

A Study on the Implementation of the Student-Centered Teaching Model in Junior High School Physical Education Classes in Beijing

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Abstract

Objective: This study aims to explore the current implementation of the student-centered teaching model in junior high school physical education classrooms in Beijing. **Methods:** Feedback was collected through semi-structured interviews with five junior high school physical education teachers and five junior high school students from different districts in Beijing. **Results:** (1) Most teachers hold a positive attitude toward the concept of student-centered teaching; however, due to limited resources, large class sizes, and varying levels of students' self-directed learning abilities, the effectiveness of teachers' implementation is somewhat restricted. (2) Students generally believe that the student-centered teaching model enhances classroom engagement, but their individual needs are not fully addressed. (3) There are differences in the perceptions of teachers and students regarding classroom autonomy, differentiated instruction, and classroom management. **Conclusion:** The current implementation status of student-centered teaching in junior high school physical education classrooms in Beijing remains unclear. Due to the lack of effective assessment tools, teachers find it challenging to comprehensively evaluate the effectiveness of this teaching model in practice. To overcome this limitation, future research should focus on developing an evaluation model based on McCombs' internationally recognized K-12 Learner-Centered Practices to accurately assess the implementation of student-centered teaching in junior high school physical education classrooms in Beijing.

Keywords: Student-Centered, Junior High School Physical Education, Implementation Status, Beijing; Assessment

Introduction

Since the beginning of the 21st century, the concept of "student-centered" development has been proposed, and student-centered teaching methods have increasingly garnered attention across various disciplines and fields. In the field of physical education, the student-centered teaching approach has also been evolving and expanding (Tao & Cheng, 2022). Student-centered physical education classroom teaching has become a significant trend in the

practice of physical education in China's basic education system. The traditional teacher-centered teaching model has limitations in fostering students' creativity, independent thinking, and self-directed learning abilities. In contrast, the student-centered teaching approach aims to enhance students' leading role in the classroom by respecting their individual differences, increasing their learning engagement, and promoting the development of higher-order thinking skills. This teaching method places particular emphasis on learner autonomy, advocating for teachers to act as guides and supporters rather than merely as transmitters of knowledge (Lei, 2024).

Junior high school physical education, as a crucial component of school education, not only plays a key role in improving students' physical fitness but also contributes to the development of students' mental health, social interaction skills, and teamwork awareness. The physical education classroom is not only a place for students to acquire motor skills but also the foundation for fostering lifelong interest in physical activities and healthy lifestyles (Bai, 2016). Therefore, finding effective teaching models that stimulate students' initiative and engagement in physical education classes has become a key issue in the reform of physical education (Yang, 2015).

The student-centered teaching model holds special significance in physical education. By granting students more autonomy and decision-making power, it can significantly enhance their interest in and enthusiasm for physical activities, thereby promoting their active participation in class activities and improving their mastery and understanding of physical skills. However, although this teaching concept is widely recognized in theory, its application in actual classrooms, particularly in physical education, still requires more empirical research to support its effectiveness (Chen, 2019).

There have been many theoretical and empirical studies on the student-centered teaching model, exploring its effectiveness in improving student learning outcomes and promoting students' holistic development. For example, the K-12 Learner-Centered Practices proposed by scholars such as McCombs have been implemented in several countries and have demonstrated positive educational outcomes (McCombs, 2007). Relevant studies have shown that student-centered teaching strategies can enhance students' learning autonomy and engagement, effectively promoting the internalization of knowledge and the development of skills. In China, with the deepening of the new curriculum reform, the education sector has also gradually recognized the importance of promoting and applying the student-centered teaching model. Despite the substantial theoretical and empirical support for the student-centered teaching model, there is still a lack of research on its specific implementation in junior high school physical education classrooms in Beijing. Existing research lacks in-depth analysis of the application of this teaching model in Beijing's junior high school physical education classrooms, particularly in terms of empirical data on student participation and autonomy. This study aims to fill this research gap and provide data support and theoretical foundation for further optimizing teaching models in junior high school physical education classrooms in Beijing.

Purpose of Research

This study aims to explore the current implementation of the student-centered teaching model in junior high school physical education classrooms in Beijing.

