

# *Research on Teaching Reform of Ice and Snow Sports Courses in Universities Based on OBE Concept*

**Jiaqing Li**

*Harbin Cambridge University, Harbin, 150040, China*

**Keywords:** OBE concept; Universities; Ice and snow sports courses; Reform in education

**Abstract:** In the current environment of higher education reform, the innovation and reform of educational teaching models have become one of the hot and difficult issues in the development of higher education. In the context of the rapid development of artificial intelligence and other emerging technologies, the teaching content and methods of higher education must also make corresponding adjustments and reforms in line with the changes of the times. This article explores the combination of the OBE (Outcome-Based Education) concept and the teaching reform of ice and snow sports courses in universities, aiming to explore how to better implement the OBE concept in teaching practice and improve the teaching quality and effectiveness of ice and snow sports courses in universities.

## **1. Introduction**

With the vigorous development of China's sports industry, ice and snow sports are also receiving increasing attention in China. Ice and snow sports education in universities is one of the important ways to cultivate excellent talents. The teaching reform of ice and snow sports courses in universities based on the OBE concept can not only promote students' comprehensive development, enhance their comprehensive quality and practical ability, but also help to improve the ice and snow sports industry and talent cultivation level in China. This article prospects and proposes the development direction and specific measures for the future reform of ice and snow sports curriculum in universities, hoping to provide certain reference and reference significance for the reform and development of ice and snow sports education in universities.

## **2. The enlightenment of OBE education concept on the reform of physical education teaching in universities**

The OBE education concept is an abbreviation of "Outcome-Based Education", which is a learning goal oriented education method. Its core is to emphasize the measurability of students' learning process and results. In the reform of physical education teaching in universities, the OBE education concept emphasizes student-centered and emphasizes personalized development of students. The OBE education concept emphasizes the personalized development of students, and physical education teaching should also pay attention to their different needs and differences, establish personalized learning goals and evaluation standards, and enable students to develop in different sports projects.[1] The OBE education concept emphasizes the cultivation of students' comprehensive qualities, and

physical education teaching should also highlight this point, focusing on cultivating students' hands-on ability, collaborative ability, and innovative ability, in order to improve students' comprehensive qualities. In the OBE education philosophy, evaluation is an important part of teaching, and the measurability of evaluation should also be emphasized in physical education teaching. By establishing scientific evaluation standards and methods, students can objectively see their learning outcomes and growth and further improve their motivation for learning. The OBE education concept has brought a new approach to the reform of physical education teaching in universities, promote the transformation, upgrading, and innovative development of physical education teaching in universities.[2]

### **3. Analysis of the current situation of teaching reform in Ice and snow Sports courses in universities**

With the promotion of the "ice and snow sports on campus" policy and the attention paid to ice and snow sports by society, the teaching reform of ice and snow sports courses in universities has achieved certain results, but there are still many problems. Most universities do not have professional ice and snow sports coaches, and schools can only rely on their own teachers to organize and guide ice and snow sports courses.[3] However, teachers' mastery and professionalism of ice and snow sports courses are insufficient. Due to the significant investment and maintenance costs required for the construction of ice and snow sports facilities, most universities have relatively simple facilities and cannot provide professional ice and snow courses. Due to limited understanding and exposure to ice and snow sports, as well as the difficulty of the course, students' participation is relatively low. Meanwhile, due to the lack of popularity of ice and snow sports in some regions, there are significant limitations in students' acceptance and participation in ice and snow sports courses. Due to the unique nature of ice and snow sports courses, and the fact that most university textbooks and teaching methods are not suitable for ice and snow sports teaching, these problems can easily lead to difficulties in the current physical education teaching work in universities, which is not conducive to the reform and development of physical education teaching.

### **4. Strategies for teaching reform of ice and snow sports courses in universities based on OBE concept**

#### **4.1. Determining learning outcomes**

The teaching reform of ice and snow sports courses in universities based on the OBE concept needs to determine learning outcomes to guide the selection of teaching content and methods, develop teaching plans, curriculum design, and evaluation systems. Learning achievements should include the skills, knowledge and attitudes that students should master, be measurable and realizability, and also be applicable to students' academic background and personal characteristics. Learning outcomes are divided into three levels: cognitive, skill, and attitude levels. These levels are mutually supportive and closely connected, and also present a hierarchical structure that develops step by step from low to high. Learning outcomes should have clear action guidelines. For example, students are required to apply relevant skills and master specific knowledge in certain situations. After determining the learning outcomes, evaluation criteria are necessary to determine whether students have achieved the goals. Evaluation design should run through the entire teaching process and repeatedly emphasize the need to consider the accuracy and measurability of results in course design.

