondents' mastery of execution and the flaws committed during the practical examination. The scores were interpreted as follows: 4.26–5.00, Exemplary Skills (5); 3.26–4.25, Proficient Skills (4); 2.51–3.25, Satisfactory Skills (3); 1.76–2.50, Developing Skills (2); and 1.00–1.75, Needs Improvement Skills (1). The Analytic Performance Task Rubric therefore consists of five categories, each with a verbal interpretation based on the respondent's level of execution of the skill. Respondents were made aware of the performance task rubric, including its categories and verbal interpretations, before the pre-test and post-test.

Data-Gathering Procedure

The data-gathering procedure consisted of three stages: pre-data gathering, actual data gathering, and post-data gathering.

Pre-data gathering

Prior to the implementation of the study, the research adviser approved the study, and the researcher sought all appropriate permissions at Colegio de San Antonio de Padua, including from the School President, the Vice President for Academics and Research, and other related offices. After institutional permission was granted, the researcher finalized the Tinikling Performance Assessment Rubric and the Student Experience Interview Guide Questions and sent both instruments to several experts for content validation. The instruments were revised as needed according to the experts' feedback to improve their clarity, relevance, and overall fit for the study.

Once the rubric was validated, it was pilot-tested, where possible, with students who had characteristics similar to those of the target participants. Based on the pilot results, the researcher looked for areas in which the rubric criteria were unclear. Where multiple raters were involved, procedures to measure consistency among assessors were implemented. Finally, eligible BPED students were identified using the inclusion and exclusion criteria set by the researcher, and the target participants were selected according to the approved sampling criteria. The research intervention and Peer-Assisted Learning began only after all informed consent forms and assessment schedules were in order, and the instructional materials and logistics were in place.

Actual data gathering

After the respondents were chosen, the researcher explained the purpose, goals, and procedures of the research to the participants. Informed consent was obtained from the participants before any data were collected. This was done either in person during the participants' regularly scheduled class or electronically through an online link to minimize class disruption, and links were distributed at the most convenient time. When respondents were ready, they completed and submitted their responses for review of completeness. The data were then secured to protect confidentiality.

Before the intervention, the students took a pre-test in which their initial performance in each of the five Tinikling steps was evaluated. Each student's dance steps were scored against the validated rubric. The conditions of the test were kept consistent for all participants and included demonstrations of the dance steps and the use of the bamboo poles. The pre-test scores served as the foundation for comparison with the post-test results.

After the pre-test, the researcher implemented Peer-Assisted Learning (PAL) as the instructional strategy for teaching Tinikling. During the intervention, students engaged in structured peer-assisted activities in which they observed demonstrations and practiced dance steps with a partner or classmate. The students gave one another constructive feedback on how to improve the execution of the steps, and they learned to identify their movement errors and how to correct them. The researcher supervised the activities and ensured that participants observed safety and followed the lesson plan to achieve the intended outcomes. The intervention was systematically structured, with a determined length, frequency, and order, and it remained consistent throughout the study.

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Post-data gathering

After data collection, both the qualitative and quantitative data were coded and categorized and were treated according to the sequential explanatory mixed-methods design. This involved scoring the pre-test and post-test assessments and developing a coding structure to sort the interview responses into common themes and issues. Once the data had been coded, interpreted, and analyzed, the findings were integrated. Integration helped the researcher understand the relationship between the results of the performance assessment and the students' perspectives on the use of peer-assisted learning. It also helped identify performance weaknesses and the teaching methods and areas of instruction that were most effective for the students. The findings guided the design and construction of the Enhanced Lesson Exemplar for Teaching Tinikling Using Peer-Assisted Learning, which is intended to enhance the curriculum and supplement instructional methods.

Data Analysis

Because this was a mixed-methods study, the quantitative data were organized, tabulated, analyzed, and interpreted using descriptive and inferential statistical tools aligned with the research questions, while the qualitative data were analyzed thematically to explain and supplement the quantitative findings. The following procedures were used to address the specific objectives of the study.

Mean and standard deviation. The students' mean performance levels and the standard deviations of their performance on each of the five basic Tinikling steps were calculated for both the pre-test and the post-test. The means indicated students' average scores on the touch or dip step, hop step, cross step, turn step, and double step, and the standard deviations indicated the variability of the students' performance scores. These descriptive statistics provided a general overview of the students' pre-intervention and post-intervention scores.

Paired-samples t-test. The differences between the students' pre-test and post-test performance scores were evaluated using a paired-samples *t*-test to determine whether they were statistically significant. The test examined the performance scores for the five dance steps and an overall performance score for all steps. The researcher evaluated the assumptions for the test, specifically the distribution of score differences, and the Wilcoxon signed-rank test was to be used instead if the assumptions were not fully met. The alpha level was set at .05.

Thematic analysis. Thematic analysis was used to explore and identify patterns in the qualitative data from the interviews and focus group discussions. The research process involved transcript analysis: the researcher generated initial codes, generated themes from the coded transcripts, defined and reviewed the themes, and addressed the research questions that motivated the study. The analysis made it possible to examine the students' experiences of Peer-Assisted Learning (PAL), including its benefits, potential challenges in its implementation, interactions with peers, and suggestions for future Tinikling instruction.

Integrating quantitative and qualitative data. As the sequential explanatory mixed-methods design prescribes, the results were interpreted once all the quantitative and qualitative data had been collected. The quantitative findings were supported and clarified by the interview results. For instance, students' perspectives on their peers' feedback and on their experiences in practicing the specific dance steps they found difficult could help explain their dance scores. These results provided evidence in support of the proposed revised and improved teaching plan.

Statistical significance was measured at the 0.05 level of probability, which evaluated whether students demonstrated a change in performance following participation in the Peer-Assisted Learning Strategy. Because the study had no control group, the improvement in student performance was regarded as an improvement observed after participation in the intervention and not as proof that participation in Peer-Assisted Learning was the cause of the improvement.

Ethical Considerations

To uphold ethical standards, the following measures were observed during the conduct of the study. The researcher ensured that the privacy and anonymity of the students were protected as a matter of paramount importance.

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Respondents participated on the basis of informed consent: they were fully informed and freely made the decision to participate without any pressure or coercion. The research data remained confidential throughout the study, and the identities and other personal information of the respondents were kept anonymous. Participation was voluntary, and respondents could withdraw from the study at any time. Lastly, the works of other authors were acknowledged and properly referenced using the APA 7th edition referencing system. The informed consent form is presented in Appendix C.

