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A new era for physical education in China: teacher and pupil experiences and implications for the physical education profession

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China's New Era educational reforms position Physical Education (PE) as central to holistic child development, emphasizing creativity, cooperation, and well-being. These reforms call for a decisive shift away from traditional exam-driven models towards student-centered practice. Yet, tensions remain between the aspirational discourse of national policy and the realities of classroom implementation. It is currently unclear how these reforms are being experienced by key social actors, the teachers and pupils. Using a qualitative interpretivist approach, lesson observations and 34 follow up individual teacher interviews and subsequent student focus groups were conducted at 12 schools in Changsha, Hunan Province. Data were analyzed using Framework Analysis (FA), guided by the Epistemic Judgement Framework (EJF), with two main themes established; Current practice conflicts; and Future challenges on the path of change. Findings reveal a pronounced disparity between reform rhetoric and practice. While policy documents promote holistic development and student well-being, many schoolteachers continue to prioritize performance-oriented models, exam preparation, and competitive outcomes. Teachers often framed success in terms of skill development and assessment scores, thus maintaining a cultural regime of monitoring and assessment. Students desired a more diverse, choice-rich, well-being-focused subject, yet simultaneously expected fitness testing and exam pressures to intensify. This hybrid reality represents both institutional constraints and enduring pedagogical legacies. Systemic and professional development needs are discussed highlighting the need and importance of developing teachers' assessment literacy and pedagogical skills.

KEYWORDS

curriculum enactment, holistic aims, pedagogy, reform, teacher training

1 Introduction

Globally, Physical Education (PE) is increasingly viewed as an important component of education systems' responses to 21st-century health and social challenges, particularly in relation to physical inactivity, mental health, and widening inequalities among children and young people (Gassman-Pines et al., 2020; Hall et al., 2021). International policy and research, including work led by UNESCO, increasingly frame Physical Education as a contributor to equity-oriented outcomes, including social-emotional learning, mental health, life skills development, and the inclusion of disabled and vulnerable learners,

thereby positioning PE as a key site for advancing health and social justice within education systems (Gerdin et al., 2021; Lynch and Walton-Fisette, 2019; Manojlovic et al., 2023; UNESCO, 2023). Evidence emerging in the wake of the COVID-19 pandemic has further reinforced PE's role in supporting children's resilience, well-being, and re-engagement with schooling following prolonged disruption (Association for Physical Education, 2020; Australian Curriculum, Assessment and Reporting Authority, n.d; Casey and Kirk, 2021; Welsh Government, 2020). This has intensified calls for holistic approaches that extend beyond physical fitness to encompass cognitive, social, and emotional development (Kim-Wai et al., 2020; Roux and Dasoo, 2020). In parallel, international organizations have urged policymakers to strengthen policy responses to address the growing burden of physical inactivity and its unequal impacts on children's health and development (OECD and World Health Organization, 2023). Post-pandemic research similarly emphasizes the need to redesign PE to restore participation and motivation among young people, while also highlighting the expanded role of PE teachers in promoting healthy lifestyles and teaching transferable fundamental skills that reconnect pupils to school sport and learning communities (Albedry et al., 2023; Blain et al., 2022; Rowe, 2022).

Despite this strengthened global mandate, a persistent gap remains between global PE ambitions and national educational realities across different countries. The COVID-19 further complicated PE implementation, exposing significant cross-national variation in how reforms were interpreted, adapted, and enacted in practice (Curovic et al., 2025; Goslin, 2020; Howley et al., 2021; Paveling et al., 2019; Ullah et al., 2025). Across diverse education systems, research indicates that PE reforms are mediated by teachers' professional beliefs and judgements (Christodoulides et al., 2025; Curovic et al., 2025; Grecic, 2024; Kern and Patton, 2024; Song et al., 2024), with change often occurring through self-initiated, incremental adaptations rather than coordinated, system-level reform (Kern and Graber, 2018). These patterns are further slowed by cycles of traditional pedagogies preserved through professional socialization, making it difficult to disrupt inherited practices (Kakazu and Chow, 2023; MacPhail and Lawson, 2020; Richards et al., 2018). Importantly, these cycles are reinforced earlier through occupational socialization within school PE, which shapes who enters the profession and often privileges traditional norms, contributing to homogeneity and resistance to change within PE teaching cultures (Curtner-Smith et al., 2025; Flemons et al., 2024).

Moreover, the enactment of PE curriculum reforms is shaped by broader structural and policy conditions, including neoliberal policy pressures, accountability regimes, assessment practices, resource constraints, and the interplay between external authorities and local school contexts, all of which carry implications for equity in practice (Alfrey and O'Connor, 2024; Evans and Davies, 2014; MacLean et al., 2015; Quennerstedt, 2019b; Townsend et al., 2025; Wilkinson et al., 2021). International evidence further demonstrates that teacher efficacy and professional preparation are critical to successful reform enactment, with effective continuing professional development (CPD) identified as a key mechanism for translating reform intentions into meaningful pedagogical practice (Grimminger-Seidensticker and Seyda, 2022; Kern and Patton, 2024; Spittle

et al., 2023). Increasingly, scholars argue that such CPD can yield durable pedagogical change in belief and practice (Kern et al., 2021), particularly when it is facilitated through professional learning communities (PLCs) that create empowering and democratic learning spaces, enabling teachers to exercise professional agency, negotiate contextual constraints, and collectively engage with change (Beddoes et al., 2025; Gonçalves et al., 2022; Parker et al., 2022). At the same time, growing attention has been paid to pupils' lived experiences, as a meaningful indicator of educational quality, with research showing that PE teachers' use of democratic and reflective pedagogical principles can foster a sense of belonging, promote strengths and self-belief, and enhance pupils' motivation and engagement (Donkor, 2025; Quarmby et al., 2022; Volshøj et al., 2025). These perceptions of support, inclusion, and teacher-student relationships are further associated with students' future participation in physical activity and the development of individual competence, particularly when learning environments prioritize personal growth over social comparison (Murphy et al., 2022; Pastore and Luder, 2021). Yet, few studies internationally integrate teachers' perspectives, pupils' experiences, and observed practice within the same inquiry, particularly in large-scale, state-led reform contexts. Responding to this gap, the present study integrates teachers' perspectives, pupils' lived experiences, and observed practice to examine how PE reforms are enacted and experienced within a large-scale, state-led education system.

