

Research on the Application of BOPPPS Teaching Model in Physical Education Teaching in Universities

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Abstract

The BOPPPS teaching model includes six stages: Bridge-in, Objectives or outcomes, Pre-assessment, Participation, Post-assessment, and Summary. In college physical education teaching, the bridge-in stage focuses on linking new knowledge to known knowledge; the objective stage clarifies learning objectives; the pre-assessment stage evaluates student knowledge levels; the participation stage adopts interactive teaching methods; the post-assessment stage provides feedback and improvement suggestions; and the summary part recaps key points and provide lessons to take away.

Keywords

BOPPPS teaching model
Teaching mode
Universities
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Teaching application

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1. Introduction

The BOPPPS teaching model is an acronym for bridge-in, objectives, pre-assessment, participation, post-assessment, and summary, representing a comprehensive teaching framework aimed at improving teaching efficiency in universities. In this model, the first stage establishes a connection between prior knowledge and new concepts, promoting a seamless transition to the learning process. The focus of the second stage is to set clear and achievable learning objectives that are consistent with the specific content

of physical education teaching in universities. The pre-assessment stage estimates and measures the existing knowledge of students, enabling teachers to customize their methods according to individual needs. The participation stage emphasizes interactive teaching methods and collaborative learning, promoting active participation. Lastly, the post-assessment stage evaluates students' understanding ability and provides timely feedback for continuous improvement. Therefore, the BOPPPS teaching model has become a strategic and dynamic approach, catering to different

learning styles and ensuring a comprehensive educational experience in the field of physical education teaching in universities ^[1].

2. Analysis of BOPPPS teaching mode

2.1. Basic framework of BOPPPS mode

2.1.1. Bridge-in

The basic elements of the BOPPPS teaching model lie in its basic framework, starting from the crucial first stage—bridge in. This initial stage serves as an educational portal, promoting a seamless transition from existing knowledge to new concepts. In this stage, teachers strategically establish a connection between students' previous understanding and upcoming materials, creating a conceptual bridge. This not only attracts the attention of learners but also sets the tone for an immersive and effective learning experience. Through carefully designed introductions, the bridge-in stage of the BOPPPS model lays the foundation for increasing engagement, ensuring that students are fully prepared for the subsequent stages of in-depth research in the teaching process.

2.1.2. Objectives

The second key stage of the BOPPPS teaching model is the objective stage, which plays a core role in shaping the learning trajectory. At this stage, teachers will carefully define and clarify learning objectives to guide the entire educational process. These goals are like lighthouses, providing students with a focused direction and a tangible endpoint for learning. The target stage is closely related to the content of the physical education curriculum, ensuring that educational goals are specific, measurable, and achievable. By setting transparent goals, educators enable students to understand their learning objectives and expected outcomes ^[2,3].

2.1.3. Pre-assessment

The pre-assessment stage is the third key component of the BOPPPS teaching model, which is a diagnostic

tool used to measure students' existing knowledge levels before delving deeper into the core content. At this stage, teachers systematically evaluate individuals' basic understanding, enabling them to adjust teaching methods to meet different learning needs ^[4]. This diagnostic process includes exploring the student's prior knowledge and identifying gaps and strengths. By gaining a deeper understanding of each learner's starting point, educators can strategically design personalized curriculum plans to ensure that teaching content is consistent with the diverse backgrounds and abilities of students.

2.1.4. Participation

The participation stage is the fourth aspect of the BOPPPS teaching model and an indispensable part of cultivating a positive and engaging learning environment in physical education in universities. This stage goes beyond traditional teaching and encourages interactive teaching methods and collaborative learning experiences. Teachers adopt strategies to promote student participation, ensuring active participation and enhancing understanding. By adopting interactive technologies such as group discussions, practical exercises, and hands-on activities, educators create a vibrant atmosphere that caters to different learning styles. Emphasizing teamwork at this stage not only enhances understanding of the topic but also promotes basic skills such as communication and collaboration ^[5].