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RESULTS AND DISCUSSION

This section presents the results of the study on the respondents' performance in the common Tinikling steps before and after the use of the Peer-Assisted Learning Strategy (PALS), as well as the respondents' experiences when using the strategy.

Pre-test Performance of the Students

Table 2 presents the students' initial performance levels in the five basic Tinikling steps, namely the Touch Step, Hop Step, Cross Step, Turn Step, and Double Step, based on their pre-test scores. The results are presented in terms of frequency, percentage, mean, and standard deviation to describe the students' level of performance before the implementation of PALS.

Table 2. Students' Pre-test Performance Levels in the Five Basic Tinikling Steps

Performance Range	Performance Level	Touch Step *f* (%)	Hop Step *f* (%)	Cross Step *f* (%)	Turn Step *f* (%)	Double Step *f* (%)
1.00–1.75	Needs Improvement Skills	0 (0.00%)	1 (2.50%)	3 (7.50%)	19 (47.50%)	19 (47.50%)
1.76–2.50	Developing Skills	1 (2.50%)	19 (47.50%)	18 (45.00%)	16 (40.00%)	20 (50.00%)
2.51–3.25	Satisfactory Skills	17 (42.50%)	17 (42.50%)	18 (45.00%)	5 (12.50%)	1 (2.50%)
3.26–4.25	Proficient Skills	22 (55.00%)	3 (7.50%)	1 (2.50%)	0 (0.00%)	0 (0.00%)
4.26–5.00	Exemplary Skills	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Total		40	40	40	40	40
Mean		3.53	2.55	2.43	1.65	1.55
Standard Deviation		0.55	0.68	0.68	0.70	0.55

Note. *f* = frequency; % = percentage. Performance levels are based on the computed mean scores for each dance step.

The Touch Step obtained the highest pre-test mean score ($M = 3.53$, $SD = 0.55$), indicating Proficient performance, with 55.00% of the students classified under Proficient Skills. The Hop Step ($M = 2.55$, $SD = 0.68$) fell within the Satisfactory Skills range, and the Cross Step ($M = 2.43$, $SD = 0.68$) fell within the Developing Skills range, although the distributions of both varied across performance levels.

In contrast, the Turn Step ($M = 1.65$, $SD = 0.70$) and Double Step ($M = 1.55$, $SD = 0.55$) fell under Needs Improvement. Almost half of the students (47.50%) were classified under Needs Improvement in both steps, while 50.00% were still at the Developing Skills level in the Double Step. No student attained the Exemplary Skills level in any of the five dance steps during the pre-assessment.

Overall, the results indicate differences in students' initial performance across the five basic Tinikling steps. While the students demonstrated relatively stronger performance in the Touch Step, the Turn and Double Steps were areas requiring greater attention and practice. These initial results provide a basis for identifying the dance skills that needed more instructional support during the implementation of PALS.

The findings indicate the need for further support through instruction, practice, and correction to aid learners' dance performance. They are similar to the results of Beseler et al. (2024), who highlighted the use of peer teaching and peer critique as a teaching strategy and analyzed its effects. Similarly, Fahrul et al. (2025) found peer critique to be a positive addition to the classroom for increasing students' ability to master a skill. For dance educators, Brown (2023) highlighted how both peer-led and teacher-led activities positively affected dancers' technique and emphasized the importance of developing students' skills in giving and receiving constructive feedback.

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Post-test Performance of the Students

Table 3 presents the students' post-test performance levels in the five basic Tinikling steps following the implementation of PALS in the class, in terms of frequency, percentage, mean, and standard deviation.

Table 3. Students' Post-test Performance Levels in the Five Basic Tinikling Steps

Performance Range	Performance Level	Touch Step *f* (%)	Hop Step *f* (%)	Cross Step *f* (%)	Turn Step *f* (%)	Double Step *f* (%)
1.00–1.75	Needs Improvement Skills	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
1.76–2.50	Developing Skills	0 (0.00%)	0 (0.00%)	3 (7.50%)	14 (35.00%)	1 (2.50%)
2.51–3.25	Satisfactory Skills	0 (0.00%)	28 (70.00%)	29 (72.50%)	25 (62.50%)	27 (67.50%)
3.26–4.25	Proficient Skills	24 (60.00%)	10 (25.00%)	7 (17.50%)	1 (2.50%)	12 (30.00%)
4.26–5.00	Exemplary Skills	16 (40.00%)	2 (5.00%)	1 (2.50%)	0 (0.00%)	0 (0.00%)
Total		40	40	40	40	40
Mean		4.40	3.35	3.15	2.68	3.28
Standard Deviation		0.50	0.58	0.58	0.53	0.51

Note. f = frequency; % = percentage. Performance levels are based on the computed mean scores for each dance step.

The Touch Step obtained the highest post-test mean score (M = 4.40, SD = 0.50), indicating exemplary performance, with 60.00% of the students classified as Proficient and 40.00% as Exemplary. The Hop Step (M = 3.35, SD = 0.58) and Double Step (M = 3.28, SD = 0.51) both reached the Proficient Skills level, while the Cross Step (M = 3.15, SD = 0.58) and Turn Step (M = 2.68, SD = 0.53) remained within the Satisfactory Skills level.

None of the students was classified under the Needs Improvement level in any of the five dance steps after the implementation of PALS. However, 35.00% of the students remained at the Developing Skills level in the Turn Step, making it the step with the largest proportion of students requiring further improvement. No student reached the Exemplary Skills level in either the Turn Step or the Double Step.

Overall, the post-test results show that the students demonstrated varied levels of performance across the five basic Tinikling steps after the implementation of PALS, with the Touch Step as the strongest. Although the Turn and Cross Steps remained at the Satisfactory Skills level, the distribution suggests that further practice may be necessary to strengthen students' execution of these movements.

These findings are consistent with Gumelar et al. (2023), who found that the peer tutor method increased students' interest in learning how to dance. Bores-García et al. (2020) likewise emphasized that peer assessment is a vital element of PE that helps students observe, demonstrate, and provide constructive feedback to their peers, and Kusuma et al. (2023) discussed how peer teaching helps students develop both motor skills and social skills.

