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THE EFFECT OF THE I.P.A.G.A STRATEGY USING PEER-GUIDED APPLICATION METHOD IN LEARNING SOME BASIC FOOTBALL SKILLS FOR FIRST-YEAR INTERMEDIATE STUDENTS

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Keywords: I.P.A.G.A Strategy; Peer-Guided Application Method; football skills; Physical Education	ABSTRACT <i>This study investigates the effect of the I.P.A.G.A. strategy in conjunction with the peer-guided application method on the development of essential football abilities in first-year intermediate students. The study aims to investigate how this modern teaching approach enhances the development of fundamental technical skills, such as dribbling and ball control. An experimental design employing two equivalent groups (experimental and control) with pre-test and post-test assessments was implemented, consistent with the study's objectives. The study population comprised 123 first-year students from Al-Shuhadaa Intermediate School for Boys during the 2023–2024 academic year. A fundamental random selection procedure was employed to pick 40 individuals, thereafter divided into two groups of 20 each. The experimental group received training through the I.P.A.G.A. methodology with peer guidance, while the control group was instructed using conventional methods. The SPSS statistical software was employed to analyze the data and identify significant differences between the groups. The results demonstrated that the experimental group showed a markedly superior improvement in essential football skills, particularly in dribbling and ball control, compared to the control group. The findings demonstrate that the integration of structured teaching methodologies with peer-supported learning environments significantly improves children's motor skills. The research indicates that the I.P.A.G.A. technique, in conjunction with peer-guided application, significantly enhances individuals' ability to learn football. The researcher advocates for the implementation of contemporary, student-focused pedagogical approaches, such as the I.P.A.G.A. strategy, to promote active learning, collaboration, and skill mastery in physical education environments.</i>		
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INTRODUCTION

The educational process plays a vital and fundamental role in learning skill performance according to advanced scientific principles (Suryadi et al., 2024). Therefore, specialists have sought to develop various teaching strategies and methods to enhance skill learning across different educational stages (Ebrahim & Hussein, 2025; Yusroni, 2024). Teaching strategies, including cognitive and constructive approaches, are essentially learning programs that shift the focus from the teacher to the learner (Athaya et al., 2023; Mariati et al., 2024). Accordingly, experts have recognized the necessity of relying on research findings and studies to develop physical education lessons, as these lessons constitute the foundational pillar for achieving progress and success.

The I.P.A.G.A strategy is one of the teaching strategies based on constructivist theory, which emphasizes interpreting and understanding the targeted phenomenon by linking current information with prior experience. This strategy aims to support students in developing their performance by creating a better connection between theoretical content and its practical application, keeping them engaged and far from inactivity and boredom. The I.P.A.G.A strategy focuses on internal cognitive processes such as comprehension, reception, and information processing (Darwish et al., 2024). It emphasizes mental and cognitive processes, interpreting learning within the framework of the stimulus-response relationship. It represents a purposeful mental activity aimed at problem-solving and promotes reflective thinking through exposure to different educational situations, scientific and cognitive skills that stimulate students' motivation for observation, insight, and problem-solving (Saho, 2022). This encourages learners to achieve a deeper understanding of the educational content and to transform their interconnected experiences and emotions into positive experiences that enable them to reach a solution. The strategy includes the following steps: preparation or introduction, presentation, linking, generalization, and application (Hussein & Shaalan, 2021).

The peer-guided application method is a teaching approach in which students are organized into pairs. One student acts as the "performer," carrying out the required task and receiving feedback from their peer, while the other acts as the "observer" or "monitor," who observes the performance, provides feedback, and helps correct mistakes. The teacher plans the lesson and sets the objectives. After a specified period, students switch roles. This method promotes cooperation among students, increases participation, saves time, and improves performance.

