

Research on the Influence of Critical Thinking of Physical Education Teachers on Students' Performance in Physical Education Curriculum

Jing Lu

Emilio Aguinaldo College 1113-1117 San Marcelino St., Cor. General Luna st. Bgy. 674 Paco., Metro Manila postal 1007;

College of International Business and Economics, WTU, Wuhan City, Hubei Province, 430079;

Abstract: This article explores the impact of critical thinking of physical education teachers on students' performance in physical education courses and optimization strategies. The article first analyzes the problems of critical thinking of physical education teachers in students' course performance, including traditional concept constraints, single evaluation system, resource and environmental limitations, etc. In response to these issues, the article proposes optimization measures such as building a training system, encouraging innovative teaching, improving the evaluation system, and optimizing resource allocation. By implementing these measures, it is possible to effectively enhance the critical thinking ability of physical education teachers, promote students' performance in physical education courses, and provide strong support for the future development of physical education.

Keywords: Physical education teacher; Critical thinking; Performance in physical education courses; Optimization measures

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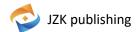
introduction

In the field of physical education, teachers' thinking patterns have a significant impact on students' learning outcomes. Critical thinking, as an advanced cognitive skill, can help teachers better understand teaching content, design more effective teaching strategies, and guide students to develop independent thinking and problem-solving abilities. There are still some issues in current physical education that constrain the application of critical thinking by physical education teachers. This article aims to explore these issues and propose corresponding optimization strategies, providing reference for improving the critical thinking ability of physical education teachers and optimizing students' physical education curriculum performance.

1. Characteristics of Critical Thinking in Physical Education Teachers

1.1Definition of Critical Thinking for Physical Education Teachers

Critical thinking, as a high-level cognitive ability, refers to the ability of physical education teachers to use key elements such as analysis, evaluation, reasoning, and reflection in the context of physical education teaching to deeply reflect and judge physical education knowledge, skills, teaching methods, and student performance. Specifically, analysis refers to the ability of physical education teachers to break down complex physical education teaching problems, identify their core elements and related factors; Evaluation is an objective assessment of the effectiveness, suitability, and student progress of physical education teaching based on certain standards or frameworks; Reasoning is the process of predicting possible outcomes of teaching interventions and optimizing teaching strategies through logical reasoning; Reflection, on the other hand, refers to the in-depth thinking of physical education teachers on the teaching process, methods, and effects after teaching practice, identifying shortcomings, and seeking ways to improve. This critical thinking not only requires teachers to have solid knowledge of physical education, but also to have an open mind, keen insight, and continuous learning motivation to promote the improvement of students' physical education curriculum performance and the continuous



improvement of physical education teaching quality.

1.2Performance in teaching

The critical thinking of physical education teachers in teaching is reflected in various aspects of curriculum planning, teaching method selection, and student performance evaluation. In the curriculum planning stage, physical education teachers use critical thinking to not only consider the scientific and systematic nature of teaching objectives and content, but also deeply analyze students' characteristics, interests, and needs, ensuring that curriculum design not only conforms to the development laws of physical education, but also is close to students' reality, and stimulates learning enthusiasm. In terms of teaching method selection, teachers critically examine the advantages and disadvantages of traditional and emerging teaching methods, combine teaching content with student characteristics, and flexibly adopt various methods such as demonstration, group cooperation, and independent exploration to improve teaching effectiveness through optimal strategies. In student performance evaluation, physical education teachers go beyond single skill testing and use multiple evaluation methods, such as process evaluation, peer evaluation, and self-evaluation, to comprehensively and objectively evaluate students' physical education learning effectiveness. At the same time, they reflect on the evaluation process and continuously adjust evaluation strategies to better promote the comprehensive development of students' physical education curriculum performance.