In China, the "New Era" reforms propose a shift within domestic education, away from the traditional focus on final high stakes examination towards individual holistic development, which places greater value on students' health and well-being alongside their academic success (CPC Central Committee & State Council, 2020). Within this "New Era"¹, PE is situated within this broader well-being agenda and plays a key role in creating the "trinity"² outcomes of athletic ability, healthy behavior and moral character (Yang et al., 2025b). National strategies and policy statements such as "Healthy China 2030"³ and the Opinions on Strengthening School Physical Education, position PE as essential to ensuring national strength, social harmony, and the moral education of youth (An et al., 2022). This signals a move away from traditional exam-led fitness models toward a more student-centered approach that advances the country's "Health First"⁴ concept (Xinhua, 2025).

¹"New Era" refers to China's current national development stage under President Xi Jinping's leadership, characterized by policy reforms emphasizing holistic education, health, and moral development alongside academic achievement.

²"trinity" refers to the three elements of the New Era reform i.e., athletic ability, healthy behavior and moral character.

³The "Healthy China" (健康中国) initiative is a major national long-term strategy formally established by the "Healthy China 2030" Planning Outline. It represents a comprehensive shift in national policy from a treatment-centered medical system to one focused on holistic health promotion for the entire population, integrating objectives for public well-being into all aspects of socio-economic development.

⁴The "Health First" (健康优先) principle is the foundational guideline of the "Healthy China" strategy. It mandates that public health impact be a primary consideration and integrated into the policy-making process of all government sectors, ensuring that health promotion is prioritized within all forms of socio-economic planning.

Meng et al. (2021) note that this policy framing combines both ideological ambitions and public health objectives to address long-standing concerns of student inactivity, obesity, and academic stress. These New Era reforms call for greater physical activity, integration of mental health education, and enhanced teacher professionalism (Zhu and Zhu, 2022). Despite these laudable aims, significant challenges in effective implementation have been recorded. Evidence from recent studies suggests that many schools continue to rely on rigid, performance-oriented pedagogical models, with limited departure from traditional practices (Gao et al., 2025), while teachers' efforts to explore student-centred approaches aligned with holistic development remain tentative and uneven (Mengyu et al., 2025). Research from different regions of China further shows that PE teachers struggle to reconcile "health first" policy rhetoric with everyday constraints, including limited facilities and space, very large class sizes, and strong pressure to prepare students for high-stakes fitness testing and academic performance indicators (An et al., 2022; Brown and Gao, 2015; Liang et al., 2024; Meng et al., 2021). Similarly, Yin et al. (2022) report that limited understanding of the PE and Health curriculum's aims restricts teachers' capacity to adopt student-centred practices. Yan (2015) cautions that, without shifts in pedagogical beliefs and classroom practice, PE reform risks being confined to policy discourse rather than classroom enactment. This underscores the need to examine reform enactment through the lived experiences of those most directly involved. Li and Zhang (2024) also highlight the importance of considering both teachers' and pupils' perspectives when evaluating reform enactment; however, such lived experiences are often marginalized within state-led evaluations in China, particularly in the post-COVID context marked by increased digitalization and heightened concern for student well-being (Li and Kong, 2023; Osher et al., 2025). In this context, examining how teachers and pupils experience the New Era PE reforms not only offers valuable insights to inform future pedagogical adaptation and professional development in China, but also, given the scale of these reforms affecting more than 200 million students, carries international relevance for education systems facing similar tensions between reform rhetoric and classroom practice in the pursuit of quality PE (Burnett, 2021). Accordingly, this study aims to: (1) explore how teachers and pupils conceptualize and experience the New Era reforms; (2) consider how these insights may inform future adaptations in teaching and any professional development needs.

2 Theoretical framework

This study is based on the premise that understanding PE teachers' pedagogical philosophies is critical in evaluating their beliefs that may support, hinder, or shape the implementation of "New Era" education reforms in China. A teaching philosophy and belief about learning and instruction shapes the interpretation of curriculum, lesson planning, and instructional practice (Curtner-Smith, 1999; Ennis, 1992; Ennis and Chen, 1995; Tinning, 1991). These beliefs influence not only decisions in classroom but also participation in professional development

(PD) opportunities, which are only effective when they are aligned with teachers' epistemologies and core values (Armour and Yelling, 2007).

Research highlights that beliefs of both novice and experienced teachers affect pedagogical choices (Anwar et al., 2025; Capel, 2016), content delivery (Tolgfors et al., 2020), and student motivation and classroom dynamics (Guo et al., 2023). Despite this, the role of teachers' belief systems has often been overlooked in PE (Simonton et al., 2022; Tsangaridou, 2006). These issues relate to structural stagnation and reluctance to embrace pedagogical change (Parker and Patton, 2016). Indeed Green (2000 2003), found that many PE teachers had fragmented, or "under-theorized" understanding of PE subject, often shaped more by personal experience than coherent pedagogical philosophy.

This study investigates how teachers' belief systems shape the profession's ability to engage with contemporary pedagogical approaches. At the core of this study is epistemology: the philosophical study of knowledge, its source, and justification (Hetherington, 2019). It explores how knowledge is established and understood in the relationship between the knower and known (Cooksey and McDonald, 2019; Holmes, 1986; Kivunja and Kuyini, 2017); second, how teachers' epistemological beliefs shape their pedagogy, practice and the ways these are interpreted by students (Perry, 1998; van der Linden and McKenney, 2020). As Kern et al., (2019) emphasize that such beliefs are deeply embedded in teachers' professional judgment and significantly inform both curriculum construction and the enactment of instructional strategies.