Since football is one of the important curricular subjects in our schools, it relies on basic skills as an essential foundation for the game. Mastering these skills is the first step toward advancement in the game. Therefore, it is crucial to focus on teaching these skills through appropriate effort and the optimal use of suitable teaching strategies and methods, considering the learner's capabilities, the type of skills, and how to learn and develop them efficiently.

Thus, the significance of the study lies in selecting the I.P.A.G.A strategy using the peer-guided application method for learning some basic football skills for first-year intermediate students, which can play a major role in achieving the desired educational objectives.

Parameters of the Research

The researcher, drawing from experience as a physical education instructor in public schools and a football practitioner, alongside a review of prior studies and observation of student performance during practical lessons at Al-Shuhadaa Intermediate School for Boys, noted significant variations in the proficiency of fundamental football skills among first-year intermediate students. This inconsistency can be ascribed to various factors, including insufficient consideration of individual student differences, the unsuitable selection of pedagogical strategies that do not prioritize learners, and the substantial class sizes that restrict personalized instruction. The researcher advocated the implementation of the I.P.A.G.A. strategy in conjunction with the peer-guided application method as a potentially viable means of enhancing the development of

fundamental football skills among first-year intermediate students. This study seeks to evaluate the impact of the I.P.A.G.A. strategy employing the peer-guided application technique on the acquisition of specific fundamental football abilities and to analyze the differences between pre-test and post-test outcomes of students subjected to this strategy. The study posits that statistically significant differences exist between the pre-test and post-test results of the experimental and control groups, as well as between their post-test outcomes, favoring the experimental group. The research is confined to first-year intermediate students at Al-Shuhadaa Intermediate School for Boys in Wasit Governorate, Iraq, conducted from March 4, 2024, until May 9, 2024.

RESEARCH METHOD

Participant

The research population was deliberately chosen to encompass all first-year intermediate students registered at Al-Shuhadaa Intermediate School for Boys in Wasit Governorate for the 2023–2024 academic year, totaling 123 students over three classes (A, B, and C). A random sample of 40 students was selected from this population to represent the study participants. The selection was conducted after the exclusion of 42 students for the following reasons: five students failing, four students absent, one student with a medical report, thirty students engaged in exploratory experiments for reliability and validity assessment, and two students whose primary sport was volleyball. Thus, the final research sample comprised 40 students, accounting for 32.52% of the total population, evenly divided into two groups of 20 students each. The experimental group was instructed utilizing the I.P.A.G.A. strategy with peer-guided application, whereas the control group was taught by standard methods. The allocation of teaching methods to groups was performed randomly to guarantee objectivity and minimize bias in the experimental procedures.

Research Design

The researcher employed the experimental method using a two equivalent groups design (experimental and control) to suit the research problem, achieve the study objectives, and verify its hypotheses. The researcher employed the experimental design known as the two equivalent groups design with pre-test and post-test.

Table 1. Illustrates the Experimental Design of the Research Groups.

Groups	Pre-Test	Experimental Treatment	Post-Test
Experimental	Football Skills Test (dribbling, control)	I.P.A.G.A Strategy using Peer- Guided Application Method	Football Skills Test (dribbling, control)

Tools, Instruments, and Equipment Used in the Study

To accomplish the aims of this study, many methods of data collecting and an array of techniques and equipment were utilized. The principal methods of information collection comprised tests and measurements, questionnaires, and structured interviews. These devices were utilized to acquire both quantitative and qualitative data concerning the pupils' performance and learning advancement in fundamental football skills. Moreover, a range of instruments and equipment was employed to execute the practical components of the investigation. The research was carried out on the school playground, furnished with the requisite materials for football training sessions. The equipment comprised ten official Molten footballs, ten big cones for area delineation, a 50-meter measuring measure, and colorful adhesive tapes for defining borders and zones for drills. The researcher employed two whistles to manage training and testing sessions, while a DELL laptop enabled data collection and analysis. Additionally, two Casio stopwatches were utilized to precisely measure time during performance evaluations. Collectively, these

instruments and technologies facilitated accurate data collection, uniformity in execution, and dependability in assessing the efficacy of the I.P.A.G.A. approach through the peer-guided application technique in acquiring fundamental football skills.

