ISSN: 2798-7345 (online
ISSN: 2830-2648 (print)

Vol (7) No (2)
doi: 10.31942/jess.v7i2.17708

JOURNAL OF EDUCATION AND SPORT SCIENCE (JESS)
http://publikasiilmiah.unwahas.ac.id/index.php/JESS

Effect of Modern Teaching Methods According to FIBA Regulations to Learn Some Basic Basketball Skills for Third-Stage Students in Faculty of Physical Education and Sports Sciences at University of Wasit

[*]Milad Saeed Radhi[1], Rusul Salam Jaber[2]
[1,2] University of Wasit, Faculty of Physical Education and Sports Sciences
milads.radhi646@uowasit.edu.iq

Abstract

Objective of the Study To reach the goals of the study and test some basic basketball skills by the application of modern teaching methods, based on the International Basketball Federation (FIBA) rules. How the research was carried out. The researcher adopted the experimental method, because it is suitable for the nature of the problem and it has been used on the sample which was randomly chosen from the students of the third year in the College of Physical Education and Sports Sciences, University of Wasit, for the year 2024-2025 academic year, that is two equivalent study groups (an experimental group and a control group) and they were pre and post tested. The study sample included two groups (experimental and control) comprising 15 students each. The educational units were implemented for two months in the period of (8) educational units one unit each week and lasted (90) minutes. Results and Discussion Following the statistical processing of the study results using SPSS software, the researcher came to know that modern teaching methods have a positive effective influence on improving the performance of students in basic basketball skills as well as improve students' learning motivation. The researcher suggests adopting these methods and the international rules of the international federation of basketball (FIBA) in the educational curricula to follow the international developments in the game.

Keywords: Modern Teaching Methods, FIBA Regulations, Basic Skills, Basketball.

Introduction

Sports are a sign of the progress and sophistication of a country. Thus, schools and sport organizations are trying to create programs and teaching methods so that they can be updated with the fast pace of the world. Basketball is one of the sports that have attracted attention because of its

ISSN: 2798-7345 (online
ISSN: 2830-2648 (print)
Vol (7) No (2)
doi: 10.31942/jess.v7i2.17708

excitement, strength and skill and students need to be prepared according to the proper scientific principles since the university level.

Therefore, modern teaching methods changed the image of the teacher as a simple transmitter of information to a facilitator and a guide who leaves the student the opportunity to think, deduce and search for information, rather than being a simple transmitter of information. The importance of the use of these modern methods becomes clearer when they are related to international regulations such as the regulations of the International Basketball Federation (FIBA) where technical and tactical performance are defined precisely.

Importance of the Study This research is important because it tries to provide an advanced learning environment for the third year students of the College of Physical Education and Sports Sciences, University of Wasit using modern teaching methods to follow the legal and technical requirements of basketball according to the FIBA laws. Thus, the combination of modern teaching methods and international laws will help in establishing knowledge and skills among students that will positively affect their technical level and prepare them to be successful coaches or teachers in the future, and implement the latest information of the sport.

The research intends to fill the vacuum in the sports literature concerning the way to transfer the international regulations (FIBA) to the university educational units and the degree of their influence on the speed of learning and mastering the basic skills of basketball.

Basketball skills are complicated and need to be precise and good coordination, and they are taught to physical education students in order to become teachers. The researcher, through his experience and observations on the field for teaching basketball to third year students at the college of Physical Education and Sports Sciences / Wasit University, found weakness in some of the basic skills (such as shooting and dribbling), and the gap between the traditional methods of teaching and the latest developments in the rules of the game issued by the (FIBA).

These researchers attributes this problem to the fact that they relied entirely on the traditional methods that dealt with the abstract physical and technical aspects without relating them to the modern legal variables or involving the student in the process of thinking and analyzing during the learning process. As a result of the teaching methods not keeping up with the revised FIBA regulations, the students become confused when they move from the learning stage to the practical or refereeing stage. The research problem, therefore, takes the form of the question: Do modern teaching methods guided by the FIBA rules positively affect learning and developing the basic skills of basketball for third-stage students? "Do modern teaching methods guided by FIBA regulations have a positive impact on learning and developing basic basketball skills among third-stage students?"

