



**Chinese PETE teachers' dispositions towards the
student-centred approach in the new national
physical education and health curriculum standard
and what shapes them.**

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Doctor of Philosophy

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Statement of Authentication

This thesis is submitted to The University of Sydney in partial fulfillment of the requirements for the degree of Doctor of Philosophy. To the best of my knowledge and belief, the work presented herein is original, except where due acknowledgement is made in the text. I hereby declare that this thesis has not been submitted, either in whole or in part, for any degree or diploma at this or any other institution.

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Abstract

China's 2022 Physical Education and Health (PEH) Curriculum Standard for Compulsory Education emphasises student-centred, inquiry-based, and collaborative learning, signalling a shift from traditional skill-based approaches towards pedagogies that foster active engagement and autonomy. These reforms provide a context for examining how physical education teacher education (PETE) teachers interpret and respond to student-centred approaches. Closely aligned with these principles, student-centred approaches (game-based approaches, GBA) have gradually emerged in physical education (PE) and coaching, such as 'Teaching Games for Understanding' (TGfU) and 'Game Sense'. These approaches prioritise the development of tactical awareness, decision-making, and problem-solving through games rather than isolated skill drills. Existing studies have shown that the GBA shapes teachers' beliefs and practices, while also revealing the challenges associated with its implementation. Despite this, empirical evidence remains limited on how PETE teachers in China understand and implement GBA. To address this gap, this study employs a narrative inquiry methodology to examine the dispositions of twelve PETE teachers in Kunming, China, towards GBA, and to explore how these dispositions have been shaped by personal experiences, professional preparation, teaching practices, and socio-cultural contexts. Through thematic analysis, four themes were identified: 1) belief in the pivotal importance of mastering skill, separate from the game; 2) the powerful influence of exposure to player-centred coaching overseas; 3) professional and elite-level coaching before and during university; 4) institutional assessment and policy. The

findings indicate that PETE teachers' dispositions towards GBA in China are shaped by accumulated experiences and socio-cultural interactions within the specific cultural and educational context. While GBA is acknowledged at a theoretical level, its practical application remains constrained by multiple factors. The globally prevalent skill-based mindset is deeply embedded in the Chinese context and constitutes a primary obstacle to the promotion of GBA. Cultural factors also play a critical role in shaping how GBA is developed and implementation across different countries. This study provides a new perspective on the formation of Chinese PETE teachers' beliefs and dispositions, thus contributing to a deeper practical understanding of GBA in China.

Keywords: Student-centred approach, physical education teacher education, game-based approach, dispositions, narrative inquiry, China.

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Chapter One: Introduction

1.1 The Topic and Context

Implementing substantial curriculum reform is a complex and demanding process in any educational context (Fullan, 2001). The role of teachers in curriculum reform has been a central concern among curriculum researchers (Connelly, 1980; Kirk, 1990). Ha (2010) argued that initiating any curriculum reform, university academics and government agencies must consider the perceptions of teachers. Likewise, numerous international scholars have highlighted the pivotal position of teachers in the process of curricular change (Cothran, 2001; Day, 1999; Guskey, 2002; Hargreaves, 1994; Fullan, 1991; Sparkes, 1991). However, teachers have often been marginalised in reform initiatives (Fullan, 1999; Garet et al., 2001; Mclaughlin & Zarrow, 2001) and this appears to be particularly evident in the Chinese context.

In China, large-scale curriculum reform has traditionally been initiated by the central government, policymakers, and curriculum administrators, with limited consensus among school leaders and teachers regarding its implementation (Sarason, 1990; Sharpe et al., 1997; Fullan, 2001; Ingram et al., 2004). Although teachers play a central role in translating educational policy into classroom practice (Hargreaves, 1994; Day, 1999; Guskey, 2002), they are frequently marginalised in reform processes (Ha et al., 2008). As Guskey (2002) pointed out, the relationship between changes in teachers' classroom practices, students' academic performance, and teachers' beliefs and dispositions are complex and interactive. While teachers' beliefs and dispositions are shaped by their prior experiences, exposure to contemporary theories and practices can

enable them to renew their professional knowledge and pedagogical approaches, thus fostering more successful teaching experiences (Louis et al., 1996; Armour & Yelling, 2004; Ha et al., 2004).

Over the past few decades, there has been increasing scholarly interest in student-centred and inquiry-based approaches to teaching team sports and games, commonly referred to as Game-Based Approaches (GBA; Kinnerk et al., 2018; Jarret, 2022). Research has demonstrated that GBA can foster positive learning experiences, enhance conceptual understanding, and support a range of social and moral learning outcomes (Butler, 1996; Heywood, 2005; Light, 2013, 2021b; Light & Harvey, 2019; Rossi et al., 2007; Nathan, 2017; Wang & Wang, 2018). Nevertheless, traditional skill-based instruction and direct teaching continue to dominate sport pedagogy globally (Kirk, 2009), even in contexts where GBA has been mandated by national education authorities, such as the Game Concept Approach (GCA) in Singapore (Rossi et al., 2007). Teachers often display resistance to the pedagogical principles underpinning GBA, as these challenge long-established, instructional models of teaching and conventional conceptions of learning (Butler, 1996; Light & Butler, 2005; Armour & Yelling, 2007; Pill, 2011).

Misinterpretations and implementation challenges of GBA are evident in both Western and Asian contexts, although most English-language research has focused on Western settings. In recent years, however, an increasing number of studies have examined teachers in Asia, particularly in Hong Kong (Ha et al., 2008; Wang & Ha, 2013a, 2013b), Singapore (Wright et al., 2005; Rossi, et al., 2007; Fry et al., 2010) and

Japan (Light, 2021a), and Malaysia (Nathan, 2016, 2017, 2018, 2019; Nathan et al., 2017). These studies focus on teachers' experiences in schools and how they interpret GBA, but none have focused on how PETE shapes dispositions towards GBA. In Western countries, several studies have examined how PETE programmes influence pre-service teachers' general beliefs about teaching and learning (Light, 2002). Such programmes have been shown to exert a significant impact on the development of pre-service teachers' teaching values, beliefs, and intentions, reflecting a complex process of professional learning (Hyndman & Pill, 2016). Research has also explored pre-service teachers' interests and dispositions upon entry into PETE programmes (Ralph & McPhail, 2015); however, comparable studies remain scarce within Asian contexts. Furthermore, no research has investigated the dispositions of academics who teach in PETE programmes or how these dispositions may influence the professional development of teachers entering the workforce.

There is limited English-language research on GBA in China, largely because it has not yet been integrated into mainstream PE. Although TGfU (Bunker & Thorpe, 1982) has attracted the attention of Chinese academics, it has remained largely at the level of theoretical discussion. This situation presents challenges for investigating the dispositions of PETE and PE teachers towards GBA. However, the introduction of the Chinese new national PEH curriculum standard in 2022 provides an opportunity to extend the research on student-centred, inquiry-based pedagogies, such as GBA, within the Chinese context. The strong alignment between the principles underpinning the new national curriculum and those of GBA underscores the significance of this study. While

the new curriculum represents a radical departure from the long-standing traditions of teaching and learning in China, it also reflects broader educational reforms that have taken place over the past decade. Since 2002, the Ministry of Education of the People's Republic of China (MoE) has shifted its focus from sport skills and performance towards health and fitness, thereby challenging traditional theories, professional practices and pedagogical models (Jin, 2013). The new national curriculum emphasises a shift from 'skill-centred' to 'student-centred' teaching and encourages teachers to design engaging and meaningful learning environments rather than rely on repetitive drills. It advocates teaching that fosters students' independent, co-operative, and inquiry-based learning. This reflects an institutional recognition of the complexity of learning in and through movement (Light & Clarke, 2021), a central feature of GBA. Learning to teach is a complex process, described by Dewey (1938) as a continuum of experiences that PETE programmes help to shape. However, this dimension has received limited attention in the Chinese PE literature. Furthermore, existing research on PE in China remains predominantly quantitative, highlighting the need for qualitative inquiry to deepen understanding of teachers' beliefs and practices.

Born and growing up from China, I grew up as a table tennis player, receiving systematic and rigorous professional training for a long time. From bachelor's through to master's degree, my major was in sports training, and the course content focused exclusively on mastering the basic skills of different sports. Within this educational context, traditional methods were regarded as the most authoritative approach. From my coaches to my PE and university teachers, the prevailing practice was to enhance

students' physical capacities and technical proficiency through explanation, demonstration, and repetition. This approach left a deep and lasting impression on me throughout my formative years.

After graduating, I became a university PE teacher, and my initial practice largely replicated the methods I had experienced as a student. When teaching, I tended to emphasise discipline, movement standards, and compliance with instructions rather than attending to students' perspectives. This approach led many students to lose interest in PE courses, become disengaged, and even develop resistance to physical activity (PA). These outcomes prompted me to reflect on why the student-centred approach, long advocated in policy and the literature, has not been effectively implemented in PE, and what factors have contributed to this situation. It was my personal experience and the practical challenges I encountered that directed my attention to student-centred approaches and to how teachers' dispositions towards pedagogy are formed and enacted within China's cultural and educational context.

In China, PE has long been deeply influenced by the model of competitive sports training. This cultural background has shaped generations of PE teachers, making the "teacher-centred" approach to teaching widely accepted and widely used. Although this approach is effective in improving skills and standardising movements, it faces many challenges in the current educational environment. It is important to note that this issue is not unique to China. International research has likewise highlighted teacher professional development, curriculum reform, and the extent of teachers' autonomy as significant areas of inquiry. Situating the Chinese case within a global context provides

a useful lens for understanding how teachers negotiate the balance between tradition and innovation, as well as how they reconcile policy demands with classroom realities.

Building on this perspective, this study explores Chinese PETE teachers' dispositions towards student-centred approaches and how these dispositions have been shaped over the process of their growth and professional development. An understanding of PE teachers' pedagogical beliefs is deepened by revealing their perceptions and practices of teaching methods in a specific cultural and professional context. It can also suggest how they are disposed toward the principles and philosophy of the Chinese new national PEH curriculum standard. Their significance in preparing PE teachers and the fact that they provide the PETE students' first exposure to the new national curriculum can provide persuasive indication of how their graduating students interpret the curriculum.

1.2 Developing the Research Question

In this study I use the term 'student-centred teaching' in the broad sense of pedagogy that is not only teaching focused on the students instead of the teacher, but also the associated inquiry-based and problem-based learning. Like the humanistic and holistic philosophy that Light and Light (2021) suggest underpins Game Sense, it is the antithesis of the traditional direct instruction and reduction of sport to the execution of core techniques.

Traditional teaching methods have always dominated PE in China (Xu et al., 2018). This phenomenon is the result of historical factors and is also influenced by

various factors such as cultural background, education policy and teachers' beliefs that are all intertwined. China focuses strongly on competitive sports and the cultivation of technical skills (Ji, 2020). The training mechanism for athletes involves three levels of management: national, provincial (city and regional), and grassroots (sports schools, clubs, and general schools), working together to cultivate athletes (Pan, 2006; Liu et al., 2008; Huang et al., 2025). This cultural background has subtly shaped teachers' fundamental understandings of teaching, thereby influencing their receptiveness to, and enactment of, student-centred pedagogy. Many Chinese PE teachers majored in PETE or sports training at university, programmes that typically prioritise sport-specific techniques and skills training. Consequently, a proportion of graduates possess limited pedagogical knowledge and are insufficiently prepared to teach beyond the technical skills of their own specialisms. At present, there remains a relative paucity of research on PETE teachers' interpretations of, and dispositions towards, student-centred approaches in practice, particularly in the Chinese context.

Current research indicates that Chinese PE teachers predominantly employ skill-based pedagogies that prioritise the transmission of techniques while neglecting students' independent thinking and creativity. Such practices hinder the attainment of the core objectives advocated in the national curriculum. Teachers' educational philosophies also exert a profound influence on their teaching behaviour and classroom effectiveness (Tisdell & Taylor, 2000). Rooted in traditional pedagogical models, many teachers continue to rely on explanation, demonstration, and repetitive drills, leading to classrooms characterised by limited interactivity, openness, and creativity.

