



The Effect of the Wallace Model on Teaching Selected Offensive Basketball Skills to Students

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Abstract:

The importance and necessity of the research are manifested in the researcher's serious scientific attempt during the (university) stage to benefit from the Wallace Model and to identify its impact on teaching some basic offensive skills in basketball, and the ability to use it in a scientifically correct manner in student learning with the aim of enriching the educational process by finding an effective means for learning and teaching, thereby achieving the desired goals of the educational process.

As for the research problem, through the researcher's observation of physical education classes at the College of Physical Education and Sports Sciences at Al-Ain University, it was found that learners face difficulty in performing some offensive skills in basketball. This may be due to the lack of using models or strategies that simulate the individual differences possessed by the learner, and that work on making the learner active, creative, and capable of problem-solving.

The aims of the research were to design instructional units according to the Wallace Model to teach some offensive skills in basketball to students, to identify the impact of the Wallace Model and the method followed by the instructor in teaching some offensive skills in basketball to students, and to identify the differences in post-test results between the control and experimental groups in learning some offensive skills in basketball. The researcher used the experimental method due to its suitability to the nature of the research problem, employing the two equivalent groups approach (control and experimental) with pre- and post-testing. The research population was determined as the first-year students (morning study) in the College of Physical Education and Sports Sciences – Al-Ain University for the academic year (2023/2024). The research sample consisted of (32) students, representing (13.38%) of the research population, distributed across two sections with (16) students in each section.

One of the most important conclusions was that the Wallace Model had a positive effect on learning passing, dribbling, and shooting skills in basketball for the students.



1 – Research Identification

1.1 Introduction and Importance of the Research:

The Wallace Model is considered one of the models of the creative process and is regarded as one of the classical models of creativity. It has been used as a foundation for many other models. The model focuses on the process that an individual goes through to achieve creativity, encompassing successive stages that lead to the emergence of a creative idea. This model was designed by the British scholar Graham Wallace in 1926 to help students solve creative problems. It consists of four stages: preparation, incubation, illumination, and verification. Wallace believes that the learner's engagement in these stages or mental processes helps in reshaping their cognitive structure and developing various mental skills such as gathering, analyzing, and synthesizing information from multiple sources. This model also relies on the learner applying knowledge and skills within the context of the simple information they possess. Basketball is one of the competitive team sports that has gained significant global popularity. It includes various offensive and defensive skills, with offensive skills being among the most important and challenging. Learners often struggle to perform them easily, as they require more time and greater effort to master. Learning these skills is considered a vital element in achieving optimal results.

Hence, the significance and necessity of this research emerge as a serious scientific attempt by the researcher, through her university-level experience, to benefit from the Wallace Model and explore its impact on teaching certain offensive basketball skills and the ability to use it in a scientifically correct way for student learning. The aim is to enrich the educational process by providing an effective method for learning and teaching, thereby achieving the desired educational goals.

1.2 Research Problem:

Through the researcher's observation of physical education classes at the College of Physical Education and Sports Sciences at Al-Ain University, it was found that learners show low practical scores based on their performance in examinations. This may be due to the lack of models or strategies that simulate the individual differences possessed by learners and help



make them active, creative, and capable of solving the problems they may face while learning the targeted skills. In addition, the students in the research sample had limited knowledge related to basketball and the specific skills being taught. Based on the above, the idea for this research emerged from the need to improve the students' basic offensive basketball skills.

1.3 Research Objectives:

- A. To prepare instructional units according to the Wallace Model to teach certain basic offensive basketball skills to students.
- B. To identify the impact of the Wallace Model and the method used by the instructor in teaching some basic offensive basketball skills to students.
- C. To identify the differences between the results of the post-tests between the control and experimental groups in learning some basic offensive basketball skills.

1.4 Research Hypotheses:

- A. There are statistically significant differences in learning some offensive skills between the pre- and post-tests of the control and experimental groups, in favor of the post-tests.
- B. There are statistically significant differences in learning some offensive skills between the post-tests of the control and experimental groups, in favor of the experimental group.

1.5 Research Fields:

1.5.1 Human Field: First-year students / College of Physical Education and Sports Sciences / Al-Ain University.

1.5.2 Time Field: From 1/10/2023 to 15/2/2024.

1.5.3 Spatial Field: Basketball court and lecture halls in the College of Physical Education and Sports Sciences / Al-Ain University.

2 – Research Methodology and Field Procedures

2.1 Research Method:

The researcher used the experimental method due to its suitability to the nature of the research problem, employing the two-group equivalent approach (control and experimental groups) with pre- and post-tests.

