

Exploration on the Interactive Mode between Physical Education and Sports Training in Universities

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Abstract: With the development of education, the importance of university physical education (PE) has become increasingly prominent. This article focuses on the interactive mode of PE and sports training in universities. Through literature research, this article sorts out the relevant research status, analyzes their theoretical basis by theoretical analysis, constructs the framework of interactive mode and discusses its operating mechanism, and deeply analyzes the factors affecting the interactive mode. It is found that PE and sports training in universities are relatively independent at present. To build an interactive model, it is necessary to uphold scientific concepts and principles, design a framework from the aspects of teaching, teachers and resources, and establish an effective operating mechanism. However, the educational management system, teachers and individual students have a significant impact on the interactive mode. The purpose of this study is to provide theoretical reference for universities to build a scientific and reasonable interactive model of PE and sports training, so as to promote the better development of PE and improve students' physical literacy and competitive level.

1. Introduction

In today's era of all-round development of education, university PE, as an important part of higher education, has become increasingly prominent in its value and significance [1]. PE not only undertakes the basic task of strengthening students' physique, but also is the key link of cultivating students' comprehensive quality and shaping sound personality [2]. At the same time, sports training, as an important way to improve students' competitive level and cultivate professional sports talents, occupies a unique position in the university sports system [3].

With the continuous improvement of the society's requirements for the comprehensive quality of talents, the coordinated development between PE and sports training in universities has become particularly urgent [4]. On the one hand, PE aims at all students, imparting sports knowledge and skills, cultivating students' sports awareness and healthy lifestyle, and laying the foundation for students' lifelong development [5]. On the other hand, sports training focuses on systematic training for students with certain sports talent and competitive potential, improving their sports performance and transporting professionals for the national sports cause [6]. Although they have different emphases, they have the same goal, and they are both committed to promoting the all-round development of students.

At present, PE and sports training in universities are often relatively independent and lack of effective interaction [7]. There is a lack of organic combination between the teaching content of PE and sports training methods, the teachers are fighting each other, and the resources are not fully shared, which seriously restricts the overall function of PE [8]. Therefore, it is of great practical significance to explore the interactive mode of PE and sports training in universities.

By constructing a scientific and reasonable interactive model, it is expected to break the barrier between PE and sports training and realize their complementary advantages and coordinated development. This can not only improve the quality and effect of PE, enrich the teaching content and form, but also stimulate the enthusiasm of students to participate in physical activities; It can also provide a broader talent pool and a more solid foundation for sports training, and promote the improvement of competitive sports level in universities. The purpose of this study is to

systematically analyze the theoretical basis of the interaction between them, build a practical interaction model, and deeply explore the key factors affecting the interaction, in order to provide useful reference for the development of university sports.

2. PE and sports training theory in universities

PE is not a simple physical exercise activity, but its connotation is rich and diverse. It takes physical exercise as the basic means, not only imparting sports knowledge and skills, but also paying more attention to cultivating students' sports spirit and sports morality. From improving students' health and shaping good body shape to cultivating students' sense of teamwork and competition, we can promote students' development in all directions. Its core goal is to help students master scientific exercise methods, form the habit of lifelong PE, devote themselves to study and life with a healthy body and a positive attitude, and lay the foundation for becoming all-round high-quality talents.

Sports training aims at improving athletes' competitive ability and performance. It is a systematic and scientific process, according to the physical and psychological characteristics of athletes, combined with the laws of sports, to develop targeted training programs. Sports training has distinct professionalism, and there are significant differences in training contents and methods for different sports. At the same time, it is systematic, from basic training to special improvement, and all stages are closely linked. High intensity is also one of its characteristics. In order to achieve excellent results, athletes need to bear a large training load.

PE and sports training in universities are interdependent and promote each other. PE provides talent reserve and popularization foundation for sports training. Through extensive PE, we can stimulate students' interest in sports and find young people with sports talent. The achievements of sports training, such as advanced training concepts and methods, can be fed back into PE, enriching teaching contents and means. In addition, the campus sports culture atmosphere created by PE can create a good environment for sports training; The competitive spirit displayed in sports training can also encourage more students to participate in sports activities and promote the development of PE.