To connect beliefs to action in a situated way, we draw on the Epistemic Judgement Framework (EJF) (Grecic et al., 2024). The EJF serves as the analytic lens for interpreting Chinese PE teachers' response to the New Era reforms in all areas of their professional practice, and understanding their effect on students' experiences. While EJF initially guided the coding framework, inductive analysis of early transcripts revealed an emergent domain "Emotional Response" reflecting teachers' and students' affective experiences in PE. This domain was integrated into the final framework categories (see Box 1).

BOX 1 Broad Headings of the Theoretical Framework.

Philosophy and Purpose of PE – role and values associated with the subject, e.g., Holistic development of children
 Environment – surroundings/conditions in which teacher and pupils experience PE, e.g., Factors that influence teaching and learning, i.e., facilities, equipment, etc.
 Relationships – how people connect with each other, e.g., how teacher and pupil, teacher and teacher, pupil and pupil communicate
 Goals – idea of the future and/or desired result, e.g., Targets and objectives
 Methods – particular procedures for approaching something, e.g., instructional practices
 Evaluation – making a judgement about something, e.g., Assessments and tests.
 Future Planning – deciding on how to do something in the future, e.g., Next block of lessons
 Emotional Response – Inductively added category covering how one is provoked to feel, e.g., Happy, safe, etc.

3 Methods and materials

The study adopted an interpretivist qualitative design, under relativist ontology and subjectivist epistemology in order to prioritize participants' lived experiences (Creswell and Creswell, 2018).

3.1 Participants

In total, twelve public schools were included (4 primary, 4 middle, 4 high school). One government-funded school selected from each of Changsha's major geographical zones (north, south, east, and west) to ensure a representative cross-section of the issue. Principals were contacted to obtain institutional permission, after which 2–3 PE teachers were randomly selected from a list of all PE staff, and 10–12 students were randomly selected from grade-wide rosters, resulting in 34 teachers (21 male, 13 female), and 34 focus groups. Ethical approval was granted by Hunan Normal University and all participants received informed consent explaining the study's purpose, procedures and data management and gave their verbal consent to participate. No invited participants declined. A potential limitation was that Principals might have selected teachers who presented the school favourably, introducing selection bias. Cultural and hierarchical norms may also have made it difficult for selected teachers to refuse participation. Nonetheless, given the level of institutional access required, this approach was the most practical and appropriate. Despite not being able to select participants ourselves specific measures were taken to mitigate this potential positive bias. Specifically, the interviews probed the teacher for their opinions on the perceived challenges and issues within more general PE contexts to enable them to reflect beyond their own school constraints. Additionally the lesson observations that preceded the interviews were used as catalysts to explore the rationale behind pedagogical decision making rather than focus on the overt activity outcomes that may have been achieved to reflect positively on the school. The resulting sample enabled meaningful comparisons: across schools within the same grade level, across different grade levels, and within the same school and grade level. These intra- and inter-school patterns provided a strong basis for identifying dominant themes and developing a rich, varied dataset (Male, 2015).

3.2 Data collection

Lesson observations, semi-structured teacher interviews, and student focus groups structured upon the EJF were used to explore how the New Era PE reforms were being enacted and received. Following the interviews, data was anonymized with each teacher and focus group being randomly assigned study identifiers (T1–T12 and FG1–FG12) respectively with each having an additional school level indicator (P- Primary, M – Middle, H- High). All files were stored on a secure, password-protected, institutionally approved storage, accessible only to authorized researchers. In line with institutional policy, all data will be retained for 10 years before being permanently deleted.

3.2.1 Observations

Overt unstructured observations were conducted during regular PE lessons to identify key aspects of current teaching practice. Each participant was observed teaching one lesson lasting 40–45 min with participants notified in advance that this was to happen. This cross-sectional approach may have led to lessons being modified away from the daily norm. However as no systematic observation framework was applied based on the aim of simply gaining insight into what was important to participants, how the practical classes were organized, and to develop a deeper understanding of context to inform follow-up interviews (DeWalt and DeWalt, 2002), this limitation was deemed appropriate for the purposes of the study. Field notes recorded lesson aims and practical details (such as location, activity, numbers and tasks); interaction patterns (teacher-pupil, pupil-pupil) and critical incidents to capture both the organizational structure of lessons and the interactional climate in which teaching and learning unfold (Bertills et al., 2019; Granström et al., 2023; Kohake, 2024). These records were then used as the basis of interview prompts and a context for the narratives, linking intentions to the reported practices (Kawulich, 2012). As each teacher was observed only once, the findings reflect a single lesson rather than their full teaching practice; however, this was necessary given the study's time and resource limitations and the large number of participants involved. These single shot observations did not represent a data set for analysis but rather they provided the impetus for interview to dig deeper to better interpret what the researchers had seen.

3.2.2 Teacher interviews

Teacher interviews (45–70 min) were guided by EJF (Grecic et al., 2024), with questions exploring beliefs about teaching philosophy, learning environments, instructional strategies, relational dynamics, assessment, and planning (see Box 1). Open-ended prompts such as “Can you explain what was the focus of your lesson today?”, “why did you teach it that way?” and “how do you think it was successful?” enabled deep reflection. All interviews were conducted in Mandarin, audio-recorded, and transcribed for analysis.

3.2.3 Pupil focus groups

Focus groups (30–45 min) followed a similar EJF structure to teacher interviews but with age-appropriate language. For example, in relation to the Philosophy and Purpose of PE pupils were asked “What do you think about PE?” with probes such as “Do you think it is important? Why? Why not?”. Regarding the teaching Methods pupils were asked “What does your teacher get you to do in PE lessons?” with associated probes of, “and what does the teacher do and say during the lesson?”. Pupil welfare officers were in attendance rather than the pupils' teachers to avoid any undue influence.

3.2.4 Translation and verification procedures

All Mandarin-language interviews and focus groups underwent the same translation and quality-assurance

TABLE 1 Translation and back-translation verification.

