Innovation System of "Base Group" in Outdoor Sports Practice Teaching in Universities

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Abstract-The course of outdoor sports is one of the important curriculums of physical education department and specialty, which has strong practical characteristics. Taking the outdoor sports talents training of physical education specialty of China University of Geosciences (Wuhan) as the research object, this paper uses the methods of documentation, questionnaire survey, field investigation and case analysis, and combines the content and characteristics of outdoor sports practice teaching courses in colleges and universities of Hubei Province, explores the construction idea of "base group" of outdoor sports practice teaching. Starting from the training goal of coordinated development of knowledge, technique and skills of sports professionals, the "base group" of outdoor sports practice teaching is constructed according to different regions, projects, times and groups of people. The paper discusses the innovation construction system of "base group" composed of five subsystems including target, curriculum, management, guarantee and the evaluation of practice teaching. The "five-in-one" practicing base group evaluation system of outdoor sports is probed, aiming at the cultivating of outdoor sports professionals who satisfy the social requirements, meet the characteristics of students' development, and possess the theoretical skills and practical abilities.

Key words: outdoor sports; practical teaching; base group; innovation system

I. INTRODUCTION

The importance of practice cannot be overstated. Almost everyone accepts that the practice is the best way to learn. The Ministries of Education, and the Culture, as well as the Propaganda jointly issued in 2012 "Some Opinions on Further Improving the Practical Education Work in Colleges and Universities" pointed out that "the link of practical teaching should be strengthened, the construction of teaching staff should be focused on, the construction of various forms of practical teaching bases should be reinforced, and the theoretical and practical abilities of college students should be effectively augmented." With the introduction of relevant policies, the construction of teaching practice base has become one of the significant issues in the development of higher education practice teaching in China.

Practice training of outdoor sports is called the lifeline of sustainable development of outdoor sports in colleges and universities [1]. While discussing the importance of outdoor sports base construction, colleges and universities are also exploring innovative models to meet the needs of practical teaching in the new situation [2].

Breaking the traditional "dot-type" base practice teaching mode and entering the "new normal" college outdoor sports "base group" innovation system play an irreplaceable role in improving students' practical ability, comprehensive quality and employment capability.

II. RESEARCH STATUS OF OUTDOOR SPORTS PRACTICE BASE CONSTRUCTION AT HOME AND ABROAD

A. Current Situation of Construction of Outdoor Sports Practice Teaching Base Abroad

The main content of outdoor sports education in developed countries is a vital part of national physical education [3]. In the United States, Germany, France, Britain, Australia, Singapore, Japan and other countries, various kinds of outdoor sports for teenagers are widely carried out and popularized, and closely combined with quality education [4]. Many outdoor extreme sports are also enormously socialized.

In practical teaching mode, developed countries mostly adopt the "dual system" and "TAPE" model: the "dual system" model represented by Germany; and the "TAFE" model represented by Australia, which combines industry with government, industry and school, and establishes a perfect internship and training base inside and outside schools [5].

B. Current Situation of Construction of Outdoor Sports Practice Base in China

In the mid-1990s, China University of Geosciences (Wuhan)-CUG(W)- took the lead in introducing outdoor sports into physical education, and proposed a "5+1" training model to promote the scientific development of outdoor sports talents and their cultivation.

According to the needs of teaching, the college has built many practical teaching bases around Hubei. With the continuous entry of physical education reform, higher requirements have been put forward for the geological environment, project characteristics, teaching effect and students' sustainable development of outdoor sports practice base.
At present, the use of outdoor sports practice teaching base in colleges and universities generally is in a situation that demand is far greater than supply side imbalance, which is called "supply-side imbalance" [6]. Based on the actual investigation of the satisfaction degree of practice process, the author of this paper has obtained abundant first-hand data through in-depth investigation, which provides a basis for the construction and innovation of outdoor sports practice teaching system in colleges and universities.

| Category                        | student self-evaluation | teacher evaluation | expert supervision | base mutual evaluation | scenic spot self-evaluation |
|--------------------------------|-------------------------|--------------------|--------------------|------------------------|----------------------------|
| Infrastructure                 | 5.34                    | 8.27               | 5.32               | 7.35                   | 1.23                       |
| Safety and environmental       | 3.12                    | 8.47               | 4.33               | 7.48                   | 1.14                       |
| Project development            | 6.12                    | 8.48               | 8.37               | 7.15                   | 4.37                       |
| Transportation logistics       | 0.23                    | 4.32               | 2.47               | 5.68                   | 0.69                       |

Note: Set the full score of satisfaction as 10.