2.2 Research Population and Sample:



The research population consisted of first-year students (morning study) at the College of Physical Education and Sports Sciences – Al-Ain University for the academic year 2023/2024. The research sample consisted of (32) students, representing (13.38%) of the research population, distributed across two sections, with (16) students in each section.

2.2.1 Homogeneity of the Research Sample:

Before implementing the Wallace Model, and in order to control the variables that may affect the accuracy of the research results, the researcher verified the homogeneity of the research sample in the variables that could influence the accuracy of the outcomes.

Table (1)

It shows the homogeneity of the research sample individuals in the variables (height, age, mass)

coefficient of variation	Standard deviation	Arithmetic mean	Unit of measurement	Variables	T
2.241 %	3.85	171.75	poison	height	1
4.32%	0.80	18.50	year	the age	2
6.18%	4.43	71.62	kg	mass	3

From Table (1), it is evident that all values of the coefficient of variation fell within the range of (± 3), indicating homogeneity of the sample in the aforementioned variables.

2.2.2 Equivalence of the Research Groups

To ensure that the sample was equivalent in all research variables and to establish a baseline for the participants, the t-value was calculated between the two groups (control and experimental), as shown in the following table:

Table (2)

Shows the equivalence of the control and experimental research groups in all variables under study.

No.	Variables	Unit of Measurement	Mean (Control)	SD (Control)	Mean (Experimental)	SD (Experimental)	T	Sig	Type of Significance
1	Passing	Degree	17.18	2.04	16.87	1.70	0.470	0.64	Not Significant
2	Dribbling	Second	14.62	0.80	15.05	1.37	1.07	0.28	Not Significant



3	Shooting	Degree	5.12	1.45	5.09	1.34	0.63	0.95	Not Significant
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Significant at $< (0.05)$

From Table (2), it is clear that all calculated values indicate no statistically significant differences between the two research groups across all variables. Based on the statistical analysis, it can be concluded that the research sample was equivalent. These results were therefore adopted as the results of the pre-tests.

2.3 Data Collection Tools, Devices, and Instruments Used in the Research

2.3.1 Data Collection Tools:

To collect data and information and reach accurate results, the researcher utilized the following tools:

1. Arabic and foreign sources and references, 2. The Internet (information network) ,3. Mental fitness scale, 4. Motor satisfaction scale, 5. Personal interviews, 6. Questionnaire form, 7. Scientific observation

2.3.2 Devices and Instruments Used in the Research

The researcher used the following devices and instruments:

1. Official basketball court, 2. iPhone 11 mobile phone, 3. 20 official basketballs, 4. 3 adhesive tapes, 5. 4 whistles, 6. 1 stopwatch, 7. Metric measuring tape
 8. 2 Dell laptops, 9. Chinese-made seca medical scale for weight measurement.

2.4 Field Procedures

2.4.1 Identifying the Skills Used in the Research:

After agreement with the committee members and the research supervisor, a set of offensive basketball skills was selected to align with the adopted curriculum and suit the study's objectives. These skills include: chest pass, high-speed dribbling, and lay-up shooting.

2.4.2 Identifying the Skill Performance Tests:

A questionnaire form was prepared and presented to a group of experts and specialists to nominate appropriate tests for the basketball skills under investigation. After nominating a number of standardized tests for each skill, attention was given to selecting tests that are performance-based, feasible in terms of implementation, and time-efficient. These tests were also chosen for their strong scientific validity as established in previous studies.

Table (3)

Illustrates the experts’ opinions on the selected basketball skill tests for students.

Statistical significance	value Sig	value of Ka2	Not suitable	Suitable	per of exper	Tests	Skills	T
Non-moral	0.057	3,571	1	6	7	Push-to-swipe accuracy test (Pectoral Communion)	Pectoral Communion	1
Non-moral	0.257	1.286	2	5	7	measuring the laboratory's ability to handle and receive quickly		
Moral	0.000	7.00	0	7	7	handling the ball and receiving it towards the lapping circles on the wall from a distance (5m).		
Non-moral	0.057	3,571	1	6	7	on the high start, tap the direction between (13.5m) ns for a distance of (13.5m) back and forth	Patting	2
Moral	0.000	7.00	0	7	7	High tapping speed test.		
not Moral	0.057	3,571	1	6	7	test Dialogue between obstacles (patting) .		
Non-moral	0.057	3,571	1	6	7	Correction of the peaceful movement after performing the dialogue	Peaceful targeting	3
Moral	0.000	7.00	0	7	7	noting test from the peaceful movement after performing the tapping		

