



Challenges and Breakthroughs: Constructing Practical Pathways for Digitally Empowering Ideological and Political Education in University Physical Education Courses

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ABSTRACT

Against the backdrop of rapid digital technology advancement, integrating ideological and political education into physical education curricula serves not only as a crucial measure to fulfill the fundamental mission of fostering virtue through education but also as a key pathway to promote the integration of physical education and ideological education while driving collaborative innovation in ideological and political education. From the perspective of digital reform, the integration of ideological and political education into university physical education curricula demonstrates both urgency and necessity in terms of educational philosophy innovation, pedagogical transformation, educational resource sharing, and educational content diversification. Employing research methods such as literature review and interviews, this paper systematically explores how digital technologies reshape the pedagogical ecosystem of ideological and political education in university physical education courses through resource integration, model innovation, and evaluation optimization. Findings indicate that the core value of digital empowerment lies in its ability to transcend the temporal and spatial constraints of traditional teaching, while enhancing the persuasive power of value guidance through dynamic updating mechanisms and immersive teaching scenarios. However, current development still faces practical challenges such as lagging infrastructure, disconnect between resources and applications, and insufficient digital literacy among faculty. In response, this paper proposes a practical pathway centered on data mining, interactive scenario creation, multidimensional evaluation, and blended learning communities to advance the high-quality development of ideological and political education in university physical education courses.

KEYWORDS

Digital Empowerment; University Physical Education; Ideological and Political Education in Curriculum; Practical Pathways; Smart Education

1. INTRODUCTION

In this new historical era, the core mission of higher education lies in fully implementing the fundamental task of fostering virtue through education and integrating ideological and political education throughout the talent development system. As a vital component of the “five-fold education” approach, university physical education not only bears the responsibility of enhancing students' physical fitness but also holds irreplaceable unique value in cultivating their spirit of perseverance, teamwork awareness, sense of rules, and patriotic sentiments [1-2]. However, traditional approaches to integrating ideological and political education into physical education courses face numerous challenges. The disconnect between ideological content and sports skill instruction is particularly

pronounced. Teaching methods often rely heavily on didactic lectures, struggling to resonate deeply with students. Moreover, evaluating the educational outcomes lacks scientific and effective quantitative measures. Currently, the rapid advancement of digital technology is profoundly reshaping development patterns across all sectors, with higher education being significantly impacted. With the widespread adoption and deep integration of cutting-edge digital technologies like 5G, artificial intelligence, big data, and blockchain, educational models are undergoing unprecedented transformation. At the National Conference on Ideological and Political Work in Higher Education Institutions, General Secretary Xi Jinping emphasized: “We must leverage new media and technologies to invigorate our work, promoting the deep integration of traditional strengths in ideological and political work with information technology to enhance its contemporary relevance and appeal.” This statement charts the course for integrating digital technologies into university education. However, empirical research indicates that Chinese universities still face multidimensional systemic obstacles in advancing the deep integration of ideological and political education within physical education curricula and digital technologies. For instance: educational stakeholders exhibit cognitive lag, with traditional teaching philosophies constraining the maximization of technology-enabled effectiveness; the absence of top-level design results in inadequate institutional safeguards; there is insufficient alignment between technological applications and instructional content; and incomplete digital ethics regulatory mechanisms [3]. Concurrently, rapid advancements in China's higher education and deepening educational informatization have profoundly transformed students' learning approaches and ideological perspectives, particularly elevating their demands and expectations for ideological and political education within university physical education courses [4]. Against the backdrop of the in-depth advancement of the “Digital Education Strategy Initiative,” the development of ideological and political education in university physical education is undergoing a paradigm shift from instrumental rationality to value rationality. Building a digital ecosystem for ideological and political education tailored to the characteristics of physical education has become a key breakthrough in deepening the “Three-All Education” reform. Leveraging technology clusters such as virtual reality and big data analytics can effectively achieve the spatiotemporal coupling of motor skill acquisition and the integration of ideological and political elements. This technology-enabled curriculum restructuring not only overcomes the practical challenge of “labeling” ideological and political elements in traditional physical education but also dynamically optimizes the adaptability and precision of educational strategies through multidimensional analysis of learning behavior data. This drives the comprehensive transformation of ideological and political education in university physical education courses from traditional models toward digital and modern approaches [5-8].