It can be seen from Table 1 that there are great differences between the present situation of satisfaction and ideal value of outdoor sports practice teaching in colleges, especially in the two aspects, i.e. "the basic infrastructure" and "safety and environmental protection" [7]. This fully shows that the basic configuration of the existing practice teaching base could not meet the requirements of outdoor sports teaching process in colleges and universities.

From this point of view, this paper proposes the idea of constructing the "base group" of outdoor sports practice teaching in colleges and universities, and builds the "base group" of outdoor sports practice teaching according to different regions, different projects, different times and different groups of people, so as to achieve the balance between supply and demand.

### III. IDEAS OF CONSTRUCTING AN INNOVATION SYSTEM OF "BASE GROUP" IN OUTDOOR SPORTS PRACTICE

The construction of the innovative system of "base group" in outdoor sports practice teaching is based on the needs of professionals' cultivation and the establishment of specialties with characteristics [8]. Under the guidance of the international advanced outdoor sports education concept, a talent training system with coordinated development of "knowledge, technology and skills" is set up. The innovative construction system of "base group" is composed of five subsystems, which are: the objective system of practical teaching, the curriculum system, the systematic management mechanism, teaching guarantee system and practice teaching evaluation system.

They are independent, interconnected, mutually supportive and cooperate with the construction of the innovation system of "base group" in outdoor sports practice teaching. The idea is shown in figure 1.
IV. Construction of Innovation System of "Base Group" in Outdoor Sports Practice

A. Teaching objective system of "base group"

The teaching objective of outdoor sports practice is the basis of teaching system constructing, and practical teaching is an important way to train talents, especially the excellent sports talents [9]. The target of outdoor sports practice teaching must be designed according to the characteristics and significance of different outdoor sports projects, with the core of cultivating students' abilities and qualities, and the issues of designing an index system to adapt to the development level of students' knowledge, abilities and qualities.

The setting of teaching objectives must abide by the principles of integrity, scientificity and realizability [10]. The construction of "base group" should be able to better improve the diversity, integrity and coherence of outdoor sports in practical teaching, and play a good risk control role for outdoor sports projects with higher venture.

Under the guidance of the orderliness of talent cultivation, a target system of "base group" of practical teaching, which is based on the four dimensions of fundamental education goal, professional theory cognitive goal, professional applied skill goal and professional technology adaptability goal, can fully meet the requirements of the society for talent development.

B. Constructing the Classification System of Outdoor Sports Practice Teaching "Base Group" Practice Teaching

On the basis of on-the-spot investigation, analysis and statistics of outdoor sports practice teaching bases in southwest, northwest, southeast, northeast and central areas of Hubei Province, this paper further establishes the base groups with pertinence and practical significance, and screens and classifies them.

Considering the characteristics of different types of bases and the adaptability of bases in different seasons, the suitable outdoor teaching projects are planned. From the six directions...
of outdoor sports- "water", "land", "air", "ice", "snow" and "rock", the five target dimensions of improving students' sports participation, sports skills, physical health, mental health and social adaptation are elaborate designed aimed at making a nice teaching practice system to train and produce high-level outdoor sports talents.