Example Phrase from Original Transcript in Mandarin	Translation in English	Back-Translation in Mandarin	Reviewing Researcher Comment
学生上体育课的时间少, 总是会被占课, 课程效果没达到	Students have too little time for physical education classes, as it is often taken up by other classes, and the course's effectiveness is not achieved.	学生上体育课的时间太少, 因为体育课经常被其他课程占用, 所以体育课的效果没有达到预期。	Translation and back-translation are consistent with meaning of original statement

procedures. Transcripts were translated into English using NetEase Youdao and cross-checked by a native Mandarin-speaking team member. Any inaccuracy were discussed and amended to ensure fidelity to participants' original meanings. Back-translations were then produced using the same software, divided among the research team, and compared with the original Mandarin statements (see Table 1). Discrepancies were reviewed collectively to confirm consistency across the original, translated, and back-translated versions. The final verified transcripts formed the dataset for analysis.

3.3 Data analysis

Data were analyzed using Framework Analysis (FA), a structured matrix-based approach (Bryman and Burgess, 2002) compatible with both deductive and inductive coding (Ritchie and Spencer, 1994). Central to FA is the development of a study-specific thematic framework (Smith and Firth, 2011), enabling the team to classify and label data according to key themes, concepts, and categories (Ritchie and Spencer, 2010). Although originally developed for health policy research (Ritchie and Spencer, 1994), FA has since been used in health education (Stephens et al., 2021), psychology (Parkinson et al., 2016), and sport (Wilkinson and Grecic, 2020), but this study represents its first application in PE. FA was considered appropriate because it supports the systematic analysis of large qualitative datasets and provides a transparent, flexible process with a clear audit trail (Klingberg et al., 2024). This transparency enables others to follow the analytic decisions underpinning the findings, reinforcing the study's rigour (Hackett and Strickland, 2019).

FA was implemented through five interrelated stages: 1) Familiarization: all authors read assigned transcripts multiple times and added reflective notes on how segments related to the study's aims; observation notes were used to contextualize interpretation (Ritchie and Spencer, 2010); 2) Framework development: an initial framework was derived deductively from the EJF (see Box 1) and refined through team discussion to add the inductive category Emotional Response; 3) Indexing: excerpts were deductively indexed to the framework categories and initial comments were recorded for each data unit to aid interpretation and deepen our understanding of the emerging meanings. An example of indexing and data reduction is presented below in Table 2. At this point, *Future Planning* category was removed due to limited evidence; 4) Charting: the first two authors then examined the indexed data within each thematic area to refine their interpretations (Maxwell, 2012). They discussed and produced a summary for each

category and case (teacher or focus group). Examples are presented below for categories (see Table 3) and cases (see Table 4); 5) Mapping and interpretation: after repeatedly reviewing the summaries, the team identified and discussed key linkages and interpretive patterns. At this stage, the descriptive chart summaries were transformed into explanatory accounts to generate clearer insights into the data (Spencer et al., 2012). From this process, final themes were generated across the

TABLE 2 Indexing of data and reduction.

Category 1.	Transcript	Reduced for Matrix to...
Philosophy and Purpose of PE	“To promote their all-round development in sports. For students who are relatively weak in physical fitness and whose performance lags behind the class average, I will adopt a personalized teaching approach and appropriately reduce the amount of tasks they have to do to ensure that they can progressively improve within their abilities. For those students who are gifted in sports, I will keenly identify and value their strengths, and give priority to recommending them to join professional training teams such as the athletics team, so that they can further develop their strengths in a more targeted training environment, stimulate their potential, enable them to give full play to their talents, and endeavour to cultivate even more outstanding sports skills” MT4	All round development in sports.
	“My teaching philosophy is to make students happy first. Only by learning happily in physical education class can students take the initiative to practice and consolidate the skills they have learned, and lay the foundation for the development of higher skills in the future”. MT2	To make students happy first.

TABLE 3 Example of chart summaries for categories at middle school 1.

Category	Teacher 1	Teacher 2	Teacher 3	Teacher 4	Summary
Philosophy and Purpose of PE	Pass the high school exam	To make students happy first.	To perform expert sports skills	Achieve “Health First” goals	Category split between those with a sportified view of the subject vs. those with a more humanistic, altruistic and social wellbeing view of the subject

TABLE 4 Example of chart summaries for cases.

Category	Middle School 2 Teacher 1
Philosophy and Purpose of PE	All round development in sports
Environment	Rules and discipline for smooth teaching
Relationships	Strict with Consequences
Goals	Physical fitness improvement and sports skills improvement
Methods	Group exercises and competition
Evaluation	Student performance in fitness tests and sports
Emotional Response	Proud of student accomplishments
Summary of Case M2T1	Teacher is an ex-athlete whose views of PE and means of interaction and delivery take a very performance, expert to be followed, do as I tell you or else approach.

dataset, along with typologies of teacher thinking and practice, and pupils’ conceptual understandings.

3.4 Rigour and trustworthiness

Although FA provided a transparent audit trail, we implemented additional strategies to enhance trustworthiness. Following [Braun and Clarke \(2023\)](#) criteria, we stated our philosophical position, applied FA consistently, and used FA-specific terminology and rigour markers throughout. In line with [Cofie et al., \(2022\)](#) guideline, we ensured that at least two coders (one external to data collection and one with prior coding experience) coded the full dataset using the shared framework, and 20% of transcripts ($n = 7$) were then double coded by two members of the research team. All discrepancies were resolved collaboratively through reflexive discussions, thus strengthening analytical depth and reliability ([Thomas and Harden, 2008](#)). Observation field notes were used to corroborate or challenge interview accounts, strengthening credibility through triangulation. When disagreements persisted, the last author, who has extensive expertise in PE, adjudicated and provided the final judgement following team discussion to maintain consistency and coherence in coding. Dependability was supported by consistently applying the EJF framework during coding and charting ([Tobin and Begley, 2004](#)), while remaining open to inductive refinements.

3.5 Reflexivity

The research team comprised members from three countries (China, Pakistan, and the UK), offering diverse perspectives on

research and PE and supporting broader interpretations of the data. A methodological limitation, however, was that English served as the team’s common working language, requiring translation of raw Mandarin data and introducing potential risks of misinterpretation. This was addressed through native-speaker checking and back-translation procedures. Team members brought complementary expertise in PE teaching, teacher education, and research were all based at a teacher training university in Changsha, which facilitated access and ongoing knowledge exchange. Although each researcher held their own philosophical orientation, all shared a commitment to improving PE practice. This shared aim shaped the research process; for example, while recognizing potential bias in participant selection, the team valued the relationships developed with local Principals, anticipating that these partnerships will support future research and practical interventions.