2.1.5. Post-assessment

The post-assessment stage is the fifth and last pillar of BOPPPS teaching mode, which marks the climax of the college physical education learning process. This critical stage involves assessing the student's mastery of the subject matter during the teaching process. Through carefully designed assessments, teachers measure the effectiveness of teaching methods and the extent to which learning goals are achieved. The post-assessment phase provides valuable insights into individual and collective understanding, enabling educators to identify areas for improvement and refine future teaching strategies ^[6]. They then provide timely and constructive

feedback to students to promote continuous growth and reinforce key concepts.

2.1.6. Summary

The last stage of BOPPPS teaching mode—summary, summarizes the basic views and key points in the process of college physical education. This phase is a reflective synthesis that allows educators and students to re-examine and consolidate their understanding of the subject. Teachers can summarize key concepts, highlight achievements, and enhance the overall goal of the learning experience ^[7].

2.2. Advantages and characteristics of BOPPPS mode

2.2.1. Promoting student participation and interaction

One of the significant advantages of BOPPPS teaching model is that it can actively promote student participation and interaction. Through the design, the model gives priority to dynamic participation, which goes beyond traditional lecture-based teaching. In the participation phase, the combination of interactive teaching methods such as group discussions, practice exercises, and collaborative learning activities ensures that students are not passive recipients but active contributors to the learning experience. This emphasis on participation not only enhances understanding but also fosters critical thinking and communication skills. The BOPPPS model seeks to create an interactive learning environment that is consistent with modern teaching principles, recognizing that active participation is the foundation for effective acquisition and retention of knowledge in the context of college physical education ^[8].

2.2.2. Emphasizing the combination of practice and theory

One of the inherent advantages of BOPPPS teaching mode is its deliberate emphasis on the seamless integration of

theory and practice. This strategic integration is particularly beneficial in the context of college physical education because theoretical knowledge must be translated into practical application ^[9]. The goal stage of the model is centered on goal setting to ensure that learning goals are not limited to theoretical understanding but extended to practical implementation. The anticipation and engagement phases further strengthen this integration by assessing theoretical knowledge and providing opportunities for practical application.

2.2.3. Applicable to different disciplines and teaching scenarios

The adaptability of the BOPPPS teaching mode is a key advantage, making it highly suitable for various disciplines and teaching scenarios, including the subtle areas of college physical education. Its flexible framework adapts to different themes and teaching environments. The versatility of the model is reflected in the manner in which it is customized at each stage (from bridge-in to post-assessment) to meet the unique requirements of different disciplines. Whether applied to theoretical subjects or practical skill development, the efficacy of the BOPPPS model is consistent. It can be seamlessly integrated with various teaching styles and adapted to different educational environments, highlighting its universal applicability ^[10].

3. Application strategies of BOPPPS in physical education teaching in universities

3.1. Design and implementation of bridge-in stage

3.1.1. Establishing a pre-knowledge bridge-in

The design and implementation of the bridge-in stage in the BOPPPS teaching mode is a key aspect in promoting effective learning of physical education in universities. The focus of this initial stage is to build a knowledge bridge that connects students' existing understanding with new concepts. Teachers adopt

various strategies to bridge the gap between prior knowledge and upcoming content. The purpose is to attract students' attention, create relevance, and lay the foundation for deeper exploration.

3.1.2. Stimulating student interest and participation

This crucial step acknowledges that cultivating curiosity is the foundation for effective learning of physical education in universities ^[11]. Teachers use various strategies, such as interesting anecdotes, real-world applications, or multimedia elements, to attract students' attention and make the content relevant. By creating an engaging atmosphere during the introduction phase, educators lay the foundation for a positive and participatory learning experience.

3.2. Goal setting during the objective stage

3.2.1. Determining clear learning objectives

Clear learning objectives are crucial for guiding students to complete college physical education. This process involves defining specific, measurable, and achievable goals that are consistent with the curriculum. By establishing transparent goals, educators provide students with a roadmap to cultivate a focused and purposeful learning experience. These clear learning objectives can not only serve as benchmarks for evaluation but also help improve student motivation as they understand the purpose and direction of learning. When setting clear goals in the target stage, the BOPPPS model ensures a clear definition of the educational path, thereby improving teaching efficiency in the context of university sports ^[12].