Research Variables and Tests

The researcher derived the study variables from the football teaching content mandated by the Ministry of Education for the first-year intermediate level. This study focuses on two essential football skills—dribbling and ball control—since they are the most commonly performed techniques in actual play and are critical indicators of technical quality. Standardized assessments were employed to assess performance levels and ascertain the degree of improvement subsequent to the execution of the instructional program.

The initial assessment was the 20-meter Ball Dribbling Test, intended to evaluate the velocity and precision of ball dribbling. The necessary equipment comprised a measuring tape, a football, a timer, two cones, a whistle, and a recording sheet. The contestant commenced with the ball positioned behind the beginning cone and, at the whistle signal, dribbled the ball 20 meters ahead to the second cone, navigated around it, and returned to the starting point. The cumulative time was documented, permitting each participant two chances, with the superior score preserved.

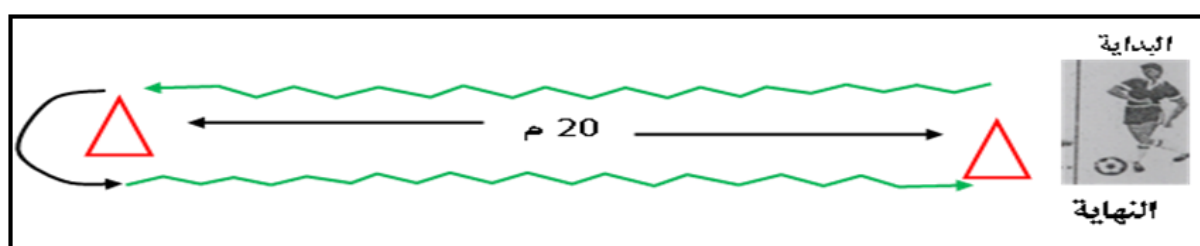


Figure 1. Illustration of the Dribbling Test

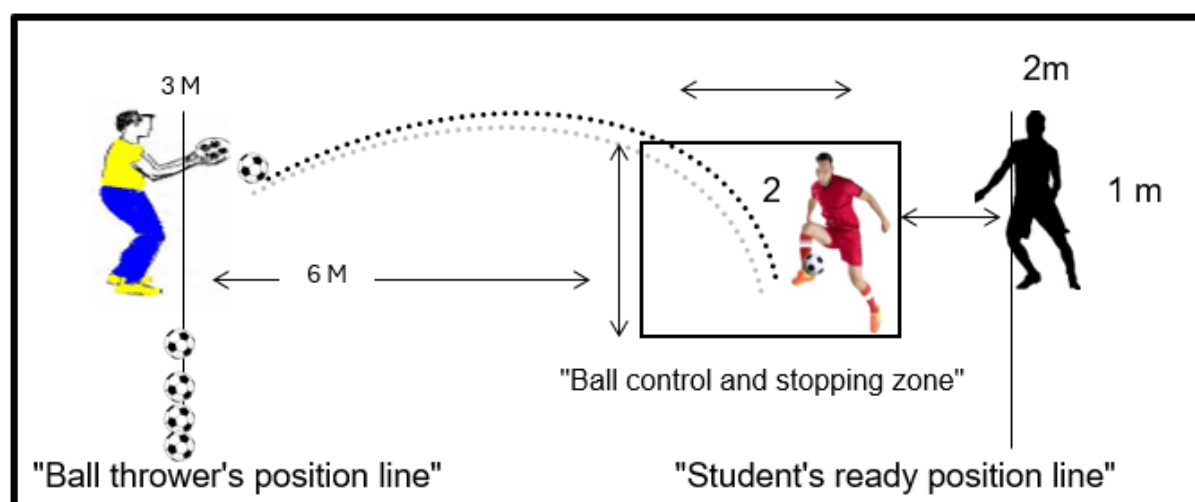


Figure 2. Illustrates The Ball Control (Trapping) Test

The second assessment was the Ball Control (Stopping) Test, designed to evaluate the player's capacity to manage a ball inside a specified area utilizing all body parts except the arms. A 2 m × 2 m square was designated as the control zone, with a throwing line located 6 meters away and a starting line situated 1 meter behind the square. The thrower, situated at the 6-meter line,

