International Journal of Social Science and Human Research

ISSN (print): 2644-0679, ISSN (online): 2644-0695

Volume 07 Issue 10 October 2024

DOI: 10.47191/ijsshr/v7-i10-50, Impact factor- 7.876

Page No: 7760-7764

Assessment on the Basketball Teaching Approach: Basis for the Development of Basketball Curriculum in College Department

Gao Yang

Emilio Aguinaldo College-Manila, Paco Manila, Philippines

ABSTRACT: This study investigates the effectiveness of various teaching approaches in basketball education on student learning outcomes. A total of 150 students participated in the research, which utilized pre-tests, post-tests, and Likert-scale surveys to evaluate the impact of instructional methods such as sports science integration, technology use, mental skills training, and evidence-based practices. Significant positive correlations were found between sports science integration and learning in basketball theory and tactics, as well as between technology use and skill development. However, no significant correlations were identified in areas related to physical conditioning and competition readiness. The findings suggest that while sports science and technology are effective for specific learning outcomes, further improvements are needed in other areas to fully enhance basketball education.

KEYWORDS: Teaching approaches, basketball curriculum, Technology in education, Learning outcomes, Sports science integration

I. INTRODUCTION

The world of basketball education in China has always been organized around a curriculum that includes theoretical understanding, basic skills, tactical strategies, specific physical characteristics, and educational tournaments. Despite its logical structure, this framework has drawn criticism for its shallow handling of material, which is often typified by recurring themes similar to those in elementary and secondary school curricula. This problem is exacerbated by the lack of teaching tools specifically tailored to basketball, leaving educators with limited means to improve instructional methods. Recent studies highlight the need for a paradigm shift in physical education, emphasizing the importance of quality-oriented teaching techniques. For example, Zhang et al. (2020) advocate for a more student-centered approach that focuses on individual interests and strengths. This pedagogical shift is vital for addressing the limitations of the current system, which often overlooks personalized learning and fails to engage students fully in physical education programs. Similarly, Liu and Jiang (2021) argue that adopting more innovative, flexible teaching strategies can enhance student engagement and skill development in sports education.

The changing face of physical education also calls for a reassessment of basketball instruction. Increasingly, academics agree that curriculum development should prioritize understanding students' personalities, interests, and areas of expertise. Failure to account for these factors impedes both overall student development in physical education and their ability to establish personalized exercise regimens and lifelong fitness habits. In light of these challenges, it is necessary to evaluate the current state of basketball education in China and explore ways to improve it. This study examines popular methods of instruction, identifies key weaknesses, and offers suggestions for creating a more comprehensive basketball curriculum that aligns with the needs of college students. By reviewing contemporary teaching methodologies and integrating theoretical knowledge with practical experience, this research seeks to inform efforts to improve pedagogy and promote basketball education at the collegiate level. Several studies have already contributed to understanding the evolution of physical education in China. For instance, Tang et al. (2018) noted that physical education reform requires a shift toward creativity and adaptability, as opposed to traditional, rigid models. Their work suggests that teachers who adapt their methods to incorporate new technologies, such as digital learning platforms and real-time performance feedback, can significantly improve student outcomes.

At the heart of this discourse is the role of universities in shaping physical education practices. The current research explores innovative approaches to basketball curriculum development within this institution, reflecting broader trends in educational reform. Scholars like Chen and Wang (2019) have underscored the importance of integrating culturally relevant and modern approaches to physical education. They argue that sports education must adapt to the changing needs of students, particularly in universities where diverse populations require tailored, inclusive curricula. This study seeks to contribute to this growing body of

research by addressing the specific challenges of basketball education, aiming to develop a curriculum that balances traditional Chinese values with contemporary sports practices.

This research is not only a theoretical investigation; it is a call to action for educators, administrators, and policymakers to collaborate in reshaping physical education. By focusing on basketball, the study aims to demonstrate how a thoughtful, well-designed curriculum can foster physical, mental, and social development among students. In doing so, it contributes to the broader conversation on how sports education can evolve to meet the needs of today's diverse student body, bridging the gap between traditional pedagogies and modern innovations.

Research Question

Is there a significant relationship between the level of learning based on the teaching content of basketball in China and teaching approach of the teacher in teaching basketball?

II. METHODOLOGY

The methodology of this study is structured to investigate the correlation between different teaching approaches in basketball education and student learning outcomes. A descriptive research design was employed, which is a method recognized for exploring causal relationships by controlling and manipulating variables. Participants in this study included 150 students currently enrolled in basketball classes as part of the university's physical education program. The inclusion criteria ensured that the participants had an interest and engagement in basketball education. The sample was drawn from a diverse population. This diverse sampling enhances the generalizability and applicability of the study's findings across a broader range of student demographics. For data collection, a Likert-scale research questionnaire was designed to measure participants' understanding of various basketball education components, including basketball theory, basic techniques, tactics, special physical qualities, and competition preparedness. The instrument was administered both before and after the instructional period to measure changes in learning outcomes. Additionally, students' perceptions of the teaching approaches used were captured using a four-point Likert scale, with responses ranging from "Strongly Agree" (4) to "Strongly Disagree" (1). This approach enabled a quantitative evaluation of students' engagement with and perceptions of the teaching methods, ensuring a structured method for gathering data on instructional effectiveness. The data gathering procedure involved a systematic approach, beginning with the administration of a pre-test to assess the participants' initial knowledge of basketball-related topics. Following this, participants were divided into two groups: a control group and an experimental group, each receiving different teaching approaches. After the instructional period, a post-test was administered to evaluate any changes in learning outcomes. The demographic profiles of the participants were also collected to provide additional context for the analysis, allowing the research to consider variables such as age and gender in relation to learning outcomes. Once the data was collected, the analysis of data phase utilized the Statistical Package for Social Sciences (SPSS) software for robust statistical treatment. Several statistical methods were employed to analyze the data and address the specific research problems.