Significant Difference Between Pre-test and Post-test Performance

Table 4 presents the results of the paired-samples *t*-test on the differences in Tinikling step scores before and after the implementation of PALS. As expected, the post-test mean scores were higher than the pre-test mean scores for each of the Tinikling steps.

Table 4. Test of Significant Difference in Students' Performance Before and After the Implementation of Peer-Assisted Instruction in the Five Basic Tinikling Steps

Basic Step	Pre-test *M* (*SD*)	Post-test *M* (*SD*)	Mean Difference	*t* (39)	*p*	Decision	Effect Size (*d*)
Touch Step	3.53 (0.55)	4.40 (0.50)	0.88	9.82	<.001	Reject Ho	1.55
Hop Step	2.55 (0.68)	3.35 (0.58)	0.80	9.80	<.001	Reject Ho	1.55

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Basic Step	Pre-test *M* (*SD*)	Post-test *M* (*SD*)	Mean Difference	*t* (39)	*p*	Decision	Effect Size (*d*)
Cross Step	2.43 (0.68)	3.15 (0.58)	0.73	7.66	<.001	Reject Ho	1.21
Turn Step	1.65 (0.70)	2.68 (0.53)	1.03	9.83	<.001	Reject Ho	1.55
Double Step	1.55 (0.55)	3.28 (0.51)	1.73	17.05	<.001	Reject Ho	2.70

Note. *M* = mean; *SD* = standard deviation; *t* = paired-samples *t*-test statistic. Mean differences were calculated as post-test minus pre-test. Cohen's *d* represents the paired-samples effect size, interpreted as small (0.20), medium (0.50), and large (0.80) following Cohen's (1988) guidelines. All five dance steps demonstrated very large effects.

Among the five steps, the post-test mean of the Touch Step was the highest at 4.40 (*SD* = 0.50), followed by the Hop Step at 3.35 (*SD* = 0.58) and the Cross Step at 3.15 (*SD* = 0.58). Post-test mean scores for these three steps exceeded the pre-test means by 0.88, 0.80, and 0.73, respectively, suggesting better motor coordination.

Larger improvements were shown for the Turn Step and Double Step. The Turn Step mean increased from a pre-test score of 1.65 (*SD* = 0.70) to a post-test score of 2.68 (*SD* = 0.53), and the Double Step mean increased by 1.73, from 1.55 (*SD* = 0.55) to 3.28 (*SD* = 0.51). Because the performance levels in these steps were initially quite low, these improvements are more meaningful than those of the steps that began at higher levels. Peer-assisted practice may have given students more opportunities to watch and perform the movements that were previously harder for them.

The paired-samples *t*-test showed statistically significant improvements in each of the dance steps (Touch Step, *t* = 9.82; Hop Step, *t* = 9.80; Cross Step, *t* = 7.66; Turn Step, *t* = 9.83; Double Step, *t* = 17.05; $p < .001$ for all). Accordingly, the null hypothesis was rejected for all steps, indicating a statistically significant difference in each movement.

In terms of practical significance, all the steps showed effect sizes that surpassed the threshold of 0.80 that Cohen (1988) recommends for a large effect. The effect sizes were 2.70 for the Double Step; 1.55 for each of the Touch Step, Hop Step, and Turn Step; and 1.21 for the Cross Step. These are substantial improvements in student performance, and the result for the Double Step reflects strong progress in a step that learners were expected to find difficult at the start.

This study examined PALS as a method of teaching Tinikling. Through demonstration, feedback, mutual assistance, and guided practice, learners can gain more confidence in their timing, accuracy, coordination, and learning of the steps, and the approach appears particularly effective for the Turn and Double Steps. In all five basic Tinikling steps, learners showed a significant improvement in performance after the use of PALS. However, these results must be interpreted in light of the one-group pre-test–post-test design used in the study; in the absence of a comparison group, the improvement cannot be attributed solely to the peer-assisted learning strategy.

These results are consistent with the work of Park et al. (2021), who showed that peer-led learning and prompts improve the accuracy of performance, which illustrates that peer-led instruction can provide the guidance a person needs to learn physical activities better. Madou et al. (2025) reported the efficacy of peer-led instruction, especially when students can observe and analyze mistakes in a person's performance, which supports training students to observe and give feedback to their peers.

Thematic Analysis of the Students' Experiences

This section presents the thematic analysis of the interview responses of the 40 respondents to the three interview guide questions asked during data gathering. The analysis identifies recurring patterns in the students' experiences, their perceptions of peer feedback and assistance, and their recommendations for using PALS in teaching Tinikling. The responses were organized into emerging themes and corresponding categories, with selected verbatim statements presented to support each theme, and the findings are discussed according to the three interview questions.

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Students' experiences in using the Peer-Assisted Learning Strategy

The first interview question was: "What are your experiences during the use of the peer-assisted learning strategy upon learning and performing the different basic dance steps of Tinikling in your class?" Table 5 shows five themes describing students' experiences with PALS. First, Collaborative Learning and Peer Support emerged as an important aspect of the learning process, as students described how they shared knowledge, demonstrated movements, and assisted classmates who experienced difficulties. This implies that, with the peer-assisted learning strategy, students are encouraged to cooperate and share responsibility in learning Tinikling.

Table 5. Thematic Analysis of Students' Experiences in Using the Peer-Assisted Learning Strategy

Emerging Theme	Category	Supporting Response
1. Collaborative Learning and Peer Support	Mutual assistance and cooperation	*R3: "We helped each other understand the steps, practice the movements, and improve our performance."*
	Peer guidance and demonstration	*R2: "I found it helpful to learn from my classmates who are more skilled and experienced."*
	Shared learning experiences	*R28: "Those who mastered the steps guided those who struggled."*
2. Improved Dance Skills and Understanding	Better understanding of dance movements	*R9: "Peers explained movements in simple ways that I could quickly understand."*
	Improved execution and performance	*R16: "Strategy that can enhance my skills, execution, and the right posture that needed to apply."*
	Mastery of steps, rhythm, and coordination	*R5: "Remembering the steps, following the rhythm, and performing the movements correctly."*
3. Increased Confidence and Reduced Performance Anxiety	Greater confidence in dancing	*R24: "It also helped me become more confident in dancing."*
	Reduced shyness and fear of mistakes	*R15: "I could ask questions freely without feeling shy."*
	Less intimidating learning environment	*R29: "We could practice, mess up, and try again without feeling embarrassed."*
4. Enjoyable and Engaging Learning Experience	Enjoyment and motivation	*R22: "My experience was exciting and enjoyable."*
	Interactive classroom participation	*R38: "Learning with a classmate made the lessons more interactive and less stressful."*
	Positive attitude toward folk dancing	*R30: "This experience made me appreciate them a little more."*
5. Challenges in Learning and Performing Dance Steps	Difficulty with timing and coordination	*R37: "I found some of the steps difficult, especially the timing of my movements with the bamboo poles."*
	Difficulty executing precise movements	*R7: "There are times that we have difficulty in executing the movements."*
	Initial difficulty with complex footwork	*R15: "The complex footwork, timing, and coordination."*

Second, Improved Dance Skills and Understanding reflected the students' perceived improvement in remembering dance steps, following the rhythm, maintaining proper posture, and executing movements. With the help of peer demonstrations, the exchange of feedback, and simplified explanations, the students gained a better understanding of the fundamental dance movements.