3. Construction of interactive mode between PE and sports training in universities

3.1. The concept and principle of interactive mode

Educators should adhere to the core interactive concept of "people-oriented, all-round development", fully respect students' individual differences and needs, and put students' physical and mental health improvement and comprehensive quality development in the first place. It emphasizes the coordination of PE and sports training, aiming at cultivating compound talents with solid physical knowledge and skills and good competitive quality.

The principles are as follows:

- 1) Scientific principle: The construction of interactive mode should be based on the scientific laws of PE and sports training, combined with the characteristics of students' physical and mental development, and reasonably plan the contents, methods and processes of teaching and training.
- 2) Systematic principle: PE and sports training are regarded as an organic whole, and systematic design and integration are carried out from teaching objectives, curriculum setting, teacher deployment to resource sharing.
- 3) Feasibility principle: The interactive mode should fully consider the actual situation of universities, including teachers, facilities, students' academic burden, etc., to ensure that the mode is feasible and easy to operate.

3.2. Framework design of interactive mode

The boundary between traditional physical education curriculum and sports training programs should be broken down to achieve an organic integration of the two. For example, in the PE curriculum, according to students' interests and specialties, the basic content of some sports training items, such as basketball and football, is added. At the same time, the theoretical knowledge of PE,

such as sports anatomy and sports physiology, is integrated into sports training to make the training more scientific. Figure 1 shows the specific content of the integration of PE and sports training teaching in universities:

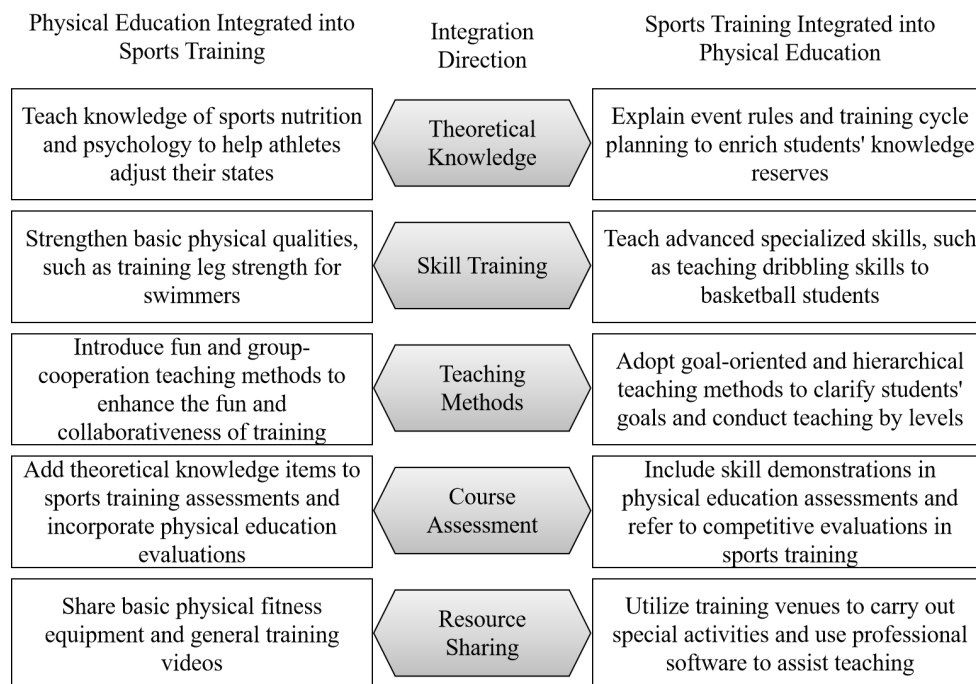


Figure 1 Integration of PE and sports training teaching in universities

Communication and cooperation between physical education teachers and training coaches should be strengthened. On the one hand, teachers and coaches are regularly organized to carry out business training and discussion activities, share teaching and training experience and experience, and jointly improve professional quality. On the other hand, teachers and coaches are encouraged to participate in each other's teaching and training activities to realize the optimal allocation of teacher resources. PE teachers participate in the physical training link of sports training and train coaches to assist in the teaching of special skills in PE courses.

Relevant departments need to establish and improve the sharing mechanism of resources such as venues and equipment. It is necessary to make a detailed plan for the use of resources and allocate resources reasonably according to the schedule of physical education courses and sports training. For example, in the non-training peak period, it is necessary to open sports training venues to physical education courses; The new equipment purchased in physical education can also be borrowed by the training team as needed. At the same time, it is necessary to integrate sports information resources in universities, such as teaching courseware and training videos, to realize online sharing of these resources so as to facilitate teachers and students to consult and study at any time.

