CHEN, Qiuyi, CHEN, Zhijun, JIANG, Bo and WANG, Shaojie. Research on the cultivation system of college campus football reserve talents from the perspective of integration of sports and education. Quality in Sport. 2025;38:58696. eISSN 2450-3118. https://doi.org/10.12775/QS.2025.38.58696

https://apcz.umk.pl/QS/article/view/58696

The journal has been 20 points in the Ministry of Higher Education and Science of Poland parametric evaluation. Annex to the announcement of the Minister of Higher Education and Science of 05.01.2024. No. 32553.

Has a Journal's Unique Identifier: 201398. Scientific disciplines assigned: Economics and finance (Field of social sciences); Management and Quality Sciences (Field of social sciences).

Punkty Ministerialne z 2019 - aktualny rok 20 punktów. Załącznik do komunikatu Ministra Szkolnictwa Wyższego i Nauki z dnia 05.01.2024 r. Lp. 32553. Posiada Unikatowy Identyfikator Czasopisma: 201398.

Przypisane dyscypliny naukowe: Ekonomia i finanse (Dziedzina nauk społecznych); Nauki o zarządzaniu i jakości (Dziedzina nauk społecznych).

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The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 11.01.2025. Revised: 12.02.2025. Accepted: 14.02.2025 Published: 18.02.2025.

Research on the cultivation system of college campus football reserve talents from the perspective of integration of sports and education

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Abstract

With the rapid development of football in our country and the country's increasing emphasis on the training of football talents, establishing an effective environment for the development of talents has become the key to improve the level of campus football. Under this background, the training of college campus football reserve personnel is faced with many challenges, such as the single training mode, the insufficient integration of resources and so on. Starting from the aspects of training concept renewal, curriculum system construction, teacher team construction, site facility guarantee, this study focuses on the construction path of college campus football reserve talent cultivation system from the perspective of sports and education integration. Through the research, it is found that constructing a scientific and reasonable training system is of great significance to improve the quality of college football reserve talents, which not only provides strong support for the development of college football, but also helps to promote the students' physical and mental health and all-round development, and lays a solid foundation for the long-term development of football cause in our country.

Key words: Integration of sports and education; College campus football; Reserve personnel training; Training system

1 Research background

The identification and development of talent has become a highly valued issue in football worldwide. Effective football talent development aims to help young players progress and learn through coaching, training and competition, thereby laying a solid foundation for a future career in professional football. Such talent development not only directly affects a player's individual development trajectory, but also has a profound impact on the player's overall level of competitiveness.

For the cultivation of college football reserve talents, the importance of sports and education integration policy is self-evident. It provides a powerful policy guarantee for^[1] the development of college football and makes colleges and universities more confident in football teaching and training. The policy support enables colleges and universities to introduce excellent football coaches and players, improve the quality of football teaching and competition level. At the same time, the policy also promotes the cooperation and exchanges between colleges and universities and external resources such as society and enterprises, providing a broader platform and more opportunities for the cultivation of college football reserve talents.

To sum up, the sports and education integration policy is an important measure to promote the deep integration of education and sports and promote the all-round development of students. The policy has played an irreplaceable role in the cultivation of college campus football reserve talents. In the future, we should continue to deepen the practical exploration and theoretical research of the integration policy of sports and education, and constantly improve the policy system and implementation mechanism, so as to contribute to the cultivation of more excellent football reserve talents.

2 Current situation and existing problems of college campus football reserve talent training

2.1 Current situation of college campus football reserve talent training resources

Under the background of the integration of sports and education, the resources of college campus football reserve talent training present multi-level complexity. From the perspective of teachers, the number and qualification of college football coaches are unevenly distributed. Although some colleges and universities have a certain number of coaches, their professional qualifications and coaching experience are uneven^[2]. Taking universities in Chongqing as an example, statistics show that only 15 percent of them have national qualifications, while most of the coaches only hold primary or intermediate qualifications. This uneven distribution directly affects the quality of training, making it difficult for some universities to achieve the expected results in the cultivation of soccer reserve talents.