Third, Increased Confidence and Reduced Performance Anxiety highlighted how practicing with classmates helped students feel more comfortable, less embarrassed during performance, and more willing to participate in the activity. The supportive environment allowed them to ask questions, make mistakes while performing, and improve without excessive fear of judgment.

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Fourth, Enjoyable and Engaging Learning Experience demonstrated that students generally perceived the peer-assisted learning strategy as a fun, interactive, and meaningful intervention. Some participants also developed a greater appreciation of Philippine folk dances, specifically Tinikling, despite having different dance preferences.

Finally, Challenges in Learning and Performing Dance Steps showed that, for the most part, students continued to have difficulties with rhythm, movement, and complex footwork, which is to be expected with this style of dance. However, repeated practice and collaboration with classmates eventually gave students the comfort they needed to execute the movements.

These results resemble those of Vattøy and Gamlem (2024), who found that students who participated in peer-assisted feedback, as opposed to a control group, demonstrated better self-assessment and self-monitoring and a better understanding of self-efficacy. Shilcutt et al. (2023) likewise highlighted the importance of active participation in a dance class for increasing student motivation and participation, and Asmiwirda (2023) documented improvements in learning and performance in dance following the use of peer tutoring. These studies parallel what the participants described as factors that facilitated their learning of the basics of Tinikling: peer review, simplified explanations, working in partnership, and repeated practice of the dance steps led to mastery of the steps.

Influence of peer feedback, corrections, and assistance

The second interview question was: "How did the feedback, corrections, and assistance provided by your peer or classmate influence your learning and performance of the different basic dance steps of Tinikling in your class?" Table 6 shows the six themes generated on the influence of peer feedback, corrections, and assistance on students' learning and performance.

Table 6. Thematic Analysis of the Influence of Peer Feedback, Corrections, and Assistance on Students' Learning and Performance

Emerging Theme	Category	Supporting Response
1. Improved Performance Through Error Correction	Identification of mistakes	*R9: "I notice my mistakes that I could not see by myself, such as wrong timing in Tinikling."*
	Correction of improper movements	*R10: "They corrected my footwork, timing, and posture right away, which I didn't notice myself."*
	Improved accuracy and execution	*R3: "Their assistance made it easier for me to understand the steps and perform the movements properly."*
2. Enhanced Dance Skills and Technical Understanding	Improved footwork, posture, and coordination	*R2: "With their help, I was able to improve my hand gestures, body movements, and coordination."*
	Better timing and rhythm	*R15: "My partner counted the beat for me and guided my feet."*
	Understanding proper dance execution	*R37: "My partner's assistance helped me understand the proper timing and execution of each step."*
3. Increased Confidence and Motivation	Greater confidence in performing	*R40: "My classmate's encouragement gave me the confidence to perform even when I was afraid of making mistakes."*
	Motivation to practice and improve	*R25: "Their guidance helped me understand the correct steps and avoid mistakes. It also motivated me to practice more."*
	Reduced fear of making mistakes	*R11: "Their assistance helped me recognize the areas where I needed improvement without feeling embarrassed about making mistakes."*
4. Acceptance of Constructive Feedback and Positive Learning Attitudes	Openness to corrections	*R29: "Receiving constructive feedback taught me how to be resilient, open-minded, and receptive to comments."*
	Positive acceptance of criticism	*R15: "Because the feedback was given in a friendly and encouraging way, I accepted it easily and was motivated to improve."*

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Emerging Theme	Category	Supporting Response
	Recognition of feedback as part of learning	*R11: "I also learned to accept corrections positively because they were part of the learning process."*
5. Development of Cultural Awareness and Appreciation	Understanding cultural significance	*R16: "It helps me to enhance my skills, and boost my confidence and it teach me how to honor our culture."*
	Respect for authentic dance execution	*R14: "We must always follow the dance literature because it shows respect to the researchers who studied and documented the dance."*
	Appreciation of Philippine folk dance traditions	*R30: "With the help of my classmates, I was able to improve my performance while gaining a better appreciation of Philippine Folk Dances."*
6. Individual Differences in Receiving Feedback	Different perspectives and learning preferences	*R7: "Accepting corrections and feedback helps me the most especially I'm not the good kind of dancer as other performer/learner."*
	Limited reliance on peer feedback	*R13: "I really don't care about others feedback as long as I am comfortable with it it's good."*

First, Improved Performance Through Error Correction showed that students realized their classmates identified and corrected errors that were not easily noticeable to them. Peer correction covered footwork, timing, posture, and movement execution, which in turn improved the accuracy with which the students performed the dance steps. This suggests the value of immediate peer feedback in identifying performance errors during practice.

Second, Enhanced Dance Skills and Technical Understanding highlighted how peer assistance contributed positively to students' understanding of Tinikling. Students appreciated how peer assistance helped them understand the footwork, hand gestures, body movements, timing, rhythm, and coordination of the dance steps, and they explained that it gave them a better understanding of how to perform the dance movements and clarified how to execute the steps properly.

Third, Increased Confidence and Motivation showed how encouragement and peer assistance constructively supported students' confidence and enthusiasm. It made it easier for students to perform despite the difficulty of the task, knowing that someone would help them, especially at the start.

Fourth, Acceptance of Constructive Feedback and Positive Learning Attitudes manifested the students' improvement. Students were less bothered by correction and saw it as an inherent component of learning. Participants expressed the need for a flexible, open mind and a willingness to receive input from their peers. When feedback was given with good intent, it became useful and productive for them.