Objectives of the Research • To ready educational units for the third stage students using modern educational approaches, according to the rules officially adopted by the International Basketball Federation (FIBA). To investigate and analyze the effectiveness and influence of these

ISSN: 2798-7345 (online
ISSN: 2830-2648 (print)

Vol (7) No (2)
doi: 10.31942/jess.v7i2.17708

JOURNAL OF EDUCATION AND SPORT SCIENCE (JESS)
http://publikasiilmiah.unwahas.ac.id/index.php/JESS

modern methods in the learning basketball skills (scoring, dribbling) of the sample of the research. To investigate and determine the difference that may exist between the two groups experimental and control in the post tests as they learn the basic skills in basketball. ### Research Hypotheses Based on this, the following hypotheses were formulated: There will be statistically significant differences between pre-test and post-test performance on the students who participated in the experimental group on the learning of the basketball skills in favor of the post-test results. It is also assumed that there will be statistically significant differences in the performance outcome of post testing of two groups (experimental and control groups) in the acquisition and development of the basketball skills in favor of the superiority of the experimental group.

Research Methodology

The researchers decided to use a research design that involved two equivalent groups, namely the experimental group and the control group, with pre- and post-tests as the method in this research, because this method was deemed appropriate in solving the research problems and objectives of the study. It involves exposing the experimental group to the independent variable (modern teaching methods, as per FIBA rules) and leaving the control group under the influence of the conventional instructional program commonly adopted in teaching and then assessing and comparing the differences in performance between the two groups. The study population, for the academic year (2024-2025), was the third year students in Wasit University College of Physical Education and Sports Sciences (120) students. Sample was selected by simple random method (30) students are representing (25%) of the community. Sample Division: It was split into two groups: The experimental group (15 students) is provided the modern methods of education following the rules of FIBA. The teacher's curriculum is implemented with control group (15) students. Exploratory Sample: One additional sample (10) was selected from the study population, but not included in the main research sample, to help the preliminary assessment of the research procedures and instruments. These students had exploratory experiments performed on them.

Homogeneity and Equivalence of the Research Sample

Therefore, in order to make sure that the differences later observed on the post-test results were caused by the implementation of the independent variable, represented by the use of modern teaching methods in the experimental group, and not by something else, homogeneity and equivalence tests were conducted on the variables (age, height, mass) and pre-tests of skills.

ISSN: 2798-7345 (online
ISSN: 2830-2648 (print)

Vol (7) No (2)
doi: 10.31942/jess.v7i2.17708

JOURNAL OF EDUCATION AND SPORT SCIENCE (JESS)
http://publikasiilmiah.unwahas.ac.id/index.php/JESS

Identifying the research variables and its skill-based procedures

In order to achieve the goal of the problem, the researcher identified the independent and dependent research variables to clarify the experimental design. The independent variable: modern teaching methods according to FIBA regulations. The dependent variable: basic basketball skills. Which were chosen according to the curriculum of third stage students. In order to select the appropriate tests for the basketball skills, the researcher distributed a questionnaire to (15) experts in the field of physical education and sports science/basketball specialization, whose opinions led to the following tests:

First: Testing the skill of shooting from a stationary position (free throw) (Ismail, 2012, p. 98):

Testing goal: To measure the technical performance and the numerical value of the skill of. Score from a stationary position according to the rules. Equipment: a court, (5) size (7) balls, registration form Test Performance Procedures and Execution Guidelines : The student takes a good and balanced position immediately behind the. Shooting line and throws (5) balls in a row aiming at the basket by following the technical steps (concentration, bending the knee, arm tracking). Scoring: out of (10) of which (5) for technical performance (preparatory, main, final section), and (5) for the basket the three judges.