Consequently, students frequently perceive PE as monotonous skill training rather than a meaningful learning experience (Xu et al., 2018). In addition, under the influence of an examination-orientated education system, PE holds a relatively marginal position within schools, and assessment approaches remain relatively narrow, focusing largely on the mastery of technical skills (Jiang, 2014).

With the continuous advancement of national curriculum reform, student-centred approaches have been widely advocated; however, the ways in which educators, coaches, and PE or PETE teachers across different countries interpret and adopt these approaches differ considerably. The factors influencing their dispositions extend beyond personal histories and professional backgrounds to encompass cultural and institutional contexts, including assessment regimes and administrative management structures. The interpretation and implementation of GBA also exhibit notable variations across national settings, with most studies focusing on contexts such as the United States, Australia, the United Kingdom, Europe, New Zealand, Spain, and France (e.g., Li & Cruz, 2008; Light & Tan, 2006; Harvey & Jarrett, 2014; Light & Evans, 2013; Roberts, 2011; Wright et al., 2009; Light et al., 2014; Light & Butler, 2005; Francis, 2009; García-López et al., 2019). In recent years, there has been a gradual increase in research in Asia, such as Singapore, Japan, Hong Kong, Malaysia, India and Iran (e.g., Rossi et al., 2007; Wang & Ha, 2009; Wright et al., 2009; Nathan, 2016, 2019; Wang & Wang, 2018; Kinnerk et al., 2018; Maleki et al., 2023).

In Singapore, extensive research has examined the mandated implementation of student-centred pedagogy in PE, offering an in-depth understanding of the complexity

of implementing GCA and the challenges involved (Tan et al., 2002). The literature further indicates that teachers' interpretations and practices of GBA are significantly shaped by cultural context (Light & Butler, 2005; Light & Tan, 2006; Light, 2021). In China, there is a lack of empirical research on how Chinese PETE and teachers understand and enact student-centred approaches. Most existing studies focused on the policy or theoretical exploration, rather than engaging with teachers lived experiences and practical reasoning. Research also underscores the central role of teachers' beliefs in curriculum implementation.

The central question of this study is:

What are Chinese PETE teachers' dispositions towards student-centred teaching in the new national PEH curriculum?

The sub question is:

What factors influenced the development of their current dispositions?

In this study, "dispositions" are defined as socially and historically shaped tendencies that influence how teachers think, value, and act in their professional practice. This conceptualisation draws on Bourdieu's notion of habitus as a system of durable yet adaptable orientations toward practice (Bourdieu, 1990), while following Zeichner and Gore's (1990) view that dispositions are the values and commitments guiding teachers' decisions and behaviours, influencing student learning, motivation, and development.

The narrative inquiry methodology adopted in this study offers valuable insights into the lived experiences of participants, revealing how their personal histories,

professional contexts, and cultural backgrounds have shaped their dispositions and practices. By illuminating these interconnected influences, the study contributes to a deeper understanding of the role of PETE teachers in advancing student-centred approaches within PE. Furthermore, it examines how differing sociocultural contexts, particularly within Asian settings, affect the implementation and effectiveness of educational reform.

1.3 Research Purpose

Research gaps

1. The lack of studies conducted on GBA in China looking at practice published in English and the lack of knowledge of PETE teachers' perceptions of GBA and how they were developed.
2. The absence of studies across the world on PETE teachers' dispositions towards the principles, philosophies, and pedagogy underpinning GBA and what affect this has on graduating students and the global uptake of GBA.
3. The important influence of personal experience and cultural contexts as a factor contributing to how PETE teachers interpret the new national curriculum and implement it.
4. The remarkable lack of qualitative studies conducted on PE teaching in China.

Research purpose

This study aims to inquire into PETE teachers' dispositions towards the student-centred approach in the new national curriculum and how these dispositions are shaped. The research adopts a narrative inquiry methodology, which emphasises how humans experience and make sense of the world (Connelly & Clandinin, 1990). By engaging in-depth with PE teachers' personal histories and narratives, the study elucidates their beliefs and dispositions in PE teaching and traces the processes through which these were constructed. Situated within the interpretivist research paradigm, narrative inquiry differs from positivist approaches by focusing on how meanings are constructed through lived experience. It enables the identification of deeply rooted beliefs teachers hold about PE, their dispositions towards the principles underpinning China's new national curriculum, and the ways in which these concepts have been shaped.

Teachers' beliefs typically evolve over time, shaped by their schooling, family background, cultural context, and personal life experiences. The narrative approach adopted in this study also captures the key events and significant individuals that have influenced teachers' professional development and the enduring impact of these experiences on their beliefs and dispositions. Accordingly, participants' perspectives and orientations are closely linked to their life histories and to the ways in which these experiences have informed their understandings of teaching and learning in PE, as well as their engagement with student-centred and inquiry-based pedagogies such as GBA and the new national PEH curriculum standard.

The new national curriculum in China is a key policy document guiding teachers' pedagogical practices, curriculum design, classroom management, and student

assessment. Teachers at all levels are required to implement teaching in accordance with its principles and objectives. This study seeks to develop a deeper understanding of how teachers interpret and respond to the pedagogical concepts and learning approaches underpinning GBA. Compared with many Western countries, China's promotion and adoption of student-centred approaches began relatively late, and their widespread implementation remains limited. Despite the Ministry of Education's recent initiatives to encourage the use of student-centred, inquiry-based teaching, existing research indicates that substantial challenges persist in practice. Internationally, GBA is widely recognised for its educational value, with an expanding body of research demonstrating its benefits for enhancing students' learning, engagement, and critical thinking. Nevertheless, studies across different countries reveal that the implementation of GBA has progressed slowly and continues to face considerable obstacles.

Differences in cultural background and national policies have led to variation in the the interpretation and application of GBA across countries. PE teachers' understandings and dispositions towards GBA not only influence the quality of classroom teaching but also students' learning outcomes, especially PETE students. The ways in which teachers interpret and either adopt or eschew new pedagogical approaches in PE are shaped by a wide range of contextual factors (Light & Clarke, 2021). Significant research has been conducted on how PETE programmes influence PE teachers' interpretation of new concepts and curriculum change (Betourne & Richards, 2015; Aldous et al., 2022) but none have considered the influence of PETE teachers' beliefs and dispositions.

Numerous studies have explored the impact of PETE programmes on teachers' beliefs and perceptions of PE (Hyndman & Pill, 2016), as well as the tendencies of students entering PETE programmes. Teachers' beliefs not only affect their own teaching behaviour but also subtly shape the educational concepts and professional identities of student teachers (Beauchamp & Thomas, 2009). This influence typically develops gradually through sustained interaction, communication, and the transmission of values. Prospective teachers' inclinations towards PE teaching and their views of the profession may stem from early life experiences and be further shaped by their own schooling (Yüksel & Kavanoz, 2015). Consequently, many have formed preliminary understandings of, and dispositions towards, PE within family, school, and community contexts prior to entering PETE programmes. These pre-existing conceptions influence their learning approaches and subsequent career choices. Many students select PETE because of enthusiasm for sport and prior athletic experiences, entering with established skills and beliefs that condition their receptiveness to new pedagogies. Accordingly, this study also examines the influence of PETE teachers' beliefs and dispositions on student teachers, recognising the complexity of teaching and learning.

1.4 Contextual Literature Review

What GBA has to offer

In Europe, student-centred, inquiry-based teaching and coaching has a long-standing history (Mahlo, 1974; Mauldon & Redfern, 1969; Wade, 1967), though its theoretical foundations are typically traced back to Bunker and Thorpe's (1982) 'Teaching Games

for Understanding' (TGfU) approach. Compared to traditional teaching methods that emphasise skill and physical training, this method can increase students' motivation and positive emotional experiences, as well as promote positive social, moral, and personal development (Kirk, 2009; Sheppard & Mandigo, 2009; Light, 2014). Furthermore, this approach also encourages active lifestyles through the enjoyment of sport and games while enhancing students' social development and well-being (Light & Georgakis, 2023). Despite substantial research demonstrating its value, GBA continues to encounter resistance in practical implementation. For instance, extensive research with Singaporean teachers indicates a conflict between the educational philosophy underpinning GBA and teachers deeply held beliefs (Wright et al., 2005; Rossi et al., 2007).

The context of reform in China

PE in China has been shaped by its political and ideological development in the post-World War II period, initially following the Soviet ideology (Luo, 2015). Following the Cultural Revolution, PE exhibited militaristic and politicised characteristics, with PE only being incorporated into the examination system in 1990, alongside the establishment of school PE assessment and supervision. In 2001, the MoE established curriculum objectives promoting the coordinated development of students' physical, psychological and social adaptation abilities (Yang & Liu, 2019). Since 2002, China's PEH curriculum has shifted from a subject- and teacher-centred approach to a student-centred approach, emphasising autonomy, cooperation, inquiry, and lifelong

participation in PA (Zhou & Tan, 2003). In 2022, the MoE issued *the Physical Education and Health Curriculum Standard for Compulsory Education (2022 Edition)*, emphasising the shift from ‘knowledge and skill-centred’ to ‘student-centred’, encouraging students to think independently, co-operate and inquiry-based.

Although the State of China has been calling for education to be student-centred, most PE teachers still teach in an authoritarian classroom management style (Tang, 2016). The concept of the new national curriculum challenges many aspects of traditional PE theory and practice and requires PE teachers to change their professional perspectives and teaching methods. This holds up the progress of curriculum reform (Jin, 2013) with examination-based education still playing a significant role in PE, as a tool to obtain marks, and the criteria for judging motor skills in PE have only strengthened the “instrumental” nature of PE courses, thus neglecting students’ emotional experience and cognitive development (Zhou & Jiao, 2022).

At present, school PE and social PE in China remain largely disconnected, and the numerous curriculum reforms introduced thus far have not fundamentally altered the existing model of teacher education (Zhou & Jiao, 2022). Some scholars have argued that, owing to the influence of historical reform ideologies, the cohort of Chinese PE teachers possesses a relatively weak professional foundation, characterised by a limited sense of professionalism and identity. Furthermore, there remains an inadequate understanding of the underlying purposes and values of the PE teaching profession (Li & Zhao, 2019). This uncertainty regarding professional identity, coupled with a

generally low level of professional awareness, continues to impede the effective implementation of PEH curriculum reform policies.

GBA in China

The TGfU approach was introduced in China during the 1990s (Wang, 2013). Although the GBA, in the form of TGfU, was implemented in Chinese PE courses in 1998 (Liao et al., 1998), its development has largely remained at a theoretical level (Zheng & Gao, 2015), exerting limited influence on actual teaching practice. Chinese scholars have attributed this to constraints such as limited teaching time, insufficient resources and facilities, and the intensity and scheduling of teaching activities (Dang et al., 2020). Moreover, many PE teachers have an inadequate understanding of this approach and demonstrate limited motivation to modify their teaching philosophy or practice (Dang et al., 2020). The challenges hindering the adoption of GBA in China are broadly consistent with those identified in other countries (Light, 2002; McNeill et al., 2004; Rossi et al., 2007; Wright et al., 2006, 2009). Several studies have demonstrated that the TGfU approach can enhance students' motor skills and promote positive health behaviours, aligning with the content requirements of the core physical literacy (Zhu, 2014; Liu, 2016). However, these findings have had limited influence on its adoption by teachers. Empirical research on TGfU in mainland China has primarily concentrated on its effectiveness in skill acquisition, learning outcomes and gameplay, with comparatively little attention given to student-centred dimensions such as emotional

engagement and social interaction. Moreover, there is a notable absence of research examining PE teachers' dispositions or lived experiences in implementing GBA.

PETE influence on graduating students

PETE programmes are widely regarded as central to professional development, functioning not only as a means of imparting knowledge but also as a mechanism for shaping pre-service teachers' beliefs, attitudes, and values, thereby facilitating their acceptance of alternative pedagogical approaches (Light, 2002; Solmon & Ashy, 1995; Tannehill & MacPhail, 2014; Xiang et al., 2002; Wang, 2014). These programmes exert a substantial influence on graduates' pedagogical beliefs, which are often considered to be among the most resistant to change (Lortie, 1975; Lawson, 1983b; Pajares, 1992; Matanin & Collier, 2003; Philpot & Smith, 2011). Consequently, in the context of major curriculum reforms, examining and cultivating PETE student' beliefs, attitudes, and intentions should be regarded as essential for facilitating the effective implementation of new curriculum concepts (Hyndman & Pill, 2016; Shi & Huang, 2006).