* Significant at the level $\leq (0.05)$

2.4.3 Description of Skill Tests:

1. Chest Pass Test⁽¹⁾

- **Test Name:** Passing and receiving the ball toward concentric circles on a wall from a distance of 5 meters.
- **Test Objective:** To measure the accuracy of the chest pass directed toward a target.
- **Required Equipment:** Smooth wall, 2 legal basketballs, measuring tape, chalk, non-elastic string, and a nail to mark the center of the circles.
- **Procedure:**
 - Three concentric circles are drawn on a smooth wall using chalk, string, and a nail as the common center.

Faez Basheer Hamoudat & Mueid Abdullah: Basketball, 2nd Edition, Ministry of Higher Education, University of
⁽¹⁾ .Mosul, 1999, p46.



- Circle diameters: small (45 cm), medium (98 cm), large (150 cm); the bottom of the largest circle is 90 cm above the ground.
- A line is drawn on the floor 5 meters away from the wall.

• **Performance Description:**

- The player stands behind the start line holding the ball.
- Each player is allowed one trial pass before starting.
- The player performs 10 successive chest passes toward the concentric circles.
- The player must not cross the start line.

• **Test Administration:**

- A recorder calls out names and logs results.
- A judge ensures correct performance and counts successful attempts.

• **Scoring:**

- 3 points for hitting the small circle.
- 2 points for the medium circle.
- 1 point for the large circle.
- Maximum score: 30 points.

2– hight tapping speed test⁽²⁾

• **Test Objective:** To measure high–speed dribbling ability.

• **Required Equipment:** Basketball court, two parallel lines (20 m apart) marked as A (start) and B (finish), stopwatch, basketball, measuring tape, chalk, whistle.

• **Performance Procedure:**

- The subject stands behind line A in a high–start position holding the ball.
- Upon hearing the start signal, the subject dribbles at maximum speed using their dominant hand to cross line B.

• **Test Conditions:**

- Correct starting position with ball in hand.
- Test ends once line B is crossed at full speed.
- Two attempts are allowed.



- **Scoring:**

The time from the start signal at line A to crossing line B is recorded.

Note: This test is suitable for both genders.

3. Lay-Up Shooting After Dribbling Test⁽³⁾

- **Test Objective:** To evaluate shooting accuracy after performing dribbling and a three-step approach.

- **Required Equipment:** Basketball, basketball hoop.

- **Performance Procedure:**

- The player dribbles from mid-court toward the basket, performs a three-step approach, and then executes a lay-up.
- The type of lay-up (underhand or overhand) is determined by the coach.

- **Test Conditions:**

- The subject is given 10 attempts.
- Dribbling and the three-step approach must be performed correctly.
- Scores from illegal movements are not counted.

- **Scoring:**

- One point per successful basket.
- Maximum score: 10 points.

2.5 Pilot Studies ⁽⁴⁾Pilot testing is defined as “a preliminary experimental study conducted on a small sample before launching the main research, aiming to select suitable methods and tools” (reference to be added).

2.5.1 Pilot Test for Skill Assessments:

The researcher conducted a pilot study on 6/12/2023, Wednesday at 9:00 AM, on the basketball court at the College of Physical Education and Sports Sciences / Al-Ain University.

The pilot involved 10 students from the research population to:

1. Verify the validity of the skill tests used in the study.

Iman Fouad Hashem Abdul Wahab: The Use of Play Situations and Their Impact on Developing the Teaching of Some Basic Offensive Skills in Basketball, Master's Thesis, College of Physical Education for Women, University of ⁽³⁾ .Baghdad, 2009, p. 69.

Dhoqan Obaidat and others: Scientific Research: Its Concept, Tools and Methods, 6th ed., Amman, Dar Al Fikr for Printing, Publishing and Distribution, 1988, p. 195.

⁽⁴⁾



2. Identify the time required for each individual test and for all tests combined.
3. Assess the readiness of devices, tools, and the court for conducting the main study.
4. Evaluate the workflow efficiency and student organization during testing, and confirm proper score recording methods.
5. Ensure the competency of the assisting research team.
6. Verifying the Scientific Foundations of the Tests.

The researcher concluded the following:

1. All skill tests were appropriate for the research sample of students.
2. The assistant team was competent and efficient.