Research Methodology

To achieve this research purpose, this study employed a qualitative research methodology, as outlined below:

Research Design

This study adopted a semi-structured interview research design. Through interviews, the perceptions and evaluations of junior high school physical education teachers and students regarding the current implementation of student-centered teaching were collected. The study aimed to understand the specific practices employed by teachers in their teaching and the classroom experiences of students.

Participants

The participants in this study included physical education teachers and junior high school students from selected schools across various districts in Beijing. A multi-stage stratified random sampling method was used to select five schools to ensure the representativeness of the sample. For the teacher sample, factors such as gender, job title, teaching experience, and weekly teaching hours were considered. For the student sample, students from different grades and genders were included to comprehensively reflect their experiences with the student-centered teaching model. The study surveyed five physical education teachers from junior high schools in different districts of Beijing. Five junior high school students from the same schools as the teachers were surveyed. This study strictly adhered to ethical research guidelines. All participants provided informed consent, and their personal information was kept confidential. The study did not involve any content that could negatively affect participants physically or psychologically, and participants were allowed to withdraw from the study at any time.

Data Collection

Semi-Structured Interviews

To gain an in-depth understanding of the implementation of the student-centered teaching model, semi-structured interviews were conducted with selected physical education teachers and students. The interview questions for teachers focused on the following topics: The student-centered teaching strategies employed by teachers in their actual teaching. Teachers' evaluation of the current implementation and the challenges they face. Teachers' suggestions for improving classroom teaching in the future. The interview questions for students focused on the following topics: What is the overall classroom atmosphere like during actual teaching? Is the relationship with the teacher harmonious? Does the teacher respect students in various aspects? Do students feel respected by the teacher? Does the teacher focus on cultivating students' higher-order thinking skills? Does the teacher emphasize and appropriately handle the inclusivity of individual differences? Students' suggestions for improving classroom teaching in the future.

The interview recordings were coded and analyzed to extract representative opinions and insights.

Methodology

This study utilized qualitative analysis, with interview data coded and analyzed using thematic analysis. The researcher identified several themes based on the interview records and further

summarized these themes to reveal the key strategies, challenges, and recommendations related to the implementation of student-centered teaching.

Finding

This section presents the research findings on the perceptions and practices of student-centered teaching from the perspectives of teachers and students, as well as the differences in their understanding. Through interviews with five teachers and five students, both groups consistently recognized the value of student-centered teaching. However, several difficulties and challenges were identified during the implementation process: (i) large class sizes and insufficient physical education equipment; (ii) students' limited learning abilities; (iii) unsatisfactory outcomes of self-directed learning; (iv) difficulties in balancing student autonomy with classroom control; (v) limited teacher energy, resulting in insufficient attention to individual needs; (vi) unclear instructional strategies from teachers; and (vii) teachers emphasizing task assignment but neglecting feedback on students' skill mastery.

(i) Large Class Sizes and Insufficient Physical Education Equipment

Teachers A and C expressed that although they strongly agree with the student-centered teaching model, they often feel overwhelmed in the actual classroom. At their schools, there is a shortage of physical education equipment, and class sizes are large, making it difficult for them to provide personalized attention and guidance to each student within the limited resources. Teacher B mentioned, "In such a large class, it's hard for me to cater to every student's needs. While I want to give students more autonomy, the reality often forces me to revert to traditional lecture-based teaching."

(ii) Students' Limited Learning Abilities

Teacher C believes that the student-centered teaching model is theoretically feasible, but in practice, he found that some students lack the ability to learn independently and cannot learn effectively when given full autonomy. Teacher C stated, "Sometimes I think it's better to let students explore on their own, but the result is that some students lose their way entirely, and the class becomes chaotic. I feel that in practice, this model needs a more balanced design, encouraging self-directed learning while also providing teacher guidance at the right moments."

(iii) Unsatisfactory Outcomes of Self-Directed Learning

Teacher D attempted to implement student-centered teaching in her class and adjusted her teaching methods based on student feedback. She believes that this model can effectively increase student engagement, but she also noted that sometimes the outcomes of students' self-directed learning are not ideal, especially when the activity design is unclear, and some students lose their direction.