**Table 2 Classification System of Outdoor Sports Practical Teaching Courses**

| Category              | Practice Course          | Use of Teaching Bases               | Teaching Objects       |
|-----------------------|--------------------------|------------------------------------|------------------------|
| Aquatic Sports        | Diving                   | Fairy Island Lake                  | All students           |
|                       | Rafting and swimming     | Mu Lan Shan                        | All students           |
|                       | skiing                   | Shennongjia                         | Professional students  |
| winter sports         | Field survival           | Rock Climbing                       | All students           |
|                       | Bicycle                  | Camping                             | All students           |
| Mountain sports       | Mountaineering           | Rock fall                           | Student               |
|                       | Glider                   | Hot Air Balloon                     | Professional students  |
| Aviation movement     | Powered parachutes       | Mu Lan Shan                         | Student               |
|                       | delta wing               | Xianning base                       | Professional students  |

C. Architecture of Outdoor Sports Practice Course

Through the investigating and researching the eight best outdoor sports practice bases in Hubei Province, and in order to embody the professional features of outdoor sports teaching, we did lots of job to clarify the relationship between course system and the practice teaching system, and between the outdoor practicing and talents training scheme for undergraduate education, analyzed the characteristics of geographical resources, meteorological conditions, topography and human customs of outdoor sports practice base, and established different types and levels of outdoor sports project system to enriches the content of sports quality training in higher education and to establish a perfect "base group" teaching system of outdoor sports practicing.

According to different bases, student types, teaching methods and so on, we have designed a serious of new model of solidifying outdoor practice teaching, such as: basic module (in-school) - theoretical compulsory course; Application module (on peripheral) - skill operation compulsory course; practice module (in the base) - field environment practice compulsory course (see table 3).

**Table 3 Outdoor Sports Course Teaching System**

| Teaching Courses         | Hours | Teaching Method | Place        | Participating units                        |
|--------------------------|-------|-----------------|--------------|--------------------------------------------|
| Basic Knowledge Course   | 6     | Teaching        | Classroom    | Relevant Departments on Campus             |
|                          |       | Simulation      |              |                                            |
|                          |       | Case            |              |                                            |
| Basic Skills Course      | 8     | Observation     | School ground| Relevant Departments on Campus             |
|                          |       | Teaching        |              |                                            |
|                          |       | Competitive     |              | Association, Training Institution          |
|                          |       | Testing         |              |                                            |
| Basic Quality Course     | 4     | Situational     | School Gym   | Relevant Departments on Campus             |
|                          |       | Teaching        |              |                                            |
|                          |       | Simulation      |              | Association, Training Institution          |
|                          |       | Testing         |              |                                            |
| Field Practice           | 18    | Experience      | Practice base| Relevant Departments on Campus             |
|                          |       | Teaching        | (off campus) |                                            |
|                          |       | Observation     |              | Base-related agencies                      |
|                          |       | Competitive     |              |                                            |

D. Management System of "Base Group" in Outdoor Sports Practicing

The innovative system of outdoor sports practicing system refers to a set of rules and regulations that are conducive to or promote the innovation of outdoor sports practice teaching system, and the system agreements that the matching personnel, institutions and management departments abide by together. In the institutional innovation System, the following characteristics need to be guaranteed:

(1) Integrity: Outdoor sports practicing has formed a whole since the beginning of teaching, and the formulation of each system must consist of various sub-systems which are interrelated, mutually reinforcing and influencing.

(2) Hierarchy: The "base group" system of outdoor sports practice in colleges and universities and the operating mechanism of each subsystem constitute an interrelated mechanism system. However, according to the influence and scope of each link in the p

(3) Maneuverability: When formulating the outdoor sports practice teaching system, the institution system must be able to change with the altering of outside practice activities, while ensuring the feasibility, scientificity and democracy of the system operation process.

(4) Stability: Due to the particularity of the teaching place of outdoor sports practicing, students, parents, teachers and managers should strictly abide by the system as a norm of the behavior of them in the process of practicing. The
management system should have certain stability and effectiveness.

![Diagram of "Base Group" System for Outdoor Sports Practice Teaching]

**Fig. 3 Outdoor Sports Practice Teaching "Base Group" Management System**

**E. "Base Group" Guarantee System of Outdoor Sports Practicing**

The guarantee system of outdoor sports practice "base group" is mainly constructed from three dimensions: participant level, school level and base level.