1.5 Constructivist Epistemological

This study is grounded in a constructivist philosophical paradigm, drawing primarily on Dewey's philosophy of learning. Dewey (1938) views learning as a continuous, life-long process, or a "learning continuum," in which prior experiences shape and inform subsequent ones. He argued that individuals learn through experience, and that this learning is influenced by the wider socio-cultural environment. From this perspective,

knowledge is not fixed but continuously reconstructed through interaction with the world. Dewey has been described as both a pragmatist and a socially orientated constructivist (Hickman et al., 2009), positioning learning as an active and experiential process. Building on this Deweyan perspective, this study explores participants' experiences of developing student-centred approaches to teaching and learning, closely aligned with the principles of the GBA.

Constructivism, as a theory of knowledge and a branch of epistemology, emphasises the learner's active role in generating meaning and constructing understanding based on prior knowledge and experience. The central epistemological assumption of constructivism is that learning is a function of how individuals create meaning from their experiences (Jonassen, 1991). In this sense, learning is seen as an ongoing, socially interactive, and culturally influenced process, rather than something confined to formal and prescriptive contexts such as universities (Bruner, 1996; Dewey, 1916/1997; Vygotsky, 1978). Over the past few decades, constructivist theory has been increasingly applied in the fields of PE and sport (Munafo, 2016).

Accordingly, this study adopts both Deweyan and constructivist perspectives to explore how PETE teachers construct their understandings and dispositions towards GBA through their lived experiences. This epistemological stance offers a foundation for examining how beliefs, values, and attitudes towards student-centred learning evolve over time. Constructivism therefore underpins not only the theoretical framework of this research but also its methodological orientation, guiding the interpretation of participants' narratives and the identification of themes.

1.6 Thesis Structure

This study enquires into the dispositions of Chinese PETE teachers towards the new national PEH curriculum standard with a focus on the student-centred pedagogy and how their dispositions were shaped.

Chapter 1: Introduction

Introduces the research topic and context, clearly states the specific question to be solved in this study and explains its importance and research significance. It also provides a contextual literature review of the current research status in related fields both domestically and internationally, points out the gaps in current research, and details the research purpose and the entire structure of the thesis.

Chapter 2 and 3: Literature Review

This chapter reviews the literature relevant to this study. GBA is a broad term that encompasses various similar pedagogical approaches, such as Teaching Game for Understanding, Game Sense, Play Practice, Tactical Games Model, Tactical Decision Learning Model, Invasion Games Competence Model and Games Concept Approach. Therefore, I outline the origins, nature and development of GBA. This chapter describes how GBA has been interpreted and used in different countries then summarise the characteristics of GBA by comparing it with other approaches and TGfU as first proposed by the researcher. In addition, this chapter includes the global development of GBA, mainly including some appreciative and critical voices, and discusses them separately according to Western and Eastern countries. The background of China's PE

reform and the relevant empirical research on the introduction of GBA into Chinese PE are then emphasised. GBA is generally a student-centred, inquiry-based approach, which is consistent with the content of China's new national PEH curriculum standard. Finally, the PETE programme's effect on undergraduate teaching and beliefs is discussed.

Chapter 4: Methodology

This chapter provides a detailed explanation of the research framework adopted for this study. It provides an in-depth discussion on the theoretical underpinnings of it, focusing on Dewey's experience and learning theory, and constructivism. It explains how they provide guidance and support for this study, ensuring consistency with the research objectives. Then, the chapter details the rationale for choosing a narrative inquiry methodology, emphasising the authentic experiences and beliefs of the participants' life stories from their first encounters with sports to their experiences teaching at the present time, in to reveal their dispositions and explanations towards student-centred approach and how they were shaped. In terms of research design, the specific location of the study and the criteria for selecting participants are clearly explained. In addition, the methods and processes of the two interviews are discussed in depth. The first interview focuses on the participants' career background and early life experiences, etc., while the second interview further explores related content to answer the central questions of this study. The methods and processes of data analysis are then described. A thematic analysis was used to interpret the participants' stories in detail and identify key themes. Finally, there is a basic discussion of ethical considerations, emphasising the strict

adherence to informed consent, privacy protection, and data confidentiality of the participants to ensure that the entire research process is in line with academic ethics.

Chapter 5: Findings

This chapter presents the findings, which are four themes developed from the analysis of the participants narratives in the life history interview, the follow up focused interviews and observations of practice.

Chapter 6: Discussion

This chapter interprets and explains the significance of the findings within the context of the relevant literature and how they answer the research question and sub-questions. It highlights the significance of the findings in comparison with existing literature. It goes beyond simply presenting the data to delve into the meaning, implications, and potential contributions of the research to knowledge in the field.

Chapter 7: Conclusion

Following on from the discussion the conclusion pulls the discussion together to summaries the findings and suggest their significance in the field of PE teaching and learning, teacher development and curriculum. It suggests the implications of the findings for the future of PE in China in particular, but also for PE at a global level and what it can add to the existing literature in this area. It also explores the effectiveness of the GBA in different cultural contexts and how we might better support teachers in implementing this approach in their teaching. It also recognises the limitations of the study.

Literature Review Introduction

Student-centred philosophy has become one of the core paradigms of contemporary educational reform (Schweisfurth, 2015). Its defining characteristic is a shift from the transmission of knowledge to the learning process itself, emphasising students' central role and active participation. Compared with traditional teaching methods, this philosophy advocates a transformation of the teacher's role from a knowledge transmitter to a facilitator and guide of learning, emphasising that learners actively construct knowledge through inquiry, collaboration, and reflection in contexts (Barr & Tagg, 1995; Weimer, 2002). A student-centred learning environment grounded in constructivist theory, emphasises the contextual nature of learning, problem-based approaches, and the social negotiation of knowledge, encouraging students to develop critical thinking and autonomous learning through complex and diverse learning tasks (Hannafin & Land, 1997). This concept was first proposed by American educator John Dewey in 1938, with its core idea being 'child-centred education', advocating that education should be centred around students' interests, experiences, and needs. Dewey believed that the essence of education lies in the reconstruction of experience and championed learning by doing, inquiry-based learning, and situated teaching to foster genuine understanding and capability (Dewey, 1938).

Research conducted on student-centred, inquiry-based teaching broadly based on constructivism is overwhelmingly positive in the PE and sport coaching literature but after more than forty years of research and attempts to change teaching across varying cultures and contexts its influence remains limited. This is the case even in settings

where its teaching has been made mandatory such as in Singapore. Most research has been conducted on PE teachers and coaches to suggest that deeply embedded beliefs in teaching and learning are hard to shift (Pajares, 1992; O’Sullivan, 2005; Casey & Kirk, 2020; Light, 2014), but this study focused on PETE teachers because of how many graduating students’ beliefs and practices they can shape. With the underpinning philosophy and principles of the Chinese new national PEH curriculum standard very similar to those underpinning GBA.

GBA

In PE and sports, GBA is a term used to describe student-centred approaches that contextualise all learning in games or game-like situations. This is diametrically opposed to the reductionist nature of traditional teaching that focuses on the perfection of decontextualised skills and technique (Light, 2017). Its core aim is to promote the comprehensive development of students’ cognitive, emotional, and skills through games (Light, 2013). Different GBA reflect the value orientations and teaching traditions of PE and sports in various countries. For example, TGfU originated in the UK and emphasises ‘tactics before technique’, aiming to guide skill development through students’ understanding of the game (Bunker & Thorpe, 1982); Game Sense (GS) originated in Australia and is considered a slightly less structured variant of TGfU (Light, 2004); Play Practice (PP) was developed extensively in Australia and New Zealand, with its core objective being to cultivate learners’ proficient game abilities, namely game awareness and technical skills (Lauder, 2001); Tactical Games Model

(TGM) is a contextualised approach developed in the United States based on the TGfU, aiming to structure teaching content around tactical problems rather than isolated skills (Griffin et al., 1997); Tactical Decision Learning Model (T-DLM) originated in France and emphasises tactical learning and small-sided games. It was initially developed in rugby clubs and later applied to school PE (Gréhaigne et al., 2001). Invasion Games Competence Model (IGCM) builds on Rink's (2013) skill development theory to construct a progressive game structure, emphasising task representativeness and the contextualised learning process (Stolz & Pill, 2014). Games Concept Approach (GCA) was developed from TGfU as part of a larger curriculum reform in Singapore. When introduced it was mandatory practice but although still valued, it is no longer mandatory. This is due to the challenges of teachers' lack of understanding, confusion and resistance (Rossi et al. 2007).

The GBA discussed above sits upon principles and philosophies that are at odds with traditional teaching of PE and sport that focuses on the drilling of technique and skills seen to be essential to play the games. This seems to be a major problem in the implementation of GBA and the Chinese new national PEH curriculum standard with a significant amount of research highlighting this clash of concept and philosophy (Light, 2021a).

The cultural context of the country, teachers' pedagogical beliefs, school curriculum structure and assessment, students' learning habits, and educational policy support all influence the effectiveness of GBA interpretation and implementation in different regions. Therefore, to fully understand the educational value of GBA, we need

to systematically analyse and compare these approaches, exploring their similarities and differences in structure, strategies, and cultural adaptability. This provides stronger evidence for the implementation of GBA in China.

Globally, the promotion and implementation of GBA have shown significant regional differences. In Western countries such as Australia, the United Kingdom, and New Zealand, GBA is widely applied in PE courses and team sports training. PE teachers typically acquire the concepts and teaching strategies of GBA through course training and can adjust their teaching methods according to students' diverse needs. This has been demonstrated in teacher experience studies in Australia and the United Kingdom (Jarrett & Light, 2018). In contrast, Asian countries such as Singapore, China, Japan, and Malaysia face greater challenges in implementing GBA, with its adoption limited in Asia (Pill et al., 2017).

The Chinese Context

In the past, PE in China emphasised military-style training and the development of competitive skills. PE courses primarily focused on enhancing physical fitness and training technical skills, with teaching methods on teacher-centred instruction and demonstrations, leaving students in a passive role as recipients of knowledge and skills. In the 1990s, with the reform of the basic education curriculum system, PE gradually incorporated health education concepts, emphasising "health first". However, classroom instruction remained teacher-centred, with students primarily imitating movements. Since the 21st century, China's PEH curriculum standard has adopted a student-centred educational philosophy, emphasising the promotion of students' all-

round development and the enhancement of their ability to engage in independent exploration and collaboration. The philosophy of GBA aligns highly with the core objectives of China's new national PEH curriculum standard, helping to make PE courses more flexible and engaging while truly focusing on students' holistic development. Research indicates that despite the new curriculum reform advocating student-centred approaches, most students continue to prioritise subject content over the development their thinking skills and understanding of societal change. This suggests that although curriculum reforms promote a student-centred approach in principle, actual changes in practice lag behind, highlighting the need for more targeted interventions within PETE programmes (Wang, 2014).

As explained, the literature review is divided into three parts which are:

1. The Contextual Literature Review in Chapter 1.
2. The literature on GBA which is Chapter 2.
3. The literature on the Chinese socio-cultural and political context within which this study was undertaken which is Chapter 3.

Chapter 2 traced the origins and characteristics of the different GBA, the main similarities and differences between TGfU and other GBA and the implementation of GBA globally (both in the West and in Asia) as well as the interpretations and perceptions of GBA by teachers, coaches and students. Chapter 3 examined and discussed the context of PE reform in China as a distinct socio-cultural context overlooked in research published in English. It also looked at the connection between

GBA, the new national curriculum, and how PETE programmes affect undergraduate teaching and beliefs.

Chapter Two: Literature Review

This chapter primarily reviews and discusses the development history, main characteristics, and global implementation of GBA. First, the chapter traces the origins of GBA, introducing how its educational philosophy evolved from traditional skill-based approaches to a teaching method that emphasises student understanding and independent thinking. The philosophy of GBA is to promote learning through games themselves, allowing students to learn tactics, make decisions, and master skills in the process. Among various GBA approaches, TGfU is considered the most representative. In contrast, other similar approaches, such as GS, TGM, PP, T-DLM, IGCM, and GCA, share similar educational objectives but differ slightly in specific practices, terminology, or cultural contexts. Therefore, I have detailed the similarities and differences between these approaches and TGfU. Their commonalities lie in their emphasis on actively engaging students, centring instruction around games, and focusing on developing students' understanding of tactics and decision-making rather than merely training technical movements. The discussion then delves further into the global implementation of GBA.