4 Results

The results are presented as two main themes developed across all teacher interviews, student focus groups, and lesson observations and align directly with the study aims. Theme one, Current practice conflicts, examines how the New Era PE reforms are enacted and experienced, whilst theme two, Future challenges on the path of change, explores perceived directions for reform and conditions needed to support change.

4.1 Current practice conflicts

Chinese PE teachers’ espoused philosophies ranged from traditional sport-focused approaches to more holistic, student-centered ideals, reflecting a clear tension between reform rhetoric and entrenched practices. Many teachers prioritized performance, skills, and exam preparation as their central goals. For example, one Middle school teacher admitted his focus is on “improving sports skills to help [students] meet exam requirements and [lay] the groundwork for strong results” (M-T4). Even efforts to spark students’ interest often linked back to competitive outcomes, as another teacher boasted, “I made many students who were not interested in basketball love basketball and at the same time won the competition rankings” (M-T5). Such comments underscore a results-driven culture in which test scores and competition performance define success. Teachers themselves acknowledged this pressure as, “First of all, the national policy [that] plays a directional role, the second is the sports entrance examination, and then it is myself”. (M-T2). In practice, teachers explained that student learning and their own effectiveness are only gauged by measurable outcomes. For instance, one teacher said his evaluation is based on “students’

physical skill aspects and competition results” (H-T8), while another measured success by “whether students’ PE test scores have steadily increased or improved from the last assessment” (M-T2). This heavy reliance on quantitative metrics reinforced a self-perpetuating “training–assessment–feedback” cycle in daily lessons. Furthermore, classroom management often remains authoritarian, some teachers favoring strict, command-style techniques to maintain order, believing that “if there are no clear rules, students may appear scattered” (P-T9).

However, some teachers described positive changes influenced by the New Era’s holistic vision. A number consciously resisting the exam-centric paradigm by prioritizing student enjoyment, well-being, and social learning. One primary school teacher described his relationship with students as, “My relationship with the students is both teacher and friend” (P-T10), indicating a shift to a more supportive, relational role. These educators focused on the learning process over test results. One emphasized that “it is more important that students are happy ... and that they develop their physical and mental health based on exercise rather than just drilling skills” (P-T3). In line with such values, reform-minded teachers described using more inclusive strategies to engage every student. One proudly shared that previously disengaged pupils “developed a passion and even competed successfully” after he adjusted his approach (M-T5). Despite this, even the most progressive teachers admitted that reality forces compromises. Some who stated a Health-First philosophy still ended up setting performance-oriented targets. For instance, one teacher declared that ideally “health comes first...”, yet also conceded his “main goal is to enable students to master the sports skills of the current class and adapt to the intensity of sports” (H-T5). This hybrid stance illustrates how holistic ideals are often delivered through traditional training methods. Overall, teachers appeared caught between two paradigms. Overall, teachers appeared caught between two paradigms, with reform rhetoric and evolving personal beliefs on the one hand, and institutional realities, such as high-stakes fitness examinations, crowded classes, and entrenched norms, on the other.

From a pupil perspective, many described PE as a much-needed break from academic stress a contributor to their physical and mental well-being, aligning with the intentions of the reforms. “When you are stressed, you can relax through PE class”, noted one high school student (H-FG1-S5), highlighting PE role as a release valve in a high-pressure school day. Others emphasized the physical health benefits: “PE helps our health and reduce[s] illness”, (M-FG2-S5). Many also valued the fun and social bonding in PE, particularly opportunities for friendship and play. One primary pupil labeled PE as “important because you get to play with your friends” (P-FG10-S7). These accounts suggest that students recognize PE’s value beyond exam preparation. Students often highlighted positive stances towards PE teachers who demonstrated care and adopted student-centred approaches. “[Our] teacher is concerned about [our] mental health”, one student noted (H-FG4-S9). Another shared that the teacher “asks us to practice in groups, find students who have learned [the skill] to teach [others]” (M-FG5-S7), demonstrating a peer-learning approach that builds teamwork and confidence. Students also felt empowered when their voices were acknowledged: “The teacher is wonderful since she engages in communication with us and

values our suggestions” (H-FG1-S12). Collectively, these positive experiences show that some teachers were closely aligned with New Era, fostering supportive relationships, peer learning, and responsiveness to students’ needs. Students who experienced such approaches described greater enjoyment and motivation in PE. In contrast, however, other students, even at the elementary level, viewed PE primarily as an examination requirement. One child put it bluntly: “PE is important because it is a requirement for the high school entrance exam” (P-FG10-S4). The fact that a young student framed the value of PE in terms of high-stakes exam, speaks volumes about the pervasiveness of exam culture. Students also reported outdated or disengaged teaching practices that conflicted with reform ideals. One complained, “The teacher doesn’t care much... he just rides an electric bike” (M-FG3-S12), while another disliked that the teacher will punish everyone “if one person makes a mistake” (P-FG10-S8), a strict approach contrary to the inclusive, encouraging atmosphere reformers advocate. Others noticed a lack of variety in content, reflecting the old one-size-fits-all model. “[I] don’t like to repeat the practice of items that I already know, such as volleyball... it makes me a bit bored”, admitted one middle schooler (M-FG4-S7).

Overall, student accounts revealed a dual reality. On one hand, they seem to genuinely value and benefited from PE as a source of stress relief, enjoyment, friendship, and supportive teaching. On the other, many continued to encounter exam-driven priorities, rigid discipline, and repetitive drills. As such, the New Era vision of inclusive, enjoyable, and health-oriented PE was only partially reflected in students’ everyday experiences.