Fifth, Development of Cultural Awareness and Appreciation showed that peer feedback gave students a chance to realize the importance of Philippine folk dance and to understand how these dances are significant and valued. The meaning and traditions of Philippine folk dances, as well as their authentic manner of performance, should be understood in order to keep the dances original.

The last theme, Individual Differences in Receiving Feedback, demonstrated that individuals may respond to peer feedback in different ways. Most participants welcomed constructive and critical feedback from peers. Respondent 13, however, placed greater value on personal comfort than on the feedback of others. It is best to maintain a supportive and respectful learning environment that meets students' needs. Overall, peer feedback proved useful for correcting dance movements, encouraging development, improving skills, and appreciating dance as an art form.

Han et al. (2022) documented that corrective and visual feedback contributed to students' learning of motor skills in PE. Treschman et al. (2024) highlighted that the effectiveness of feedback depends on how learners receive, interpret, and apply it to improve performance, and Fitriady et al. (2022) highlighted the importance of a respectful learning environment. These studies showed that feedback positively influenced students' learning of motor skills

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and support the present finding that corrective and constructive peer feedback positively influences students' learning and development. Peer feedback can be considered a support system for learning, development, and appreciation of dance.

Students' suggestions and recommendations

The third interview question was: "What are your suggestions or recommendations in using the Peer-Assisted Learning Strategy in teaching Tinikling and other Philippine folk dances?" Table 7 shows the seven themes reflecting students' recommendations for improving the implementation of PALS.

Table 7. Thematic Analysis of Students' Suggestions and Recommendations for Using the Peer-Assisted Learning Strategy

Emerging Theme	Category	Supporting Response
1. Provision of Adequate Practice Time	Extended and repeated practice; additional time for difficult steps	*R3: "I recommend giving students enough time to practice with their partners or groups."*
2. Proper Teacher Demonstration and Guidance	Clear demonstrations; step-by-step instructions; teacher supervision	*R1: "Teachers should also demonstrate the proper fundamentals before letting students practice with their peers."*
3. Strategic Pairing and Partner Rotation	Mixed-ability grouping; partner rotation; exchange of tutor and learner roles	*R39: "Teachers should pair students with different levels of dancing abilities so that those who are more knowledgeable can assist those who are still struggling."*
4. Cooperation and Inclusive Participation	Teamwork; equal opportunities for assistance; patience and encouragement	*R12: "All the students would receive an equal guidance and help not just by their teacher but also from their fellow classmates."*
5. Constructive Feedback and Supportive Environment	Respectful corrections; clear feedback guidelines; safe learning environment	*R15: "Teaching students how to give respectful and constructive feedback."*
6. Cultural Understanding and Authentic Execution	Knowledge of dance origins and meanings; proper movements; teacher competence	*R14: "The demonstrator should clearly explain each movement and dance figure, including its meaning and purpose."*
7. Supplementary Learning Materials	Instructional videos; learning guides; visual references	*R10: "Providing a clear guide or video for peers to follow."*

Note. The themes were developed from the participants' recommendations. Respondents 13 and 34 indicated "None," while Respondent 31 expressed general satisfaction with the strategy. These responses were not included in the recommendation categories.

First, Provision of Adequate Practice Time emerged again as a key need for the students. Participants pointed out the need for many opportunities for partners or small groups to practice together before presenting to the whole group. Repeated practice of the dance movements helps build confidence, rhythm, coordination, and the ability to remember the steps.

Second, and more importantly, Proper Teacher Demonstration and instructional guidance were emphasized to ensure that students understand and execute the correct dance movements. Participants believed that it was the teacher's responsibility to demonstrate the movements and to guide students through a step-by-step process of practice, including teacher observation. They felt that such demonstration would help students perform the correct movements even while practicing.

Third, Strategic Pairing and Rotation of Peer Partners took into account students' varying levels of skill and proposed the strategic pairing of experienced dancers with less skilled ones. Some participants even proposed switching partners so that both could assume the roles of teacher and student.

Fourth, Cooperation and Inclusive Participation focused on cultivating teamwork and a cooperative attitude. Students recognized the need for a flexible approach to dance learning that ensures equal contribution, and they believed that all learners should be given opportunities to help their peers and to contribute to the learning process.

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Fifth, Constructive Feedback and a Supportive Learning Environment pointed to the importance of training students to give constructive and positive feedback. Guidelines on rhythm, footwork, and posture should be clearly defined and easily accessible to students, together with the rules for being a supportive feedback provider in the dance space.

Sixth, Cultural Understanding and Authentic Execution showed how important dance context and history were to the students in learning how to perform Philippine folk dances properly.

Lastly, Supplementary Learning Materials called for peer coaching and feedback guides that students can refer to when working through the material. These materials would also help students understand and recall dance terminology and movements. Overall, the recommendations include giving enough time to learn and practice, providing guidance from teachers, pairing students effectively for practice and constructive feedback, including everyone in the learning process, and fostering awareness of the culture behind Philippine folk dances.

The students' recommendations are supported by Kurita and Ohnishi (2023), who emphasized the importance of appropriately structuring cooperative learning activities and adjusting instructional tasks to students' abilities and learning needs. Similarly, Zach et al. (2023) highlighted the value of cooperative learning in PE in promoting students' social, physical, affective, and cognitive development through structured collaborative activities. Furthermore, Mödinger et al. (2022) established that video-based visual feedback can enhance motor learning, which supports the use of instructional videos and visual guides as supplementary materials in teaching physical movements. These studies reinforce the importance of providing adequate practice opportunities, appropriate teacher guidance, inclusive peer collaboration, and supplementary instructional resources in implementing PALS in Tinikling and other Philippine folk dances.

Summary of the Findings

This research examined the effectiveness of PALS when teaching Tinikling to BPED students at Colegio de San Antonio de Padua. It looked at how students performed in the five basic Tinikling steps (Touch Step, Hop Step, Cross Step, Turn Step, and Double Step) before and after the strategy was used, at the students' experiences and the influence of peer feedback and support on their learning and performance, and at their suggestions for improving the implementation of the strategy in teaching Tinikling and other Filipino dances.

Before the implementation of PALS, students showed varied performance across all five basic Tinikling steps. They performed somewhat better in the Touch Step, while the Turn and Double Steps were the most difficult. These results point to a lack of guided practice, support, and constructive feedback, as students continued to struggle with the foundational movements of these steps. Following the implementation of PALS, students improved in all five basic Tinikling steps, most prominently in the Touch Step; improvements were also shown in the Turn and Double Steps. Although some students needed additional instruction in certain steps, they improved overall in the basic dance steps after the implementation.