2.5.2 Pilot Study of the Instructional Units

The researcher conducted this pilot study on Monday, December 11, 2023, at 10:00 a.m., on a sample of ten (10) students from the research population. The objectives of conducting this pilot study were as follows:

- To identify the potential obstacles that might be faced during the implementation of the first instructional unit (chest pass), which was designed based on the Wallace model.
- To determine the time required to implement each stage of the Wallace model (preparation, incubation, illumination, verification).
- To assess the suitability of the time allocated to each part of the instructional unit and the feasibility of its implementation.

The significance of the second pilot study lies in the following outcomes:

- The exact time needed for each stage of the Wallace model was calculated.
- The duration of each part of the instructional unit was also calculated.

2.6 Scientific Foundations of the Skill Tests:

To ensure accurate measurement, the researcher needed to verify the scientific properties of the skill tests (chest pass, high-speed dribbling, and lay-up shooting) before conducting the main experiment. Therefore, the researcher established the following psychometric properties validity, reliability, and objectivity—for the selected tests to ensure their suitability and applicability to the research sample:

1. Validity:

The researcher employed both content validity and face validity by presenting the skill tests (passing, dribbling, and shooting) to a panel of experts and specialists to obtain their feedback and suggestions. Based on their evaluation, the tests were considered valid.

2. Reliability:

To determine the reliability coefficient, the researcher applied the test–retest method for the skill tests (passing, dribbling, and shooting). The first application took place on 6/12/2023, during the initial pilot study, and the second application was conducted on Wednesday, 13/12/2023, at 10:00 a.m., with a 7–day interval between the two tests. Pearson’s simple correlation coefficient was then calculated between the results of the two applications to determine test–retest reliability.

3. Objectivity:

To ensure the objectivity of the tests, the researcher enlisted the assistance of qualified judges to score the results during the reapplication of the tests on 13/12/2023. After statistically analyzing the scores using the correlation coefficient, the objectivity of all skill tests was confirmed.

Table (4)
Illustrates the scientific foundations (reliability coefficient, objectivity coefficient) for the basketball skills used in the research.

Type of indication	Sig .	coefficient of Objectivity	Type of indication	Sig .	coefficient of stability	Tests	T
Moral	0.000	0.912	moral	0.000	0.827	Chest handling test	1
Moral	0.000	0.865	moral	0.000	0.819	High pat test	2
Moral	0.000	0.839	moral	0.000	0.804	Peaceful shooting test	3

2.7 Pre–Tests

The pre–tests for the skill assessments were conducted on the research sample for both the control and experimental groups on Monday, December 25, 2023, at 9:00 a.m., on the



basketball court of the College of Physical Education and Sport Sciences – Al-Ayen University. The tests were administered in the presence of the course instructor and the assisting team, under the direct supervision of the researcher.

2.8 The Main Experiment (Instructional Units)

After reviewing numerous scientific sources, references, and related studies, and based on personal interviews and the researcher's experience—which was informed by the results of the pilot study conducted on a group of students who received a selected instructional unit—as well as the findings of several previous studies, the researcher developed an instructional unit for the experimental group in alignment with the Wallace Model. This unit consists of four stages tailored to the research sample. The duration of each instructional unit was 90 minutes. The implementation of the unit, following the Wallace Model, began on Wednesday, December 27, 2023, and was delivered by a specialized basketball instructor.

2.9 Stages of Applying the Wallace Model⁽⁵⁾

In selecting and organizing the content of the current instructional units, the researcher utilized basketball as the core subject to teach offensive skills, as mandated by the sectoral committee for first-year students. The researcher structured the unit based on the Wallace Model, and the experimental group followed the model's stages as outlined below:

• Preparation Stage

In this stage, the teacher, drawing on their experience, identifies the students' prior knowledge about the passing skill and poses guiding questions to assess their existing understanding of the skill. Examples include:

“What do you know about the passing skill in basketball? What is its importance? What are its requirements? Is it used for long or short distances?”

After this, the teacher explains the skill, the execution technique, the mechanical body posture during performance, hand movement, and body balance, and links the new information to the learners' existing knowledge. The teacher's role here is to activate prior knowledge, define the problem (skill), understand and analyze its components, and stimulate students' thinking, enabling them to explore their abilities and creativity. This stage helps learners recognize the

⁽⁵⁾ Wallas, G: The art of thought. Jonathan Cape, 1926,p79 .



problem they need to solve while reducing psychological pressure and fostering positive engagement with the skill.