2. RESEARCH METHOD

2.1. Literature Survey

Using databases such as CNKI, Wanfang, and PubMed, we searched for keywords including “ideological and political education in physical education courses,” “digital and intelligent transformation,” and “smart education.” We then reviewed relevant theoretical findings and policy documents from both domestic and international sources to construct a theoretical framework for this research.

2.2. Interview Method Conduct

To explore the practical bottlenecks and optimization directions for constructing digital empowerment pathways in ideological and political education within university physical education courses, interviews were conducted with full-time faculty members specializing in ideological and political education for physical education, digital education technology experts, and scholars researching physical education ideology. The interviews focused on the adaptability of digital

resources for physical education ideology, integration models between technology (VR/AR, big data, etc.) and ideological education, the current state of teachers' digital literacy, and university-enterprise collaboration mechanisms. Concurrently, in-depth interviews were conducted with executives from 15 enterprises (specializing in smart sports platforms, digital ideological and political resource supply, and sports venue technology operations) and 20 industry experts (in digital education, sports ideological and political education, and university teaching management). These interviews explored the industry's capacity for technological empowerment, resource provision, scenario development, and collaborative demands, providing empirical evidence to inform the construction of practical pathways [9-11].

3. LITERATURE SOURCES AND SELECTION

3.1. Literature Sources and Search Keywords

As research on digital empowerment in ideological and political education within university physical education courses continues to deepen, an increasing number of scholars have begun to focus on the practical teaching aspects of digital empowerment in this field, conducting relevant studies and discussions that have yielded substantial results. This paper collected CSSCI-indexed literature on digital empowerment of ideological and political education in university physical education courses published over the past eight years (2018–October 2025). It conducted an in-depth analysis and summary of the research content based on existing findings and the current state of research applications. Employing a systematic review methodology, this study utilized China National Knowledge Infrastructure (CNKI), Wanfang, and VIP Journal Database as primary data sources. The Chinese search term “ideological and political education in physical education courses” yielded 183 CSSCI core journal articles.

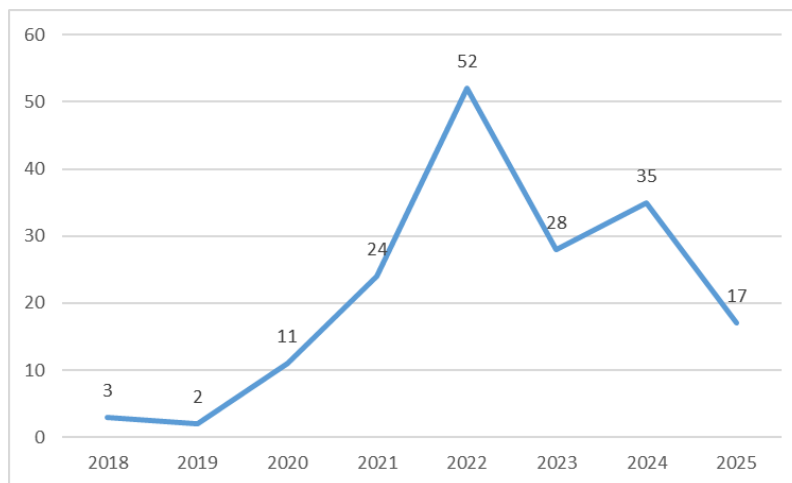


Figure 1. Publication Analysis Chart for 2018–2025

3.2. Keyword Co-occurrence Analysis

Keywords, as highly condensed carriers of literature content, hold significant academic indicative value. Keywords with high centrality and frequency precisely map the core issues of shared scholarly interest within a specific timeframe—that is, the research hotspots of the field. Keyword co-occurrence maps and keyword salience maps effectively reveal the evolutionary trajectory of knowledge structures, core research themes, and emerging research directions within corresponding fields. They provide intuitive and systematic analytical foundations for comprehending field dynamics and developmental trends. During CiteSpace software operation, the time slice parameter was set to “1 year,” node type selected as “keyword,” with all other parameters retaining default configurations. Keyword frequency and centrality-related data are detailed in Table 2. Keyword node