(iv) Difficulties in Balancing Student Autonomy with Classroom Control

Teachers A, C, and E expressed concerns that overemphasizing student autonomy might lead to difficulties in classroom management, and that a balance between autonomy and classroom control is still needed. For example, Teacher E said, "Sometimes I feel that if I give students too much freedom, they lose direction, and it's hard to maintain classroom order." She pointed out that overemphasizing self-directed learning might lead to a decrease in classroom efficiency, especially when time is limited, and that she has to make flexible

adjustments in practice. Two students also mentioned that when the class becomes too free, discipline can become lax. For example, Student D remarked, "Sometimes everyone is just playing around, and the teacher can't manage everyone, so we end up not learning anything." However, some students desired more autonomy, believing that it would allow them to engage more deeply in classroom learning. Student B stated, "I wish the teacher would give us more freedom so we could explore on our own."

(v) Limited Teacher Energy Resulting in Insufficient Attention to Individual Needs

Some teachers believe that the student-centered teaching model requires more energy from teachers to manage the classroom, and in large classes, it is difficult to implement differentiated instruction. For example, Teacher A mentioned that she often feels overwhelmed, especially when dealing with students with varying learning needs in the class. Three students reported that although the class emphasized student participation, teachers did not truly understand the specific needs of each student. Xiaohong, a third-year student, said, "I feel like the teacher still pays more attention to the students who perform well, while those of us with average grades don't get as much attention." This feedback indicates that although the student-centered teaching model advocates for personalized instruction, in practice, the teachers' energy and resource limitations hinder its full implementation.

(vi) Unclear Instructional Strategies from Teachers

One student mentioned that in the student-centered classroom, they could participate more in physical activities, and the classroom atmosphere became livelier. However, sometimes the teacher's instructions were unclear, leaving them unsure of how to complete tasks.

(vii) Teachers Emphasizing Task Assignment but Neglecting Feedback on Students' Skill Mastery

Student D hoped that teachers would provide more feedback. He said, "It's great that the teacher lets us make our own decisions, but we also need to know how we're doing. Without feedback, I don't know what I'm doing wrong." Student E also felt that their opinions were not given enough attention. He mentioned, "Sometimes we share our thoughts with the teacher, but it feels like they don't make many adjustments based on our feedback."

Discussion

This study explored the current implementation of student-centered teaching in physical education classrooms in Beijing junior high schools through semi-structured interviews with physical education teachers and students. The findings revealed that while both teachers and students held positive attitudes toward the student-centered teaching approach, its application in actual classrooms faced numerous challenges. The main findings will be discussed below and compared with existing literature.

Most teachers recognized the potential of the student-centered teaching model to enhance student engagement and learning outcomes. However, the study found that teachers' efforts to implement this teaching philosophy were often hindered by a lack of resources, time constraints, and traditional teaching beliefs. Compared to learner-centered practices proposed by McCombs et al (2010), physical education teachers in Beijing still face limitations in their implementation of this model, which aligns with existing literature on the impact of inadequate educational resources and support on teaching effectiveness (McCombs, 2010).

Teachers' concerns about classroom management reflected their unease about the degree of control over student autonomy. This finding is consistent with Reeve's (2016), research, which pointed out that teachers often hesitate to support student autonomy due to fears of losing classroom order(Reeve, 2016). Therefore, to effectively promote student-centered teaching, schools and educational authorities need to provide more resource support and teacher training to help overcome these barriers.

Student feedback indicated that the student-centered teaching model indeed enhanced their sense of engagement and classroom experience. This is in line with existing research, which suggests that higher levels of student participation lead to better learning outcomes and increased interest in the course content(Elias, 2018).

However, the study also found that although the student-centered teaching model advocates for differentiated instruction, some students still felt that their individual needs were not fully addressed. This issue may stem from teachers lacking sufficient strategies or resources to implement differentiated instruction. This problem is consistent with research both domestically and internationally, which indicates that while teachers are willing to implement differentiated instruction, a lack of effective tools and support often becomes the main obstacle(Darling-Hammond et al., 2017; Grafi-Sharabi, 2009).