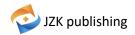
1.3Promote innovative teaching

The fourth characteristic of critical thinking in physical education teachers is that it can significantly promote innovation in physical education teaching, encourage teachers to try innovative teaching methods, and comprehensively enhance students' learning experience. Driven by critical thinking, physical education teachers are no longer satisfied with traditional teaching models, but actively seek breakthroughs by combining physical education teaching with real-life situations. Through situational simulation, students can learn skills and exercise physical fitness in simulated sports competitions and sports scenes, while cultivating their comprehensive abilities such as teamwork and problem-solving. Gamified learning is another innovative manifestation of critical thinking in physical education teaching. By integrating game elements into physical education teaching, not only does it increase the fun of physical education courses, but it also stimulates students' learning motivation, enabling them to master sports knowledge and improve their sports skills in a relaxed and enjoyable atmosphere. This innovative teaching method not only enriches students' physical education learning experience, but also invisibly cultivates their innovative thinking and self-learning ability. The application of critical thinking by physical education teachers provides a continuous driving force for innovation in physical education teaching, prompting teachers to constantly explore novel teaching methods and enhance students' physical education learning experience in a more flexible and diverse way, laying a solid foundation for cultivating well-rounded sports talents.

2.The problem of critical thinking of physical education teachers on students' curriculum performance

2.1Lack of systematic cultivation

When exploring the impact of critical thinking among physical education teachers on students' performance in physical education courses, a key issue must be addressed: the current training system for critical thinking among physical education teachers is not yet perfect, lacking systematic training courses and practical guidance. This situation seriously restricts the improvement of critical thinking ability of physical education teachers and affects students' performance in physical education courses. Specifically, although the importance of critical thinking in physical education teaching is increasingly prominent, there is a scarcity of courses specifically designed to cultivate critical thinking in the existing physical education teacher training system. Most training still focuses on improving sports professional skills and instilling teaching theories, while neglecting the cultivation of critical thinking as a core ability. Even if a few trainings involve critical thinking, they often lack depth and breadth, making it difficult to meet the needs of physical education teachers in practical teaching. More importantly, the lack of practical guidance makes physical education teachers feel powerless when trying to integrate critical thinking into physical education teaching, lacking specific practical analysis and practical exercises. Teachers find it difficult to translate theory into practical teaching abilities, let alone effectively evaluate the actual



effectiveness of critical thinking in teaching.

2.2Traditional conceptual constraints

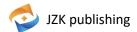
In the research on the impact of critical thinking of physical education teachers on students' performance in physical education courses, the limitation of traditional physical education teaching concepts on the development of critical thinking of physical education teachers is an issue that cannot be ignored. For a long time, physical education teaching has been deeply influenced by traditional concepts, overemphasizing the imparting of skills and physical exercise, while neglecting the cultivation of students' thinking ability and innovative spirit. This concept to some extent constrains the critical thinking development of physical education teachers, making them more inclined to adopt fixed teaching modes and methods in teaching, lacking innovation and flexibility. Specifically, traditional physical education teaching concepts often view physical education courses as simple skill training courses, where the main task of teachers is to teach students to master various sports skills, while students are seen as passive containers for receiving knowledge. Under the guidance of this concept, physical education teachers often lack attention and respect for individual differences among students, neglecting their subject status and initiative in physical education learning. At the same time, due to excessive emphasis on skill imparting, physical education teachers often lack the cultivation of students' thinking and problem-solving abilities, resulting in students lacking independent thinking and coping skills when facing complex and changing sports situations. The traditional concept of physical education teaching also limits the application of critical thinking by physical education teachers in teaching practice. Due to the habit of teaching according to established teaching plans, physical education teachers often lack in-depth analysis and reflection on students' learning processes, making it difficult to identify problems and deficiencies in teaching, and unable to adjust teaching strategies and methods in a timely manner to meet students' needs.