The paired-samples *t*-test showed highly significant improvement in the students' performance in all five basic Tinikling steps from pre-test to post-test, and large effect sizes were noted. The null hypothesis was therefore rejected, indicating a difference in student performance between the pre-test and the post-test.

The students' perceptions of PALS illustrated a collaborative, supportive, and engaging learning atmosphere. Sharing knowledge, demonstrating steps, and helping one another practice were noted to have increased students' dance skills and knowledge, and students felt less nervous about their dance performance as their confidence grew. However, the strategy did not fully help some students develop a better sense of timing and rhythm in addition to the footwork required by the dance.

Peer correction and assistance increased students' confidence and motivation and facilitated better learning and understanding of the technical steps of Tinikling. Most students were able to accept constructive feedback and recognized that respect is key when giving or receiving feedback, while also learning the significance of individual

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differences in dance performance. Interaction with peers also led students to understand and appreciate Philippine folk dances and increased their cultural understanding.

Finally, the students suggested ways to strengthen the implementation of PALS: more practice time, better instruction from teachers, more structured pairing and rotation of students, greater collaboration and more inclusive participation, more structured feedback, more cultural context and authentic execution of the dances, and the use of supplemental teaching materials, including videos. These recommendations were used to formulate an improved lesson exemplar for Tinikling and other Philippine folk dances.

Output of the Study: Enhanced Lesson Exemplar

Tinikling is one of the most iconic and internationally recognized cultural dances of the Philippines, yet it presents many pedagogical difficulties because of the technicalities of the dance. The Enhanced Lesson Exemplar was developed as one of the possible outputs of this study to aid the teaching and learning of Tinikling. It was developed on the basis of the findings, which revealed improvements in students' performance of the five basic Tinikling steps following the implementation of PALS. Although students demonstrated progress in executing the dance steps, the findings also indicated varying levels of proficiency, particularly in the more challenging movements that require proper footwork, coordination, timing, and rhythmic execution. Furthermore, the students' experiences highlighted the value of peer collaboration, constructive feedback, teacher guidance, sufficient practice opportunities, and supplementary instructional materials in facilitating their learning.

In response to these findings, the lesson exemplar aims to provide a structured and enhanced instructional guide that integrates peer-assisted learning activities, teacher demonstrations, guided practice, and collaborative performance tasks. It is intended to strengthen students' mastery of Tinikling, address the identified learning difficulties, and promote active participation in and appreciation of Philippine folk dance. Ultimately, it seeks to give PE teachers a practical instructional resource for making Tinikling lessons more systematic, engaging, and responsive to students' learning needs. The Enhanced Lesson Exemplar aims to enable students to:

1. demonstrate the proper execution of the five basic Tinikling steps: Touch or Dip Step, Hop Step, Cross Step, Turn Step, and Double Step;
2. improve their footwork, coordination, timing, and rhythmic execution through guided demonstrations and repeated practice;
3. apply the peer-assisted learning strategy by providing constructive feedback, corrections, and assistance to their classmates;
4. perform the basic Tinikling steps with improved confidence, accuracy, coordination, and synchronization with the bamboo poles and music;
5. demonstrate cooperation, respect, and active participation during individual, pair, and group learning activities; and
6. appreciate the cultural significance of Tinikling as part of the Philippines' traditional folk-dance heritage.

The output consists of four lesson exemplars (Appendix D) designed as a progressive instructional sequence: students' appreciation and understanding of Tinikling, familiarization with its fundamental dance steps, guided peer-assisted practice, and a culminating performance task. Each lesson incorporates PALS, in which students work with assigned partners to demonstrate movements, observe performances, provide constructive feedback, correct errors, and support one another's learning. The lessons are designed for college-level PE, particularly for BPED students, and each may be delivered in approximately 60 minutes, depending on class size, available facilities, and students' learning needs. Five phases provide a consistent structure while allowing the level of peer assistance and movement complexity to increase across the lessons. The sequence also responds to the findings of the study: students benefited from peer collaboration and constructive feedback but continued to need adequate practice, teacher demonstrations, clear guidance, and opportunities to improve challenging dance movements. Accordingly, the exemplars combine teacher-led instruction with structured peer-assisted activities rather than relying entirely on students to teach one another.

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Scope and Limitations

The following limitations of the study are acknowledged despite the positive findings obtained.

First, the study was limited to BPED students of Colegio de San Antonio de Padua who met the established inclusion criteria and participated in the research during the specified academic year. The intervention focused on the peer-assisted learning strategy only as a teaching strategy for the selected Tinikling dance steps. Other factors that may influence students' performance, such as prior dance experience, physical fitness, musical background, motivation, previous exposure to Tinikling, and differences in peer tutors' instructional abilities, were not treated as primary variables of investigation, although they were acknowledged in interpreting the findings.

Second, the study had methodological limitations. Students' performance scores depended on the clarity of the assessment rubric, the consistency of its application, and the competence of the evaluators. To strengthen the credibility and consistency of the assessment, the rubric was subjected to expert validation and measures for consistent scoring were established. The qualitative findings reflect the experiences of the students who participated in the interviews or focus group discussions and may not represent the experiences of all BPED students.

Third, the study employed a one-group pre-test and post-test design without a comparison group. Any observed improvement in students' performance therefore cannot be attributed exclusively to peer-assisted instruction, since other factors may also have contributed to the results. Furthermore, the findings are context-specific and may not be readily generalizable to students from other institutions, academic programs, or learning environments. Despite these limitations, the study provides evidence regarding changes in students' Tinikling performance following the intervention and insights into their experiences with peer-assisted instruction.

Fourth, the study included only forty (40) second-year and third-year BPED students from a single institution. Consequently, the findings may have limited generalizability to other educational settings, grade levels, or student populations.

Fifth, the duration of the intervention was limited to one academic term, which may not have been sufficient to capture the long-term effects of the peer-assisted learning strategy on students' development in learning Tinikling.