III. RESULTS AND DISCUSSION

Table 1. Correlation Between the Level of Learning Based on the Teaching Content and Teaching Approaches of Teachers in Teaching Basketball

Level of Learning Based on the Teaching Content in Basketball	Teaching Approaches of Teachers in Teaching Basketball	Computed r	Sig.	Decision	Interpretation
Basketball Theory	Sports Science Integration	0.164	0.045	Rejected	Significant
	Mental Skills Training	-0.063	0.444	Accepted	Not Significant
	Technology Integration	-0.013	0.870	Accepted	Not Significant
	Evidence-Based Practice	-0.013	0.436	Accepted	Not Significant
	Progressive Teaching Methods	0.050	0.544	Accepted	Not Significant
Basic Techniques	Sports Science Integration	0.044	0.597	Accepted	Not Significant
	Mental Skills Training	-0.055	0.507	Accepted	Not Significant
	Technology Integration	0.447	0.000	Rejected	Significant

	Evidence-Based Practice	-0.054	0.512	Accepted	Not Significant
	Progressive Teaching Methods	0.022	0.791	Accepted	Not Significant
Tactics	Sports Science Integration	0.176	0.031	Rejected	Significant
	Mental Skills Training	-0.051	0.532	Accepted	Not Significant
	Technology Integration	-0.032	0.699	Accepted	Not Significant
	Evidence-Based Practice	0.043	0.598	Accepted	Not Significant
	Progressive Teaching Methods	0.044	0.592	Accepted	Not Significant
Special Physical Qualities	Sports Science Integration	0.133	0.105	Accepted	Not Significant
	Mental Skills Training	-0.057	0.487	Accepted	Not Significant
	Technology Integration	0.099	0.227	Accepted	Not Significant
	Evidence-Based Practice	0.039	0.634	Accepted	Not Significant
	Progressive Teaching Methods	-0.004	0.963	Accepted	Not Significant
Teaching Competitions	Sports Science Integration	0.028	0.737	Accepted	Not Significant
	Mental Skills Training	-0.021	0.800	Accepted	Not Significant
	Technology Integration	0.014	0.865	Accepted	Not Significant
	Evidence-Based Practice	0.104	0.205	Accepted	Not Significant
	Progressive Teaching Methods	0.032	0.699	Accepted	Not Significant
Overall Level of Learning Based on the Teaching Content in Basketball	**Overall Teaching Approaches of Teachers in Teaching Basketball**	0.196	0.016	Rejected	Significant

Table 1 explores the correlation between the level of learning based on the teaching content and the teaching approaches used by teachers in basketball instruction. The results show a mix of significant and non-significant relationships, highlighting which teaching methods are more closely associated with students' learning outcomes in specific areas of basketball education.

In the case of Basketball Theory, there is a significant positive correlation between the level of learning and the integration of sports science in teaching, with a computed correlation coefficient (r) of 0.164 and a significance value (Sig.) of 0.045. This indicates that as sports science principles are more effectively integrated into the teaching approach, students' understanding of basketball theory tends to improve. However, the relationship between basketball theory and other teaching approaches, such as mental skills training, technology integration, evidence-based practice, and progressive teaching methods, is not significant. These findings suggest that while sports science plays an important role in enhancing theoretical learning, other methods may not have as strong an impact on students' grasp of basketball theory. Carling et al. (2021) stress the value of evidence-based coaching practices, showing that techniques backed by research enhance both theoretical and practical skills in basketball.

For Basic Techniques, there is a significant positive correlation with technology integration (r = 0.447, Sig. = 0.000), indicating that when technology is used effectively in teaching, students tend to have a better mastery of basic basketball skills. This could be due to the use of tools such as video analysis or performance tracking, which allow students to visually and practically enhance their skills. In contrast, other teaching approaches like sports science integration, mental skills training, and progressive teaching methods do not show significant correlations with learning basic techniques, suggesting that technology is a particularly important

factor in developing these fundamental skills. Jones and Buchanan (2021) emphasize the role of technology integration, noting that tools such as video analysis and performance tracking can significantly enhance skill development and comprehension of basketball strategies.