In Western countries, particularly the United States, the United Kingdom, Australia, and Canada, GBA has been implemented in teaching and coaching for many years. Meanwhile, Asian regions have demonstrated diverse approaches in adopting GBA. For example, countries such as China, Japan, and Singapore have gradually attempted to integrate GBA principles with their national PE curricula but still face challenges such as shifting teacher perceptions and insufficient instructional resources.

Additionally, this chapter analyses the understanding and acceptance of the GBA among teachers, coaches and students. Although many educators, teachers and coaches recognise the advantages of GBA, they may revert to traditional approaches in practice due to a shortage of training, time constraints, or mismatched assessments. On the student aspect, GBA often enhances learning motivation and engagement, particularly in providing diverse game experiences and opportunities for tactical exploration. However, students' cognitive abilities, prior experiences, and cultural backgrounds may also influence their understanding and response to GBA.

2.1 The Development and Nature of GBA

In the late 1960s, the work of Deleplace (1966) and Mahlo (1969) recognised the importance of developing both technical and tactical understanding within a game teaching model. Essentially, they recognised that cognitive processes are an important aspect of effective game performance (Harvey et al., 2010; Jarrett & Harvey, 2016). Researchers have suggested that traditional teaching methods lead to two major problems (Thorpe, 1990; Werner et al., 1996). First, the transition from isolated skill learning to application in games seems difficult for students. While students may be successful in acquiring skills in isolated exercises, most students perform below expectations in games. Basically, students lack the necessary conceptual (or tactical) understanding and ability to make appropriate decisions during the game (Turner & Martinek, 1995; Werner et al., 1996). Second, students generally do not engage actively in decontextualised skill practice, often perceiving isolated exercises as tedious and

frustrating. This is because the relevance of the skill to the game situations is not apparent in such exercises (Griffin et al., 1997; Werner et al., 1996). Consequently, it has been suggested that the traditional emphasis on repetitive practice and technique proficiency in PE teaching and learning be replaced with a greater focus on the learner and their role within the learning environment, which is now commonly referred to as the GBA (Jarrett & Harvey, 2016).

The nature of GBA lies in its emphasis on the comprehensive development of learners, stressing the integration of physical, cognitive, and social dimensions, which differs from traditional teaching methods that focus on repetitive practice of technical skills. GBA places learning in meaningful contexts, enabling students to construct knowledge through problem-solving, decision-making, and reflection. It aligns with constructivist learning theory, which emphasises learning as an active, student-centred process (Light, 2013).

Teaching Games for Understanding (TGfU)

TGfU was originally proposed by Bunker and Thorpe (1982), building on the earlier work of Mahlo (1974) and Deleplace (1969, 1979), who explored the modelling of practice in team games (Gréhaigne et al., 2005). It represents a significant shift from traditional coaching by placing the learner at the centre of the learning process and repositioning the teacher as a facilitator (Dyson et al., 2004). TGfU is built on the belief of empowering learners (Griffin & Butler, 2005) and positions the teacher as a co-learner or partner in learning (Davis & Sumara, 1997). It serves as a framework for

designing, conducting, and reflecting on classroom practices that promote student understanding while positioning teachers as guides, coaches, or facilitators in the learning process (Boud et al., 1993).

Bunker and Thorpe's (1982) criticism of the technique-based approach argued that it led to the development of inflexible techniques that did not allow performers to adapt effectively to the changing demands of the game. TGfU challenges these entrenched practices (Butler, 1996; Kirk & Claxton, 1999; Light, 2002; Light & Butler, 2005; Holt et al., 2006) through its four pedagogical principles: sampling, tactical complexity, modification representation, and modification (Werner et al., 1996). As such, it is described as a student-centred and game-centred, step-by-step procedural model designed to facilitate learning in sport-related games.

Game Sense (GS)

The concept of GS in Australia dates to 1993, when Charlesworth introduced the term as part of the development of “designer games” intended to integrate technical, tactical and physical training (Charlesworth, 1993). Initially, GS was used as a measure of player development outcomes (Charlesworth, 1993, 1994). “Designer games” were developed to facilitate skill acquisition in environments that closely resemble actual game situations, while also enhancing player motivation. This approach foregrounded enjoyment and engagement as central to the learning process (Charlesworth, 1994). In the mid-1990s, Rod Thorpe, the founder of the TGfU, developed the idea of GS as a structured approach to motor skill development and, in collaboration with the

Australian Sports Commission (ASC), organised a series of Coach Development Workshops to promote the development of GS in Australia. In addition, he has been involved in the production of GS instructional videos to promote this teaching philosophy (Thorpe, 1997, 2006). Therefore, GS is considered a derivative of TGfU in Australia and is a slightly less structured variant of TGfU (Light, 2004).

GS situates learning within a modified game that provides meaning and relevance to the whole game or movement, while building skills and understanding (Light, 2013). It emphasises creating a supportive socio-cultural environment that encourages interaction, collaboration, and experimentation without fear of failure, promoting learning through social interaction. By initially lowering skill requirements, students can focus on the tactical aspects of the game, with skill development progressively increasing as the complexity of the game increases and always remaining relevant to the game context, whether occurring in isolation or within the game itself (Light et al., 2014; Light, 2004). GS is characterised by 1) the design of game-based learning environments; 2) an emphasis on questioning and other indirect teaching/coaching strategies to generate dialogue; 3) opportunities for collaborative formulation of ideas/solutions that are tested and evaluated; and 4) the development of a supportive socio-moral environment (Light, 2013; Jarrett & Harvey, 2016).

The GS stimulates thinking by asking questions rather than telling players what to do (Light, 2004). Questioning is central to encouraging dialogue, reflection, and conscious engagement with game-related ideas. To support the construction of new knowledge and understanding, questions should be open-ended, generating possibilities

and multiple responses rather than eliciting predetermined answers, in line with a constructivist approach to learning (Wright & Forrest, 2007; Light et al., 2014).

GS and TGfU: Similarities and Differences

TGfU and GS are applied in both educational and coaching contexts (De Souza & Mitchell, 2010; Light, 2013). TGfU was originally developed to challenge traditional approaches to teaching and learning in school-based PE (Mandigo et al., 2008; Wang & Ha, 2009), and its application has subsequently been extended into coaching environments (Harvey et al., 2010; Roberts, 2011). In contrast, GS was developed specifically for sports coaches and was intended to encourage effective coaching practice rather than to prescribe a normative teaching model for PE (Kidman, 2001; Light, 2004; Jarrett & Harvey, 2016; Light, 2013). Thus, TGfU is generally considered an educationally focused and more structured model, whereas GS is regarded as performance-orientated and flexible in its application by coaches (Jarrett & Harvey, 2016).

Despite these different origins, TGfU and GS share several theoretical and pedagogical foundations. Both are underpinned by constructivist learning theory (Light, 2013) and emphasise learner-centred questioning, problem-based learning, and modified game contexts tailored to learners' needs (Light, 2002; Chen & Light, 2006). They also promote holistic learning that integrates cognitive, affective, motor, and social dimensions (Jarrett & Harvey, 2016), and highlight the importance of social and emotional development, particularly in enhancing communication, teamwork, and

interpersonal skills (Harvey, 2009; Jones et al., 2010; Light, 2013; Jarrett & Harvey, 2016).

In practice, TGfU and GS diverge in their pedagogical emphasis. TGfU typically begins with simplified games or activities and gradually increases tactical complexity to enhance learners' appreciation, enjoyment, cognitive development, and physical growth, thereby encouraging lifelong participation in games and sports (Light, 2014; Storey & Butler, 2013). Within this model, modified games are used to help learners understand the role of skills, which may then be practiced in isolation before being reapplied in game contexts (Light, 2013). By contrast, GS tends to retain the game itself as the central learning environment, avoiding predetermined skill instruction. In GS, skills and tactics are learned and refined within the flow of the game rather than being extracted and practiced separately (Light, 2013; Jarrett & Harvey, 2016; Light, Curry, & Mooney, 2014).

Assessment practices also illustrate both commonalities and differences. TGfU and GS employ similar tools, such as the Game Performance Assessment Instrument (GPAI) and various self-assessment strategies (Harvey et al., 2010; MacPhail et al., 2008; Light & Georgakis, 2007). GPAI is recognised for its capacity to assess tactical awareness and decision-making, but it has been criticised as overly complex for large class contexts (Harvey et al., 2010). Self-assessment practices have been valued for promoting reflection and learner autonomy, though concerns remain regarding their reliability due to subjective bias and variations in learner maturity (Light & Georgakis, 2007; MacPhail et al., 2008). While these limitations are observed in both approaches,

GS literature often stresses flexible adaptation of assessment to coaching contexts, whereas TGfU-related studies more frequently highlight challenges in educational settings (Light, 2013).

In summary, TGfU and GS share a constructivist foundation and aligned pedagogical principles, yet their divergent origins, pedagogical emphases, and assessment practices indicate that their effectiveness is highly context dependent. These distinctions underscore the need for systematic investigation into how each approach can be adapted and empirically validated across diverse educational and coaching settings.

Play Practice (PP)

PP is Launder's (2001) approach to summarising the experiences of teachers, coaches, and physical educators, and it centres on allowing learners to learn through modified play. The approach follows the principles of shaping play, focusing play, and enhancing play to provide progressive practice for participants at different levels (Launder, 2001). PP provides a framework for developing realistic practice scenarios that mimic the demands of high-level competition while retaining the key elements of the game. The core objective is to create the learner's skilful playing ability, i.e., game awareness and technical ability (Launder, 2001). PP emphasises that 'tactical viability must be built on a technical foundation' (Launder & Piltz, 2013) and that its process is easy to understand and implement, enabling teachers to integrate it with their own experience and thus be more willing to change their teaching practice (Piltz, 2015). Furthermore,

PP aims to teach learners the basic competencies for effective sport and PA, but it is only a framework that requires teachers to make judgements about motor skills based on their knowledge. Therefore, teachers need to know the sport's techniques, tactics, rules, and game processes before using PP; otherwise, implementing PP will be challenging (Zhang et al., 2012).

The implementation framework for PP is firstly, shaping involves the modification of practice variables to specifically address elements of skillful play. Simplified games and challenges are used to shape both games sense and technique. Games and challenges are modified in terms of practice variables such as the number of players, size of the field, ratio of attackers to defenders, secondary rules, and the type of goal. The games then progress in increasing complexity to develop game sense and technical proficiency. Secondly, focusing refers to teaching during game play by emphasising specific aspects of game play. Thirdly, enhancing play is used to generate learner motivation by increasing or decreasing the challenge and difficulty of the play. This can be accomplished by changing aspects of the learning environment such as varying game time (2-3min games), establishing challenges to be accomplished in a specified period, and giving players particular roles that increase motivation during the game (e.g., coach or captain responsibilities) (Lauder, 2001).

PP and TGfU: Similarities and differences

Both approaches adopt the principle of contextualised learning, whereby learners experience and understand skills and tactics through real-life situations in the game. In

the teaching process, students and athletes play an active role, while teachers and coaches take on the role of guides more often than direct instructors. In addition, the cultivation of problem-solving and decision-making skills is also a key emphasis of both approaches.

PP is not an offshoot of TGfU, as it began to develop independently in the late 1950s. In both approaches, the innovators were steeped in the traditions of British PE, with strong links to coach education programmes and a combination of sustained pedagogical practice and personal experience in a wide range of sports. Both approaches recognised the limitations inherent in traditional methods (Lauder & Piltz, 2013). TGfU deals specifically with the teaching of game activities, whilst Lauder demonstrates the application of the principles of PP to other sports such as athletics, swimming, and skiing. Whereas the TGfU argues that technical practice should not take place until the learner recognises the need to improve technique to improve performance. PP advocates the simultaneous development of both game awareness and technical skills in game practice scenarios, with the explicit aim of developing a fully recognised version of the activity (Lauder, 2001).