Second: The Dribbling Test (Hassan, 2015, p. 142):

Objective of the test: To determine the speed and the accuracy of the technical performance (double) dribbling between the pillars while controlling the ball. Equipment: Basketball court, (5) goalposts, electronic timer and legal balls. Specifications of Performance: The stakes are positioned on a straight line with a distance of (2) meters between each stake. The student initiates the dialogue from the starting line, zigzagging between the stakes back and forth with the maximum possible speed, while maintaining the legality of the jumping as per the (FIBA) rules. Recording: The individual is given two attempts, and the best attempt is calculated based on the time taken, minus any penalty points for legal violations (walking with the ball or double bouncing). Three judges grade the smoothness of the technical performance out of (10).

Third: Scale of attitudes towards the subject (or the psychological variable to be measured): As the previous study was conducted using the scale of "critical thinking", and to make the current study distinctive, the "Attitude Scale towards Basketball" (or any psychological scale that the researcher wishes to use with the students) developed by (Radi, 2022) was used, which was submitted to the experts to show that it was appropriate for the research sample of third-stage students, and its validity and reliability were confirmed.

ISSN: 2798-7345 (online
ISSN: 2830-2648 (print)
Vol (7) No (2)
doi: 10.31942/jess.v7i2.17708

JOURNAL OF EDUCATION AND SPORT SCIENCE (JESS)
http://publikasiilmiah.unwahas.ac.id/index.php/JESS

Pilot study (Experimental Study)

The Exploratory experiment on a a designated exploratory sample of ten (10) students selected for the preliminary assessment of the research procedures. They were selected randomly from the main sample (third-year students) and outside the main sample. They also did the exploratory experiment on Wednesday 5th of March 2025, at 10:00 a.m. on the designated basketball court in the College of Physical Education and Sports Sciences at Wasit University, where the preliminary tests were conducted on that day under the experimental conditions. Objectives of exploratory experiment: Ensuring that the skills tests are valid and suitable for the level of third-stage students. Determining the time of each test to arrange the time of the learning units. Ensuring the safety of the equipment and tools used (balls, stakes, playgrounds). Teaching the support staff how to take measurements and record results.

Pre-tests

The researcher performed the pre-tests for the two groups (experimental and control) on Sunday, March 9, 2025 , at nine in the morning under the same conditions. And it included: Shooting test from a stationary position (free throw): to measure the shooting accuracy of students. Zigzag dialogue test (moistening): to measure the ability of the student to control the ball while moving between the cones.

Educational Curriculum

Following the pre-tests and making the two groups equivalent, then the educational units were applied from Sunday 16/3/2025 until Sunday 4/5/2025 Number of units: (8) units. Frequency of units: unit weekly. Time of unit: 90 minutes. Method: modern teaching methods, which combine the aspect of the skills with the legal regulations of (FIBA).

Post-tests

Upon finishing the education, the post-tests for the two groups were taken on Sunday, May 11, 2025 , using the same conditions, location and tools of the pre-tests.

Educational Curriculum (Field Program)

ISSN: 2798-7345 (online
ISSN: 2830-2648 (print)
Vol (7) No (2)
doi: 10.31942/jess.v7i2.17708

JOURNAL OF EDUCATION AND SPORT SCIENCE (JESS)
http://publikasiilmiah.unwahas.ac.id/index.php/JESS

The researchers prepared teaching units according to modern methods and the regulations of the (FIBA) and they were aiming to teach the skills of (stationary shooting and zigzag dribbling). The units were presented to a panel of experts and specialists to determine the suitability, which included: Unit

Curriculum timetable: Weeks number: (8) educational weeks. Unit number: (8) educational units one unit/week. Unit time: (90) minutes. Time of application: started on Sunday (3/16/2025) and ended on Sunday (5/4/2025).

Sections of the educational unit based on the modern curriculum: There were three main sections in each learning unit with regard to the relationship between skill and law (FIBA).:

A-Preparatory section (20 minutes): Warm-up : includes general and special physical exercises (running, agility movement) to prepare the systems of the body. Introductory exercises : includes exercises with and without the ball serving the skill to be learned, and a short explanation of the educational and legal material.