Name of university	Total	National	Senior	Intermediate	Junior
	coaches	coaches	coach	coach	coach
Southwestern	12	2	3	4	3
Chongqing University of	8	1	2	3	2
Technology					
Southwest University of	10	1	3	4	2
Political Science and Law					
Chongqing Technology and	6	0	1	3	2
Business University					
Chongqing University	9	1	2	4	2

In terms of venue facilities, there are also significant differences in the quantity and quality of college football fields. Some universities have multiple standard football fields, which are well maintained and can meet the needs of daily training and competition. While

others face the problem of insufficient fields or aging facilities. In one city, for example, only 30 percent of colleges and universities have more than two standard football fields, while the rest rely on only one field for training, even on rainy days. This uneven distribution of resources not only limits the effect of training, but also affects the enthusiasm of students to participate in it to some extent.

Capital investment is another key factor in the cultivation of college campus football reserve talents. At present, the funding of college football programs mainly comes from school grants, social sponsorship and government subsidies, but the efficiency of the use of funds and the transparency of management need to be improved. Although some colleges and universities have obtained sufficient financial support, the lack of scientific fund management mechanism leads to inefficient use of funds and even waste of resources. For example, a university obtained 1 million yuan of special funds for football in one year, but due to the lack of a clear plan for the use of funds, only 60 percent of the funds were actually used for the cultivation of football reserve talents, and the rest were used for other projects or administrative expenses.

The current situation of teaching staff, field facilities and capital investment reflects the overall situation of college campus football reserve talent training resources. Although some colleges and universities have outstanding performance in resource investment, on the whole, problems such as uneven distribution of resources and poor management still exist. These problems not only restrict the effect of college campus football reserve talent training, but also affect the implementation of sports and education integration policy to a certain extent. In order to improve this situation, colleges and universities need to optimize the resource allocation and management mechanism to ensure that every resource can serve the training goal of football reserve talents to the maximum.

2.2 College campus football reserve talent recruitment status

2.2.1 Enrollment policy

Under the background of the integration of sports and education, the recruitment policy of college campus football reserve talents, as an important part of the talent training system, is directly related to the selection and training quality^[3] of football talents. At present, the college campus football reserve talent recruitment policy presents the characteristics of diversification, but there are also some problems to be solved. The formulation and implementation of the enrollment policy not only need to conform to the national education

policy and the macroscopic direction of sports development, but also need to combine the actual situation of colleges and universities to ensure that the policy is scientific and operable.

From the perspective of policy content, the recruitment policy of college campus football reserve talents mainly includes the following aspects: First, the enrollment object is usually the students with football expertise, including the athletes who have outstanding performance in campus football leagues at all levels. Secondly, the recruitment methods are diversified, including comprehensive evaluation through the combination of the academic scores of college entrance examination and sports special tests, and independent college enrollment or sports single enrollment. In addition, some colleges and universities have also cooperated with local football associations and clubs to establish a targeted training mechanism to provide channels for outstanding soccer talents to study.

2.2.2 Enrollment channels

General college entrance examination enrollment is one of the main sources of college campus football reserve talents. Students enter colleges and universities through the cultural course examination and sports professional test. The advantage of this method is that it can select students with both cultural quality and sports ability, but at the same time, there is a problem that sports special ability is not outstanding. Sports single enrollment is a kind of enrollment method for sports special students, who are selected through special sports tests and cultural examinations. This method can more accurately select students with strong football special ability, but the academic performance is often a restricting factor. The recruitment of high-level sports teams is to select students with high competitive level through special tests and cultural examinations. The advantage of this method is that it can select students with high competitive level, but the enrollment places are limited and the competition is fierce.

Special talent introduction is a way for universities to recruit students with special football talents, usually through expert recommendations or special tests. The advantage of this method is that it can quickly introduce high-level soccer talents, but the operation process is complicated and easy to be affected by human factors. In order to more intuitively show the characteristics of these recruitment channels, here is a specific table:

Admissions	Selection methods	advantage	Limitations
channels			
General college	Cultural examination	Both cultural quality	Sports special ability is
entrance	+ physical education	and sports ability	not outstanding
examination	professional test		
Sports single	Sports special test +	Select students with	Academic scores
move culture class exam		strong football special	become a limiting
		ability accurately	factor
Recruiting high-	Special test + cultural	Select students with	Enrollment places are
level sports teams	class exam	higher competitive	limited and
		level	competition is fierce
Special Talent	Expert referrals or	Rapid introduction of	The operation process
Introduction	special tests	high level football	is complicated and
		talent	human factors affect