Taking college ice and snow sports courses as an example, students need to understand the history and current situation of ice and snow sports, as well as their global impact and development trends, at the cognitive level. Familiarize yourself with the rules and techniques of ice and snow sports, and

learn the basic skills of curling, figure skating, and other events. Master athlete training knowledge and physical fitness training techniques, and learn how to conduct ice speed training, flexibility training, and other related courses.

At the skill level, teachers can set the following learning objectives: learn how to use ice and snow equipment, proficiently master tools such as snowgear and scooters, and how to avoid dangerous situations. Familiar with the facilities and regulations of ice and snow sports venues, and understand basic skills such as independent sliding, turning, avoiding, and braking on ice. Familiarize oneself with competition rules and tactical strategies, improve individual and team competitive skills, and enhance the overall quality of ice and snow sports.

In terms of attitude, teachers can set the following learning goals: to cultivate students' teamwork and leadership abilities, and to encourage students to help each other and improve together in competitions. We should cultivate students' confidence and adaptability, help them overcome setbacks, and dare to challenge themselves, in order to promote a positive and healthy lifestyle and cultural awareness, promote the value and spirit of ice and snow sports, and promote the health and development of the entire society.

#### **4.2. Reasonably setting teaching content based on teaching objectives**

The teaching reform of ice and snow sports courses in universities based on the OBE concept requires the rational setting of teaching content based on clear teaching objectives. Under the traditional teaching mode, the teaching objectives are too simple and single, making it difficult to meet the requirements of modern university talent cultivation. Based on the OBE concept, it is possible to combine industry dynamics and talent needs to develop teaching objectives that are in line with reality, and clarify the direction and purpose of teaching. Teachers should start from practical abilities and design challenging and practical teaching tasks. The teaching of ice and snow sports courses in universities needs to focus on cultivating practical operational abilities. Therefore, design diverse, challenging, and practical teaching tasks for different student groups, allowing students to experience and master relevant skills and knowledge in practice.

The teaching reform of ice and snow sports courses in universities based on the OBE concept should focus on the application of diversified teaching methods and evaluation methods, such as group discussions, case studies, simulation exercises, and other teaching methods. Through various evaluation methods such as practical tasks, course assignments, and student self-evaluation, their mastery of knowledge and practical skills should be balanced. In response to the singularity of traditional teaching methods, new teaching methods and technical support can be considered, Such as VR technology and intelligent teaching platforms, providing richer, more intuitive, and interactive teaching experiences, improving teaching efficiency and quality.

#### **4.3. Reasonably choosing teaching methods and methods based on teaching objectives**

With the promotion of the "ice and snow sports on campus" policy and the emphasis on ice and snow sports, the reform of ice and snow sports curriculum teaching in universities has become a hot topic in the education industry. Under the OBE concept, educational goals should be based on meeting the needs and practical needs of future students, clarifying the purpose and significance of education. Establishing scientific educational goals and evaluation standards is of great significance for teacher instructional design and evaluation of student learning outcomes. On the basis of clarifying educational objectives, teachers should adopt various teaching methods and methods, and choose based on the principle of effectiveness evaluation. The characteristics of ice and snow sports courses determine that practice is the main educational method. Therefore, various forms such as group training, fun competitions, and game simulations can be adopted to better promote students' practical

operation and skill mastery. Diversified teaching resources and learning spaces can greatly promote students' self-directed and exploratory learning. Under the OBE concept, a rich library of ice and snow sports teaching resources should be established, including teaching PPTs, teaching videos, lesson plan design, etc. By providing diverse learning resources and learning spaces, diversified learning conditions can be created to enhance students' initiative and interest in learning.

In the teaching of ice and snow sports in universities, practical teaching is the core and should focus on cultivating students' practical abilities and practical operational skills. We should strengthen the experimental process in the teaching process, so that students can truly comprehensively grasp the course knowledge and operational skills, and improve their comprehensive quality and practical ability. Teachers are an important component of ice and snow sports teaching in universities. Under the OBE concept, teachers should strengthen their professional training and teaching ability improvement, improve their professional level of ice and snow sports courses, and enable them to better guide students and adjust and optimize teaching plans based on actual situations. The teaching reform strategy of ice and snow sports courses in universities based on the OBE concept should be student-centered, emphasizing personalized development and measurability of teaching objectives. Multiple teaching methods and methods should be adopted to provide diversified teaching resources and learning space, strengthen practical teaching and improve teachers' teaching level, in order to achieve the goal of improving students' comprehensive quality.