centrality serves as a core metric for assessing its position within the network, while node network strength indicates functional weight. Its value correlates positively with node importance—higher values signify greater centrality, influence, and thematic support. Nodes with centrality exceeding 0.01 are classified as central nodes, representing the core carriers of domain themes. The color gradient, ranging from dark to light, represents the evolutionary relationship over time from early to recent periods, enabling intuitive tracing of keyword temporal distribution patterns. Node size is positively correlated with keyword frequency—larger nodes indicate higher occurrence of the corresponding keyword in research literature. Connecting lines serve as visual carriers of keyword co-occurrence relationships, directly illustrating associations between different keywords. Line thickness corresponds to the strength of co-occurrence associations: thicker lines indicate higher co-occurrence frequency and stronger association between the corresponding keyword pairs. Based on Table 2, the core structural parameters of the network are clearly defined: it comprises 176 nodes (N, representing core keywords within the research domain) and 324 edges (E, representing co-occurrence relationships between keywords). The network density (Density) value of the map is 0.021. This metric reflects the overall intensity of co-occurrence relationships among all keyword nodes in the map, providing foundational parameters for subsequent analysis of the structural characteristics of the domain knowledge network. Keywords such as “course-based ideological and political education,” “physical education courses,” “cultivating virtue through education,” and “school physical education” not only exhibit high frequency but also possess significant intermediary centrality. Analysis indicates that within the research domain of course-based ideological and political education in university physical education, scholars focus most intensely on the educational practices of fostering cultural identity through course-based ideological and political education. Additionally, this field explores pathways for implementing the practice of cultivating virtue through education within physical education courses.

Table 1. Keyword Frequency and Centrality in Ideological and Political Education of College Physical Education Courses (2018-2025)

Serial number	Frequency /time	years	Centrality	Keyword
1	88	2020	0.7	Ideological and Political Education in Courses
2	40	2018	0.29	Physical Education Curriculum
3	34	2020	0.49	Fostering Virtue and Cultivating Talent
4	28	2020	0.33	School Physical Education
5	28	2020	0.3	Physical Education Instruction
6	17	2018	0.18	Physical Education
7	11	2020	0.11	University Physical Education
8	9	2021	0.16	Ideological and Political Education Elements
9	9	2021	0.06	Universities
10	6	2020	0.03	Physical Education Teachers

3.3. Research Review Analysis

The data clearly outlines the trajectory of literature growth in the field of ideological and political education in physical education curricula from 2018 to 2025. Its evolution exhibits distinct phased characteristics, profoundly reflecting the interplay between external policy drivers and internal academic logic. Development in this field can be clearly divided into three main stages:

(1) Concept Introduction and Preliminary Exploration Phase (2018–2019): Annual publication volume remained extremely low during this period (3 papers in 2018, 2 in 2019), marking the nascent stage of theoretical groundwork and conceptual clarification for “ideological and political education in physical education curricula” as an emerging interdisciplinary field. Academic attention focused on preliminary discussions regarding the applicability of the “ideological and political education

through curriculum” concept within physical education disciplines, without yet forming a large-scale research cluster.

(2) Policy-Driven Expansion Phase (2020–2022): Publication volume began a significant climb in 2020 (11 papers) and reached its peak in 2022 (52 papers), exhibiting exponential growth. This explosive growth was closely tied to strong national-level promotion of “ideological and political education through curriculum,” particularly the 2020 issuance of the “Guidelines for Ideological and Political Education through Curriculum in Higher Education Institutions.” This provided clear policy guidance and an action framework for ideological and political research across disciplines. Against this backdrop, research themes rapidly shifted from conceptual elaboration to practical implementation pathways, yielding numerous outcomes on integration models, instructional design, and case studies.