As can be seen from the table, each admissions channel has its own unique advantages and limitations. Although the general college entrance examination and the single admission of sports are different in the selection methods, they both emphasize the combination of cultural courses and sports ability. The recruitment of high-level sports teams and the introduction of special talents pay more attention to the competitive level of students, but in practice, they face the problems of limited quotas and complicated procedures.

In order to further optimize the enrollment channels, colleges and universities can take the following measures: First, improve the selection criteria of sports single enrollment and high-level sports team enrollment, and ensure the balance between academic performance and sports special ability. Secondly, the transparency of the introduction of special talents should be strengthened to reduce the interference of human factors. Finally, explore new ways of enrollment, such as establishing cooperation mechanisms with middle schools or clubs, to form a stable pipeline of students.

2.3 Current training mode of college campus football reserve talents

2.3.1 Training mode

Under the background of the integration of sports and education, the training mode of college campus football reserve talents shows diversified characteristics, but its core goal is always to improve the competitive level and comprehensive quality of students. At present, the training mode of college campus football is mainly divided into three types: centralized training, decentralized training and mixed training. The centralized training mode is usually organized by the school, and fixed training time and field are arranged to ensure the continuity and systematicness of training. Decentralized training mode is more flexible, allowing students to conduct independent training according to personal schedule, emphasizing personalized development; The mixed training mode combines the advantages of centralized and decentralized training, ensuring the standardization of training and taking into account the individual needs of students.

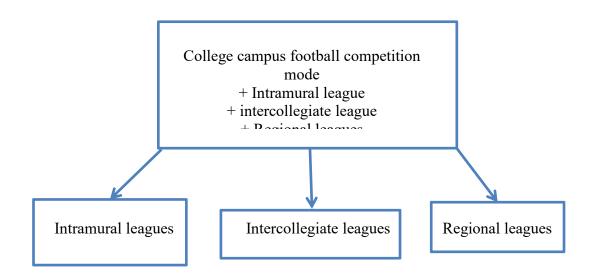
Training	Features	Strengths	Weaknesses
mode			
Concentrated	Unified organization,	Continuous training,	Poor flexibility and
training	fixed time and venue,	easy to manage	may neglect individual
	systematic and strong		needs
Spread	Students make	Personalized	Lack of systematicness,
training	independent	development to suit	training effect is
	arrangements and have	students' time	difficult to guarantee
	strong flexibility		
Mixed	Combine centralized	Strong	It is difficult to
training	and decentralized	comprehensiveness,	implement and requires
	training, taking into	flexibility and	high management and
	account both normative	standardization	coordination ability
	and personalized		

In the implementation of the training mode, it is also necessary to pay attention to the long-term development of students and avoid overemphasizing short-term results while ignoring students' physical and mental health. Through scientific and reasonable training arrangements, combined with psychological counseling and team building, students should be helped to establish the correct concept of competition, cultivate their indomitable will quality and teamwork spirit. Only in the framework of the integration of sports and education can we

truly realize the all-round development of campus football reserve talents and lay a solid foundation for the future of Chinese football.

2.3.2 Competition mode

In the perspective of the integration of sports and education, the competition mode of college campus football reserve talents shows the characteristics of diversification, but there are also some problems to be solved. At present, the college campus football competition system is mainly composed of intramural league, intercollegiate league and regional league. These competition forms provide a platform for the reserve talents to show and exercise to a certain extent. However, the science and systematicness of the competition mode still need to be further improved.



In addition, the incentive mechanism of college campus football competition mode is also inadequate. At present, most colleges and universities pay more attention to the competition results, but not enough attention to the cultivation of students' comprehensive quality. Competition results often become the main criteria for evaluating students and coaches, leading some schools and coaches to pursue short-term results excessively, ignoring the long-term development of students. This kind of utilitarian competition mode is not conducive to the all-round growth of reserve talents.