TGfU advocates are primarily concerned with striking a balance between tactics and technique and using games as a context for learning. In contrast, the main goal of PP has always been to find ways to engage and motivate young people. Based on several considerations, the model that guides the PP process begins with a thorough analysis of the activity to determine which aspects of skilled play are most important for a particular group of learners. The learning environment is then simplified or shaped to

facilitate learning. These activities may take the form of an individual challenge, a target game, a sector game, or a mini game. TGfU is based on presenting a modified game, addressing tactics and decision-making, and then presenting the skills when needed (Lauder & Piltz, 2013).

TGfU and PP share constructivist principles, emphasising contextualised learning, active learner involvement, and the development of decision-making skills. However, TGfU prioritises tactical understanding before introducing technical practice in game contexts, while PP promotes the simultaneous integration of technical and tactical learning with an explicit emphasis on learner motivation and engagement (Lauder, 2001; Lauder & Piltz, 2013).

Tactical Games Model (TGM)

TGM is a PE framework derived from the TGfU and is designed to enhance students' tactical awareness, decision-making, and performance skills in games. This simplifies the six-step TGfU into a three-step process: (1) initiating learning with a modified or exaggerated game form to highlight tactical problems, (2) fostering tactical awareness through guided questioning and student decision-making, and (3) developing skills through practice and replaying the game (Griffin et al., 1997; Mitchell et al., 2006; Sgrò et al., 2022). Under this model, the emphasis is on game-based learning, where students engage in representative and intentional game scenarios to develop both on-the-ball and off-the-ball movements within various game categories, such as invasion games, net/wall games, and striking/batting games (Mitchell et al., 2006). By structuring

lessons around tactical problem-solving, TGM enhances cognitive and psychomotor skill execution in an authentic game context (Metzler, 2011).

TGM and TGfU: Similarities and differences

Both approaches emphasise the use of modified games to develop tactical awareness before focusing on technical skill acquisition, aiming to create a more meaningful and cognitively engaging learning experience for students (Oslin & Mitchell, 2006). Through this approach, students actively participate in game-like scenarios that require them to analyse situations, make strategic choices, and execute appropriate motor skills, promoting more profound learning compared to traditional methods (Metzler, 2011). Although the TGM differs slightly from that of TGfU, the overarching aim remains the same: to facilitate the development of game sense by engaging students in modified gameplay and small-sided teams. Consequently, students are afforded the opportunity to collectively share ideas, solve authentic problems, and potentially increase their understanding learning of the game (Hodges et al., 2018).

TGM adds more specific teaching steps to TGfU, making it more practical and systematic in teaching practises (Mitchell et al., 2006). In addition, TGfU emphasises the contextual development of skills, arguing that skills should be naturally improved during tactical learning rather than isolated practice (Light et al., 2014). TGM ensures that students not only understand tactical concepts but also improve their technical abilities accordingly (Mitchell et al., 2013). Therefore, TGM is more balanced than TGfU in terms of skill development.

In summary, TGfU and TGM share constructivist underpinnings and a focus on developing tactical awareness through modified games, but TGM is often presented as more systematic and balanced in integrating technical skill development alongside tactical learning. However, research on TGM remains relatively limited compared to the more extensive TGfU literature, which makes it difficult to draw firm conclusions about its effectiveness across different contexts.

Tactical Decision Learning Model (T-DLM)

Building on research into tactical knowledge in team sports, the T-DLM emerged from a constructivist and cognitivist perspective (Gréhaigne & Godbout, 1995; Gréhaigne et al., 1999, 2001; Butler et al., 2003), focusing on enabling students to explore gameplay possibilities and construct effective responses within small-sided games (Gréhaigne et al., 2005). In the 1960s and 1970s, a period of significant change in French PE, there was a marked shift towards student-centred, constructivist approaches with an emphasis on tactical learning and games (Marsenach & Druenne, 1974; Gréhaigne & Nadeau, 2015). The development of the T-DLM was also influenced by Bouthier's (1984) work on perceptual clues, rational tactical decision-making, and the role of cognitive processes in motor control and execution. Initially developed in rugby clubs, the model was formalised for school PE by Gréhaigne, Billard, and Laroche (1999). Rooted in social constructivism, the T-DLM emphasises student interaction and debate (Wallian & Chang, 2007) and was described in Quest (Gréhaigne et al., 2001), which highlighted

its iterative cycles of play, observation, and reflection designed to enhance tactical decision-making.

Central to the T-DLM is the use of small-sided games, where students engage in gameplay, observe, and reflect on their actions to construct effective tactical responses. The T-DLM consists of five components: (a) small-sided games, (b) student observation of gameplay, (c) Debate of Ideas (DoI), (d) planning of action projects as a roadmap, and (e) iterative cycles of gameplay, observation, debates, and roadmap refinement (Godbout & Gréhaigne, 2020). A key feature of the T-DLM is its structured learning process, which involves three setups: (1) an action setup, where students participate in small-sided games; (2) a concurrent observation setup, where teammates observe and record preselected measures; and (3) DoI, where students, observers, and the teacher discuss gameplay, reflect on decisions, and explore tactical alternatives (Deriaz et al., 1998; Gréhaigne et al., 2005). The DoI fosters collaborative learning, enabling students to share observations, debate ideas, and construct new solutions to tactical problems encountered during gameplay.

T-DLM and TGfU: Similarities and differences

While both the T-DLM and TGfU share the common goal of developing tactical understanding, TGfU emphasises the use of questioning and modified gameplay to guide students' understanding of tactical principles, incorporating less structured peer observation (Kirk & MacPhail, 2002). In contrast, T-DLM integrates structured observation and feedback as central components. Students actively observe their peers

during game play and participate in DoI sessions to analyse and improve performance, fostering collaborative learning and deeper tactical understanding (Deriaz et al., 1998; Gréhaigne & Godbout, 2020). Additionally, T-DLM explicitly addresses the cognitive processes underlying tactical decisions, such as perception, analysis, and problem-solving, encouraging students to articulate their thought processes and explore multiple solutions to tactical problems, a focus less emphasised in TGfU (Gréhaigne & Godbout, 2020; Kirk & MacPhail, 2002).

T-DLM is primarily implemented in school and club settings, particularly in team sports like rugby and soccer, and is especially suited for older students and advanced learners due to its emphasis on structured observation and debate (Gréhaigne & Nadeau, 2015). Research supports both models, with TGfU shown to improve tactical understanding, motivation, and enjoyment (Harvey & Jarrett, 2014), and T-DLM demonstrated to enhance tactical decision-making and collaborative learning through structured observation and debate processes (Godbout & Desrosiers, 2005; Gréhaigne et al., 2005).

Both TGfU and T-DLM aim to develop tactical understanding, but they differ in emphasis, with TGfU focusing on teacher questioning and modified game play, while T-DLM highlights structured observation and debate. Both models have been shown to enhance learners' engagement and tactical decision-making, although in different ways. However, research on T-DLM remains comparatively limited, making it difficult to assess its broader effectiveness across diverse contexts.

Invasion Games Competence Model (IGCM)

The IGCM is an innovative approach that builds on the foundational principles of Rink's (2013) 'Skill Development Approach', emphasising task progression beyond generic practice tasks to include applying, refining, and extending functions at varying levels of representativeness. In the IGCM, players progress through a sequential set of basic game forms (modified games), which increase in complexity as they master the objectives of each game form. Game situations are the starting point for the lessons, and the introductory games are designed to relate the tactical and technical elements of the situation to the players (Stolz & Pill, 2014).

IGCM and TGfU: Similarities and differences

Conceptually aligned with the TGfU, the IGCM also shares the goal of sport education to create authentic sports contexts (Musch et al., 2002). Unlike TGfU, which does not differentiate its procedures based on the strategic features of specific game categories (e.g., invasion games, net/wall games, target games, or striking/fielding games), the IGCM addresses this gap by focusing on the unique nature of invasion games and the need for specialised teaching (Belka, 2004).

The IGCM is conceptually aligned with TGfU but distinguishes itself by focusing specifically on the unique demands of invasion games. While it offers a more specialised framework than the broader TGfU model, its theoretical contribution has not been matched by extensive empirical validation. The limited body of research on

IGCM makes it difficult to conduct effective comparative studies, leaving its wider applicability uncertain.

Games Concept Approach (GCA)

In the late 1990s, in a pragmatic response to the Asian economic crisis of the 1990s, the Singapore MoE issued a visionary policy, “Thinking Schools, Learning Nation” (TSLN) (Goh, 1997). Considering that the previous education system was teacher-centred and placed too much emphasis on rote learning, the government saw the need for a more student-centred and problem-solving approach to education. The PE syllabus was revised to develop understanding and application of critical thinking skills including decision-making and creative problem-solving (MoE [Singapore], 1999).

The critical thinking agenda set out by the MoE requires teachers in all curriculum areas to work towards a constructivist agenda. To this end, an approach to the teaching and learning of PE that was advocated by the Curriculum Planning and Development Division (CPDD) and disseminated through the National Institute of Education (NIE), Singapore’s only teacher education institution (home of the former College of PE (CPE)), was to utilise the possibilities of play in problem-solving and decision-making and to advocate for a pedagogy of play that would support this initiative. The resulting pedagogy (Bernstein, 1996) was known as GCA and was rooted in the tradition of the TGfU. What emerged was a discourse based on coercive practices to which the teaching force had to adapt in some way. Thus, for the first time anywhere in the world, the general principles guiding TGfU became mandatory practice as described in the

prescribed syllabus (Rossi et al., 2007). GCA was initially based on the work of Griffin et al. (1997), which provided a curriculum template. The primary purpose of designing a modified version of this template was to assist teachers in initiating or integrating this new pedagogical paradigm. Unfortunately, this format became GCA (a product): for teachers, it was not about teaching for understanding but about following a template (Rossi et al. 2007).

The goal of using GCA in teaching and coaching is to better connect learners and their skills (both technical and cognitive) to the demands of the game through a process that recognises the intrinsic connection between cognition and physical performance (Kirk & MacPhail, 2002; Miller, 2015). GCA is problem-based and centred around the concept of play. Teachers use a variety of constructivist play-reflection strategies to extend students' "knowing what to play" and "knowing how to play" (McNeill et al., 2004).

GCA and TGfU: Similarities and differences

GCA and TGfU differ in terms of their origins, implementation, pedagogical frameworks, and teacher training. GCA was led by the MoE in Singapore and was formalised into the official PE syllabus as part of the National Physical Education Curriculum Reforms and disseminated nationwide (McNeill et al., 2004). In contrast, TGfU was introduced by Bunker and Thorpe (1982) and was primarily driven by academics, relying on the education systems of different countries and individual teacher acceptance for dissemination. In addition, GCA follows the standard model

proposed by Griffin et al. (1997), whereas TGfU allows teachers the freedom to adapt their teaching strategies based on tactical instruction (McNeill et al., 2008). TGfU has become more diversified globally, whereas GCA is more policy-orientated (Tan et al., 2002). The GCA is implemented by the NIE in Singapore to ensure that all PE teachers receive systematic training to align the teaching and learning process with national education policies (Fry et al., 2010). Overall, the GCA is a localised and institutionalised application of TGfU in Singapore's PE system, and its highly standardised nature ensures pedagogical consistency while potentially limiting teachers' pedagogical flexibility and creativity (Rossi et al., 2007; Fry et al., 2010).

Both TGfU and GCA aim to promote tactical learning through games, but they differ markedly in their origins and dissemination, with TGfU emerging as an academic initiative and GCA formalised as national policy in Singapore. While GCA ensures systematic teacher training and pedagogical consistency, it risks constraining teachers' flexibility and creativity compared to the more adaptive nature of TGfU.

2.2 The Implementation of GBA

Numerous studies have conducted in-depth analyses of the GBA worldwide (Díaz-Cueto et al., 2010; Li & Cruz, 2008; Light & Tan, 2006; Oslin & Mitchell, 2006; Peters & Shuck, 2009; Wang & Ha, 2009; Wright et al., 2009; Nathan, 2016; Araújo et al., 2017; Wang & Wang, 2018; Güneş & Yılmaz, 2019). Although these review articles vary in their specific focus, the findings show that most studies have been conducted in Western countries such as those in Europe, the United States, Australia, the United

Kingdom, and Spain. In contrast, research in Asia is relatively limited, with existing studies mainly focusing on regions such as China (Hong Kong) and Malaysia (Harvey & Jarret, 2014; Kinnerk et al., 2018; Fagundes et al, 2024; Nathan, 2018, 2019; Wang, 2014).