(3) Period of Conceptual Deepening and Rational Adjustment (2023–2025): Publication volume declined to 28 articles in 2023, signaling the field’s entry into an adjustment phase. This represents not a waning of research interest but an inevitable shift within the academic community from initial “broad expansion” to “deep exploration.” Research focus began to concentrate on specialized and thematic directions, with more in-depth topics such as digital empowerment of physical education ideological and political education, exploration of the specificity of ideological and political elements in specialized sports courses, and quantitative assessment of ideological and political effectiveness emerging as frontiers. The slight rebound in 2024 (35 papers) can be seen as an initial manifestation of research outcomes in specialized subfields, while the projected decline in 2025 (17 papers) further confirms that the field is gradually advancing toward a new stage of mature development oriented toward quality. The 2022 peak primarily resulted from the synchronized resonance between strong policy intervention and academic response. Under the policy directive of “comprehensive coverage throughout the entire process,” the unique practical, social, and cultural characteristics of physical education highlighted its educational value like never before, sparking academic enthusiasm for systematically constructing theoretical frameworks and practical models for ideological and political education within physical education curricula. The subsequent adjustment and differentiation observed after 2023 reflect the self-organizing and optimization mechanisms inherent in academic research. The repetitive and superficial research phenomena accompanying earlier rapid growth prompted scholarly reflection, driving a paradigm shift from macro-level construction to micro-level empirical inquiry. This transition signifies the field's entry into a high-quality development phase centered on theoretical deepening and methodological innovation.

Within just a few years, the field of “ideological and political education in physical education curricula” has fully traversed the typical disciplinary growth cycle—from inception to rapid expansion and then to refined development. The current adjustment in publication volume signals positive developments in research deepening and paradigm shift. It indicates that the field is gradually moving beyond unilateral reliance on policy directives, instead seeking to build a more robust and autonomous academic core. This marks the beginning of a new journey toward supporting physical education practices with high-quality research outcomes.

4. RESEARCH RESULTS AND ANALYSIS

4.1. The Value of Digital Empowerment in Integrating Ideological and Political Education into College Physical Education Courses

4.1.1. Promoting Resource Integration and Sharing to Break Through Spatial and Temporal Boundaries in Teaching

Digital sports courses leverage digital technology to systematically organize and integrate fragmented ideological and political elements traditionally scattered throughout physical education—such as sportsmanship, inspirational athlete stories, cultural significance of major competitions, and ethical

standards in sports—to build a structured, modular resource system. By deeply exploring the ideological and political significance of exemplary cases—such as the spirit of the Chinese women's volleyball team, the perseverance of Winter Olympic athletes, and sports-based poverty alleviation initiatives—it distills targeted entry points for ideological and political education. This enables the continuous accumulation and efficient aggregation of high-quality ideological and political teaching resources. It supports teachers and students in accessing diverse resources across time and space as needed, effectively serving blended online and offline teaching while overcoming the physical limitations of traditional classroom instruction.

4.1.2. Innovating Ideological and Political Education Models to Enhance Value Guidance and Influence

Digitalized physical education courses fully leverage intelligent technologies such as virtual reality (VR) and big data to create highly immersive ideological and political teaching scenarios. For instance, virtual environments can simulate ethical dilemmas athletes face when confronted with “doping temptations,” guiding students to deeply explore sports ethics and professional integrity. Alternatively, by analyzing individual student training data and linking it to the “Healthy China” strategic goals, courses can elucidate the social responsibility inherent in scientific exercise. Simultaneously, leveraging diverse formats like MOOCs, virtual simulation courses, and online seminars, it provides students with more flexible, open, and customizable learning platforms. This allows ideological and political elements to be naturally integrated into the teaching process through interactive formats tailored to students' cognitive characteristics, thereby deepening their understanding and identification with the value connotations within the course content.

4.1.3. Establish a Dynamic Update Mechanism to Ensure Timeliness of Ideological and Political Content

Digital sports course ideological and political education features real-time content iteration and personalized push notifications, enabling the timely incorporation of the latest national policy directions, hot social topics, and cutting-edge academic achievements. This ensures ideological and political educational resources remain contemporary and innovative. For instance, around the “Double Reduction” policy, dynamic thematic modules like “Exploring the Educational Function of After-School Sports Programs” can be launched, guiding students to participate in relevant ideological and political teaching interactions and resource sharing via online platforms at any time. By recording and analyzing user behavior, the system constructs personalized learning paths for different students, significantly enhancing the autonomy, engagement, and sense of accomplishment in their learning process.