In order to solve these problems, universities need to build a more scientific and reasonable competition mode under the framework of the integration of sports and education. First of all, we should improve the organization and management of the school league,

increase the number of matches, and improve the standardization and continuity of the competition. Secondly, the coverage of intercollegiate league should be expanded, more universities should be encouraged to participate, and the interference to study should be reduced through reasonable scheduling. Finally, we should strengthen the support for regional leagues, raise the funds and site conditions of competitions, improve the level of referees, and ensure the fairness and competitiveness of competitions.

3 Analysis on the influence of college campus football reserve talent training

3.1 Influence of talent development environment

Research has shown that systematic and effective talent development is one of the key factors for the success of football, and talent development requires a supportive environment [4]. Environment is the accelerant of talent development. A successful environment can make players better cross to the elite stage with influence. Some foreign scholars have pointed out that talents, as an individual, have the potential to perform at a higher level of competition, and the environment plays a crucial role in cultivating and realizing this potential. Many studies have also emphasized the importance of environment in human talent development. In the present academic field, both qualitative and quantitative methods have been widely^[5] used. Two models are included: the athlete talent development environment and environmental success factors. These models highly suggest that talent development is dynamic, multifactorial, and influenced by micro and macro environments. The athlete-centric microenvironment involves key social activities (e.g., parents, coaches, clubs), while the macro environment includes broader systems (e.g., sports associations, educational institutions).

Sports development needs to focus on long-term growth, as short-term success does not guarantee future success. Early specialization and deliberate practice of a single sport has been linked to negative effects on an athlete's mental health (such as mental fatigue) and physical health (such as overuse injuries). Parents and coaches play a vital role in youth sports development and can have a profound impact on an athlete's psyche. Parental support can help children develop psychosocial qualities, reduce fatigue and can increase willingness to continue participating in sports. In addition, research has shown that the behavior of adolescent athletes is related to the motivation of athletes, indicating that the positive attitude of athletes and coaches is positively correlated with the mental health status of athletes.

3.2 Influence of teaching and training modes

3.2.1 Changes in curriculum Settings

The change of curriculum is first reflected in the expansion of teaching content. In the past, football training courses mainly focused on the repeated practice of technical movements and the drill of tactical cooperation, but under the background of the integration of sports and teaching, the course content began to extend^[6] to a wider field. For example, physical training courses not only focus on improving students' physical fitness, but also introduce scientific training methods to help students better understand the basic principles of exercise physiology. The addition of psychological counseling courses helps students maintain mental balance and enhance their ability to withstand pressure during high-intensity training. The inclusion of cultural courses ensures that students can balance their studies and achieve all-round development in addition to football training. This diversified curriculum not only improves students' soccer skills, but also lays a solid foundation for their future career development.

The change of curriculum structure is also one of the important influences brought about by the integration of sports and education. The traditional curriculum structure often takes training as the core, with cultural courses and physical training as the auxiliary, while the integration of physical education emphasizes the organic connection and balance^[7] between courses. For example, in the course arrangement, training courses are alternated with cultural courses, which avoids the situation that students neglect their studies due to long training hours. At the same time, the schedule of courses is more flexible, taking into account the individual differences and needs of students. This structural optimization not only improves the implementation efficiency of the course, but also effectively alleviates the conflict between learning and training, so that students can find a better balance between football training and study.

In addition, the repositioning of curriculum objectives is also one of the important influences of the integration of sports and education on the curriculum. The traditional curriculum goal mainly focuses on the improvement of competitive performance, but the integration of sports and education pays more attention to the all-round development of students. The curriculum goal has changed from the single training of competitive ability to the improvement of comprehensive quality, including physical quality, psychological quality, cultural quality and many other aspects. This change of goal makes the curriculum pay more attention to the individual needs of students, and the course content and teaching methods are

more diversified. For example, in training courses, coaches not only pay attention to students' technical and tactical level, but also focus on cultivating their teamwork spirit and leadership. Cultural courses help students broaden their knowledge and improve their overall quality through interdisciplinary teaching design.

