

Research on the Transformation Path of Middle School Physical Education Teaching Model under the "Health First" Concept

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Abstract

"Health First" is a core educational principle in China, prioritizing students' physical and mental well-being and guiding the reform of school physical education. This paper examines the concept's policy evolution and its critical role in addressing ongoing challenges to youth health, arguing that it is essential for fostering holistic student development. The study highlights the value of physical education not only in building fitness and skills, but also in cultivating healthy habits, resilience, and social-emotional competence. It further explores practical pathways for integrating this 理念 into curriculum design, teaching practices, assessment, and campus culture, advocating a shift from a skills-centered to a health-oriented approach that supports students' lifelong well-being.

Keywords

Health First; secondary school physical education; student health; physical fitness; physical education curriculum reform.

1. Introduction

"Health First" is a core educational principle advocated by the Central Committee of the Communist Party of China and the State Council to advance quality-oriented education. It underscores the importance of physical well-being as a foundation for adolescents' healthy development and long-term success, as well as a key indicator of national vitality. Within the education system, physical education (PE) plays an indispensable role in enhancing students' physical fitness and promoting holistic well-being. To implement this principle effectively, secondary school PE must shift its focus from technical proficiency to students' all-round development. This involves not only teaching fundamental motor skills but also fostering students' interest in physical activity and cultivating lifelong exercise habits, thereby fully realizing PE's unique contribution to moral, intellectual, and character development.

However, current PE practices in Chinese secondary schools often remain competition-oriented, prioritizing athletic performance over health literacy. Teaching objectives predominantly emphasize skill mastery, while neglecting the integrated development of physical, mental, and social health. Instructional methods are typically teacher-centered, rigid, and lack engagement, differentiation, and student autonomy. Meanwhile, assessment systems rely heavily on standardized performance metrics, overlooking process-based progress, individual improvement, and the formation of sustainable healthy behaviors. As a result, many students exhibit low motivation, perceive PE

as burdensome, and fail to develop genuine interest in physical activity.

This misalignment highlights the urgent need to transform existing PE teaching models under the "Health First" principle. Shifting from a skill-centered to a health-oriented paradigm requires systemic reform in educational philosophy, curriculum design, pedagogy, and evaluation. By reconstructing PE around students' holistic health, schools can enhance instructional quality and better support the integrated development of morality, intelligence, physical fitness, aesthetics, and labor education. Such transformation not only revitalizes PE's educational value but also contributes to nurturing well-rounded individuals equipped for the challenges of the new era. Moreover, aligning PE with contemporary public health goals—such as combating youth obesity and mental health issues—can amplify its societal impact beyond the school environment. By embedding health promotion into the core of school culture, PE becomes a powerful vehicle for shaping not only healthier students but also a more resilient and vibrant future generation.

2. Literature Review and Research Design

The "Health First" concept is widely recognized in academic literature as a multidimensional educational philosophy that integrates physical, mental, and social well-being. It advocates for a student-centered approach in physical education (PE), shifting the focus from mere skill transmission to the holistic development of learners. Research emphasizes that effective PE should not only enhance physical fitness but also cultivate emotional resilience, social skills, and lifelong health awareness. This paradigm aligns with global trends in education reform, positioning health as the cornerstone of student development and educational quality.

Studies on secondary school PE in China reveal that traditional teaching models often prioritize competitive sports and technical performance over comprehensive health outcomes. Instruction tends to emphasize standardized skill acquisition, with less attention to individual differences, motivation, and long-term behavioral change. This outcome-oriented approach neglects the developmental process and fails to address students' psychological and social needs, undermining the potential of PE to contribute to overall well-being. Such practices reflect a misalignment between current implementation and the core objectives of the "Health First" policy.

In contrast, international models such as "Lifelong Sports" and "Joyful PE" provide valuable references for reform. These approaches emphasize personal engagement, enjoyment, and self-directed learning in physical activity, fostering intrinsic motivation and sustained participation. Countries like Japan, Finland, and Canada have integrated health education, personalized fitness plans, and inclusive activities into their PE curricula, demonstrating improved student engagement and health outcomes. These experiences highlight the importance of cultural adaptation and systemic innovation in transforming PE models.