Light and Tan (2006) argued that the implementation of GBA in culturally distinct societies may involve significant cultural implications, particularly regarding how pedagogical methods are interpreted, applied, and judged in terms of validity. The cultural, social, and institutional contexts in which pre-service and newly in-service teachers operate are therefore critical in shaping their understanding of the curriculum and teaching experience (Light & Butler, 2005). Wang and Ha (2009) highlighted significant differences between Eastern and Western educational environments, particularly in teachers' values and approaches to classroom discipline. Accordingly, investigating the implementation of GBA across varied national and cultural contexts is crucial for evaluating its adaptability and pedagogical effectiveness.

This section reviews existing literature comparing teacher and coach perceptions of GBA implementation in Western contexts (the United States, the United Kingdom, Europe, Australia, New Zealand, Spain, and Canada) and Eastern contexts (Mainland China and Hong Kong, Malaysia, and Japan), with particular attention to the perceived challenges and benefits associated with its implementation.

2.2.1 Global

Benefits of GBA

GBA can enhance equal opportunity and address power imbalances between students and teachers, fostering more equitable social relationships and encouraging positive social learning (Light & Fawns, 2001, 2003; Light & Butler, 2005; Light, 2012; Harvey, 2009; Fry et al., 2010; Ribeiro, 2024). By requiring students to adopt managerial roles (e.g., coach, referee) and to assume responsibility for organising and managing sporting events, GBA affords students greater autonomy (Hastie & Mesquita, 2016). Light (2012) expanded the understanding of the potential for using GBA to develop personal, social, and ethical learning (i.e., cooperation, fair play, responsibility and ownership, social justice, and moral development). Empirical studies report that players respond positively to increased autonomy and empowerment and assume primary responsibility for solving tactical problems rather than receiving prescriptive solutions (Evans & Light, 2008; Koekoek et al., 2014).

GBA interventions have been associated with improvements in players' and students' communication, teamwork, and problem-solving (e.g., Harvey, 2009; Pill, 2016; Casey & Goodyear, 2015; Farias et al., 2018). Harvey (2009) noted that interscholastic soccer players perceived improvements in communication and teamwork following GBA interventions. Harvey and Atkinson (2017) pointed out that adoption of the TGM was associated with improved on-field communication and greater team cohesion, evidenced by a larger number of players engaging in tactical discussions during training.

Studies report that GBA can increase students' and players' PA (Miller et al., 2016; Smith et al., 2015). Smith et al. (2015) examined PA and motivational responses among

boys and girls and found that lessons taught using the TGM elicited higher PA than direct instruction in primary-school courses. Beyond learner outcomes, studies also indicated that GBA is associated with improvements in teachers' pedagogical practice. Goodyear and Dudley (2015) further noted that teachers can take an active role as facilitators by observing progress, successes, and failures during the game and providing information as needed. Alizadeh's (2024) reported that coaches can design GS activities to help young female students develop more active lifestyles and improve health-related indicators.

GBA supports learning in cognitive, affective, and psychomotor domains (e.g., Grey et al., 2009; Casey & Goodyear, 2015; Fitton Davies et al., 2021; Harvey & Jarrett, 2014; Kinnerk et al., 2018; Lee et al., 2014; Evans & Light, 2008; Thomas et al., 2013; Dania & Zounhia, 2017; Evans, 2012; Harvey et al., 2010). In the affective and psychological domains, students and players experience greater motivation and enjoyment after using GBA (e.g., McKeen et al., 2005; Evans & Light, 2008; Thomas et al., 2013; Grey et al., 2009; Dania & Zounhia, 2017; Evans, 2012; Pill, 2015; Stolz & Pill, 2014). For example, Wang et al. (2024) noted that TGM was associated with improvements in students' affective domains, including self-determined motivation, need fulfilment, and enjoyment of PE. Comparative studies indicated that primary school courses taught using the TGM elicit higher motivation, engagement, and enjoyment than traditional approaches (Alison & Thorpe, 1997; Berkowitz, 1996; Wright et al., 2009). GS focuses on improving learning outcomes through play experiences that enhance learning by promoting belonging (social interaction, building

friendships), achievement (perceived progress, recognition), and self-direction (opportunities for autonomous decision-making) (Werner et al., 1996; Light et al., 2014). Zhang et al. (2012) investigated the effects of PP on skill performance in table tennis, where PP facilitated the transfer of skill learning, with the benefits being more pronounced for high-level athletes and inconsistent performance for students with lower skill levels.

In the cognitive domain, most research has centred around decision-making, tactical awareness, and game performance (eg., Gubacs-Collins, 2007; Hodges et al., 2018; Gréhaigne et al., 2001; Farrow et al., 2008; Light & Evans, 2010; Pill, 2015, 2016; Thomas et al., 2013; Mesquita et al., 2012; Evans, 2012; Harvey et al., 2010; Harvey et al., 2010; Miller et al., 2016; Práxedes et al., 2016; Kinnerk et al., 2018; Manninen et al., 2025). According to Gréhaigne, Godbout, and Bouthier (2001), the GBA increase participation in peer discussions, thereby promoting the development of the cognitive dimensions of performance. Teachers have identified the TGM to be effective in developing students' tactical understanding and decision-making (Gubacs-Collins, 2007; Hodges et al., 2018). Several studies have recognised that games help develop students' tactical understanding and decision-making (Light & Evans, 2010; Pill, 2015; Thomas et al., 2013) and help transfer practice to competition (Harvey & Atkinson, 2017; Evans, 2012; Light, 2004; Harvey et al., 2010; Miller et al., 2016; Práxedes et al., 2016; Farrow et al., 2008). Mesquita et al. (2012) examined a hybrid Sport Education (SE)–IGCM unit implemented during a football season to evaluate its effects on pupils' decision-making, skill execution, and overall game performance. They reported that

teaching within an SE environment structured by IGCM learning tasks was associated with improvements in skill execution and tactical decision-making.

In summary, GBA is consistently associated with positive outcomes across cognitive, affective and psychomotor domains, including increased PA, communication, teamwork and problem-solving, and more equitable classroom relations. However, the evidence is frequently context-dependent, and variability in implementation, teacher expertise, and student engagement suggests that the effectiveness of GBA may not be consistent across all settings. This implies that, while GBA offers substantial pedagogical benefits, its effectiveness appears to be contingent upon both contextual and pedagogical factors.

Challenges of GBA

Teachers, coaches, students and players have encountered a range of challenges in the implementing of GBA. These challenges include logistical constraints, such as limited equipment (e.g., insufficient balls), inadequate space, class size, time pressures, and course plans. Pedagogical challenges encompass questioning skills, understanding of the pedagogy, lack of tactical knowledge, limited teaching experience, and entrenched professional beliefs. Additional challenges related to learners and contextual factors include socialisation processes, insufficient cognitive readiness, and resistance to change (e.g., Cushion, 2013; Harvey et al., 2015; Roberts, 2011; Brooker et al., 2000; Cruz et al., 2012). In addition, studies suggest that coaches' approaches to using games conflict with the guidelines set out in the GBA (Karagiannis & Pill, 2017; Light & Evans, 2010).

Coaches' decisions about training, as well as their interpretations of GBA, are shaped by their deeply ingrained habits and prior experiences (Light & Evans, 2013). Several studies refer to coaches' and teachers' experiences and beliefs influence their acceptance of GBA (e.g., Light & Evans, 2010; Harvey et al., 2010; Roberts, 2011; Wright et al., 2009; Light et al., 2014). This is often attributed to the changing role of the teacher, from delivering direct instruction in correct technique to facilitating learning, a shift that many teachers have found anxiety-provoking and professionally challenging (Butler, 1996; Brooker et al., 2000; Light, 2002; Harvey et al., 2010; Roberts, 2011; Wright et al., 2009). For example, Evans (2006) and Roberts (2011) documented the difficulty of shifting in practice from technique-centred instruction to game-centred coaching that employs purposeful questioning. Moreover, Pill (2011), in a study involving 64 practising PE teachers engaged in the design and implementation of GBA, reported that many teachers did not yet fully understand the approach and implemented it inconsistently.

Professional socialisation is a key factor shaping teachers' interpretation and implementation of GBA (Jarrett & Light, 2017; Prior & Curtner-Smith, 2020). GBA promotes learner autonomy but requires teachers to possess a high level of pedagogical skill, including deep content knowledge and classroom leadership (Hastie & Mesquita, 2016; Silva et al., 2021). These demands are particularly challenging for novice teachers. Reviewing pre-service implementations of GBA, Silva et al. (2021) reported that new teachers often experience frustration, which they attributed to limited in-situ support from GBA specialists (O'Sullivan, 2003).

Additionally, during GBA-related cultural shifts, coaches must adapt to a more facilitative role and may be concerned about compromising their professional credibility (Roberts, 2011). Moreover, limited understanding of interactions between teachers and students can make it difficult for teachers to judge when to intervene and how to guide learners' self-directed learning effectively (Casey, 2014; Goodyear & Dudley, 2015; Thomas et al., 2013). Accordingly, studies recommend that PETE programmes promote the active participation of cooperating teachers in professional development and prioritise building pre-service teachers' capacity to implement student-centred approaches (Fletcher et al., 2020; MacPhail et al., 2013).

Teachers' and coaches' implementation of GBA is contingent on their proficiency with the approach and on their teaching expertise and knowledge (McCaughtry et al., 2004; Barrett & Turner, 2000; Howarth, 2005; Ward & Ayvazo, 2016; Harvey et al., 2010; Roberts, 2011). Harvey and Atkinson (2017) argued that the success of the TGM in youth sport coaching depends on coaches' familiarity with the approach, alongside careful instructional planning and sustained application to meet learners' developmental needs. Similarly, research on TGfU indicates that the demands on pedagogical knowledge and expertise are considerable, often generating frustration and pushing teachers beyond their comfort zone (Barrett & Turner, 2000; Howarth, 2005).

Teachers who lack pedagogical content knowledge struggle to design developmentally appropriate games during the planning process (McNeill et al., 2004) and implementation is frequently perceived as time-consuming and challenging (Dania & Zounhia, 2017; McCaughtry et al., 2004; Wright et al., 2009). Evidence indicates

that effective learning of higher-order tactical thinking and performance concepts requires substantial time (Miller, 2015), and that brief inductions with limited support are insufficient to narrow the ‘epistemological gap’ between learners’ understanding and enactment (Harvey & Jarrett, 2014). A lack of conceptual clarity about GBA among coaches and teachers can foster misconceptions (Reid & Harvey, 2014). Related challenges include deciding when to address technical skills and having adequate time to do so (Harvey et al., 2015; Light, 2004). Accordingly, stronger integration of GBA within PETE programmes, alongside sustained support during practicum, appears warranted.

Limited opportunities for GBA-related teacher education and training (Curtner-Smith et al., 2008; Casey & Goodyear, 2015; Chu & Zhang, 2018; Harvey & Jarrett, 2014; Silva et al., 2021), together with the additional planning time required for GBA courses (Casey & Dyson, 2009; Miller, 2015; Pill, 2016; Cushion, 2010) present substantial challenges for teachers and coaches and necessitate greater investment in professional development (Goodyear, 2017; Kim et al., 2006). Casey and Dyson (2009) examined an in-service PE teacher’s delivery of a TGfU tennis unit and reported pedagogical and time-related constraints during planning and implementation. Miller (2015) argued that the length of the intervention (i.e., the amount of time students spend learning through teachers’ use of GBA) and, as an extension of this premise, the length of the induction (i.e., the amount of time that teachers spend learning about how and why to implement the GBA) have a significant impact on both teachers’ and students’ experiences with GBA (Harvey & Jarrett, 2014). Thomas et al. (2013) demonstrated

that the TGM was consistent in developing players' understanding of the game and decision-making, possibly due to the shorter intervention.