The change of curriculum is also reflected in the innovation of teaching methods. The traditional teaching method takes the coach as the leading and the students receive the training passively, while the integration of physical education emphasizes the principal position of the students and pays attention to stimulating the students' learning interest and initiative. For example, in training courses, coaches use more heuristic teaching and interactive teaching to encourage students to actively think and explore. Cultural courses cultivate students' independent learning ability and innovative thinking through project-based and inquisitive learning. The innovation of this teaching method not only improves the teaching effect of the course, but also enhances students' learning experience and sense of participation.

In the course evaluation system, the integration of physical education has also brought new changes. The traditional evaluation system is mainly based on students' competitive performance, while the integration of sports and teaching introduces a more comprehensive evaluation standard. For example, the evaluation system includes not only students' technical and tactical level, but also their physical, psychological and cultural qualities. This diversified evaluation system is not only more scientific and reasonable, but also provides more comprehensive feedback and guidance for students' all-round development.

3.2.2 Innovation of training methods

The innovation of training content is reflected in the comprehensive cultivation of football skills, physical fitness, psychological quality and teamwork ability. The traditional training mode often focuses on the repetition of technical movements, while the training under the integration of physical education pays more attention to the all-round development^[8] of students. For example, psychological training is introduced to help students overcome the tension in the competition and improve their psychological ability to withstand pressure; And cultivate students' communication skills and team spirit through teamwork training. This multi-dimensional training method not only improves students' soccer skills, but also lays a solid foundation for their future careers.

On the other hand, the innovation of training methods is reflected in the scientific and personalized training program design. The traditional training mode often adopts a "one-size-

fits-all" approach, ignoring the individual differences of students. However, the training under the integration of physical education pays more attention to teaching students according to their aptitude, and makes personalized training plans according to students' physical quality, technical level and psychological state. For example, through data analysis technology, real-time monitoring of students' training effect, timely adjustment of training intensity and methods; By introducing high-tech equipment, such as smart wearable devices and virtual reality technology, to enhance the fun and effectiveness of training. This scientific training method not only improves the training efficiency, but also inspires students' enthusiasm for training.

3.3 Influence of talent evaluation system

Under the background of the integration of sports and education, the diversification of college campus football reserve talent evaluation system has become a trend that cannot be ignored. The traditional talent evaluation often relies too much on competitive results and neglects the cultivation of students' comprehensive quality, while the concept of the integration of sports and education requires the evaluation index to be more comprehensive and scientific, so as to promote the all-round development of students. The diversification of evaluation indicators is not only reflected in the assessment of competitive ability, but also covers many dimensions such as academic performance, psychological quality, teamwork ability and social responsibility. This multi-dimensional evaluation system can more accurately reflect the true level of students, and at the same time provide more possibilities for students' personalized development.

In terms of competitive ability, the evaluation index is no longer limited to competition results, but extends to training attitude, comprehensiveness of technical mastery and tactical understanding^[9]. For example, students' competitive potential can be evaluated more comprehensively by analyzing their degree of involvement in training, the regularity of technical movements and the flexibility of tactical execution. In addition, the evaluation of psychological quality is also increasingly valued. Football requires very high psychological endurance of athletes, therefore, through psychological testing, pressure resistance assessment and other ways, we can better understand the psychological state of students, and provide scientific basis for their future development.

As an important part of the evaluation system, academic performance embodies the core idea of the integration of sports and education. College campus football reserve talents are not only athletes, but also students, whose academic performance is directly related to the improvement of their comprehensive quality. By integrating academic performance into the evaluation system, students can be encouraged to pay attention to their studies and achieve the balance of learning and training. The evaluation of teamwork ability and social responsibility further enriches the connotation of the evaluation system. Football is a team sport, and students' collaboration, leadership and awareness of social responsibility are key factors for their future development. Through the evaluation of team projects and participation in social practice activities, students' comprehensive qualities can be more comprehensively cultivated.

The diversified evaluation system not only provides a broader space for the growth of students, but also injects new vitality into the cultivation of college campus football reserve talents. It breaks the limitation of the traditional evaluation system and makes the talent training more scientific and humanized. At the same time, this evaluation system also provides a more comprehensive reference for coaches and managers, and helps to formulate more reasonable training plans and training programs. Driven by the integration of sports and education, the diversification of college campus football reserve talent evaluation system will become an inevitable trend in the future development, and open up a new path for the training of football talents.