- **Incubation Stage**

In this phase, the student is given the opportunity to detach from the problem (shifting from conscious to subconscious processing) for a short period. During this time, the student revisits and reorganizes thoughts related to the chest pass skill and its execution. Ideas begin to emerge spontaneously, and the learner makes mental efforts to solve the problem posed by the teacher. The student uses all acquired knowledge about the skill while the teacher steps back to avoid imposing pressure, allowing the student space to generate positive solutions.

- **Illumination Stage**

Once the student has defined the problem and gathered their ideas, this stage involves building those ideas and generating initial solutions. Here, the learner transitions from subconscious to conscious understanding of the skill, both mentally and physically, through initial performance attempts. The learner performs the skill without pressure, activating their mind to reach correct execution. This stage fosters creativity as the learner strives to master the skill and eliminate negative thoughts that could hinder performance.

- **Verification Stage**

This stage is where the correctness of the solution or performance is evaluated. The teacher assesses the outcome to correct or enhance aspects of the final performance. It is the point at which the learner determines whether their execution of the skill meets a satisfactory level of motor performance.

If the performance is not satisfactory, it may be necessary to return to the previous stages (incubation and illumination) to achieve a more creative and accurate execution, both mentally and physically.

The researcher and the subject instructor reviewed numerous scientific sources on instructional exercises for offensive basketball skills. They selected the most suitable exercises for each stage of the Wallace Model. The researcher supervised the experimental group during the implementation of the model for the following reasons:



- The Wallace Model is modern and relatively new, consisting of multiple stages. The researcher found it essential to monitor the process to identify strengths and challenges for future recommendations.
- To ensure proper progression from one stage to the next as outlined in the instructional unit and implemented by the subject instructor.
- To confirm adherence to the allocated time for each stage of the model and each section of the instructional unit.

As for the control group, they followed the traditional teaching method used by the subject instructor, with two instructional units per week over a period of five (5) weeks. Each session lasted 90 minutes. The control group’s instructional program began on Wednesday, December 27, 2023, and concluded on Monday, January 29, 2024.

2.10 Post–Tests

After completing the instructional units based on the Wallace Model, the post–tests for the skill assessments (passing, dribbling, and shooting) were administered to both the control and experimental groups at 9:00 a.m. on Monday, February 5, 2024. The researcher ensured that the same conditions of the pre–tests were maintained, including the timing of the tests, the sequence of test administration, and the presence of the same assisting team.

2.11 Statistical Tools

The research results were analyzed using the SPSS statistical software, employing the following statistical methods:

(Arithmetic mean,Standard deviation,Standard error,Coefficient of variation, Independent samples T–test,Paired samples T–test)

3. Presentation, Analysis, and Discussion of Results

3.1 Presentation and Analysis of the Pre– and Post–Test Results of Offensive Skills (Passing, Dribbling, and Shooting) for the Control Group

Table (5)



Shows the arithmetic means, standard deviations, calculated T-values, significance levels (Sig), and the type of statistical significance between the pre- and post-tests for the skills of passing, dribbling, and shooting in the control group.

Type of indication	Sig	T	Dimensional measurement		Pre-measurement		Unit of measurement	Variables
			±A	S	±A	S		
Moral	0.000	6.24	1.77	21.75	2.04	17.18	degree	ctoral Communio
Moral	0.000	7.05	0.93	12.99	0.80	14.62	second	loud pat
Moral	0.004	3.35	1.01	6.68	1.45	5.12	degree	peaceful targeting

* Significant at a significance level of < (0.05) .

3.2 Presentation and Analysis of the Pre- and Post-Test Results of Offensive Skills (Passing, Dribbling, and Shooting) for the Experimental Group

Table (6)

Shows the arithmetic means, standard deviations, calculated T-values, significance levels (Sig), and the type of statistical significance between the pre- and post-tests for the skills of passing, dribbling, and shooting in the experimental group.

Statistically significant at a significance level of < (0.05)

e of indicat	Sig	T	Dimensional measurement		Pre-measurement		Unit of measurement	Variables
			±A	S	±A	S		
Moral	0.000	20.65	1.02	27.62	1.70	16.87	degree	ctoral Communio
Moral	0.000	11.6	1.08	11.18	1.37	15.05	second	loud pat
Moral	0.000	8.89	0.83	8.81	1.34	5.09	degree	Peaceful targeting

3.3 Presentation and Analysis of the Post-Test Results for the Offensive Skills (Passing, Dribbling, and Shooting) for the Control and Experimental Groups

Table (7)



Displays the arithmetic means, standard deviations, calculated t-values, significance level (Sig), and type of statistical significance between the post-tests of passing, dribbling, and shooting skills for both the control and experimental groups.