4.1.4. Optimizing the Teaching Evaluation System to Achieve Full Coverage of Ideological and Political Education

Digitalized physical education courses can leverage cloud-based logs to track students' learning trajectories, capturing process-oriented data such as course engagement levels and discussion quality across modules. Combined with AI sentiment analysis technology, this enables auxiliary assessment of students' value perceptions and emotional inclinations during learning interactions, thereby constructing a multidimensional evaluation system encompassing cognition, behavior, and attitude. This technological framework not only enables precise and comprehensive tracking and assessment of student learning outcomes but also provides timely instructional feedback to educators, strengthening mutual growth between teachers and students in ideological and political dimensions. Furthermore, it offers teachers integrated teaching support encompassing lesson preparation tools, instructional reflection resources, and exemplary ideological and political case studies, systematically enhancing their capabilities and proficiency in designing “ideological and political education through courses” instruction.

4.2. Practical Challenges in Digital Empowerment of Ideological and Political Education in Sports Institutions

4.2.1. Dual Lag in Infrastructure and Collaborative Mechanisms

The development of digital teaching platforms faces the following prominent issues: Relatively limited investment in digital teaching platforms and slow hardware upgrades objectively constrain the digital transformation of ideological and political education. This manifests as outdated technical equipment, inadequate dynamic update mechanisms, and missing resource-sharing channels, making it difficult to support personalized teaching needs. Furthermore, no effective collaborative mechanism has been established between ideological and political educators and physical education faculty, creating structural barriers to the joint development and sharing of digital resources. The absence of regularized cooperation between the Center for Modern Educational Technology, the School of Marxism, and various physical education departments results in ideological experts lacking familiarity with practical sports training scenarios, while technical personnel struggle to comprehend the disciplinary logic of sports ethics, forming communication barriers.

4.2.2. Disconnect Between Resource Integration and Scenario Application

The integration of ideological and political resources in physical education courses exhibits fragmentation and inefficiency: First, course resources and ideological resources are scattered across different platforms, lacking unified sharing mechanisms and access standards. Second, teaching resources come in diverse formats—including text, video, images, and data—but lack systematic, standardized processing workflows, making resource integration difficult and interoperability poor. At the content level, specialized sports resources are underdeveloped. Existing repositories predominantly feature generic ideological and political case studies, while resources deeply integrated with sports disciplines remain scarce, failing to meet practical teaching needs. Functionally, some digital teaching platforms offer limited capabilities—merely supporting basic file uploads and downloads—while lacking advanced features like intelligent search, personalized recommendations, and interactive teaching. This reduces resource repositories to mere “electronic filing cabinets.” Furthermore, a significant disconnect exists between technical tools and teaching scenarios. Developers' limited understanding of actual physical education teaching processes and contexts leads to resource repository functionalities that fail to align with real-world instructional needs. Data silos are prominent, with resource repositories failing to integrate effectively with other teaching support systems such as academic management systems and student evaluation systems. This hinders the implementation of data-driven, precision resource recommendations.

4.2.3. Structural Discrepancies in Teachers' Digital Literacy and Ideological and Political Competence

Physical education teachers exhibit systemic deficiencies in digital literacy and ideological and political competence: First, a pronounced gap exists in the application of technological tools. Some teachers remain unfamiliar with basic operations of smart resource repositories, encountering usage barriers; simultaneously, advanced application skills are generally inadequate, hindering the optimization of ideological and political teaching design through data analysis tools. Some educators even perceive digital tools as increasing teaching burdens or disrupting established teaching rhythms, resulting in low actual utilization rates of resource repositories. Second, ideological and political values tend to be superficially integrated. Teachers generally lack systematic training in disciplines like Marxist theory and sports ethics, resulting in insufficient theoretical foundations to effectively extract ideological elements from professional instruction. For instance, skill-based teaching often emphasizes operational standards without extending to guiding values such as prioritizing life and social responsibility. Third, there are significant shortcomings in the ability to transform ideological and political content. Some teachers simply graft ideological elements onto skill instruction without achieving organic integration with professional content.