4 Strategies for the cultivation system of college campus football reserve talents from the perspective of the integration of sports and education

4.1 Optimize the curriculum and teaching system

Under the background of the integration of sports and education, optimizing the campus football curriculum and teaching system is the key to cultivating high-quality reserve talents. This requires not only the adjustment of course content, but also innovation in teaching methods to ensure a closer combination of theory and practice, so as to comprehensively improve students' soccer skills and literacy.

From the perspective of curriculum setting, universities should break the traditional single-skill training mode and integrate football teaching into a broader educational goal^[11]. For example, interdisciplinary content such as tactical analysis, sports psychology and exercise physiology can be introduced into the curriculum to help students understand football from multiple dimensions. This will not only improve students' competitive level, but also

cultivate their comprehensive qualities, making them more competitive in their future career development. At the same time, the course content should be set with full consideration of students' individual differences, and the needs of students at different levels should be met through layered teaching, ensuring that each student can grow at a pace that suits them.

In terms of teaching methods, the traditional "infusing" teaching mode has been difficult to meet the needs of modern football education. The introduction of advanced teaching modes, such as project-based learning, flipped classroom, cooperative learning, etc., can effectively stimulate students' learning interest and initiative. For example, through project-based learning, students can apply what they have learned in actual competitions, analyze competition data, and formulate tactical plans, thus deepening their understanding of theories in practice. Flipped classroom allows students to learn independently through videos, literature and other resources before class, while in class they focus on problem discussion and skill training to improve teaching efficiency. In addition, cooperative learning mode can promote communication and collaboration among students and cultivate their team spirit and leadership ability.

In order to further improve the teaching effect, universities should also pay attention to the integration and utilization of teaching resources. For example, with the help of modern information technology, intelligent teaching platforms can be developed to record students' training data in real time and provide personalized feedback and guidance. At the same time, colleges and universities can cooperate with professional clubs, football associations and other external organizations to invite professional coaches and retired athletes to participate in teaching, so as to provide students with more professional guidance and broader practical opportunities. This dual-track teaching model of "on-campus + off-campus" can not only make up for the lack of teaching resources in colleges and universities, but also provide students with more diversified growth paths.

In addition, the optimization of the teaching evaluation system is also a part that cannot be ignored. The traditional evaluation methods often pay too much attention to the assessment of skills, but ignore the comprehensive quality and potential of students. Therefore, colleges and universities should establish a diversified evaluation system, including students' tactical understanding ability, teamwork ability and psychological quality. For example, students' comprehensive ability can be comprehensively assessed through simulation competitions, case studies and team projects. At the same time, the evaluation process should pay attention

to dynamics and feedback to help students find deficiencies and adjust learning strategies in a timely manner.

In the perspective of the integration of sports and education, the optimization of college campus football curriculum and teaching system is not only a necessary condition for training reserve talents, but also the core driving force to promote the sustainable development of campus football. By adjusting course content, innovating teaching methods, integrating teaching resources and optimizing evaluation system, colleges and universities can provide students with higher quality education experience and cultivate more football talents with competitive level and comprehensive quality. This talent training mode can not only meet the development needs of campus football, but also inject new vitality into the overall revitalization of Chinese football.

4.2 Strengthen the construction of teaching staff

4.2.1 Upgrading of teacher training

From the perspective of the integration of sports and education, the construction of college campus football reserve talent training system cannot be separated from the construction of teacher team, and teacher training and improvement is the core link in this process. As the direct promoter of campus football, teachers' professional quality and teaching ability directly determine the quality^[12] of reserve talents training. Therefore, improving the comprehensive ability of teachers through systematic training mechanism is not only the key to solve the bottleneck of the current development of campus football, but also an important path to realize the deep integration of sports and teaching.

At present, college campus football teacher training faces many challenges. On the one hand, the professional knowledge and teaching concept of some teachers lag behind, which is difficult to meet the needs of modern football teaching; On the other hand, the training system lacks pertinence and systematization, resulting in poor training results. For example, many training programs pay too much attention to the indoctrination of theoretical knowledge and neglect the improvement of practical ability, which makes teachers often feel powerless in the face of complex teaching scenarios. In addition, the uneven distribution of training resources also exacerbates the problem, with college teachers in some remote areas struggling to obtain high-quality training opportunities, further widening the gap in teachers' levels.