underhandedly propelled the ball toward the square as the student moved to intercept it within the designated area. Each kid received five attempts with five official footballs. Successful ball control within the square using one or two touches garnered 2 points, control with more than two touches yielded 1 point, and unsuccessful attempts received 0 points. The cumulative score varied between 0 and 10. The tests yielded valid and reliable measures of the students' advancement in acquiring the specified football abilities through the I.P.A.G.A. strategy and the peer-guided application technique.

Pilot Study

The researcher conducted a pilot study at the playground of Al-Shohada Intermediate School for Boys to identify potential drawbacks and avoid them prior to implementing the educational program. The researcher carried out pilot trials related to the educational curriculum, skill exercises, and the tests (dribbling – control) on a pilot sample, which was outside the main research sample, in order to achieve accurate results before the implementation of the educational program. The pilot study aimed to achieve the following objectives:

To determine the total time required to conduct the tests and assess their suitability for the sample.

1. To verify the appropriateness of the location.
2. To ensure the validity and safety of the equipment.
3. To identify obstacles and problems that the researcher might face, as well as to assess the efficiency of the assisting team.

Pre-Tests and Equivalence of the Research Groups

The pre-test was conducted on Tuesday, 2/4/2024, at the playground of Al-Shohada Intermediate School for Boys, assessing the skills of (dribbling, control) for both the experimental and control groups. All necessary equipment was prepared, and the tests were administered under the supervision of the researcher and the assisting team. To ensure uniformity in the research procedure, the researcher conducted an equivalence check between the pre-tests covering the skills (dribbling, control), as shown in Table (2).

Table 2. Shows the equivalence between the control and experimental research groups in the variables of the football skills (dribbling and control).

No.	Variables	Unit of Measurement	Experimental Group		Control Group		Calculated t	Significance Type
			Mean	SD	Mean	SD		
1	Dribbling	Seconds	17.99	0.730	18.278	0.338	1.794	Not Significant
2	Control (Stopping)	Degree (10)	1.7	0.883	1.40	0.862	-0.629	Not Significant

the critical t-value at a significance level of 0.05 with 38 degrees of freedom was 2.03.

Educational Method Used

After reviewing the syllabus contents for the football course for first-grade intermediate students, conducting personal interviews with the course instructor regarding the teaching methods employed in physical education, and consulting a set of scientific sources related to football, an educational program was developed for the selected football skills (dribbling – control) based on the I.P.A.G.A strategy using the peer-guided application method. The program comprised eight

instructional units for each group to learn the skills of dribbling and control, with four instructional units allocated for each skill. The duration of each instructional unit was 45 minutes.

To avoid errors during the implementation of the educational program and to familiarize the learners with the selected skills (dribbling – control) and the football tests before conducting the pre-tests, the research sample was provided with two introductory instructional units. Additionally, the assisting team participated in a workshop to master their responsibilities.