2.3Single evaluation system

In the study of the impact of critical thinking among physical education teachers on students' performance in physical education courses, it was found that the existing evaluation system for physical education courses has a problem of singularity, which seriously neglects the evaluation of physical education teachers' critical thinking ability and leads to a lack of sufficient motivation for teachers to improve this ability. The current physical education curriculum evaluation system mainly focuses on the quantitative assessment of students' physical fitness level, mastery of sports skills, and competition results. Although these indicators can reflect students' physical education curriculum performance to a certain extent, they fail to fully reflect key elements such as students' thinking development, innovation ability, and problem-solving ability in the process of physical education learning. Especially critical thinking ability, which is crucial for cultivating students' independent thinking, self reflection, and continuous improvement, is almost completely ignored in the existing evaluation system. Due to the singularity of the evaluation system, physical education teachers often focus on improving students' physical fitness and skill levels, while neglecting the cultivation of students' critical thinking abilities. At the same time, due to the lack of effective evaluation of critical thinking ability, teachers lack clear guidance and motivation in improving this ability. Teachers may believe that even if critical thinking training is integrated into teaching, it cannot be reflected and recognized in the existing evaluation system, and there is a lack of enthusiasm to improve teaching methods and strategies. The singularity of the existing physical education curriculum evaluation system not only limits the comprehensive development of students' physical education curriculum performance, but also hinders the improvement of critical thinking ability of physical education teachers.

2.4Resource and environmental constraints

In the study of the impact of critical thinking by physical education teachers on students' performance in physical education courses, resource and environmental constraints have become an undeniable issue. Unequal distribution of educational resources and limitations in teaching environments have greatly constrained the practice and application of critical thinking by physical education teachers. Unequal distribution of educational resources is mainly reflected in the allocation of sports facilities, teaching materials, and teaching staff. In some regions or schools, due to funding shortages or insufficient attention, sports facilities are rudimentary and teaching materials are scarce, making it difficult to support



sports teachers to carry out diversified teaching activities, let alone provide necessary material basis for the practice of critical thinking. At the same time, the shortage of teaching staff, especially the lack of high-quality physical education teachers with critical thinking abilities, also limits the effective dissemination and application of critical thinking in physical education teaching. The limitations of the teaching environment are mainly reflected in the teaching space, teaching time, and teaching atmosphere. Some schools have limited space to meet the needs of physical education teaching, which restricts physical education teachers from conducting critical thinking training. The tight teaching schedule also makes it difficult for physical education teachers to fully engage in critical thinking teaching activities, often limited to traditional skill imparting and physical training. More importantly, the lack of a teaching atmosphere that supports the development of critical thinking makes it difficult for critical thinking to take root and sprout in physical education teaching.

3.Strategies for Optimizing Students' Curriculum Performance through Critical Thinking of Physical Education Teachers

3.1Building a training system

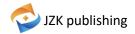
Building a specialized training system is a key strategy to optimize the critical thinking of physical education teachers in students' physical education curriculum performance. The training system should cover multiple aspects such as theoretical learning, practical analysis, and feedback, aiming to comprehensively enhance the critical thinking ability of physical education teachers. In the theoretical learning stage, through a systematic curriculum arrangement, teachers are guided to deeply understand the connotation, constituent elements, and application value of critical thinking in physical education teaching, laying a solid theoretical foundation for subsequent practical teaching. In the practical analysis section, typical examples of physical education teaching are selected to organize teachers to conduct in-depth analysis and discussion. Through simulating teaching scenarios, role-playing, and other methods, teachers can experience the importance of critical thinking in practice and learn how to integrate it into physical education teaching. The practical feedback section encourages teachers to actively use critical thinking in actual teaching, collect experiences and lessons from teaching practice through various methods such as teaching reflection, peer evaluation, and student feedback, continuously adjust and optimize teaching strategies, and form a virtuous cycle of continuous improvement.

3.2Encourage innovative teaching

To optimize the impact of critical thinking of physical education teachers on students' curriculum performance, actively encouraging innovative teaching has become an important strategy. In the field of physical education, innovative concepts should be vigorously advocated, and physical education teachers should be encouraged to break through traditional frameworks, design and implement teaching activities that include critical thinking training. Specifically, teachers can be guided to integrate critical thinking into various aspects of physical education teaching, such as reading and analyzing classic literature or cutting-edge research in the field of sports, guiding students to engage in critical reading, and cultivating the ability to think independently, question and verify. Teachers can also organize problem solving group discussions, allowing students to have in-depth discussions on a certain sports issue or phenomenon within the group, encouraging them to analyze the problem from different perspectives, propose solutions, and learn to listen, reflect, and compromise during the discussion, exercising their critical thinking ability and teamwork spirit.