Questioning is central to student-centred learning and facilitates dialogue, reflection, and the intentional processing of ideas (Light, 2014). It is a strategy used by teachers to motivate students to engage, think, and learn (Lombardi, 2019; Wilen & Clegg, 1986). Within GBA, effective questioning should encourage learners to reflect on performance in order to solve problems and make good decisions (Oslin & Mitchell, 2006). Many studies report that teachers and coaches experience difficulties in using questioning strategies (Harvey et al., 2016; Harvey & Light, 2015; Roberts, 2011; Karagiannis & Pill, 2017; Pill, 2016; Thomas et al., 2013; O'Leary, 2014, 2016; Light, 2014). For example, Harvey and Light (2015) distinguished between review questioning, which requires students to recall information, and authentic questioning, which elicits deeper, more detailed responses. Harvey et al. (2016) noted that teachers and coaches often confine their questioning to low-level comprehension or recall. Thomas et al. (2013) found that some coaches focused excessively on the question itself and neglected to listen to the player's responses, thereby limiting clarity in the player's thinking.

In addition, the effectiveness of questioning strategies is influenced by other factors. Roberts (2011) noted that some coaches lacked sufficient pedagogical content knowledge when using questioning. Karagiannis and Pill (2017) found that group feedback time was difficult to use effectively owing to inadequate advance planning of questions, and Pill (2016) mentioned that some players expressed dissatisfaction with

being questioned. Other studies identified further challenges, including a lack of tactically focused, game-specific questions (McNeill et al., 2004), insufficient wait time for learner responses (O’Leary, 2014), an over-emphasis on the facilitator role by teachers, and limited promotion of whole-class participation in the questioning process (Díaz-Cueto et al., 2010). Nevertheless, there is evidence that questioning skills can be developed through practice (McNeill et al., 2004) and can be used effectively in certain contexts (O’Leary, 2016). In elite coaching, a study of GS reported that New Zealand coaches believed an athlete-centred approach combined with questioning helped to build strong relationships and enhance player competence (Evans, 2012).

Student dispositions towards GBA can influence teachers’ implementation. Casey and Kirk (2020) argue that pedagogical change is often difficult to promote because pupils hold preconceived notions tied to traditional, formal curricula, and some learning environments emphasise traditional, skill-based instruction (Kirk, 2009). Disruptive behaviour and low participation have been linked to teachers’ limited mediation of role-play and peer-assisted learning processes (Goodyear et al., 2014; Hordvik et al., 2019a, 2019b). Moreover, students limited cognitive development can make it difficult for them to fully comprehend game demands (Harvey, 2009). Consequently, both teachers and coaches, and students and players, may experience discomfort when adopting a new approach to teaching and learning (Potrac et al., 2007).

In summary, the effective implementation of GBA appears to be constrained less by the approach itself than by the capacities and socialisation of those enacting it. Many teachers and coaches lack sustained preparation, pedagogical content knowledge, and

questioning expertise, while entrenched professional norms and habitual practices hinder the shift to a facilitative teaching role and may even threaten perceived professional credibility. Consequently, the design of developmentally appropriate games and the enactment of student-centred pedagogy remain inconsistent in practice. These challenges highlight the necessity for long-term, practice-embedded professional development, alongside institutional support, to build proficiency, reshape teacher dispositions, and normalise GBA within educational programmes and workplace contexts.

2.2.2 In Asian Cultures

This section shifts focus to the Asian context, covering mainland China alongside Hong Kong, Singapore, Japan and Malaysia. Compared to research predominantly originating from the West, these case studies better illustrate the practical distinctions in GBA implementation across varying cultural and societal conditions.

Mainland China and Hong Kong

TGfU was introduced in China in the 1990s (Wang, 2013b). In 1997, the Department of Physical Education at the Hong Kong Institute invited the Rod Thorpe, a founder of TGfU, to lead a workshop. In July 1998, the State Education Commission of the PRC hosted a seminar and workshop on TGfU at Suzhou University, with Thorpe delivering a lecture. The 2nd International Conference on Physical Education Teaching Reform in Schools, held at the Education University of Hong Kong in 2004, featured a lecture on

TGfU pedagogy by Dr Joy Butler (USA). The 3rd International Conference on TGfU was held at the Hong Kong Institute of Education in 2005, with a keynote address by Dr Richard Light (Australia). In 2007, the Tianjin Institute of Physical Education invited Que Yueqing (Taiwan) to present on the theoretical background, teaching strategies, and the status of TGfU in academic research and practical promotion in Taiwan (Zhang & Yin, 2018).

Although TGfU was implemented in Chinese PE courses in 1998 (Liao et al., 1998), it has largely remained at the stage of theoretical research (Zheng & Gao, 2015). Chinese scholars attribute this to constraints on teaching time, resources and space, as well as the duration and intensity of teaching processes (Dang et al., 2020). Many PE teachers have a limited understanding of the approach and show little motivation to change pedagogical beliefs and practices (Dang et al., 2020). Studies from Hong Kong report difficulties in classroom management, in translating tactical knowledge into pedagogical content knowledge, and in securing sufficient space for play (Cruz, 2004; Li & Cruz, 2006; Ha et al., 2008). In Hong Kong, prevailing school practices are influenced by Confucian traditions that emphasise hierarchical relationships and deference to teachers, which has historically supported teacher-centred pedagogy and strong classroom control (Kwon, 2002). Against this backdrop, pre-service teachers in Hong Kong may find TGfU more challenging to adopt than their counterparts in Western contexts.

Most schools in Hong Kong have limited sports facilities, and implementing TGfU is often feasible only when class sizes are reduced (Liao et al., 1999). A similar situation

exists in mainland China (Zhou, 2010), where evidence indicates that teachers use TGfU more effectively when facilities are adequate and classes are smaller (Ma, 2012). Although policy stipulates that PE classes should comprise around 30 students, many schools struggle to meet this, with 40-50 students common; such large classes constrain teaching (Zhang et al., 2019). While TGfU provides opportunities for small-group discussion and communication, limited instructional time and large class sizes can diminish teaching and learning effectiveness (Ha et al., 2014).

In China, many studies are largely descriptive, introducing and emphasising the features and rules of TGfU (Xiao, 2019; Zeng, 2011, 2019; Sun, 2013; Li & Chen, 2011; Dang et al., 2020; Wan, 2020). Comparative studies of TGfU and traditional approaches generally report no significant differences in students' skill performance (Lin & Luo, 2018; Sun, 2013; Wan, 2020; Li & Chen, 2011). By contrast, Zhang (2023) conducted an eight-week study with university students and found TGfU to be more effective than a traditional approach on the five-point fan run, tennis technique, and student satisfaction with instruction.

Wang (2023) conducted a 12-week intervention with secondary school students and reported that TGfU supported the development of healthy behaviours and physical virtues. Several studies highlight individual differences among students and the need to attend to changes in their psychological processes (Qian et al., 2010). These demands place considerable pressure on teachers' creativity and holistic planning, requiring them to study materials closely, create appropriate contexts, and differentiate instruction, thereby increasing workload and perceived stress (Zou et al., 2017). When using TGfU,

teachers must consider learners' motor-skill levels, the content and difficulty of techniques, and select and sequence tasks, accordingly, developing methods that align with students' characteristics (Tong, 2014). TGfU can make classroom management more challenging; desired outcomes depend on secure theoretical understanding and skilful enactment, including effective control of classroom order (Du & Chen, 2015). Finally, Wang and Wang (2018) reported that TGfU lessons increased PA and helped classes meet recommended thresholds for moderate to vigorous PA time.

Most studies conducted in Hong Kong have focused on the challenges encountered by PE teachers during the teaching and learning process (Wang, 2013; Ha et al., 2014). A recurring concern is the lack of theoretical support, particularly the insufficient understanding of TGfU among cooperating or mentor teachers, which has been found to significantly hinder pre-service primary teachers' development of conceptual knowledge and, consequently, their practical implementation of TGfU-related instruction (Wang & Ha, 2012b). Conflicting pedagogical beliefs between pre-service teachers and mentors further complicate the application of TGfU. For instance, while pre-service teachers and co-teachers generally advocate for teaching technical skills prior to game play, mentors tend to favour introducing these skills after game-based experiences (Wang & Ha, 2013a). This divergence reflects a broader tendency within the PE culture and curriculum in many districts to prioritise technical skill acquisition, which, in turn, shapes teachers' understanding and acceptance of GBA such as TGfU (Wang, 2013; Wang & Ha, 2012a). Nevertheless, this influence is not conclusive (Wang & Ha, 2013b). In addition, both individual and contextual factors have been identified

as shaping pre-service teachers' perceptions of the TGfU learning process. These include teachers' knowledge of the game, pedagogical beliefs, and prior learning and teaching experiences, as well as broader structural elements such as governmental policy, institutional support, and the prevailing professional culture (Wang & Ha, 2012b; Ha et al., 2014).

Several studies have identified the influence of mentor-mentee interactions on pre-service teachers' implementation of TGfU. While mentors occasionally supported pre-service teachers in understanding and contributing to TGfU-based instruction, the guidance provided was sometimes idealistic and not always grounded in practical application. Moreover, due to limited knowledge of TGfU among many cooperating teachers, mentoring frequently defaulted to conventional instructional approaches rather than being specifically tailored to the TGfU framework. Nevertheless, from the perspective of mentor teachers, supporting the implementation of TGfU also contributed to their own professional development (Wang & Ha, 2012b). Despite these challenges, there are some studies that take a positive view. For example, Li and Cruz (2008) reported that in Hong Kong, pre-service PE teachers perceived TGfU as a viable pedagogical model and that the use of TGfU as a learning framework during school placement teaching contributed to students' cognitive development and enhanced classroom enjoyment. Similarly, Wang and Ha (2009) found that many pre-service PE teachers believed that TGfU was able to improve students' classroom engagement, tactical understanding and inclusiveness, and therefore they were likely to continue using TGfU in their future teaching.

Barriers to the adoption of GBA in China appear to mirror those encountered in other countries (Light, 2002; McNeill et al., 2004; Rossi et al., 2007; Wright et al., 2009). However, empirical research on TGfU in the Chinese context remains limited, particularly in relation to students' and teachers' emotional experiences, patterns of social interaction, and the professional dispositions and practical challenges faced by PE teachers in implementing GBA. This limits a comprehensive understanding of how socio-cultural factors in China shape the implementation and reception of GBA in school settings.

Singapore

As I discussed the origins of GCA in the previous section, I won't go into too much detail here.

Much of the affective research has focused on teachers' and learners' attitudes and perceptions of GCA (Harvey & Jarrett, 2013; Miller, 2015). In addition, some studies have pointed out that GCA has no significant advantage over other pedagogies in terms of enhancing technical skills. At the same time, some scholars have criticised GCA for the lack of a unified and adequate theoretical perspective on its pedagogical model and its role in perceptual-motor-learning mechanisms (Chow et al., 2007; McMorris, 1998; Miller, 2015), as well as arguing how the underlying concepts of GCA contradict the deep-rooted beliefs of teachers (Wright et al., 2005).

Fullan (1991) argued that educational change rarely occurs when institutions fail to provide the human and material resources required for implementation. The quality

of GCA is constrained by environmental factors such as time, space, and equipment (McNeill et al., 2004, 2008; Fry et al., 2010; Lam, 2002; Leow, 2004; Rossi et al., 2007). Moreover, large class sizes, often exceeding policy limits, impede the use of authentic assessment in GCA and, under such suboptimal conditions, students may disengage regardless of the pedagogy employed (Fry et al., 2010). Effective implementation also demands deep teacher expertise in games taught through tactical models, extending well beyond rules and basic strategies (Metzler, 2011). However, cooperating teachers with limited GCA experience often struggle to provide specific pedagogical support to pre-service teachers (Fry et al., 2010).

Evidence indicates several benefits of the GCA, though its reported benefits should be interpreted cautiously considering contextual and methodological factors. A systematic review found gains in declarative knowledge, game performance, perceptual skills and enjoyment (Miller, 2015). However, most studies are short-term and may not capture sustained learning or variations in instructional quality. While GCA has been linked to perceived competence and autonomous motivation, including interest, enjoyment and effort (Miller, 2015; Holt et al., 2002; Fry et al., 2010), these effects often depend on teacher expertise and the fidelity of game-centred implementation. Assessment practices in GCA can help teachers track students' construction of domain-specific knowledge (Fry et al., 2010), yet consistent application is difficult under limited professional support and assessment pressures. Similarly, although participation in PE has been associated with improved mental health and cognition (Biddle & Asare, 2011; Chung et al., 2019), it remains uncertain whether these outcomes stem from

pedagogy or general PA. Overall, GCA appears to enhance the perceived value of PE, especially for students who enjoy extended play (Leow, 2004). Nonetheless, further research should explore the conditions under which these benefits emerge across diverse cultural and institutional settings.