#### **4.4. Designing an evaluation system for learning outcomes**

The teaching reform of ice and snow sports courses in universities based on the OBE concept needs to adopt measurable, evaluable, and feasible learning outcomes design, and design corresponding evaluation systems to ensure teaching effectiveness. Teachers should set clear and extensive learning achievement goals that are measurable and realizability. The learning achievement goals should include the skills, knowledge, and attitudes that students should master. Design corresponding evaluation methods and standards for different learning achievement goals. For example, learning outcomes in terms of skills can be evaluated through exams, grading, practical operations, and other methods; For attitude related learning outcomes, questionnaire surveys, group discussions, self-evaluation, and other methods can be used for evaluation. We should develop clear, specific, and actionable evaluation criteria to verify whether students have achieved their goals. The evaluation criteria should correspond to the learning achievement goals and focus on the quality and effectiveness throughout the entire process to ensure the effectiveness and sustainability of education and training. Evaluation should not only be conducted at the end of the course, but should run through the entire teaching process to help students continuously adjust and improve their learning strategies and methods, in order to achieve better teaching outcomes.

In ice and snow sports, teachers can use multiple choice questions, fill in the blank questions, or short answer questions to assess students' mastery of ice and snow sports rules and techniques. For example, students' mastery of the names and basic elements of individual figure skating techniques, as well as their understanding of competition rules and scoring systems, can be examined. Evaluate the application of skills, technical difficulty, and other aspects by allowing students to engage in practical ice and snow sports training and competitions.

#### **4.5. Building an evaluation and feedback mechanism**

Evaluation feedback is a very important part of teaching, which can help teachers understand students' learning situation and mastery level, and thus better adjust and optimize teaching. After determining the evaluation indicators and methods, teachers should provide detailed feedback to students in a timely manner, so that students can understand their learning situation and shortcomings

in a timely manner. In order to achieve effective feedback, teachers can adopt various forms, such as online feedback, written feedback, oral feedback, self-evaluation, etc. Online feedback refers to providing specific evaluation results and suggestions to students through online platforms or email. Text feedback refers to conveying the evaluation results to students in written form, such as comments, record sheets, etc. Oral feedback refers to directly communicating with students and providing feedback on evaluation results through face-to-face meetings, phone calls, and other means. Self-assessment encourages students to reflect and summarize their learning situation. Teachers also need to reflect on their teaching process and methods in a timely manner to further optimize teaching effectiveness. Teachers can continuously improve their teaching quality by listening to students' feedback and participating in teaching seminars. By continuously adjusting and improving teaching methods and methods, evaluation feedback can be made more timely and accurate, which can better help students improve their learning effectiveness and abilities.

## 5. Conclusion

This article mainly explores the strategies and implementation plans for the teaching reform of ice and snow sports courses in universities based on the OBE concept, as well as the importance of constructing a scientific evaluation and feedback mechanism. By analyzing the problems and shortcomings of current ice and snow sports courses in universities, a series of innovative and practical teaching reform measures have been proposed, and detailed explanations and arguments have been made based on practical cases. In the process of implementing teaching reform, it is necessary for teachers and students to work together to achieve the best results. Teachers should carefully prepare teaching courseware and textbooks, pay attention to diversity and interest in teaching, and create an atmosphere conducive to students' active participation and practice. At the same time, it is also necessary to encourage students to actively participate in teaching activities and conduct self-evaluation and mutual evaluation to consolidate and improve their learning outcomes.

## Acknowledgement

The 2022 Key Project of the 14th Five Year Plan for Education and Science in Heilongjiang Province, Titled "Research on Ice and Snow Sports Curriculum Teaching in Heilongjiang Universities Based on OBE Concept", Project Number: GJB1422597.

## References

- [1] Zhu Y. *Research on Promoting the Reform of Ice and Snow Curriculum Teaching in Universities through the "Regular Competition" Model* [J]. *Ice and Snow Sports*, 2023, 45(01):64-68.
- [2] Yang X. *The Implementation Strategy of Ice and Snow Sports Teaching in Universities under the Concept of Combining Sports and Education* [J]. *Research on Innovation of Ice and Snow Sports*, 2022, (24):13-15.
- [3] Pan Y. *Research on the Teaching of Ice and Snow Sports in Universities under the Concept of Integrating Sports and Education* [J]. *Innovative Research on Ice and Snow Sports*, 2022, (24):95-97.