Experimental Group

This group implemented the proposed instructional units using the I.P.A.G.A strategy with the peer-guided application method for a total of eight instructional units, following the five phases of the I.P.A.G.A strategy:

1. Phase One: Introduction (I) – In this phase, students' minds are prepared to receive new knowledge and information while recalling prior concepts stored in their memory through questions related to the instructional unit. This aims to attract students' attention, focus their thinking on the current topic, and activate their prior knowledge to be utilized in teaching the new content.
2. Phase Two: Presentation (P) – The required skill is demonstrated correctly using visual aids such as images and posters, emphasizing the essential conditions and standards of proper performance. A model of the skill is then presented by both the instructor and students, highlighting common errors to avoid during execution.
3. Phase Three: Association (A) – Students are guided to assess their impressions and the accuracy of their understanding by comparing and integrating new knowledge with previously held concepts to achieve standardized performance. This is facilitated through targeted questions and positive group participation, with each pair of students collaborating within small groups.
4. Phase Four: Generalization (G) – Students are given the freedom to express their opinions regarding the best performance of the skill based on their understanding. These opinions are then discussed and generalized for all students, clarifying how the skill should be performed correctly.
5. Phase Five: Application (A) – This phase transitions from theory to practical application. Students are divided into pairs (performer – observer) according to the peer-guided application method to practice the skill demonstrated in the previous phases using exercises pre-designed for the instructional unit. The instructor corrects errors by communicating with the observing student and providing feedback during performance, with a focus on alternating roles between the performer and the observer.

Control Group

The control group followed the standard curriculum in the form of eight instructional units, entirely teacher directed. Students were required to respond immediately to the instructor's commands without discussion. Students were randomly divided into small groups without reference to the pre-test results.

Post-Tests

After completing the implementation of the instructional units, the researcher, with the assistance of the support team, conducted the post-tests on Sunday, 5/5/2024. The researcher ensured that the same conditions as those of the pre-tests were maintained in terms of time, location, assisting team, and the equipment and tools used, in order to obtain accurate and reliable results.

Data Analysis

To fulfill the study's aims and validate its hypotheses, the researcher utilized suitable statistical techniques via the Statistical Package for the Social Sciences (SPSS) version 26. Descriptive statistics, encompassing arithmetic means, standard deviations, and percentage distributions, were employed to delineate the characteristics of the research sample and to summarize pre-test and post-test outcomes. Inferential statistical tests were utilized to ascertain the significance of differences between the experimental and control groups. The paired samples t-test was adopted to analyze the differences between the pre-test and post-test within each group, whilst the independent samples t-test was used to compare the post-test outcomes between the two groups. A significance level of $\alpha < 0.05$ was established to ascertain statistical significance. The analyses enabled the researcher to evaluate the influence of the I.P.A.G.A. strategy, employing the peer-guided application approach, on the enhancement of fundamental football skills—specifically dribbling and ball control—among first-year intermediate students. The statistical analysis results offered empirical evidence that the experimental approach is more effective than traditional teaching methods, demonstrating that peer-guided application enhances learning outcomes and motor skill acquisition in physical education contexts.

RESULTS

Table 3 displays the mean, standard deviation, and computed t-values for the football dribbling skill in the experimental and control groups. The control group demonstrated an enhancement in dribbling performance, improving from a mean of 18.278 seconds in the pre-test to 17.178 seconds in the post-test, with a computed t-value of 8.865, above the critical value of 2.03 at a significance level of 0.05. This signifies a statistically significant enhancement in performance. The experimental group demonstrated a more significant enhancement, with the mean reducing from 17.99 seconds in the pre-test to 14.53 seconds in the post-test, and a computed t-value of 16.331, surpassing the tabulated value. This outcome indicates a notable improvement in dribbling proficiency, implying that the I.P.A.G.A. strategy employing the peer-guided application method exerted a greater influence than conventional instruction.

Table 4 displays the outcomes of the football control (stopping) skill assessment. The control group exhibited an enhancement from a mean of 1.40 in the pre-test to 4.00 in the post-test, with a computed t-value of 10.8, which is statistically significant at ($\alpha < 0.05$). The experimental group demonstrated a notable enhancement, with the mean rising from 1.70 to 6.00, and a computed t-value of 17.84, which is significant at the same level. The data demonstrate that although both groups exhibited progress, the experimental group attained a superior rate of gain in ball control, underscoring the efficacy of peer-guided education in skill acquisition.