Lastly, the study relied primarily on researcher-made performance task rubrics and students' self-reported experiences. Although validated instruments and scoring procedures were employed, subjective interpretation may still have influenced some aspects of the assessment and the interview responses. Future researchers are therefore encouraged to use experimental designs with control groups, larger and more diverse samples, and longer intervention periods to strengthen the validity and generalizability of findings on the effectiveness of peer-assisted instruction in learning Tinikling.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The findings of this study showed that the Peer-Assisted Learning Strategy was associated with a substantial improvement in students' execution of the five basic steps of Tinikling. Peer modeling, working with peers, and peer feedback were essential for students to refine their movements, learn technique, and build confidence in performing traditional dances of the Philippines. There were hurdles in learning the more difficult steps, and some feedback methods posed difficulties for some students, but the strategy was, on the whole, very well received by the students. The positive results of this teaching method warrant consideration of peer-assisted learning as an option for improving PE pedagogy, more specifically the instruction of dances that require a combination of steps and other tasks necessitating cooperation, collaboration, and repeated performance. Because the study used a one-group pre-test and post-test design, these conclusions apply to the observed pre-test–post-test change and do not establish that the strategy alone caused it. To provide further support and guidance in the area, an enhanced lesson exemplar for teaching Tinikling and other folk dances using the Peer-Assisted Learning Strategy was developed.

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Recommendations

Based on the findings and conclusions of the study, the following recommendations are offered:

1. **Students** are encouraged to participate actively in peer-assisted learning activities by demonstrating movements, sharing knowledge, providing constructive feedback, and assisting classmates who experience difficulties. They should also be open to corrections, respect individual differences, and practice consistently to improve their dance skills, coordination, confidence, and appreciation of Philippine folk dances.
2. **Physical Education teachers** are encouraged to integrate the Peer-Assisted Learning Strategy as a supplementary approach in teaching Tinikling and other performance-based PE activities. They should provide clear demonstrations, step-by-step instructions, adequate practice opportunities, and continuous supervision to ensure the accuracy of dance movements. Teachers should also establish appropriate peer groupings, encourage the rotation of tutor and learner roles, and promote a respectful and inclusive environment in which students feel comfortable giving and receiving constructive feedback.
3. **BPED students and pre-service teachers** are encouraged to develop their competence in implementing peer-assisted learning activities as part of their professional preparation. They should acquire the necessary knowledge and practical skills in Philippine folk dances, learn effective strategies for demonstrating and correcting movements, and develop the ability to facilitate collaborative and inclusive learning experiences during their future teaching practice.
4. **Higher education institutions** are encouraged to support the integration of peer-assisted learning approaches in PE programs by providing adequate facilities, instructional materials, and opportunities for practical dance activities. They may also organize workshops, cultural presentations, and dance-related activities that promote collaboration, skill development, and appreciation of Philippine cultural heritage among students.
5. **Curriculum developers and academic program coordinators** are encouraged to consider the findings of this study in enhancing existing PE curricula, particularly courses involving Philippine folk dances. The enhanced lesson exemplar may serve as a supplementary instructional resource for organizing dance lessons that incorporate peer demonstrations, collaborative practice, constructive feedback, cultural understanding, and performance assessment. They may also consider providing learning competencies and instructional activities that address students' varying levels of dance proficiency.
6. **The Commission on Higher Education** is encouraged to continue supporting initiatives that strengthen the teaching and preservation of Philippine folk dances in higher education institutions, and to consider promoting instructional approaches that encourage active student participation, collaborative learning, cultural awareness, and the development of practical competencies in PE programs.
7. **Future researchers** are encouraged to conduct related studies involving the Peer-Assisted Learning Strategy in teaching other Philippine folk dances and performance-based PE activities. They may consider larger populations, different educational institutions, and experimental or quasi-experimental designs with comparison groups to examine the effectiveness of the strategy further. Further investigations may also explore other factors, such as students' motivation, confidence, cultural awareness, peer relationships, and long-term retention of dance skills, to provide a broader understanding of peer-assisted learning in PE.

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REFERENCES

Asmiwirda. (2023). The enhancement of dance learning achievement through the peer tutor learning model for Grade VIII 1 students at SMP N 5 Muara Bungo. *TOFEDU: The Future of Education Journal, 2*(1), 296–301. https://doi.org/10.61445/tofedu.v2i1.51

Berlas, I. R., & Buot, I. (2026). Learning dance in PATHFIT 1 and 2: Experiences of peer tutoring. *Psychology and Education: A Multidisciplinary Journal, 57*(8), 968–988. https://doi.org/10.70838/pemj.570804

Beseler, B., Plumb, M. S., Spittle, M., Johnson, N. F., Harvey, J. T., & Mesagno, C. (2024). Examining single session peer-teaching instructional approaches on pre-service physical education teachers' throwing techniques. *Perceptual and Motor Skills, 131*(1), 246–266. https://doi.org/10.1177/00315125231214126

Boone, T., Reilly, A. J., & Sashkin, M. (1977). Social learning theory, Albert Bandura, Englewood Cliffs, N.J.: Prentice-Hall, 1977. 247 pp., paperbound. *Group & Organization Studies, 2*(3), 384–385. https://doi.org/10.1177/105960117700200317

Bores-García, D., Hortigüela-Alcála, D., González-Calvo, G., & Barba-Martín, R. (2020). Peer assessment in physical education: A systematic review of the last five years. *Sustainability, 12*(21), 9233. https://doi.org/10.3390/su12219233

Brown, L. M. (2023). The impact of student-centered learning through use of peer feedback in the dance technique classroom. *Journal of Dance Education, 23*(2), 144–154. https://doi.org/10.1080/15290824.2021.1932911

Bruner, J. S. (1961). The act of discovery. *Harvard Educational Review, 31*(1), 21–32.

Buot, M. M. (2012). Dance movement analysis of Tinikling: A portrayal of an agrobiodiversity landscape. *Asia Life Sciences, 21*(1), 167–176.