The differences in perceptions between teachers and students regarding student-centered teaching highlighted a lack of communication in classroom teaching practices. Teachers often believed that they had integrated student-centered elements into their classrooms, while students expected more autonomy and individualized attention. These perceptual differences reflect blind spots in teachers' implementation of teaching strategies and suggest that teachers need to listen more to students' voices during the teaching process to better meet their needs.

This finding supports previous research on teacher-student perceptual differences. Many studies have shown that teachers' self-assessments of their teaching effectiveness are often higher than students' actual experiences (Durlak et al., 2011). Therefore, future research should consider developing more effective teacher-student communication mechanisms to help teachers better understand students' needs and feedback, thereby improving the specificity and effectiveness of their teaching.

Limitations and Future Research Directions

One of the limitations of this study is that it did not use a questionnaire survey to collect large-scale quantitative data, which may limit the comprehensive assessment of the current implementation of student-centered teaching in Beijing's junior high school physical education classrooms. Additionally, while the semi-structured interviews provided in-depth insights, the limited sample size may affect the generalizability of the results. Therefore, future research should consider developing a systematic evaluation model or scale to more comprehensively quantify the effectiveness of this teaching model.

Future studies should draw on the four main dimensions of learner-centered teaching practices proposed by McCombs et al. and build an evaluation tool suitable for Chinese junior

high school physical education classrooms based on this framework. This will provide more practical guidance for the implementation of the student-centered teaching model.

Conclusion

This study explored the current implementation of student-centered teaching in Beijing junior high school physical education classrooms. Although both teachers and students widely recognized the value of this approach, its practical application faced numerous challenges. Teachers encountered obstacles such as a lack of resources, time constraints, and the influence of traditional teaching beliefs, which prevented the full realization of the student-centered teaching model. Students generally viewed this model positively, noting that it increased classroom engagement, but they also highlighted teachers' shortcomings in implementing differentiated instruction.

Notably, there were perceptual differences between teachers and students regarding the effectiveness of classroom implementation, suggesting that teachers may have overlooked students' actual needs in their teaching process. As a result, the current state of student-centered teaching in Beijing junior high school physical education classrooms remains unclear, indicating a need for further research and improvement.

This study also pointed out that the existing teaching evaluation mechanisms have not yet fully developed, lacking scientific tools to accurately assess the effectiveness of the student-centered teaching model. This limitation presents a direction for future research: developing specialized evaluation models or scales to better understand and promote student-centered teaching practices.

This study provides a new perspective on the existing research through an empirical analysis of the implementation of the student-centered teaching model in junior high school physical education classes in Beijing. Although the student-centered teaching approach has been widely discussed in general educational fields, its application in junior high school physical education in China, particularly in Beijing, remains under-researched. By exploring the perspectives of both teachers and students, this study reveals the challenges and opportunities of implementing the student-centered teaching model in environments characterized by large class sizes and varying levels of students' self-directed learning abilities. The findings not only underscore the necessity of developing specific assessment tools and teacher training programs tailored to junior high school physical education, but also provide directional guidance for future research and practice in this field.

Recommendations

Based on the findings of this study, the following recommendations are proposed to guide future educational reforms and research:

Develop a Scientific Evaluation Tool

To accurately assess the effectiveness of the student-centered teaching model, future research should focus on developing a systematic evaluation model or scale. This can be informed by the four main dimensions of learner-centered practices for K-12 education as proposed by McCombs and colleagues: classroom atmosphere and teacher-student relationships, respect for student voices, cultivation of higher-order thinking skills, and

inclusiveness of individual differences. An evaluation tool based on these dimensions can not only help teachers better understand their teaching effectiveness but also provide scientific data support for schools and education departments.

Enhance Teacher Training and Resource Support

To better promote student-centered teaching practices, it is recommended that education departments and schools enhance teacher training programs, focusing on building teachers' beliefs in student-centered approaches and improving professional skills, particularly in differentiated instruction strategies, classroom management, and fostering student autonomy. Additionally, increasing investment in physical education resources is crucial to ensure that teachers have sufficient tools and support when implementing the student-centered teaching model.

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