Table 3. Results of both the experimental and control groups in the football dribbling skill.

Group	N	Unit	Pre-Test	Post-Test	t-value (tabulated)	Significance

			Mean	SD	Mean	SD	t-value (calculated)		
Control	20	Seconds	18.278	0.338	17.178	0.528	8.865	2.03	Significant
Experimental	20	Seconds	17.99	0.730	14.53	0.734	16.331		Significant

Table 4. The pre-test and post-test results of both the experimental and control groups in the football control skill.

Group	N	Unit	Pre-Test		Post-Test		t-value (calculated)	t-value (tabulated)	Significance
			Mean	SD	Mean	SD			
Control	20	Score	1.40	0.862	4.00	0.738	10.8	2.03	Significant
Experimental	20	(10)	1.70	0.883	6.00	0.563	17.84		Significant

Significance level at (0.05) and degree of freedom (38).

Table 5. Shows the arithmetic means, standard deviations, and the calculated and tabulated *t* values in the post-test of the football dribbling skill between the experimental and control groups.

Group	Experimental		Control		t-value (calculated)	t-value (tabulated)	Significance
Dribbling Skill	Mean	SD	Mean	SD	13.386	2.03	Significant
	14.53	0.734	17.178	0.528			

Significance level at (0.05) and degree of freedom (38).

Table 6. Shows the arithmetic means, standard deviations, and the calculated and tabulated *t* values in the post-test of the football control skill between the experimental and control groups.

Skill	Group	Experimental		Control		t-value (calculated)	t-value (tabulated)	Significance
		Mean	SD	Mean	SD			
Control Skill		6.00	0.563	4.00	0.738	11.30	2.03	Significant

Significance level at (0.05) and degree of freedom (38).

Table 5 illustrates that the post-test comparison of dribbling skills between the experimental and control groups demonstrated a statistically significant difference favoring the experimental group. The experimental group exhibited a mean of 14.53 seconds and a standard deviation of 0.734, whereas the control group demonstrated a mean of 17.178 seconds with a standard deviation of 0.528. The computed *t*-value of 13.386 surpassed the critical *t*-value of 2.03, signifying a statistically significant difference at the 0.05 level. This verifies that the I.P.A.G.A. technique was superior in improving dribbling speed and control relative to the traditional way.

Table 6 corroborates these findings, indicating a substantial disparity in ball control skill between the two groups. The experimental group attained a mean score of 6.00 with a standard deviation of 0.563, whereas the control group recorded a mean of 4.00 with a standard deviation

of 0.738. The computed t-value of 11.30 surpassed the critical value of 2.03, indicating a statistically significant difference at the 0.05 level. This research demonstrates that students engaged in I.P.A.G.A.-based peer-guided sessions displayed superior ball control skills compared to those instructed through conventional techniques.

DISCUSSION

Based on Tables 3 and 4, there were statistically significant differences between the pre-test and post-test results for both the experimental and control groups, favoring the post-test in the dribbling and control skills. The researcher attributes these results to the effectiveness of the educational program implemented for the research groups, through detailed explanations of the technical performance for the targeted skills and modeling by the subject teacher, which positively influenced the students' skill performance.

Furthermore, selecting skills appropriate to the learners' age and abilities, providing immediate error correction, and informing students about their learning outcomes—whether positive or negative—through feedback, as well as avoiding exercises that disregard individual differences among students, significantly contributed to learning the selected skills and improving educational outcomes (Hussein & Shaalan, 2021). This is supported by Hussein, (2025), who stated "Feedback provides the individual with information or data about the course of their performance continuously, in order to help them adjust that performance if needed or maintain it if it is progressing correctly.