Type of indicator	Sig	T	Experimental after measure		Officer after measure		Unit of measurement	Variables
			±A	S	±A	S		
Moral	0.000	11.49	1.02	27.62	1.77	21.75	degree	Factorial Communication
Moral	0.000	5.06	1.08	11.18	0.93	12.99	second	loud pat
Moral	0.000	6.47	0.83	8.81	1.01	6.68	degree	Peaceful targeting

* **Significant at a significance level of $\leq (0.05)$.**

4. Discussion of Results

Table (7) presents the post-test results of chest passing, dribbling, and shooting skills in basketball for the research sample. The results showed statistically significant differences at the level of error probability (0.05) in favor of the experimental group.

The researcher attributes this improvement in the experimental group to the positive interaction of the students with teaching models based on the constructivist theory, particularly the Wallace Model, which focuses entirely on the student and places them at the center of the educational process during the lesson. This occurs by actively engaging them in various activities while presenting the learning content in an engaging and meaningful manner, according to their abilities and readiness to understand the skills being taught. This aligns with what was stated by Abdulrahman Al-Saadani and Thanaa Al-Sayyid Oudah:

“Teaching models based on constructivist philosophy generally emphasize the active role of students in the learning process to achieve meaningful and understanding-based learning.” ⁽⁶⁾

The researcher also attributes the progress in skill performance among the experimental group to the structured sequence of problem identification (as a challenge or task), followed by a period of detachment, during which creative ideas are generated and solutions emerge. This sequence ends with personal satisfaction and verification of the final outcome, as well as diagnosing and correcting errors if present. This cycle corresponds with the stages of the

Abdul Rahman Muhammad Al-Saadani and Thanaa Al-Sayed Awda: Scientific Education, Its Approaches and
⁽⁶⁾ .Strategy, Egypt, Dar Al-Kitab Al-Hadith, 2006, p. 123.



Wallace Model (Preparation, Incubation, Illumination, Verification), which helped students understand the correct execution of each component of the targeted skill and evaluate their performance. This, in turn, increased their motivation to learn offensive basketball skills and made the most of both effort and instructional time within the educational unit:

“To ensure the success of the educational process and improve learner efficiency, opportunities must be provided for the learner to continuously evaluate the results of their performance.” ⁽⁷⁾

Moreover, the researcher attributes the differences in performance to the application of instructional units based on the Wallace Model, which significantly enhanced the effectiveness and positivity of the learning process. Each phase of the model allowed for the inclusion of diverse and appropriate exercises tailored to the model’s stages and the level of the sample. The stages of the Wallace Model form a foundation for building self-knowledge in the learner by activating their role during the implementation of each stage, promoting active engagement with the classroom environment. Thus, teaching based on the Wallace Model is more effective and positive than traditional methods. It focuses on new knowledge related to skill learning by stimulating student attention and posing skill-related questions to prepare learners mentally through:

- Eliciting prior knowledge,
- Correcting misconceptions,
- And increasing motivation for learning.

“Emphasizing the connection between new and prior knowledge using various introductory methods such as Quranic verses or relevant images helped stimulate and enhance students’ exploratory motivation.”⁽⁸⁾

Through the application of the Wallace Model, students had opportunities to think creatively, explore their learning potential, and comprehend skills by responding to guided questions and working independently on finding solutions.

Muhammad Ali Al-Qat: Swimming between Theory and Practice, 2nd ed., Egypt, Al-Manhal for Printing and
⁽⁷⁾ .Computers, 2016, p. 31.

Amer Mugheer and Karim Mahdi: The effect of the Lersbach model on the achievement of fifth-grade literary students in geography and the development of their scientific exploration, Master’s thesis, Tikrit University, 2017,
⁽⁸⁾ .p. 328.



This was followed by direct instruction, feedback, and correction of misconceptions, eventually leading to skill practice and assessment of progress—primarily taking place during the Preparation and Incubation phases. This process enabled students to:

- Diagnose and correct errors,
- Track their own learning outcomes,
- Freely explore logical answers related to the skill,
- Follow a logical sequence in skill acquisition,
- And accommodate individual differences.

Ultimately, the success of this model is attributed to its proper implementation in all its components and the emphasis on skill performance, which contributed to achieving the research objectives.