1. **Participant level:** In the process of carrying out outdoor sports practice teaching in colleges and universities, it should be kept in mind that the principle of safety is always paramount, so the safety education is momentous, and is able to promote the cultivation of their safety prevention ability;

2. **School support level:** School security is the core of outdoor sports practicing safety [11], which mainly includes the following six subsystems: organization support, system support, teacher, equipment security and logistics support. Each subsystem is not only independent but also interrelated, and jointly constructs the level of school security.

3. **Base group level:** in view of the guarantee system at the base level, measures should be taken according to local status, time conditions, respect the unique habits of the base, and at the same time, ensure the safety of the students in the outdoor sports practice teaching process.

![Diagram of "Base Group" Security System of Outdoor Sports Practice Teaching]

**Fig. 4 "Base Group" Security System of Outdoor Sports Practice Teaching**
By the construction of training bases inside and outside schools and the cooperation mode between schools and enterprises, the "base group" of practice which meets the demands of outdoor sports specialty is set up to satisfy the practical teaching requirements of various outdoor projects, so as to enable students to contact practice and enter into roles early, and lay a solid foundation for their future development.

Moreover, the school should strengthen the cooperation with the enterprise of practice base, establish the point-line radiation mode of "base group" centered on the school, meet the needs of students' practical ability training, and also drive the tourism service industry related to the base [12]. The construction of the base's guarantee system and the improvement of infrastructure can help the base to operate well [13].

**F. Constructing a Scientific Evaluation System of Outdoor Sports Practice Base Groups**

The teaching evaluation of “base group” in outdoor sports practice of universities is not only related to the whole teaching quality and the realization of teaching objectives, but also to the implementation of outdoor sports activities in bases and the quality of outdoor management personnel training in colleges and universities.

To evaluate the "base group" of outdoor sports practicing in colleges and universities, it is necessary to determine the key factors in the assessment system [14]. According to the principles of integrity, hierarchy and pluralism, the five levels of basic practice, comprehensive practice, innovative practice, social practice and base support are finally determined and the "five-in-one" outdoor sports check-up system of colleges and universities is constructed to accomplish the "base group" evaluation.

![Diagram of "Base Group" Evaluation System of Outdoor Sports Practice Teaching](image)

(1) The curriculum design needs to stimulate students' interest in outdoor sports practice courses, improve students' lifelong sports thinking and dare to challenge.

(2) Practice content, focusing on encouraging students' spirit of adventure in outdoor sports, cultivating their awareness of self-management, self-security and self-innovation in the outdoor environment, and formulating comprehensive assessing standards for students, teachers and bases in practice.

(3) Practice implementation, it is vital to break the traditional methods of physical education teaching, arouse students devote themselves to the natural environment, apply the theory to practice, realize a virtuous circle of combining theory with practice, and then make a comprehensive evaluation from two aspects of theoretical innovation and practical creation.

(4) Practice feedback, outdoor sports practice teaching feedback mainly from three aspects: student level, evaluation feedback for curriculum harvest; teacher level, shortcomings encountered in practice teaching and improvement; base level, aiming at the positive and negative impact of students' practice process on the base to establish the evaluation system.

(5) Base guarantee, mainly establish two modes, "base cooperation mode" and "school-enterprise joint training mode", in order to pursue the best practical teaching effect.

**V. CONCLUSION**

With the deepening of outdoor sports practice teaching in colleges and universities, different kinds of outdoor sports projects are carried out, which puts forward higher requirements for the construction of outdoor sports practice teaching base.

Relying on the practice teaching base and closely combining with the requirements of the outdoor sports course syllabus, strengthening the construction of the outdoor sports practice teaching and environment can realize the combination of in-class teaching and extracurricular practice, improve the practice system and personnel training program, promote the combination of sports professional education and social sports, stimulate the vitality and potential of college students, and impel them constantly improve themselves.

Establishing a scientific, reasonable and standardized "base group" of outdoor sports practicing can play a positive role in popularizing outdoor sports practice teaching in colleges and
universities, and effectively promote the outdoor sports education and teaching to a higher level.

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