3.3. Operation mechanism of interactive mode

Universities should set up a special coordination group for physical education and sports training. The group is headed by the head of the physical education department in universities, and its members include physical education teachers, training coaches and related management personnel. This group needs to hold regular coordination meetings in order to solve all kinds of problems in the process of interaction in time, such as the conflict between teaching and training time and the uneven distribution of resources. At the same time, it is necessary to establish an information communication platform, so as to facilitate team members to exchange work progress and needs at any time.

Universities need to build a scientific and reasonable interactive effect evaluation system. The system is evaluated from many dimensions, such as the improvement of students' sports literacy,

sports performance and the improvement of teaching and training quality. Relevant personnel should regularly collect the opinions and suggestions of teachers and students on the interactive mode, and adjust and optimize the interactive mode in time according to the evaluation feedback results, so as to ensure its continuous and effective operation.

4. Factors affecting the interactive mode of PE and sports training in universities

The effective implementation of the interactive mode of PE and sports training in universities is influenced by many factors. An in-depth analysis of these factors will help to better build and improve the interactive model and improve the overall level of university PE.

4.1. Educational management system factors

PE and sports training in universities often belong to different management departments. PE department is mainly responsible for PE, while competition training department is in charge of sports training. This kind of management structure easily leads to poor communication and coordination between departments. There may be time conflict between teaching plan and training arrangement, and it is difficult to achieve optimal resource allocation. Different departments have differences in goal setting and work focus. PE focuses on improving the physical literacy of all students, while sports training focuses on cultivating high-level athletes, which makes it difficult for them to form a joint force in the interactive process.

The current policy is insufficient in guiding and supporting the interaction between PE and sports training. Some universities lack policy documents that explicitly encourage the interaction between them, and lack policy basis and incentive mechanism in key links such as teacher exchange, curriculum integration and resource sharing. Teachers' participation in sports training guidance or coaches' participation in PE is not fully recognized in performance appraisal and professional title evaluation, which affects their enthusiasm for participation in interaction.

4.2. Factors of teaching staff

PE teachers and training coaches have different professional backgrounds and expertise. PE teachers have extensive PE knowledge, focusing on imparting basic PE skills and cultivating students' interest in sports, but they may be insufficient in the depth and professionalism of special sports training. However, training coaches focus on high-level training of specific events, and there is a lack of systematic mastery of PE theory and teaching methods. Figure 2 shows this difference in detail:

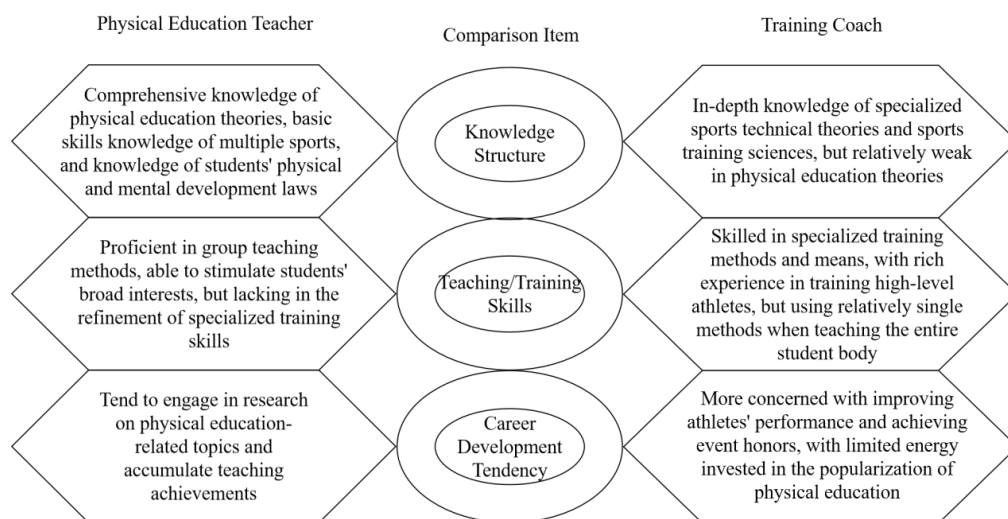


Figure 2 Comparison of professional qualities between PE teachers and training coaches

The training system of PE teachers and training coaches in universities failed to effectively promote the professional integration of the two. Teacher training focuses on the reform of PE and

the renewal of teaching methods, while coach training focuses on improving the level of special training. The lack of joint training for the skills and knowledge required for their interaction, such as the curriculum design of the integration of PE and sports training, and the hierarchical training strategies for students of different levels, has led to the problem of professional convergence in the interaction process of teachers.