4.2.4. Student Engagement Effectiveness and the Quantitative Dilemma in Evaluating Ideological and Political Literacy

Sports universities face the problem of data illusion in evaluating student engagement: First, observable behavioral data struggles to reflect true participation levels. Digital platforms can record superficial metrics like login frequency, video viewing duration, and page clicks, but they cannot effectively measure deeper learning engagement or cognitive participation. Second, online interactions often exhibit superficial characteristics. Quantitative indicators like the number of posts in discussion forums or reply frequency are easy to track, but the underlying content quality and depth of thinking are difficult to assess effectively. For instance, after instructors assign discussion topics, some students offer only superficial responses lacking critical thinking and value internalization. This results in ideological and political literacy assessments remaining superficial, failing to authentically capture or effectively guide students' value formation processes.

5. BUILDING PRACTICAL PATHWAYS FOR IDEOLOGICAL AND POLITICAL EDUCATION IN UNIVERSITY PHYSICAL EDUCATION COURSES THROUGH DIGITAL EMPOWERMENT

5.1. Establishing Data-Driven and Visualized Pathways for Identifying and Integrating Ideological and Political Elements

First, establish an interdisciplinary teaching and research team integrating the expertise of physical education instructors, ideological and political theory specialists, and educational technologists. Employ content analysis and the Delphi expert consultation method to systematically deconstruct the skill structures, competition rules, and cultural contexts of various sports disciplines. From this analysis, distill core ideological and political elements that align closely with each discipline, ultimately constructing a systematic “sports discipline-ideological and political element” mapping matrix. For instance, basketball can be mapped to “tactical collaboration, trust-building, and on-the-spot leadership”; long-distance running to “extreme endurance, self-transcendence, and goal-oriented willpower”; and martial arts to “cultural identity, respect for teachers and the way, and martial ethics cultivation.” Second, leveraging information visualization technologies (such as knowledge graphs, infographics, and dynamic data presentation), abstract ideological and political elements are transformed into intuitive, vivid structured visual resources (e.g., sports-ideological knowledge graphs, series of micro-lecture videos). In the teaching process, precise resource delivery via smart teaching platforms before class achieves “pre-class infusion” and “cognitive groundwork” of ideological elements, laying the foundation for in-depth classroom instruction.

5.2. Pathways to Creating Immersive-Interactive Ideological and Political Teaching Contexts

In instructional design, proactively integrate intelligent technologies like Virtual Reality (VR), Augmented Reality (AR), and digital twins to construct highly simulated, strongly interactive ideological and political teaching environments. For instance: - Develop VR team challenge projects where students must achieve shared goals through effective division of labor, resource integration, and strategic communication within virtual scenarios, thereby internalizing teamwork spirit into stable behavioral tendencies through practice; In martial arts instruction, AR technology can synchronously overlay and visually interpret combat techniques alongside their underlying martial ethics, enabling students to develop value recognition concurrently with physical practice. This teaching model—“immersive scenarios → behavioral interaction → emotional resonance → value internalization”—effectively stimulates student motivation while significantly enhancing the persuasiveness and impact of ideological and political education.

5.3. Establishing a Comprehensive, Multi-dimensional Evaluation and Feedback Pathway for Ideological and Political Education Outcomes

To overcome the shortcomings of traditional evaluations—which emphasize outcomes over processes and skills over character—a comprehensive, process-oriented evaluation system for ideological and political education must be constructed. This system should translate students' ideological and political performance into observable, recordable behavioral and cognitive indicators, specifically covering three dimensions:

Objective Data Indicators: 1. Attendance rates, duration of self-directed extracurricular exercise, collaborative data in team sports (e.g., support running distance, pass completion rate) 2. Subjective evaluation metrics: Instructor classroom observation records (e.g., helping behaviors, rule adherence), student self-reflection reports, rubric-based peer evaluations within groups. 3. Online behavioral metrics: Depth of reasoning in posts/replies on teaching platforms, quality of commentary on ideological and political cases, analysis of resource learning paths. Building on this foundation, Learning Dashboard technology integrates multi-source assessment data and provides dynamic visual feedback to students and teachers. This enables real-time diagnosis of the learning process and personalized interventions, ultimately achieving the formative assessment goal of “promoting learning through assessment and enhancing development through evaluation.”