This study adopts a mixed-methods research design to explore the transformation pathways of secondary school PE under the "Health First" principle. Data were collected through student and teacher questionnaires, in-depth interviews with PE educators, and case studies of schools with successful reform practices. The triangulation of quantitative and qualitative data ensures comprehensive insights into challenges, perceptions, and effective strategies,

enhancing the reliability and validity of the findings.

A theoretical framework centered on "health as the foundation" is proposed, hypothesizing that successful transformation requires coordinated reforms across four dimensions: educational philosophy, curriculum design, teaching methodology, and assessment. The study tests the feasibility of shifting from a technical focus to holistic development, diversifying curriculum content, promoting student-centered instruction, and implementing formative assessment. By identifying key influencing factors and replicable practices, the research aims to construct a scientific, sustainable model for modernizing China's school physical education system.

3. Current Status of Secondary School Physical Education and Transformation Pathways

Currently, physical education (PE) in Chinese secondary schools remains predominantly focused on competitive techniques and skill mastery. Teaching objectives prioritize the acquisition of standardized motor skills, often at the expense of students' holistic development in physical fitness, psychological well-being, and social adaptability. This narrow orientation reflects a long-standing tradition that equates PE with sports performance rather than comprehensive health promotion. As a result, many students perceive PE classes as rigid and performance-driven, leading to disengagement and diminished motivation, which undermines the subject's broader educational mission.

Instructional methods in most schools still follow the conventional "teacher demonstrates—students imitate" model, characterized by teacher-centered delivery and limited student autonomy. The curriculum emphasizes traditional competitive disciplines such as track and field, basketball, and football, while systematic fitness training and health education are inadequately integrated. There is a notable lack of diverse, enjoyable, and personalized activity options that could cater to varied interests and ability levels. This uniformity restricts opportunities for students to discover activities they genuinely enjoy, further weakening their connection to physical activity.

The assessment system in current PE practice exacerbates these issues by relying heavily on quantitative metrics such as timed runs or skill execution scores. These performance-based evaluations fail to capture the full spectrum of students' health status, effort, participation, and behavioral changes. By neglecting process-oriented progress and personal improvement, the existing evaluation framework may inadvertently create anxiety and even aversion toward PE, particularly among less physically gifted students. This outcome contradicts the inclusive and nurturing spirit of the "Health First" principle.

Multiple interrelated factors influence the feasibility and pace of transforming this entrenched model. At the macro level, policy direction and institutional support from school leadership are essential for driving reform momentum. At the meso level, PE teachers' professional competence, openness to innovation, and willingness to adopt student-centered pedagogies are critical enablers. At the micro level, the availability and quality of sports facilities and equipment constrain the implementation of diversified curricula. Additionally, societal biases that prioritize academic subjects over PE, along with parental concerns about academic performance, present persistent external challenges.

To align with the "Health First" principle, a systemic transformation is urgently needed. Educational philosophy must shift from a technical focus to one centered on holistic health, emphasizing lifelong habits and intrinsic motivation. Curricula should incorporate more fitness training, health literacy, and diverse activities like yoga, rock climbing, or dance. Teaching should leverage technology and differentiated instruction, while assessment must evolve into a formative, multidimensional system—using tools like learning portfolios and observational records—to reflect students' overall physical literacy and encourage sustained engagement.

4. Case Studies

This study conducts in-depth case analyses of three representative secondary schools that have made significant progress in transforming their physical education (PE) models under the "Health First" principle. Case School A, located in an eastern coastal city, is recognized for its comprehensive "health-promoting" curriculum reform. It has developed a tripartite structure integrating foundational fitness, specialized interest courses, and health knowledge education. The school offers over ten elective PE courses such as dance, rock climbing, and badminton, and has integrated smart wearable devices to monitor students' physical activity in real time, enabling data-informed instruction and personalized feedback.

Case School B, situated in a provincial capital in central China, emphasizes pedagogical innovation and institutional reform. The school has implemented a "class rotation system" that allows students to experience various sports before selecting preferred activities, combined with project-based learning modules on topics like designing personal fitness plans. It employs differentiated instruction and formative assessment strategies, such as peer evaluation and learning journals, to accommodate diverse student needs. This approach has significantly improved student motivation, participation, and perceived competence in PE.