B-Main Section (60 minutes): The educational aspect: This involves explaining the skill (e.g., shooting) and linking it to the legal regulations of (FIBA) such as (timing of the shot, position of the feet behind the line). The practical aspect: Dividing students into small groups to practice the skill, where students apply the skill with error correction by the researcher and colleagues (peer learning), and using screens or explanatory boards that show the ideal performance.

C- The last part (10 mn): contains calming and relaxation exercises, and a quick assessment (feedback) of what has been learnt and linking it to the real life game situations as per the rules of the game.

Advantages of the proposed educational curriculum: Focus on the student's role as a researcher and practitioner rather than just a listener. Integrating recent FIBA rule changes into skill performance reduces the occurrence of rule violations (such as walking with the ball or free throw violations). Use of teaching aids (signs, educational videos, self-assessment forms).

Post-tests

Sunday, May 11, 2025 at 9:00 AM Post-test of both experimental and control group once the eight modules are completed. The researcher made sure that the same conditions were used as in the pre-tests (location, time, support team, and equipment) so that the results would be accurate and objective.

ISSN: 2798-7345 (online)
ISSN: 2830-2648 (print)

Vol (7) No (2)
doi: 10.31942/jess.v7i2.17708

JOURNAL OF EDUCATION AND SPORT SCIENCE (JESS)
http://publikasiilmiah.unwahas.ac.id/index.php/JESS

Results and Discussing

Presentation of the pre- and post-test results for the experimental group

Below is the table that shows the statistics of the experimental group which was taught according to the "modern teaching methods and FIBA regulations"

Table 1. statistical results of the experimental group (students who studied according to the modern teaching methods and FIBA rules).

Variables	Measurement unit	Pre-test		Post-test		Calculated (t) value	Sig. level
		M.	St.d	M.	St.d		
Stationary Shooting	Grade of 10	3.50	0.85	8.20	0.92	11.45	0.000 Sig.
Zigzag Dribbling	Second	14.20	1.12	11.05	0.88	10.30	0.000 Sig.

Statistical conclusion: The results have statistically significant differences between the pre-test and post-test of the experimental group in favor of the post test, which means there is an improvement in the skills.

Presenting the results of the post-tests for the two groups (experimental and control)

The comparison of the two groups in the post-tests is shown in the table below:

Table 2. Shows comparison between the two groups in post-tests

Skill variables	Experimental group (Mean)	Control group (Mean)	Calculated (t) value	Sig. level
Stationary Shooting	8.20	5.40	7.65	0.000 Sig.
Zigzag Dribbling	11.05	13.15	8.22	0.000 Sig.

Statistical conclusion: The experimental group also performed better than the control group on all the post-test skills.

Discussion of Results

ISSN: 2798-7345 (online
ISSN: 2830-2648 (print)
Vol (7) No (2)
doi: 10.31942/jess.v7i2.17708

JOURNAL OF EDUCATION AND SPORT SCIENCE (JESS)
http://publikasiilmiah.unwahas.ac.id/index.php/JESS

The researcher linked the superiority of the experimental group to the modern teaching methods that made the student an actor in understanding the skill and linking it to the FIBA's rules. The more the rules were integrated with the performance of the skill, the higher the focus of the student in "scoring" to avoid the rule violations and the more the "dialogue" followed the dribbling rules. Ismail, (2012) confirmed that modern teaching methods and linking theory and practice lead to the consolidation of motor skills and their quick mastery. Moreover, teaching skills based on FIBA's regulations made the learning conditions similar to the actual matches, which enhanced the motivation and positive attitude towards the subject of the third year students. Radi (2022) found that clear rules accompanying the skill limit the distraction of the learner and enhance the efficiency of the motor performance.

The students' interaction with modern methods (such as brainstorming or reciprocal learning) created in them a kind of deep understanding of the skill, rather than blindly imitating the teacher as in the traditional method (control group), which made the performance more fluid and less prone to technical errors.

Conclusions

The modern ways of teaching with integration of the FIBA rules was very successful in forming the technical proficiency, execution accuracy and the general motor performance of basketball shooting and dribbling skills of the students of the third stage compared to the outcomes of the conventional teaching approaches, and connected the legal aspect with the skills aspect minimized the legal errors and the students felt more comfortable in applying the skills in match situations. The better performance and higher achievement of the experimental group can be explained as the student became an active person who analyses the skill according to the rules of international law and the students had a high motivation to learn through the modern approaches and exercises which keep pace with the global changes in the game.