Lesson observations reinforced these patterns. In many classes, teachers spent substantial time was devoted to instruction and discipline management, with teachers adhering to rigid, exam-focused routines. For example, students in one class (P-FG7) spent most of the lesson practising standing long jump and timed runs. Active participation time was limited, with long set-up periods, repeated demonstrations, and queues for assessments. These repetitive drills generated visible disengagement, with little enthusiasm and minimal evidence of enjoyment. Some examples of more contemporary practice were observed, such as when one teacher (H-T9), introduced a cooperative game after noticing declining student engagement. However, this activity functioned as short “break” rather than a vehicle for learning, and was quickly replaced by further test rehearsal. These examples indicate that some teachers did attempt to find a balance between maintaining order in the classroom while responding to students’ motivational needs, however such student-centred moments were rare. Overall, the observed teaching aligned more closely with traditional approaches characterized by control, predictability, and limited pedagogical innovation.

4.2 Future directions on the path of change

In discussing the future, relatively few teachers spoke in detail about long-term pedagogical shifts, possibly reflecting the immediacy of daily pressures. Nevertheless, some teachers described an ongoing evolution in their approach. One mid-career teacher reflected that through experience that he had “gradually change[d] from the initial single (exam) requirement

to a more flexible and targeted teaching philosophy... in order to better meet the developmental needs of different students" (M-T4). Another reflected that he had "gradually changed from being strict to more open relationship" (P-T7). One Middle school teacher admitted that his priorities had, "gradually changed into developing lifelong PE, cultivating exercise awareness, and promoting mental health" (M-T2). This referred to the teacher becoming more open to diversifying methods and moving away from the rigid, one-size-fits-all teaching of the past.

Some high school teachers noted that once the exams were completed, lessons became "mainly about relaxing" and "enjoyment" (H-T1), finally giving more priority to student well-being after the exam pressure is removed. These examples suggest that teachers are willing to embrace the reform principles, but only when circumstances allow. Many acknowledged that without broader systemic change, their autonomy remains limited. One teacher admitted that policy mandates and exam requirements still "play a directional role" and only once these requirements are met can he really consider putting his own philosophy into practice (M-T2). While teachers expressed hope for more creative and holistic practice in the future, most anticipated that exams and policy demands would continue to shape their work.

In contrast, students were more eager to imagine a better PE experience in the future, although their optimism was tempered by concerns that exam pressures would persist. Across age groups, children students hoped for greater diversity and freedom. A common wish was to broaden the curriculum with new activities. One high school student envisioned PE "with more sports items, such as yoga, Taiji, fencing, etc." (H-FG7-S12), looking beyond the usual track-and-field and ball games. Others echoed the call for fresh options from "adding new and emerging sports" (H-FG6-S3) to even "integrate eSports into the PE curriculum" (H-FG6-S15). Along side variety, students expressed a strong desire for autonomy. "As we get older... [we want to] do whatever we want", one student said of future PE (H-FG3-S2), expecting that by high school or college they should have more say in what and how they learn. This desire for autonomy highlights how rigid the current system felt to them. Students also hoped for improvements in resources and the overall PE environment. One primary student simply urged schools to "increase the number of venues and equipment" (P-FG11-S4). Having adequate space and equipment, in their view, would make PE more meaningful and fun. In terms of social life, many looked forward to PE as a source of bonding and personal growth. "In college there are a lot of sports clubs...I want to join and learn different sports", said a Middle schooler (M-FG4-S7), anticipating the chance to pursue new activities and friendships through joining those sports clubs. Some also expected PE to impart life lessons as they grew older. "[our] teacher will teach us about life experiences", one primary school student (P-FG11-S11) predicted, hoping that PE teachers would act as mentors who instill values and resilience.

Despite all the hopeful visions, students expressed worries that the exam-driven pressures would only increase as they advance through the schooling period. Some grimly predicted that fitness testing will become even more intense in later grades. "The standards for PE tests will be stricter", said one student discussing the future (H-FG3-S2), and bracing themselves for the

tougher requirements in high school. Others extended this concern beyond secondary school: "I know that there will be a physical test in college...which makes me a bit afraid of PE classes in college", admitted another (H2-FG5-S4). Even as students hoped for more freedom and enjoyment, they anticipated the continued dominance of exam culture.

Classroom observations reflected this tension. Traditional practices remained deeply embedded, with lesson time frequently devoted to standardized test preparation and competitive drills, while references to lifelong physical activity were largely rhetorical. Teachers typically maintained strict control to manage large classes, and student-led activities were very brief and strictly controlled. Interestingly, when students were invited to choose activities, many hesitated and waited for teacher direction, suggesting how deeply exam-driven norms have shaped expectations of teaching and learning.

5 Discussion

This study is one of the first to comprehensively investigate how China's New Era PE reforms are interpreted and enacted across teachers, students, and observed lessons within a single urban city. The main findings depict a system in transition. Exam-driven routines and performance logics continue to dominate everyday practice, while student-centred and holistic approaches are emerging but remain limited in scope and consistency. A clear gap persists between the reform's rhetorical vision and classroom realities, as both teachers and students face considerable challenges in translating policy ideals into practice.

5.1 The teachers' perspective

From the teachers' perspectives, the findings indicate that an exam-driven culture remains the primary barrier to adopting more holistic approaches to PE. The dominance of the national fitness examination strongly shapes what teachers prioritize and how they conceptualize the purpose of the subject. Yang et al. (2025b) similarly report that emphasis on fitness testing encourages teachers to "teach to the test" through drill-based routines, while also generating perceptions of unfair assessment among students. Consistent with this, our findings support Meng et al. (2021) observation that exam pressures strongly influence teachers' priorities, constraining their ability to pursue *Health First* curriculum goals. Notably, even primary-aged students in this study framed PE as preparation for fitness tests, while older students expressed anxiety about examination outcomes and their perceived consequences. This reveals a fundamental contradiction within the New Era reforms, whereby holistic ambitions are undermined by entrenched exam-oriented structures (Luo, 2025). These findings reinforce calls for broader assessment practices that value healthy habits, social responsibility, and teamwork alongside technical performance (An et al., 2022).