In order to solve these problems, colleges and universities need to build a multi-level and multi-dimensional teacher training system. First, the training content should cover the deep integration of football professional skills, teaching methods and the concept of integrating sports and teaching. By introducing advanced football teaching experience at home and abroad, teachers should be helped to master the latest training methods and tactical concepts, and at the same time, football teaching should be closely integrated with the comprehensive development of students. For example, we can learn from the successful experience of campus soccer in Japan, combine soccer teaching with students' physical and mental health and teamwork ability training, and form a scientific and systematic teaching system. Secondly, training forms should be diversified, including online courses, offline workshops, field trips, etc., to meet the learning needs of different teachers. Through online courses, teachers can arrange their learning time flexibly, while offline workshops and field trips provide opportunities for practice and exchange, helping teachers to transform their theoretical knowledge into practical teaching abilities. In addition, universities should also strengthen cooperation with external institutions such as professional clubs and football associations to provide teachers with more practical opportunities and resource support. For example, professional coaches can be invited to participate in teacher training to share their practical experience, or teachers can be organized to have short-term internships at professional clubs to improve their practical abilities.

In terms of the evaluation of training effects, colleges and universities should establish a scientific evaluation mechanism to ensure that the training results can be truly translated into teaching practice. For example, teachers' training effects can be comprehensively evaluated through teaching observation, student feedback and teaching results display, and the content and form of training can be adjusted according to the evaluation results. At the same time, colleges and universities should establish a long-term tracking mechanism for teacher training and regularly assess and give feedback on teachers' teaching ability to ensure that they can continuously improve their professional level.

In addition, the improvement of teacher training also needs policy support and resource guarantee. Colleges and universities should increase input in teacher training, provide adequate funding and resource support to ensure the smooth implementation of training programs. At the same time, education authorities should also introduce relevant policies to encourage and support colleges and universities to carry out teacher training, so as to form a

good atmosphere for the whole society to pay attention to and support the development of campus football. For example, special funds can be set up to support colleges and universities to carry out teacher training programs, or teacher training can be included in the evaluation system of colleges and universities to encourage colleges and universities to pay more attention to teacher training.

Through the above measures, colleges and universities can gradually build a team of campus football teachers with high professional quality and strong teaching ability, and provide a solid teacher guarantee for the cultivation of campus football reserve talents from the perspective of the integration of sports and education. This not only helps to improve the teaching quality of campus football, but also lays a solid foundation for the development of football in our country. In the future development, colleges and universities should continue to explore and improve the teacher training mechanism, promote the deep integration of campus football and sports education, and inject new vitality into the cultivation of China's football reserve talents.

4.2.2 Introduction of high-level coaches

In the perspective of the integration of sports and education, the construction of college campus football reserve talent training system is inseparable from the introduction of high-level coaches. The high-level coach is not only the core strength of technical guidance, but also the key promoter of the improvement of students' comprehensive quality. At present, many colleges and universities are faced with the problem of uneven level of coaches in the cultivation of football reserve talents, which not only affects the quality of training, but also restricts the improvement of students' competitive level. Therefore, it is particularly important to introduce high-level coaches with rich coaching experience and professional quality.

The introduction of high-level coaches can inject new vitality into college football training. They can not only make scientific and reasonable training plans according to the individual differences of students, but also teach tactical awareness and psychological adjustment skills through actual combat experience. For example, some experts who have served as coaches in professional leagues or national teams are able to introduce internationally advanced training concepts and methods to campuses, helping students break through technical bottlenecks and improve their competitive level. At the same time, the

participation of high-level coaches can also stimulate students' interest in learning and enhance their love and commitment to the sport.

In the process of introducing high-level coaches, universities need to establish a sound selection mechanism and incentive mechanism. First, excellent coaches should be widely recruited through multiple channels, including professional clubs, retired national team coaches and internationally renowned coaches. Secondly, in the selection process, attention should be paid to the coaching ability, communication ability and educational concept of the coaches to ensure that they not only have professional skills, but also can establish a good teacher-student relationship with students. In addition, universities should provide competitive salary packages and career development space for high-level coaches to attract more outstanding talents to join campus football.