3.2.2. Integrated physical education teaching content

In the objective stage of the BOPPPS teaching model, a key element is to consciously combine clear learning objectives with the specific content of physical education. This strategic integration ensures that the

goal is not an abstract concept, but directly related to the theme at hand. Educators combine goals with the unique challenges and requirements of physical education in universities, establishing a symbiotic relationship between overall learning objectives and curriculum practice.

3.3. Prior assessment during the pre-assessment stage

3.3.1. Understanding students' existing knowledge

The third component of the BOPPPS teaching model is the pre-assessment stage. This first step is crucial for teachers to master their basic understanding before delving into the content of university sports. Through methods such as testing, investigation, or diagnostic testing, educators systematically evaluate prior knowledge at different levels within a student population. This process can provide a detailed understanding of the strengths, weaknesses, and potential gaps in understanding. Through a comprehensive evaluation starting point, teachers can tailor teaching methods to ensure that the educational journey is appropriate and meets the diverse needs of learners in college physical education ^[13].

3.3.2. Developing personalized teaching plans

Teachers use the insights they gather to customize the content, meet individual needs, and optimize the learning experience of college physical education. This customization ensures that the material is neither too basic nor too advanced, creating an environment in which each student can effectively participate and understand the topic.

3.4. Participation in the participation stage

3.4.1. Adopting the interactive teaching method

Teachers actively attract students through group

discussion, simulation, and practice, and create a collaborative and participatory learning environment in college physical education. The emphasis on interactive approaches goes beyond the traditional lecture-based format and encourages students to actively contribute to the learning process. This not only enhances understanding but also fosters critical thinking and communication skills. By using these interactive techniques, the participation phase ensures that students are not passive recipients but active participants.

3.4.2. Encouraging students to work in teams

The teacher encourages the student team cooperation purposefully and constructs a cooperative study environment in the university physical education class. This collaborative approach has not only improved social skills but has also fostered joint problem-solving and a deeper understanding of the subject. Through team-based activities, students learn to communicate effectively, leverage diverse perspectives, and collectively contribute to their education. The emphasis on teamwork is consistent with the broader goal of preparing students for real-world scenarios in which collaboration and effective social skills are essential ^[14].

3.5. Follow-up assessment in the post-assessment stage

3.5.1. Assessing the students' knowledge mastery

Teachers use a variety of assessment tools to evaluate the understanding and application of the concept of college physical education. This assessment step ensures that learning goals are met and provides a measure of academic achievement. By examining students' mastery of knowledge, educators can gain valuable insights into the effectiveness of teaching strategies to achieve continuous improvement.

3.5.2. Providing timely feedback and suggestions for improvement

The second key component in the post-assessment

phase of the BOPPPS teaching model is the provision of timely feedback and suggestions for improvement. Timely feedback can guide students to understand their advantages in college sports and the need for improvement. It creates opportunities for targeted reflection and helps to consolidate the development of knowledge and skills. In addition, feedback loops are an integral part of the continual improvement of teaching methods ^[15].

3.6. Summary

This process is a summarization section. The main purpose is to recap what was learned and provide lessons to take away. It includes both the teacher summary and the student summary. The teacher summarizes key points and offers teaching reflection. Students consolidate what they learned in class, understand what they need to keep practicing after class, and how to prepare for the next class. Importantly, the teacher comments on students' performance and helps them build confidence through practicing ^[16]. Students may also self-evaluate their own performance and try to fill the gap between their own status and the expected level at the end of the semester.

4. Conclusion

The comprehensive application of the BOPPPS teaching model provides depth and breadth for physical education in universities. Through the six stages of bridging in, clarifying objectives, pre-assessing, promoting participation, post-assessing, and summarizing, educators can create a dynamic learning environment and cultivate students with comprehensive development. The advantage of this model lies in promoting interaction, integrating theory and practice, and providing a common framework for diversified disciplines and teaching scenarios.

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