Edrada, I. (2022). Step Buddy: A scheme to enhance the dance skills of the SHS students. *International Journal of Business, Law, & Education, 3*(2), 88–91. https://doi.org/10.56442/ijble.v3i2.52

Fahrul, M., Gunawan, G., Jumain, J., & Anwar, A. (2025). The implementation of the peer tutoring method to improve forward roll skills in floor gymnastics learning among junior high school students. *Ainara Journal (Jurnal Penelitian dan PKM Bidang Ilmu Pendidikan), 6*(3), 368–375. https://doi.org/10.54371/ainj.v6i3.923

Fitriady, G., Nurrochmah, S., Yudasmara, D. S., & Salamuddin, N. (2022). Alternative assessment for movement skills in physical education: The effectiveness of online self and peer assessment. In *Proceedings of the International Conference on Sports Science and Health (ICSSH 2022)* (pp. 393–398). Atlantis Press. https://doi.org/10.2991/978-94-6463-072-5_40

Gumelar, R. H., Budiman, A., & Taryana, T. (2023). Increasing male students' interest in learning dance with the peer tutor method: An action research. *Gondang: Jurnal Seni dan Budaya, 7*(1), 70–80. https://doi.org/10.24114/gondang.v7i1.44852

Han, Y., Syed Ali, S. K. B., & Ji, L. (2022). Feedback for promoting motor skill learning in physical education: A trial sequential meta-analysis. *International Journal of Environmental Research and Public Health, 19*(22), 15361. https://doi.org/10.3390/ijerph192215361

Heil, D. P., Angosta, A., Zhu, W., & Tan, R. (2019). The energy expenditure of Tinikling: A culturally relevant Filipino dance. *International Journal of Exercise Science, 12*(4), 111–121. https://doi.org/10.70252/FJUG5462

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Hsia, L.-H., Huang, I., & Hwang, G.-J. (2016). Effects of different online peer feedback approaches on students' performance skills, motivation and self-efficacy in a dance course. *Computers & Education, 96*, 55–71. https://doi.org/10.1016/j.compedu.2016.02.004

Hsia, L.-H., & Sung, H.-Y. (2020). Effects of a mobile technology-supported peer assessment approach on students' learning motivation and perceptions in a college flipped dance class. *International Journal of Mobile Learning and Organisation, 14*(1), 99–113. https://doi.org/10.1504/IJMLO.2020.103892

Irinco, R. T. (2025). Enhancing dance pedagogy: A study of theoretical and procedural knowledge in Philippine folk dances among BPEd students of the University of Eastern Philippines System. *Asian Journal of Education and Social Studies, 51*(7), 263–272. https://doi.org/10.9734/ajess/2025/v51i72120

Jenkinson, K. A., Naughton, G., & Benson, A. C. (2014). Peer-assisted learning in school physical education, sport and physical activity programmes: A systematic review. *Physical Education and Sport Pedagogy, 19*(3), 253–277. https://doi.org/10.1080/17408989.2012.754004

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

Kong, Y., Wang, W., & Rajabov, B. (2024). New model of college physical education teaching based on the algorithm and data structure of flipped classroom and OBE. *Heliyon, 10*(11), e31368. https://doi.org/10.1016/j.heliyon.2024.e31368

Kurita, S., & Ohnishi, Y. (2023). Implementation of a cooperative learning model for physical education in elementary school: Targeting of expressive activity in upper grade elementary students to improve emotional and social competence. *Taiikugaku Kenkyu (Japan Journal of Physical Education, Health and Sport Sciences), 68*, 577–596. https://doi.org/10.5432/jjpehss.23013

Kusuma, M. N. H., Novita, Komarudin, Asita, F. N., & Setyantoko, M. (2023). The role of the augmented real-time feedback to overcome the imbalance of cognitive, psychomotor, and social interaction in physical education class. *Journal of Hunan University Natural Sciences, 50*(2). https://doi.org/10.55463/issn.1674-2974.50.2.2

Lobo, J. (2025). What's in a step if not a story? Cultivating individual interest and engagement in Philippine traditional dance for cultural continuity: A quasi experimental study in physical education. *Journal of Ethnic & Cultural Studies*. https://doi.org/10.29333/ejecs/2791

Madou, T., Depaepe, F., Ward, P., & Iserbyt, P. (2025). The effect of specialized content knowledge in reciprocal peer learning in a university content class. *Physical Education and Sport Pedagogy, 30*(5), 497–507. https://doi.org/10.1080/17408989.2023.2256746

Mödinger, M., Woll, A., & Wagner, I. (2022). Video-based visual feedback to enhance motor learning in physical education—A systematic review. *German Journal of Exercise and Sport Research, 52*, 447–460. https://doi.org/10.1007/s12662-021-00782-y

Park, G., Collins, B. C., & Lo, Y.-Y. (2021). Teaching a physical activity to students with mild to moderate intellectual disability using a peer-delivered simultaneous prompting procedure: A single-case experimental design study. *Journal of Behavioral Education, 30*(3), 378–396. https://doi.org/10.1007/s10864-020-09373-7

Piaget, J. (1952). *The origins of intelligence in children*.

Santos, M. E., Martin, J. T., Salas, J. V., Soriano, M. R., Manlutac, C., & Sanchez, J. C. (2019). Movement analysis of Philippine folk dance Tinikling. *Asian Journal of Interdisciplinary Research, 2*(1). https://doi.org/10.34256/ajir1913

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DOI: 10.5281/zenodo.24305541

Shilcutt, J. B., Oliver, K. L., & Aranda, R. (2023). "You want to get us involved more": Authorizing student voice in a dance setting. *Journal of Dance Education, 23*(2), 123–133. https://doi.org/10.1080/15290824.2021.1906880

Taborada, J. C., & Sanchez, J. M. P. (2020). Learning mole concept with PALS: An intervention for working students in a night school. *KIMIKA, 31*(1), 11–19. https://doi.org/10.26534/kimika.v31i1.11-19

Treschman, P., Stylianou, M., & Brooks, C. (2024). A scoping review of feedback in physical education: Conceptualisations and the role of teachers and students. *European Physical Education Review, 30*(4), 545–562. https://doi.org/10.1177/1356336X241230829

Vattøy, K.-D., & Gamlem, S. M. (2024). Students' experiences of peer feedback practices as related to awareness raising of learning goals, self-monitoring, self-efficacy, anxiety, and enjoyment in teaching EFL and mathematics. *Scandinavian Journal of Educational Research, 68*(5), 904–918. https://doi.org/10.1080/00313831.2023.2192772

Ward, P., & Lee, M.-A. (2005). Peer-assisted learning in physical education: A review of theory and research. *Journal of Teaching in Physical Education, 24*(3), 205–225. https://doi.org/10.1123/jtpe.24.3.205

Zach, S. Z., Shoval, E., & Shulruf, B. (2023). Cooperative learning in physical education lessons – Literature review. *Frontiers in Education, 8*, Article 1273423. https://doi.org/10.3389/feduc.2023.1273423

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