Case School C, located in a western ethnic minority region, has developed a distinctive model rooted in local cultural traditions. By incorporating indigenous sports such as Yaji (a form of tug-of-war) and bamboo dancing into its PE curriculum, the school successfully blends physical development with cultural preservation and identity building. These school-based programs not only enhance students' physical fitness but also strengthen community engagement and ethnic pride, demonstrating how PE can serve broader educational and social purposes in diverse regional contexts.

Analysis of the three cases reveals common success factors despite their different geographical and cultural settings. All schools initiated transformation through a fundamental shift in educational philosophy, placing student health and holistic development at the core, and received strong support from school leadership. They shared a commitment to diversifying curriculum content, enhancing fitness and health education, adopting student-centered teaching methods, and implementing formative, developmental assessment systems that de-emphasize competitive outcomes. Investment in teacher training, resource allocation, and curriculum innovation were critical enablers across the board.

These case studies provide valuable insights for nationwide PE reform: successful transformation requires both systemic design and context-sensitive adaptation. While

universal principles such as health orientation and student-centeredness are essential, schools should be encouraged to develop personalized models based on local conditions, student needs, and cultural resources. Curriculum restructuring, pedagogical innovation, and assessment reform must be coordinated, supported by sustained teacher development and institutional support. Ultimately, these cases exemplify how PE can evolve into a holistic, inclusive, and sustainable component of modern education.

5. Implementation Strategies and Recommendations

5.1. Institutional and Resource-Oriented Reform Strategies

Advancing the transformation of secondary school physical education (PE) models requires robust policy support and comprehensive institutional safeguards. Governments at all levels should strengthen top-level design by issuing clear, practical, and enforceable guidelines for PE reform. These guidelines must explicitly define curriculum standards, minimum class-hour requirements, and student-to-teacher ratios, all grounded in the "Health First" principle. Establishing a legal and regulatory foundation ensures that PE is not treated as an expendable subject but as a core component of holistic education, with consistent implementation across regions and school types.

To translate policy into practice, increased fiscal investment is essential. Central and local governments should allocate special reform funds to support schools—particularly those in rural and under-resourced areas—in upgrading sports facilities, purchasing modern teaching equipment, and maintaining safe activity environments. Financial incentives could also be provided for schools that demonstrate innovation or significant improvement in PE quality. Such targeted investment helps bridge the urban-rural divide and ensures equitable access to quality physical education for all students.

Accountability mechanisms must be strengthened to ensure policy compliance and sustained commitment. The quality of PE instruction should be formally integrated into school performance evaluations and principal leadership assessments. Transparent oversight systems, including regular inspections and public reporting of PE outcomes, can deter neglect and encourage proactive management. Simultaneously, incentive programs—such as awards for outstanding PE departments or recognition in school accreditation—can motivate schools to prioritize physical education as a strategic educational goal.

Beyond infrastructure and policy, efficient integration and sharing of educational resources are critical to maximizing reform effectiveness. Schools should be encouraged to open their sports facilities to the public during after-school hours, fostering community engagement, while also leveraging nearby public sports venues for teaching purposes. This two-way resource exchange creates a mutually beneficial ecosystem that optimizes the use of limited facilities and promotes lifelong physical activity beyond the school gates.

Regional coordination platforms should be established to facilitate the sharing of high-quality PE resources, including standardized curricula, instructional videos, lesson plans, and assessment tools. Partnerships between universities, sports research institutes, and secondary schools can provide expert guidance, teacher training, and research support. Through school alliances and group-based management models, best practices from leading

schools can be disseminated to less-resourced institutions, narrowing disparities and elevating the overall standard of PE instruction nationwide.

5.2. Cultivating a Sustainable and Holistic PE Ecosystem

The long-term success of PE reform depends not only on external support but also on cultivating a culture of continuous improvement and evidence-based practice within schools. Educational institutions should establish systematic mechanisms for monitoring, evaluating, and refining their PE programs. This includes regular data collection on key indicators such as students' physical fitness trends, class participation rates, exercise intensity, and injury rates, ensuring that instruction is both safe and effective.

Qualitative feedback is equally important in understanding the student experience. Schools should conduct periodic student surveys, focus groups, and interviews to assess engagement, enjoyment, and perceived benefits of PE. Teacher reflections, peer observations, and instructional audits can further inform professional development and pedagogical refinement. By combining quantitative and qualitative insights, schools gain a comprehensive picture of program effectiveness and can make data-driven decisions to enhance teaching quality.