The use of the Wallace Model had a clear and significant impact on the teaching of passing, dribbling, and shooting skills, as it heightened student engagement and excitement. This is because the model places the student at the center of the educational process, granting them the opportunity to participate actively and express their opinions about the skills without fear or hesitation.

This finding aligns with what Zeinab Mohamed Bayoumi (2002) stated, as she emphasized that involving students in generating and discussing ideas opens the way for deeper understanding, which consequently improves their performance levels. It also contributes to enhancing students' prior knowledge structures, which in turn increases their ability to process new experiences and situations they may encounter⁽⁹⁾.

“Focusing on the learner, making them the core of the educational process and the center of activity, while respecting their opinions and abilities, and surrounding them with affection, acceptance, and encouragement, is a fundamental factor that facilitates learning.” ⁽¹⁰⁾

This learner-centered approach positively reflected in their performance; the observed superiority in skill execution was a direct result of the positive interaction between the student and the teacher during the implementation of the instructional unit.

Zainab Muhammad Bayumi Abd al-Latif: The effectiveness of using Karen's model in acquiring grammatical concepts by second-year middle school students, unpublished master's thesis, Egypt, Menoufia University, 2002, p. ⁽⁹⁾ 276.

⁽¹⁰⁾ .Abdullah Hassan Al-Moussawi: A Guide to Practical Education, Irbid, Modern Books World, 2005, p. 119.



The researcher further believes that the superiority of the experimental group, which was taught using the Wallace Model, is due to the sequential, integrated, and interconnected stages of the model. These stages created a desire and motivation among students to learn, as they were enabled to reach information independently. This process stimulates their cognitive activity, fosters active participation, and encourages exchange of ideas between the teacher and students. Such interaction is a positive indicator of effective learning, helping students view the skill with greater awareness and importance, and promoting a learning environment filled with energy, excitement, and engagement.

“The ultimate goal of the model is for students to develop the ability to build their own knowledge in a way that enables them to continue learning throughout their lives.” ⁽¹¹⁾.

5. Conclusions and Recommendations

5.1 Conclusions:

Based on the results obtained, the researcher has reached the following conclusions:

1. The Wallace Model had a positive impact on learning the basketball skills of passing, dribbling, and shooting among students.
2. The Wallace Model contributed to deepening students' understanding of offensive basketball skills by ensuring coherence and harmony between the elements of the instructional content.
3. The use of the Wallace Model led to a notable improvement in offensive skill performance by providing an educational environment that fosters interaction, experimentation, and constructive competition.

5.2 Recommendations:

In light of the research findings, the researcher recommends the following:

1. Adopting the instructional units developed by the researcher using the Wallace Model due to their significant role in enhancing and improving students' performance levels in the skills of passing, dribbling, and shooting in basketball.
2. Encouraging instructors in faculties of physical education and sports sciences to utilize modern instructional models and strategies, while also drawing on their own teaching

Mandour Abdel Salam Fathallah: The effectiveness of Marzano's learning dimensions model in developing conceptual understanding in science and habits of mind among sixth-grade primary school students in the Kingdom ⁽¹¹⁾ .of Saudi Arabia, published research, Al-Ma'rifah Magazine, Issue (180), Saudi Arabia, Riyadh, 2007, p. 121.



experience. It is important to move away from traditional or outdated methods and pursue more contemporary approaches that align with the nature of skill instruction and execution, ultimately contributing to improved skill performance.

3. Emphasizing the need for conducting similar studies on different age groups not addressed in the current research, including both male and female students, and focusing on other skills and activities.

4. Reinforcing the importance of integrating the Wallace Model into instructional units, given its positive effect on learning some offensive basketball skills among students.