The introduction of high-level coaches also needs to be combined with the existing resources of universities to form a synergistic effect. For example, a long-term and stable cooperative relationship can be established through cooperation with professional clubs or professional training institutions to achieve resource sharing and complementary advantages. At the same time, colleges and universities should provide a good working environment and support for coaches, including advanced training facilities, scientific management systems and sufficient logistics support, to ensure that they can give full play to their professional advantages and improve training results.

In addition, the introduction of high-level coaches should also pay attention to local training and avoid over-reliance on foreign aid. Colleges and universities can improve the professional level of existing coaching teams by setting up coach training programs, and form a virtuous circle of "attaching equal importance to introduction and training". This can not only solve the problem of coach shortage in the short term, but also lay a solid foundation for the sustainable development of college football.

In a word, the introduction of high-level coaches is an important part of the college campus football reserve talent training system. Through scientific selection, reasonable incentive and resource integration, colleges and universities can build a high-quality coaching team to provide strong support for the all-round development of students and the improvement of competitive level. This will not only help to promote the vigorous development of campus football, but also inject new impetus into the cultivation of Chinese football reserve talents.

4.3 Improve the competition system

In the perspective of the integration of sports and education, the construction of college campus football reserve talent training system cannot be separated from the improvement of internal competition organizations. Intramural competition is not only a platform to test students' football skills and tactical level, but also an important way to stimulate students' enthusiasm to participate in football and cultivate team spirit. Through scientific and reasonable competition organization, colleges and universities can provide more practical opportunities for students and promote their continuous growth and progress in the game.

The organization of intramural competitions should pay attention to the hierarchy and diversity. For students of different grades and levels, different levels of competitions can be designed, such as freshman cups, departmental leagues, and school-level tournaments. Such layered design can not only allow each student to find their own competitive stage, but also avoid the suppression of high-level students on lower-level students, ensuring the fairness and participation of the competition. At the same time, diversification of competition forms is also crucial, in addition to the traditional 11-a-side competition, small competitions such as 5-a-side and 7-a-side can also be introduced to adapt to different venue conditions and students' needs.

The timing of competitions also needs to take students' academic load into full consideration. Through reasonable planning of the competition cycle, such as arranging the main competition in the middle of the semester or before the end of the semester, it can not only avoid the conflict with the exam time, but also allow students to relax their body and mind through football. In addition, the rules of the game should be both competitive and educational. For example, "fair play awards" could be set up in competitions to encourage students to follow the rules and respect their opponents, thus fostering good sportsmanship in competitions.

The organization of intramural competitions also needs to fully mobilize the enthusiasm of students and teachers. Student football associations or clubs can be set up to allow students to participate in the planning, organization and promotion of competitions, and to develop their leadership and organizational skills. At the same time, teachers and coaches should strengthen their guidance to students to help them sum up experience and find problems in competitions, and constantly improve through training. This mode of "promoting practice

through competition and learning through practice" can effectively improve students' football level and comprehensive quality.

5 Conclusion

In the perspective of sports and education integration, the problems of training of reserve talents mainly concentrate on the aspects of teachers, training mode, and enrollment channels. With the rapid development of football in our country and the country's increasing emphasis on football personnel training, establishing an effective environment for talent development has become the key to improving the level of football on campus. Through the research, it is found that constructing a scientific and reasonable training system is of great significance to improve the quality of college football reserve talents. This study finds that adjusting the training mode, improving the competition system, strengthening the construction of teachers and integrating objective evaluation and other strategies can not only provide strong support for the development of college football, but also help to promote the physical and mental health and all-round development of students. It lays a solid foundation for the long-term development of football in China.

Competing Contributions

QY.C and ZJ.C led the study. All authors conceived and designed the study. QY.C, ZJ.C, B.J, and SJ.W drafted the article. All authors made critical revisions to the manuscript for important intellectual content and gave final approval of the manuscript.

Competing interests

The authors declare no competing interests.

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