4.3. Individual factors of students

Students' interest and demand for PE and sports training are quite different. Some students are interested in the basic courses in PE, aiming at strengthening their physique and enriching their after-school life; On the other hand, some students with competitive potential are eager to participate in high-intensity sports training and pursue higher sports performance. If we can't meet the diverse needs of students accurately, it will affect their enthusiasm for participating in the interaction.

University students face a heavy academic burden, which limits their time and energy to participate in the interactive activities of PE and sports training to some extent. In order to complete professional courses and scientific research tasks, students may be forced to reduce physical exercise time, which greatly reduces the implementation effect of interactive mode.

5. Conclusions

This article focuses on the interactive mode of PE and sports training in universities, and has achieved a series of important results. First of all, it is clear that PE and sports training in universities are interdependent and promote each other, although they have their own emphasis. PE lays the talent base and popularization environment for sports training, and the ideas and methods of sports training feed back PE and enrich its contents and means. Secondly, a more systematic interactive mode is constructed. Conceptually, it takes the all-round development of students as the core and follows the principles of scientificity, systematicness and feasibility. The framework design covers teaching, teachers and resources, and realizes curriculum integration, teacher exchange and resource sharing. At the same time, it is necessary to establish communication, coordination, and evaluation feedback mechanisms to ensure the operation of the model. Furthermore, the key factors affecting the interaction mode are analyzed. In the aspect of education management system, poor coordination between departments and insufficient policy support restrict interaction; There are differences in professional quality and imperfect training development among teachers; Differences in students' individual interest needs and academic pressure also have an impact on interaction.

In order to promote the effective interaction between PE and sports training, the management department should optimize the management system, strengthen the coordination among departments and improve the policy incentives. PE teaching units should devote themselves to improving the teaching staff and actively carry out joint training to promote professional integration. The teachers' team should pay attention to the individual differences of students, meet diversified needs and arrange activities reasonably. Through the concerted efforts of these subjects, it is expected to break down the barriers between PE and sports training and achieve coordinated development. This model can improve the level of PE in an all-round way, not only cultivate more talents with good sports literacy, but also transport reserve forces with professional ability for competitive sports.

References

- [1] Farias C, Fernández-Río J, Martins J, et al. Multi-system influences on physical education preservice teachers' teaching practice in pandemic times[J]. *Quest*, 2023, 75(4): 325-343.
- [2] Cecchini J A, Carriedo A. Effects of an interdisciplinary approach integrating mathematics and physical education on mathematical learning and physical activity levels[J]. *Journal of teaching in Physical Education*, 2020, 39(1): 121-125.

- [3] Kyriakides E, Tsangaridou N, Charalambous C Y, et al. Toward a more comprehensive picture of physical education teaching quality: Combining generic and content-specific practices[J]. *Journal of Teaching in Physical Education*, 2020, 40(2): 256-266.
- [4] Tsangaridou N, Pieroua M, Kyriakides E, et al. Teaching physical education in early years: Focusing on teachers' practices[J]. *Journal of Teaching in Physical Education*, 2021, 41(2): 278-287.
- [5] Chow D H K, Li S S W. Effects of sport imagery training and imagery ability on badminton service return in a secondary-school physical education setting[J]. *Int J Sport Psychol*, 2021, 52(3): 233-247.
- [6] Koekoek J, Knoppers A. Gender categorizations during group work in physical education[J]. *Journal of Teaching in Physical Education*, 2019, 39(2): 196-205.
- [7] Chan C H S, Ha A S C, Lander N, et al. Understanding the teaching and learning of fundamental movement skills in the primary physical education setting: A qualitative study[J]. *Journal of Teaching in Physical Education*, 2022, 42(4): 621-630.
- [8] Zhu Q, Shen H, Chen A. Can Practicum Teaching Change Preservice Physical Education Teacher Value Orientations?[J]. *Journal of Teaching in Physical Education*, 2020, 40(3): 450-459.