5.4. Pathways to Building a Blended Online-Offline Ideological and Political Learning Community

Construct a continuous, ubiquitous ecosystem for ideological and political education. Online, leverage platforms like MOOC and SPOC to offer specialized courses such as “Sports Spirit and Character Development,” systematically deepening value guidance. Utilize course communities (e.g., WeChat groups, dedicated apps) to regularly organize interactive activities like “Positive Sports Narratives” and “Scientific Exercise Log Sharing,” encouraging students to express values and share experiences. Offline, employ flipped classrooms and project-based learning to integrate high-quality online content and interactive topics into physical classrooms for in-depth discussions and value clarification. Through organic integration of online and offline elements, form an open, interactive, and continuously evolving “Sports Ideological and Political Learning Community,” ultimately creating a ubiquitous ideological and political education environment where “everyone learns, everywhere is a learning space, and anytime is a learning opportunity.”

6. CONCLUSION

Digital empowerment is far more than a simple integration of information technology and physical education instruction; it represents a profound shift in educational paradigms. This transformation propels the ideological and political education within physical education curricula from traditional experience-driven approaches toward data-driven methodologies, from one-way knowledge dissemination toward deep interactive resonance, and from singular outcome assessments toward holistic humanistic care throughout the entire process. Research and practice in this field can delve deeper: First, explore the potential applications of generative AI (AIGC) in automatically generating personalized ideological and political teaching cases and serving as intelligent tutoring systems for value-based dialogues with students. Second, theoretically investigate the reconfiguration and ultimate form of ideological and political education in physical education within the emerging domain of the “metaverse.” We firmly believe that as theoretical exploration deepens and practical experience accumulates, digital empowerment will undoubtedly open up broader, more efficient, and vibrant new horizons for higher education physical education to fulfill its fundamental mission of “cultivating character through physical education and integrating character through physical education.”

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REFERENCES

- [1] Cao Wenze. Bringing Ideological and Political Work in Higher Education Institutions to Life [EB/OL]. (2017-02-13) [2024-02-10]. <http://theory.people.com.cn/gn//n1/2017/0213/c40531-29075554.html>.
- [2] Wu Heng, Chen Dongyang. The Logic, Challenges, and Pathways of Digital Empowerment in “Comprehensive Ideological and Political Education” Teaching [J]. Research on Ideological and Political Education, 2023, 39(5): 89–93.
- [3] Mei Ping, Han Jingwen. Advantages, Challenges, and Strategies of Big Data Application in Evaluating Ideological and Political Courses in Higher Education Institutions [J]. School Party Building and Ideological Education, 2022(15):32-35.
- [4] Lü Qian, Xing Fangyuan. Distinctive Advantages, Practical Challenges, and Optimization Pathways for Ideological and Political Education in Physical Education Institutions [J]. Journal of Shenyang Sport University, 2022, 41(6):35-42.
- [5] Liang Yan. Reflections on Ideological and Political Education in Higher Education Courses in the New Era [J]. Beijing Education (Higher Education), 2020(8): 23–27.
- [6] Xie Wei, Zhang Maomao, Cao Hongjun. Exploring Ideological and Political Education in University Physical Education Courses Based on Set Theory [J]. Journal of Physical Education, 2021, 28(4): 86–93.
- [7] Pan Wei, Shen Keyin. Theoretical Foundations, Driving Mechanisms, and Implementation Pathways for Digital Economy to Boost High-Quality Development of Sports Industry [J]. Journal of Physical Education, 2022, 29(3):59-66.
- [8] Wei Chengfei. Application Risks and Correction Pathways of Big Data Analysis in Ideological and Political Education in Higher Education Institutions [J]. Higher Education Management, 2023, 17(6): 12–20.
- [9] Dou Suqin, Wang Qiang. Key Characteristics, Practical Challenges, and Breakthrough Pathways of Digital Empowerment in Ideological and Political Education at Universities [J]. Academic Exploration, 2023(2): 149–156.
- [10] Li Hongcao, Huang Jia Kang. A Brief Discussion on Digital Transformation Empowering High-Quality Development of Ideological and Political Education [J]. School Party Building and Ideological Education, 2023(23):6-64.
- [11] Yan Baohua. “Digital Sports” First Class Begins! Peking University's Digital Transformation Opens a New Chapter [EB/OL]. (2024-02-23) [2024-03-06]. <https://news.pku.edu.cn/xwzh/cc228309c654c3196a3ae1dfd69ec5c.htm>.