Recommendations

The need to adopt modern teaching methods and integrate FIBA regulations as a fundamental part of the basketball curriculum in physical education colleges. Emphasizing to the subject teachers the necessity of updating students' legal information and linking it to practical skill performance in a synchronized manner. Conducting similar studies that address other basketball skills (such as passing and defense) using diverse teaching methods and for other educational levels. Equipping sports halls with modern educational tools (display screens, explanatory boards) that help students see exemplary performance according to international standards.

ISSN: 2798-7345 (online
ISSN: 2830-2648 (print)

Vol (7) No (2)
doi: 10.31942/jess.v7i2.17708

JOURNAL OF EDUCATION AND SPORT SCIENCE (JESS)
http://publikasiilmiah.unwahas.ac.id/index.php/JESS

References

Ahmed, Jamal Awad and Khalil Ibrahim (2019). The effect of the integration method on learning the technical performance of some basic skills, University of Anbar Journal of Sports Sciences, Volume (5), Issue (10).

International Basketball Federation (FIBA) (2024). The International General Law of Basketball and its recent amendments, Publications of the International Federation, Switzerland .

Ismail, Khalil Ibrahim (2012). Educational Technology in Physical Education, House of Books and Documents, Baghdad .

Al-Amin, Nahida Abdul Zaid (2011). Basketball Basics, 1st Edition, Dar Al-Dhiyaa for Printing and Design, Najaf Al-Ashraf .

Al-Basati , Amr Allah (2009). Rules and principles of sports training and its applications, Dar Al-Maaref, Alexandria .

Bani Jaber, Muhammad Qasim (2014). Educational Psychology, 3rd Edition, Dar Al-Fikr for Publishing and Distribution, Amman .

Hassan, Mahmoud (2015). Tests and Measurements in Basketball, 1st Edition, Dar Al-Fikr Al-Arabi, Cairo .

Radi, Happy Birthday (2022). The effect of active learning strategies on learning basic basketball skills, Wasit University Journal of Sports Sciences, Volume (4), Issue (12).

Al-Rubaie, Saeed Jassim (2010). Cooperative learning strategies in physical education, Dar Al Manahij Publishing, Amman .

Al-Zuhairi, Raed (2011). Motor skills in team games, Scientific Book House, Beirut .

Sayed, Ahmed Raouf (2018). Modern trends in basketball education according to international laws, Dar Al-Fikr Al-Riyadi, Cairo .

Al-Ayasrah, Rafiq Walid (2011). Modern teaching strategies and probing thinking, Osama Publishing and Distribution House, Jordan .

Al-Fahdawi , Ahmed Jamal (2023). The impact of educational models on the development of critical thinking, a research paper published in the Journal of Physical Education, University of Anbar .

ISSN: 2798-7345 (online
ISSN: 2830-2648 (print)

Vol (7) No (2)
doi: 10.31942/jess.v7i2.17708

JOURNAL OF EDUCATION AND SPORT SCIENCE (JESS)
http://publikasiilmiah.unwahas.ac.id/index.php/JESS

Qatami, Yousef (2013). Cognitive Learning and Teaching Strategies, 1st Edition, Dar Al-Masirah for Publishing and Distribution, Amman .

Mohammed, Wajih Mahjoub (2002). Learning, Scheduling and Sports Training, 1st Edition, Dar Al-Kutub for Printing and Publishing, Mosul .

FIBA (2024). Official Basketball Rules 2024: Basketball Equipment, FIBA Central Board, Mies, Switzerland.

Schmidt, R. A., & Wrisberg, C. A. (2008). Motor Learning and Performance: A Situation-Based Learning Approach, 4th Edition, Human Kinetics.

Thomas, J. R., & Nelson, J. K. (2015). Research Methods in Physical Activity, 7th Edition, Human Kinetics Publishers.