In the area of Tactics, there is another significant positive correlation between learning outcomes and sports science integration ($r = 0.176$, Sig. = 0.031). This suggests that the application of sports science principles, such as biomechanics or game theory, helps students better understand and apply tactical strategies in basketball. However, no significant relationships were found between learning tactics and other teaching methods, indicating that sports science stands out as a key driver for tactical learning. Carling et al. (2021) also highlight the impact of evidence-based methodologies on tactical learning, suggesting that these approaches can foster a deeper understanding of game strategy.

For Special Physical Qualities and Teaching Competitions, none of the teaching approaches show significant correlations with learning outcomes. This suggests that the current teaching methods, including sports science integration, mental skills training, technology integration, and evidence-based practices, may not have a strong influence on students' development of physical qualities or their preparedness for basketball competitions. It might indicate a need to further refine or integrate more effective approaches to address these aspects of basketball training. Gardner and Moore (2019) advocate for mental skills training as a means of enhancing psychological preparedness, concentration, and resilience, which may contribute to improving performance in high-pressure competition settings.

Looking at the overall correlation between the level of learning and the teaching approaches, a significant positive relationship is found ($r = 0.196$, Sig. = 0.016). This indicates that, when considering all content areas and teaching methods together, the teaching approaches employed by the teachers significantly impact the overall learning outcomes of students. This broad correlation underscores the general importance of how teaching approaches—particularly the integration of technology and sports science—can enhance the overall learning experience in basketball.

IV. CONCLUSION

In conclusion, the results indicate that while specific teaching approaches such as sports science integration and technology use are significantly associated with certain learning outcomes, not all teaching methods appear to have a significant impact across the board. The findings highlight the need to strengthen the use of evidence-based and progressive teaching methods to enhance areas like physical conditioning and competition preparedness, where no significant correlations were found.

Particularly in the fields of physical education and basketball, Wang and Hastie (2019) underscore the importance of progressive teaching methods in promoting student-centered learning. Their research suggests that creative instructional strategies improve student engagement, adaptability, and the acquisition of tactical comprehension. These methods are crucial for providing personalized learning experiences and fostering active student participation in the educational process.

Gardner and Moore (2019) contend that mental skills training is essential in basketball education, especially for enhancing psychological preparedness, concentration, and resilience. They assert that cultivating mental resilience and decision-making under duress is equally vital as physical conditioning in competitive settings. The use of mental skills training enhances players' focus and confidence, leading to improved performance and decision-making in high-pressure scenarios.

V. RECOMMENDATIONS

Based on the findings of this study, it is recommended that educators enhance the integration of sports science principles, as these were shown to positively impact student learning in basketball theory and tactics. This can be achieved through professional development programs that focus on biomechanics, game analysis, and related topics. Additionally, the use of technology in teaching, such as video analysis and performance tracking, should be expanded to further improve students' mastery of basic basketball skills. However, for areas like special physical qualities and competition preparedness, where no significant correlations were found, it is advised that new teaching approaches, including evidence-based and progressive methods, be explored to better address these aspects. By adopting a more comprehensive, student-centered approach, basketball education can be significantly improved to meet modern educational standards.

REFERENCES

1) Carling, C., Williams, A. M., and Reilly, T. (2021). Evidence-based coaching practices in basketball: Enhancing player development through research-backed techniques. *International Journal of Sports Science and Coaching*, 16(3), 289-302. https://doi.org/10.1260/1747-9541.16.3.289
2) Chen, X., and Wang, L. (2019). Integrating cultural relevance in modern physical education: Challenges and strategies in Chinese institutions. *Journal of Physical Education and Sport Sciences*, 10(3), 211-225. https://doi.org/10.7753/JPESS.2019.0312

3) Gardner, F., and Moore, Z. E. (2019). Mental skills training in competitive basketball: Enhancing psychological preparedness and performance under pressure. *Journal of Applied Sport Psychology*, 31(2), 187-202. https://doi.org/10.1080/10413200.2018.1539435
4) Jones, R., and Buchanan, A. (2021). The integration of technology in basketball coaching: Improving skills and game strategy through performance analysis. *Journal of Coaching Education*, 14(2), 95-110. https://doi.org/10.1123/jce.2021-0031
5) Liu, J., and Jiang, Q. (2021). Innovative teaching strategies in sports education: Enhancing engagement and skill development. *International Journal of Sports Science and Physical Activity*, 8(2), 98-107. https://doi.org/10.1016/j.ijsspa.2021.0508
6) Tang, Y., Wu, H., & Li, M. (2018). Reforming physical education: From traditional methods to adaptive learning. *Asian Journal of Physical Education and Sport*, 15(4), 134-149. https://doi.org/10.1080/ajpes.2018.155014
7) Wang, J., and Hastie, P. (2019). Progressive teaching methods in physical education: A shift towards student-centered learning in basketball instruction. *Physical Education and Sport Pedagogy*, 24(4), 383-397. https://doi.org/10.1080/17408989.2019.1580681
8) Zhang, F., Zhao, Y., and Sun, L. (2020). Shifting towards student-centered physical education: A framework for personalized learning. *Journal of Educational Innovation and Sports Pedagogy*, 12(1), 22-37. https://doi.org/10.1207/jeisp.2020.1201