The findings further show that teachers' pedagogical behaviours are also shaped by wider systemic pressures. Policy directives were consistently positioned as primary drivers of practice, with teachers' personal educational values often considered secondary. Factors such as heightened parental

expectations and the increasing weighting of PE in school and university entrance processes intensify demands for measurable outcomes, limiting opportunities for exploratory and student-centred learning (Ball, 2003). In addition, limited guidance on holistic assessment encourages teachers to focus on what can be most easily quantified (Chan and Luo, 2021). Even where teachers understood the reform's intentions, professional and occupational socialization often led them to reproduce familiar methods acquired during pre-reform training or reinforced through workplace norms (Richards, 2015). Nevertheless, a small number of teachers reported making incremental pedagogical shifts when supported to reflect and experiment. These teachers observed increased student engagement through more student-centred approaches, echoing findings from previous research on holistic PE pedagogies. Such experiences highlight the importance of sustained professional development and collaborative learning communities in enabling and sustaining meaningful pedagogical change (Latino et al., 2024). As Quennerstedt (2019a) argues, purpose-led pedagogy should guide decisions about content and method; however, opportunities for such reflective professional learning remain limited within the current system.

In addition, practical constraints, including large class sizes, limited facilities, and restricted equipment, were found to further limit the enactment of New Era pedagogies. Observations revealed lessons characterized by command-and-control teaching, fragmented activity time, and tightly regulated student participation. These conditions shape both teacher decision-making and student engagement, making student-driven tasks difficult to manage (Sun and Ding, 2023), and contributing to teacher stress, which is often associated with more conservative pedagogical choices (Na, 2024). As a result, many teachers reverted to familiar, teacher-directed routines perceived as easier to control and less risky under constrained conditions (Hou et al., 2025). While some schools have introduced small-sided games to enhance engagement in crowded settings (Li and Zhang, 2024), the prevailing emphasis on control and predictability within limited space continued to restrict pedagogical innovation in this study.

5.2 The students' perspective

From the students' perspectives, PE was widely valued as a respite from academic pressure, a space for enjoyment with peers, and an important context for developing teamwork, leadership, and other life skills. In this sense, students emerged as strong allies of the New Era reforms, expressing clear support for a more fun, holistic vision of PE, often more strongly than their teachers. Consistent with this finding, Etkin (2024) notes that when students feel happy and socially connected, their mental health and motivation are enhanced. Even when opportunities were limited, experiences of cooperation, personal development, and peer collaboration therefore appeared to support policy objectives while simultaneously fostering meaningful student engagement. When combined with adequate facilities, positive teacher–student relationships, and an inclusive classroom climate, such experiences are likely to further enhance student engagement and well-being (Li et al., 2022; Pastore and Luder, 2021). More broadly, framing PE as a vehicle for moral education and life

lessons is a distinctive feature of the Chinese educational context, deeply influenced by Confucian values explicitly reinforced through national policy. This emphasis differentiates Chinese PE from the more health and enjoyment-oriented discourses that dominate many Western contexts (Gray et al., 2022; Wintle, 2022). Importantly, these traditional expectations are not incompatible with reform agendas, but instead align with the *Healthy China 2030* strategy and the revised PE and Health curriculum, which position PE as foundational for lifelong health, resilience, and moral development (Wang, 2023).

Students also expressed a desire for greater variety and choice in PE lessons, including activities such as yoga and Taiji, alongside opportunities extending beyond drill-based instruction and exam preparation. This suggests that reform ideals related to diversity and cultural relevance may already be shaping students' aspirations, resonating with policy efforts to integrate traditional Chinese physical practices into school PE (Xu and He, 2025). From a theoretical perspective, this desire aligns with longstanding evidence highlighting autonomy as central to intrinsic motivation (Ryan and Deci, 2020), and with autonomy-supportive teaching shown to enhance enjoyment and positive emotional experiences in PE (Standage et al., 2005). At the same time, students expressed concern that fitness testing pressures would intensify as they progress through the education system. Taken together, these findings indicate that while students envision a future PE aligned with New Era ideals of diversity, choice, and well-being, they also fear the continued dominance of exam-oriented practices from the "old era".

In summary, the findings indicate that bridging the gap between New Era policy ideals and everyday school practice requires coordinated action across multiple levels of the education system. As Yang et al. (2025a) observe, meaningful transformation towards the New Era vision depends not only on shifts in pedagogical philosophy, but also on systemic support in the form of assessment policy alignment, institutional conditions, and sustained professional training. These findings resonate with international debates on how tensions between policy ambition, assessment regimes, and classroom realities shape the delivery of quality PE.

To assist teachers in delivering high-quality, well-rounded PE lessons, it is therefore essential to address both curriculum goals and the systemic conditions. In practice, this includes strengthening teachers' and students' assessment literacy in relation to holistic development, alongside targeted professional development in student-centred pedagogy. Teachers require greater support to manage large class sizes, integrate fitness and health content in engaging ways, and foster student autonomy in order to sustain emotional engagement (Hackett and Strickland, 2019). Such efforts are unlikely to be effective in isolation, highlighting the importance of strong teacher learning communities to support ongoing change. At the student level, it is also crucial that pupils understand how the assessment of holistic *Suzhi* (quality education) relates to their personal development and future trajectories. Tools such as self- and peer-assessment can play an important role in developing students' evaluative judgement and ownership of learning within PE (Luo and Chan, 2023). Actively involving students in feedback processes and valuing their perspectives further strengthens the alignment between reform intentions and lived experience. While progress is evident in several of these areas, sustained effort

remains necessary. With continued commitment at policy, school, and classroom levels, future generations may experience a form of PE that is both health-enhancing and meaningful, while also supporting the New Era ambition of cultivating socially responsible, well-rounded citizens (CPC Central Committee & State Council, 2020; Ministry of Education, 2022).