Upon reviewing Tables 5 and 6 for the post-tests, which show the differences between the research groups (experimental and control), it is evident that the results favor the experimental group that employed the I.P.A.G.A strategy using peer-guided application in learning the dribbling and control skills in football. The differences between the group results are statistically significant, indicating that the use of the I.P.A.G.A strategy with peer-guided application caused these differences. Therefore, the post-test results consistently leaned toward the experimental group, as demonstrated in Tables 5 and 6.

The researcher attributes the superiority of the experimental group to the positive learning environment created by the teacher, which captured the students' attention, motivated them, and connected their prior experiences with new information through charts, posters, images demonstrating correct performance, and targeted questioning. These strategies increased students' engagement and eagerness to follow the five stages of the strategy in the carefully prepared units. Additionally, diversifying the educational exercises for the skills made the units more stimulating, enjoyable, and exciting for students (Haniyyah et al., 2025; Zulfadila et al., 2025). This aligns with Ebrahim & Hussein (2025) the diversity and renewal in using exercises, methods, and strategies when teaching sports skills is most suitable for creating an atmosphere of excitement, stimulation, and enjoyment for students, contributing to rapid learning and acquisition of movements and sports activities.

Moreover, teaching the experimental group using the I.P.A.G.A strategy with peer-guided application made the student the central focus of the learning process (Saho, 2022). Students actively sought knowledge, learned through experience and discovery, participated effectively, expanded their expertise, and applied exercises during the stages of connection, generalization, and application in a positive peer-guided manner (Aziz et al., 2023; Mashud et al., 2023; Perdana et al., 2023). This approach encouraged students' initiative, fostered autonomy, improved performance levels, enhanced self-confidence and motivation, and made students bolder in facing skill-based performance (Benda et al., 2021; Janvier et al., 2016; Sinulingga et al., 2024; Yu & Denham, 2024). This aligns with Akinci & Kirazci, (2020); Fahad & Mohammed, (2024); Gejl et al., (2021) focusing on the learner, making them the center of the learning process, respecting their

opinions and abilities, and surrounding them with care, acceptance, and encouragement is a key factor that supports learning.

The researcher also notes that using the I.P.A.G.A strategy with peer-guided application was suitable for the students' level, contributing to balance and completeness in learning, and clearly motivating them to perform through interactive and cooperative classroom activities. Teaching students to guide each other in the skills fostered enthusiasm for physical education and a love for football, which strengthened students' self-confidence, as observed in the rapid acquisition of skills and their integration during performance (Darwish et al., 2024; Hussein & Shaalan, 2021). Self-confidence is recognized as a crucial factor in the success of skill-based performance.

CONCLUSION

The study's findings indicate that the implementation of the I.P.A.G.A. strategy through the peer-guided application technique significantly enhanced the acquisition of basic football skills among first-year intermediate students. The experimental group surpassed the control group in dribbling and ball handling skills, as demonstrated by statistically significant differences in the post-test outcomes. These results validate that the amalgamation of organized pedagogical methodologies with peer-based learning environments encourages active engagement, improves motor performance, and cultivates a deeper comprehension of movement approaches. The results correspond with modern educational theories that highlight learner-centered instruction and social interaction as essential elements of effective physical education. This research illustrates the effective application of contemporary teaching approaches, specifically the I.P.A.G.A. strategy, in physical education to improve student engagement and skill development. Through the promotion of peer collaboration and structured practice, educators may cultivate dynamic learning environments that enhance both cognitive and physical dimensions of student performance. This study enhances the existing research on innovative instructional methods in sports education by offering empirical evidence of the effectiveness of the I.P.A.G.A. strategy in conjunction with peer-guided application. It emphasizes the significance of structured yet adaptable techniques that prioritize the student in the educational process, especially in cultivating technical sports skills. The researcher advises physical education instructors to implement the I.P.A.G.A. technique alongside peer-guided learning to improve the quality of teaching and learning outcomes in football and other sports. Subsequent research is recommended to broaden this investigation by implementing the technique across other age demographics, athletic disciplines, and educational settings to further substantiate its efficacy and versatility.

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