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Appendix 1 Educational unit

Notes	organization	Educational unit details	the time in minutes	educational unit section
emphasize presence, calmness, and regular general exercise.	xxxxxxx ↑	d in a straight line to register attendance and start the lesson with the agree on shout, followed by general body preparation exercises in all its details.	15	reparatory Section
emphasize performing the exercise correctly.	xxxxxxx xxxxxxx xxxxxxx ↑	xercises related to the main section, such as (arm rotation, fast jogging, tr rotation, neck rotation, etc.)	7 8	duction and Warm- physical exercises
Developing mental fitness through developing analysis, interpretation and comparison between scoring from a still and scoring from a standstill, # developing deep understanding through ing theory to application (example izing performance and making qu decisions verbally. Stimulating students' interests by ning the importance of the skill w enting it in detail and by making t questions interesting. ents become confused and men f answers. The learner tries to re solutions away from the teacher.	##### # # # ↑ ##### # # # # # # ↑	preparation phase) 15 minutes : The students are divided into cooperativ each group consisting of (4) students. Then the teacher asks the groups a mental question, (How do you prepare mentally before receiving the ba shoot? ype of shot do you think is best for the situation? And why? Do you think a efensive movement before shooting? How does it affect your decision? Ea is asked to answer one question orally, followed by a detailed demonstra teacher about the skill to be learned, explaining the body mechanics and t k what was explained to the students' previous answers about the skill. Th acher asks one of the students to perform a simple exercise that demonstr ning the skill at different angles and distances. Then, during the execution ts are asked to think and answer orally (Were you able to adjust the timir ot to suit the situation? Did you feel that the direction of the shot was perfe u notice any errors in your technique during the execution? What were the very stage) 10 minutes : The teacher asks the students to sit individually	70 2 5	Main Section Educational activity



<p>rarily separated from direct guidance to recover his thoughts and mentally process the information.</p> <p>ing to link between mental and academic work.</p> <p>the teacher here emphasizes creativity among learners and emphasizes teamwork.</p> <p>ents try to perform the skill as it viewed and work to overcome negative thoughts about the skill and reinforce the thoughts. Students help their classmates.</p> <p>st only one minute between each exercise.</p> <p>acher divides the students according to the exercise used until they perform the required.</p> <p>Developing self-observation and constructive self-criticism among learners.</p> <p>acher's role is to correct mistakes in this stage.</p> <p>teacher evaluates and identifies good performance from poor performance and decides whether or not it is necessary to return to the previous two stages.</p> <p>Helping learners achieve motor action at the end of the skill learning unit.</p>	<p>read out on the field, then instructs them as follows: (Take two minutes to remember (what feedback did you get from the coach? Did it help you? Did you expect the result of the shot before executing it? What strategy will you adopt at the successful shot ?) Discussion and practice are not allowed during this time and the teacher moves away from the student so that he does not fall under psychological pressure so that the student tries to reach positive ideas related to the problem, then discuss with the teacher the answers they reached about the performance.</p> <p>Lighting stage) 23 minutes: The teacher asks each student to perform the shooting skill freely without interference or correction. The teacher supervises and guides, but it is not technical, but rather as follows: (Focus on the feeling of the body balance, try more than one way to place the feet when performing the shot, let the student choose the different performance options. The teacher also emphasizes that the exercises chosen by the student target thinking and gives the following examples:</p> <p>Starting from the middle of the field between (5) markers, changing hands once to the right and once to the left, then making a peaceful goal, then pulling the ball, then returning to the beginning with patting . The duration of the exercise is (4 minutes) with a break of (3 minutes), and it is repeated again. .</p> <p>Group at the baseline under the basketball backboard with balls and a group of the court. The student under the basket makes a chest pass to the student on the left side of the court, then starts running to circle around the person to receive the pass from the student on the left of the court, and makes a peaceful goal. After the student makes the follow-up, after that the place is changed . The duration of the exercise is (4 minutes) with a break (4 minutes) and it is repeated again.</p> <p>Refinement phase) 22 minutes: The teacher divides the students into pairs and then asks them to do the following:</p> <p>Two groups of students, one in the middle of the field, and the other on the right side of the field, with the ball in their possession. The first student from the right group dribbles while running and then scores a peaceful goal. At the same time, the second student from the other group follows up on the ball after scoring , with the group moving to the left. The duration of the exercise is (4 minutes) with a break (3 minutes) and it is repeated again.</p> <p>The student stands in the middle of the court and begins to dunk quickly towards the basket. In the middle of the distance, a barrier (chair or cone) is placed in front of the student, representing an imaginary defender that must be overcome with a simple maneuver. The student then immediately executes the ladder shot. After shooting, he returns to the side to prepare for another attempt. The student is encouraged to use changes in direction or speed to overcome the barrier, focusing on balance and timing while shooting. Mistakes are corrected immediately by the teacher or with a partner. The duration of the drill is (4 minutes) with a (3-minute) break, and the drill is repeated.</p> <p>The teacher's role here is to correct the position of the hands and legs, look at the feet, and identify common mistakes that may occur during performance, and give them with feedback during their performance, evaluate their performance, and diagnose good performance from poor performance.</p>	45	Practical activity
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emphasis on correct performance	<div><div>xx xx</div><div>xx xx</div><div></div></div>	y two students pass the ball between them, keeping a close distance between them.	5	Final section
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