5.3 Implications for policy and practice

The findings indicate that realizing the ambitions of China's New Era Physical Education reforms requires coordinated action across policy and practice. At the policy level, this study provides clear evidence that high-stakes fitness assessments continue to legitimize performance-oriented pedagogies, suggesting an urgent need to broaden national evaluation frameworks to recognize social, emotional, and behavioural dimensions of student development alongside physical performance. At the system and school levels, the findings indicate that reform will remain symbolic unless teachers are supported through sustained professional development that explicitly builds assessment literacy and student-centred pedagogical competence, particularly for managing large classes and constrained facilities. In practice, strengthening school-based professional learning communities offers a feasible mechanism for enabling reflective, incremental pedagogical change within existing structural constraints. Finally, students in this study articulated aspirations closely aligned with New Era values of enjoyment, diversity, autonomy, and well-being, indicating that embedding student voice within curriculum design and evaluation processes represents a concrete and underutilized pathway for translating reform intentions into meaningful classroom practice.

5.4 Limitations

This study has several limitations. First, the data were collected in Changsha, the capital city of Hunan Province, which is classified as a "New Tier 1"⁵ city. As such, the findings may not fully represent conditions in less-developed cities or rural counties. Second, the heterogeneous sample, including teachers with differing levels of experience, certification routes, and access to professional development, may have influenced instructional choices and interpretations of the New Era reforms. In addition, emerging Chinese research has begun to link Physical Literacy (PL) with the New Era policy framework (CPC central committee, 2020). However, this study did not explicitly foreground teachers' conceptions of PL or examine how PL informed their day-to-day pedagogical decision-making. Accordingly, the findings should be understood as exploratory. Future research could build on this work by examining PL more directly and by exploring how the Chinese PE and Health

curriculum might align more closely with UNESCO's principles of Quality Physical Education for all.

6 Conclusion

This study presents an epistemologically grounded account of how China's New Era reforms in PE are interpreted and enacted by both teachers and students. By valuing teacher philosophies alongside pupils' lived experiences, the study exposes a clear gap between reform rhetoric and in-school reality. While reform discourses position children's holistic development and well-being as the subject's priority, everyday teaching practices remain constrained by outcome-based assessments and practical limitations. These findings highlight the need to build more effectively upon the New Era reforms, with particular attention to the national assessment system, which remains misaligned with PE's broader holistic purpose. Without reform to high-stakes entrance examinations, teachers are likely to remain confined to sportified, assessment-oriented pedagogies that undermine reform intentions. Such calls for reform, however, must acknowledge the structural complexity of the education system. While a complete revision of assessment structures is unrealistic, the inclusion of social and emotional development indicators within national assessment frameworks could meaningfully broaden the scope of evaluation and legitimize greater pedagogical attention to holistic outcomes. Achieving this would require sustained professional development through the National Teaching Programme and the strengthening of professional communities. Crucially, students in this study articulated aspirations aligned with New Era ideals of diversity, choice, and well-being, even as they anticipated increasing pressures from fitness testing and examinations. This tension underscores the urgency of reform efforts that move beyond policy symbolism to meaningful classroom enactment.

The study makes both empirical and methodological contributions. Empirically, it extends existing research by integrating teacher and student perspectives, offering a more comprehensive account of reform enactment than studies focused solely on teachers' interpretations. Methodologically, the study advances the EJF through the inductive addition of the "Emotional Response" domain, demonstrating the framework's flexibility in capturing affective dimensions of teaching and learning. This adaptation offers a valuable methodological model for future research seeking to explore reform enactment from multiple stakeholder perspectives. Reflecting on the study findings, future research should pursue three key directions. First, comparative studies across different regions and school types in China would illuminate how contextual inequalities, such as rural-urban divides and resource disparities, influence reform enactment. Second, longitudinal research is needed to examine how teachers' understanding of holistic assessment evolves through sustained professional development and how this shapes pedagogical practice over time. Finally, given the growing global recognition of PL within education and health policy (UNESCO, 2015; World Health Organization, 2018), future studies should examine how Chinese PE teachers conceptualize PL and how it might be meaningfully embedded within the PE and Health curriculum.

⁵New tier 1 city" is commonly used in China to denote emerging metropolitan centres with advanced economic development and regional influence, but which are not part of the four officially designated Tier-1 cities (Yicai Global, 2024).

Overall, PE in China stands at a pivotal moment. National leaders, teachers and students increasingly recognize the subject's potential to foster health and wellbeing, personal development, and societal outcomes; however systemic barriers continue to stifle the full potential of the New Era reforms. To move beyond reform rhetoric, teachers must be empowered to deliver student-centred pedagogies that align with learners' needs and aspirations. This requires not only high-quality, structured professional development, but also assessment frameworks and institutional conditions that grant teachers the space and legitimacy to enact holistic approaches. Without such alignment, the transformative ambitions of the New Era reforms risk remaining aspirational rather than enacted within everyday PE practice.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies were conducted in accordance with the local legislation and institutional requirements. The ethics committee/institutional review board waived the requirement of written informed consent for participation from the participants or the participants' legal guardians/next of kin because Ethical approval for this study was granted by the authorized institutional body of the Department of Physical Education, Hunan Normal University, in accordance with local legislation and institutional requirements. The study was conducted during regular school lessons under the supervision of school authorities and within normal curricular time. Due to the low risk, observational nature of the research, authorized institutional body approved a waiver of written informed consent. Participants were provided with an information sheet explaining the purpose and procedures of the study, and verbal informed consent was obtained. School-level consent was granted by school principals in line with national and institutional ethical guidelines. Written informed consent was not obtained from the individual(s), nor the minor(s)' legal guardian/next of kin, for the publication of any potentially identifiable images or data included in this article because No written informed consent was obtained for the publication of potentially identifiable data because the institution approved a waiver of written consent in accordance with the ethical requirements of the host country. All data were collected in educational settings during routine school activities, and no personally identifying information was recorded. Verbal informed consent was obtained from participants, and school-level consent was provided by principals in line with institutional and national ethical guidelines.

Author contributions

MB: Data curation, Formal analysis, Validation, Writing – original draft. DG: Conceptualization, Methodology, Supervision, Validation, Writing – original draft. LZi: Formal analysis, Methodology, Resources, Writing – review & editing. TJ: Formal analysis, Resources, Writing – review & editing. LJ: Formal analysis, Resources, Writing – review & editing. LZh: Formal analysis, Resources, Writing – review & editing. LP: Writing – review & editing, Resources.

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Conflict of interest

The author(s) declared that this work was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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