3.3Improve the evaluation system

It is particularly important to improve the evaluation system of physical education courses in order to optimize the impact of critical thinking of physical education teachers on students' curriculum performance more effectively. It is suggested to explicitly include critical thinking ability in the evaluation system of physical education courses as a key measure to promote the development of students' critical thinking. Specifically, the evaluation system should include diverse evaluation methods to comprehensively and objectively assess students' performance in critical thinking. Peer evaluation can promote mutual learning and reference among students. By observing and evaluating the thinking process and problem-solving strategies of peers in sports activities, students can draw experience and reflect on their own shortcomings in critical thinking. Self evaluation encourages students to engage in self reflection, by reviewing their performance in sports activities, reflecting on their growth and progress in critical thinking, as well as areas that need



improvement. The presentation of project-based learning outcomes is also an important way to evaluate students' critical thinking abilities. By designing challenging sports projects or tasks, students can fully demonstrate their critical thinking skills while completing the projects. Through project-based learning outcomes, teachers can visually observe students' growth in critical thinking and provide targeted guidance and feedback. Incorporating critical thinking skills into the physical education curriculum evaluation system and promoting their development through diversified evaluation methods is one of the important strategies to optimize the impact of critical thinking by physical education teachers on students' curriculum performance.

3.4Optimize resource allocation

To further optimize the impact of critical thinking of physical education teachers on students' curriculum performance, it is necessary to pay attention to and optimize the allocation of physical education resources. Currently, some schools lack physical education resources and have poor teaching environments, which seriously restricts the effective application of critical thinking of physical education teachers. So we call on all sectors of society to increase investment in physical education, improve the teaching environment, and provide necessary teaching resources and technical support for physical education teachers. Specifically, investment in sports facilities construction and teaching materials should be increased to ensure that physical education teachers have sufficient venues, equipment, and materials to smoothly carry out diverse teaching activities. At the same time, it is necessary to strengthen professional training and technical support for physical education teachers, enhance their professional competence and critical thinking ability, and effectively use critical thinking in teaching to create conditions. We should also actively introduce modern technological means to inject new vitality into physical education teaching. These technologies can not only enrich teaching methods and improve teaching effectiveness, but also provide students with a more authentic and vivid sports learning experience, stimulating their interest and enthusiasm for learning. Optimizing the allocation of resources in physical education, improving the teaching environment, and providing necessary teaching resources and technical support are important measures to enhance the critical thinking application ability of physical education teachers and optimize student curriculum performance.

Conclusion

This article analyzes the impact and existing problems of critical thinking of physical education teachers on students' performance in physical education courses, and proposes optimization measures such as building a training system, encouraging innovative teaching, improving the evaluation system, and optimizing resource allocation. The implementation of these measures will help enhance the critical thinking ability of physical education teachers, promote students' performance in physical education courses, and promote the sustainable development of physical education. In the future, we should continue to increase investment in physical education, improve the teaching environment, provide more abundant teaching resources and technical support for physical education teachers, and jointly promote the prosperity and development of physical education.

References

[1] Wanlu Exploration of "Visual Information Construction" in Primary School Physical Education Teaching for the Cultivation of Critical Thinking [J] 2021.0413.

[2]He Lian Research on the Practical Application of Interdisciplinary Theme Learning Scheme in Junior High School Physical Education Curriculum [D] Ningxia Normal University, 2023 (3): 015-017

[3] Ma Tie, Gao Haining, Cheng Zhiqing Critical thinking tendency and teaching strategies of college students majoring in sports [J] Open University Science and Engineering, 2023 (3): 74-78

[4]Qian Xia Research on the Teaching Design of Leapfrog High Jump from the Perspective of Cultivating Critical Thinking [J] Athletics, 2022 (11): 72-74

[5] Chen Feiyan, Xu Haixia, Wang Siren, etc A Study on the Status Quo of Critical Thinking Disposition of College Physical Education Students: A Case Study of H Normal University [J] China Education Technology Equipment, 2023 (17): 13-16

Author introduction: Lu Jing (December 1988), female, Han ethnicity, native place: Jieyang City, Guangdong Province, educational background: doctoral student, title: lecturer, research direction: physical education.