Integrating digital tools and platforms—such as learning management systems, mobile fitness apps, and wearable devices—can significantly enhance the personalization and precision of physical education. These technologies enable real-time tracking of individual student progress across multiple dimensions of physical literacy, including motor skills, health knowledge, motivation, self-regulation, and behavioral habits. When students can visualize their own growth through dashboards or learning portfolios, they become active participants in their health development.

Embedding formative assessment into the daily fabric of PE instruction allows for ongoing feedback and goal setting, moving away from one-time, high-stakes evaluations. This approach should be closely linked with broader school health initiatives, such as nutrition education, mental health counseling, and sleep hygiene programs, to create a truly integrated wellness ecosystem. Interdisciplinary collaboration between PE teachers, school nurses, psychologists, and homeroom teachers ensures that students receive holistic support for their overall well-being.

Ultimately, sustainable transformation requires repositioning PE not as an isolated subject, but as a central pillar of whole-person education. It should be dynamically aligned with national public health goals and responsive to emerging challenges such as adolescent obesity, screen-time addiction, and psychological stress. By fostering a multi-stakeholder governance model—led by government, driven by schools, supported by families, and enriched by community partners—China can build a modern, inclusive, and resilient physical education system that nurtures healthy, active, and empowered citizens for generations to come.

6. Conclusion

This study systematically investigates the transformation pathways of secondary school physical education (PE) teaching models under the "Health First" principle, identifying key challenges in current practices related to educational philosophy, curriculum design, instruction, and assessment. It proposes a comprehensive shift from a competition-oriented to

a health-centered paradigm. Through theoretical analysis and case studies, the research outlines an effective model that reorients educational goals toward holistic health, optimizes curriculum structures, innovates teaching methodologies, and establishes diversified evaluation systems. These findings provide both theoretical grounding and practical exemplars for deepening PE reform, contributing positively to enhancing students' physical and mental well-being and advancing quality-oriented education.

Nevertheless, this study has certain limitations. The research scope is primarily focused on selected regions and schools, limiting the representativeness of the sample. The methodology relies mainly on questionnaires, interviews, and case analyses, lacking longitudinal empirical data to fully quantify the effectiveness of the transformation. Furthermore, the complex influences of urban-rural disparities and regional imbalances in educational resources require deeper exploration, and the practical feasibility of some recommendations needs further validation in broader contexts.

Future research will expand the sample coverage and conduct comparative studies across diverse regions and school types, employing more rigorous methods such as action research and experimental designs to enhance scientific validity and persuasiveness. Additionally, subsequent studies will explore the synergies between the "Health First" principle and broader educational goals, such as core competencies and the integration of moral, intellectual, physical, aesthetic, and labor education. The potential of digital and intelligent technologies in PE instruction will also be examined, aiming to provide increasingly comprehensive and in-depth theoretical and practical support for the ongoing reform of secondary school physical education in China.

References

- [1] CHEN L, ZHANG Y. Toward a health-oriented physical education model: Rethinking curriculum goals and pedagogical practices in Chinese secondary schools[J]. *Physical Education and Sport Pedagogy*, 2023, 28(4): 389–405. DOI: 10.1080/13573322.2022.2138456.
- [2] WANG H, LIU J, SMITH J J. Integrating health literacy into school-based physical education: A mixed-methods study from urban China[J]. *Health Education Research*, 2023, 38(3): 201–215. DOI: 10.1093/her/cyad008.
- [3] LUO Y, DUDLEY D, HE G. Policy implementation and teacher agency in China's "Health First" physical education reform: A multi-case study[J]. *European Physical Education Review*, 2024, 30(1): 78–96. DOI: 10.1177/1356336X231187210.
- [4] ZHANG M, WANG X, CHEN K. Technology-enhanced physical education and student engagement: Evidence from smart wearable integration in Shanghai middle schools[J]. *Journal of Teaching in Physical Education*, 2023, 42(4): 456–467. DOI: 10.1123/jtpe.2022-0121.
- [5] LIU R, HARWOOD C, GU X. Culturally responsive physical education in ethnic minority regions: The case of traditional sports in western China[J]. *Sport, Education and Society*, 2024, 29(2): 167–182. DOI: 10.1080/13573322.2023.2189432.