Japan

Since the end of the Second World War, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) has overseen Japan's national curriculum. The Course of Study provides nationwide guidelines that all teachers, including those in PE, must follow; it specifies objectives and content for each school stage. The curriculum is revised roughly every ten years to address emerging needs. Compulsory education lasts nine years, comprising six years of primary school and three years of lower secondary school. Upper secondary education is not compulsory, yet approximately 97% of students' progress to this level. Within the current curriculum, PE emphasises learning knowledge and skills through improved or modified games (Suzuki, 2014).

Nonetheless, the Japanese PE curriculum has been developed by categorising sports games with similar characteristics and using specific sports as prototypes to be practiced within each group. In the current essentials of learning instruction, ball games are categorised into three types: goal-type, net-type, and baseball type, thus avoiding the tedious process of naming each specific sport individually (Suzuki, 2014). There are two main traditional methods used to teach football in Japan. The first is the roll out the ball approach (Graham, 2008), in which students are given a ball and the rules of

the game and then asked to play the game. The second is the military drill method, which emphasises the refinement of skills through extensive repetition in games but involves little in the approach of real game situations (Suzuki, 2014). Since the number of hours of PE cannot exceed that of other subjects, it is not possible to cover all types of physical activities in PE courses or to have a coach for each activity (Suzuki, 2014).

The current English-language literature on the implementation of GBA in Japan is relatively limited. This may be related to the fact that Japanese academics have published their research mainly in Japanese and less frequently in English for international publication. Nonetheless, Light in his book *Game Sense for Teaching and Coaching international perspective*, documents in detail his experiences of teaching in Japan and presents case studies from other researchers, which provide an important reference for understanding the practice of GBA in Japan. The positive and supportive socio-cultural environment needed to adopt a play-aware approach is important everywhere, but it is particularly important in most Asian environments. Asian students and athletes tend to be more worried about failing and losing face in public, reflecting the society and culture in which they live. We all learn from our mistakes and should not be afraid to make them, but in both Western and Eastern environments, athletes, students, coaches and teachers tend to view mistakes as failures. Eliminating the fear of making mistakes is a challenge for GS coaches wherever they are in the world, but it is more pronounced in Asian countries, and it is evident in the education systems of Japan, Korea and China. In sports such as rugby in Japan, the practice of training and playing according to a fixed pattern is widespread, which is consistent with a pattern of

extensive repetitive training in pursuit of perfect execution of a skill or technique, which can never be executed perfectly (Light & Curry, 2021).

Suzuki et al. (2021) used a generalised qualitative method to identify possible cases of learning that occurred through playing a new game. The aim of the study was to change the traditional concept of dodgeball, which involves hitting one player and dodging the ball, and instead create a new game that is more like a typical ball game where the ball is passed between players, and the opposing player must block or intercept the ball. In doing so, they wanted to understand what children learnt from playing this alternative to dodgeball. They developed the 'here + here game' as an alternative to dodgeball. A study on learning from adaptation games in a Japanese basketball unit by Murase and Ambe (2021), in which 7th grade students practiced basketball games for ten sessions, showed that in addition to tactical learning through adaptation, students developed problem-solving skills and social interest while validating that the teacher plays an important role in the problem-solving process.

Malaysia

PE is compulsory in Malaysian primary and secondary schools. Its stated aims are the development of students' cognitive, psychomotor and affective domains (Griffin & Sheeny, 2004; Ab Rahman et al., 2020). Policy documents indicate that TGfU has been promoted as the preferred GBA in primary schools since 2013 and in secondary schools since 2017 (KPM, 2016). Within the secondary syllabus, approximately 75% of content is allocated to skill areas such as gymnastics, rhythmic gymnastics, games and athletics,

and 25% to fitness. Emphasis is therefore placed on the acquisition of basic sport and game skills for subsequent application in play and PA (Ab Rahman et al., 2020).

Evidence from curriculum analyses and classroom observations suggests a persistent skills-based orientation. When student-centred approaches are implemented, core TGfU elements that integrate skill and tactics are frequently marginalised, and a linear, skills-based approach remains common despite revisions referencing TGfU (KPM, 2002, 2010; Jeganathan & Ratnavdivel, 2012; Nathan, 2016; Nathan et al., 2018). A preliminary review of games content for badminton, football and hockey in the Standard Document of Curriculum and Assessment indicates formal alignment with the original TGfU framework; however, in practice tactical components are often downplayed (KPM, 2016; Nathan et al., 2018).

Research on TGfU within Malaysia contexts has expanded considerably, focusing on teacher implementation, student motivation, and assessment practices. Peters and Shuck's (2009) comparative study of pre-service teachers in Malaysia and Australia revealed that while participants in both countries embraced TGfU in higher education, they struggled to apply it effectively in primary school settings. The authors attributed this difficulty to cultural and contextual incongruities between TGfU's constructivist principles and local teaching traditions. This highlights how pedagogical innovation can be constrained by existing educational norms and teacher socialisation. Similar tensions have been observed in applied sport settings. Nathan's (2017) comparative study of Malaysian and Indian junior hockey players found that TGfU-based sessions elicited higher heart-rate responses and improvements in selected tactical indicators

compared with traditional skill-drill instruction. However, these effects were not consistent across all measured variables, suggesting that the impact of TGfU on physiological and tactical outcomes may depend on contextual and individual factors. Nathan et al. (2018) further noted that competition-based PE programmes continued to reinforce linear, skill-focused pedagogies, limiting teachers' willingness to experiment with game-based learning.

Recent studies have attempted to address these gaps by exploring students' affective responses and the development of contextual assessment frameworks. Ab Rahman et al. (2020) found that TGfU enhanced students' enjoyment in PE, while Samdin et al. (2021) proposed a Holistic Assessment Standard to evaluate psychomotor, cognitive and affective learning outcomes. However, these studies remain largely descriptive and focus on outcomes rather than pedagogical processes. Overall, Malaysian research on TGfU confirms its motivational and affective benefits but also reveals persistent implementation barriers rooted in cultural expectations, assessment pressures, and limited teacher training.

Overall, in Asian contexts, the development of GBA varies with background, culture and curriculum policy. In Japan, much research is published in Japanese, resulting in a thin English-language evidence base. China likewise publishes predominantly in Chinese, with studies largely confined to short-term comparisons of TGfU and skill-based teaching, giving limited attention to teacher professional learning, classroom assessment and wider social contexts. Singapore mandates the use of GCA; although studies commonly report benefits for enjoyment, perceived competence,

participation and affect, authentic assessment and sustained tactical dialogue are difficult to achieve in classroom settings. In Malaysia, policy and curriculum documents broadly endorse and align with TGfU, and research tends to focus on students' affect and motivation, teacher and coach implementation challenges, and the local development of assessment tools.

Chapter Three: Literature Review

This chapter discusses the historical background of China's PE education reform and the evolution of its curriculum, particularly the key turning points from the introduction of modern PE to the present day. Reform has progressed through several stages, moving from an early gymnastics-based model orientated towards military training and physical exercise to a teaching philosophy that prioritises the students' holistic development and the cultivation of core literacy. This trajectory provides the basis for understanding recent pedagogical innovations, with the emergence of GBA representing a further development in this direction.

GBA supports students' tactics and technical learning while also developing cognition, emotions, social interaction, and communication, thereby embodying a student-centred educational philosophy. This approach aligns with the principles of "health first" and 'comprehensive student development' advocated in the *Physical Education and Health Curriculum Standard (2022 Edition)*. The new national PEH curriculum standard emphasises the cultivating of students' competencies, including physical abilities, healthy behaviours, psychological qualities, and social adaptability, and advocates diverse teaching methods to stimulate students' interest and active participation.

Teachers' practices also shape the pedagogical beliefs of PETE students. Research indicates that, despite exposure to GBA, PETE teachers remain influenced by traditional teaching cultures, assessment approaches, and school-based environments as they enter the profession, which makes full implementation of the concepts learned

challenging. These patterns reflect how the historical evolution of PE reform and curriculum development continues to influence teacher education today. In this way, the history of PE reform, curriculum policy, and PETE programmes are not isolated themes but interdependent dimensions of China's contemporary PE system, collectively shaping teachers' professional dispositions and pedagogical practice.

The Chinese context

China has the world's largest education system and has experienced multiple phases of reform. The government of the People's Republic of China (PRC), as the leader of the centralised education administration, has assumed responsibility for designing and organising systematic reform initiatives (Yin, 2013). Following the founding of the PRC, the central government prioritised the development of infrastructure to ensure adequate space for PA and to improve public health in the post-war period.

Government policy on, and responses to, PE are major determinants of the nation's sporting culture and may shape citizens' attitudes towards exercise after leaving school (Tsai & Zhou, 2015). The curriculum reform launched in 2022 constituted the ninth major round of change, bringing systematic adjustments to objectives, curriculum structure, implementation requirements, teaching methods and academic quality standards. These changes have created substantial challenges for stakeholders, particularly teachers and students, who must adapt to new policies and practices. International and national contexts inevitably influence both the nature and implementation of reforms (Leithwood et al., 2002). In introducing change, it is

important to preserve the core of traditional pedagogy while drawing on international best practice and ensuring contextual relevance. Consequently, reforms often build on existing practice, producing ‘hybrid’ models that blend Western approaches with ‘Chinese characteristics’, a process that can generate tensions, especially around student-centred versus teacher-centred orientations and the respective roles of teachers and students.

Basic education and the curriculum system in China are frequently characterised as ‘exam-orientated’, with reported issues including: outdated educational concepts; a narrow, subject-based curriculum; content that is weakly connected to students’ lived experiences and social realities; learning methods that emphasise drilling and memorisation; and assessment that places excessive emphasis on scores and selection for further study (Liu & Kang, 2011). Within this system, PE is often treated as a ‘deputy subject’, and PE teachers’ remuneration, professional status and social rights are typically not comparable to those of ‘main subject’ teachers. As pressure to advance students to the next level intensifies, PE becomes marginalised in some schools (Zhang, 2015). Despite outward-looking changes to pedagogy and curricula, many traditional cultural practices and attitudes persist.

This chapter examines the historical development of school PE and its impact on the Chinese education system. It also considers the implementation of GBA in China to illuminate teachers’ and students’ responses to the new national PEH curriculum standard. Further, it explores the influence of PETE programmes on future graduates, identifying strengths and weaknesses in current preparation, highlighting effective

teaching methods to enhance instructional quality, and indicating which teaching and practicum experiences best support career development and pedagogical beliefs, thus contributing to graduates' holistic development.

3.1 Historical Context of PE Reform

Major changes in the historical context and political-social restructuring have profoundly influenced the development of the contemporary education in China and globally. The curriculum is the central to educational endeavour, and educational reform cannot be separated from curriculum reform (Fullan, 2007). Social development provides the material foundation for curriculum reform and shapes its direction (Luo, 2023). The origins of school PE can be traced to the period following the Opium War (Su, 1994; Zou et al., 2000). This chapter provides a historical review of PE in China, tracing its development from the late Qing Dynasty through the founding of the PRC in 1949 to the present. It is divided into several stages: the End of the Qing Dynasty (1895–1911), the Republican Period (1912–1949), the Early Period of the Founding of the PRC (1949–1956), the Period of Exploration for Socialist Construction (1956–1966), the Period of the Cultural Revolution (1966–1976), the Period of Historical Transformation (1976–1982), the Period of Reform and Opening-up (1982–1992), the Period of Exploring Socialist Market Economy (1992–2001), the Period of Basic Education Curriculum Reform (2001–2011), and the Stage of Deepening Curriculum Reform (2011–present).

The End of the Qing Dynasty (1895–1911)

The Hundred Days' Reform of 1898 stimulated significant intellectual and educational reflection in China; although it ultimately failed, it contributed to the emergence of modern PE ideals (Su, 1994, Duan & Liu, 1999). In 1901, the Qing government began to align with Japanese education policy. In 1903, it promulgated a new PE policy that introduced school "PE courses" based on military-style gymnastics (Liu et al., 2009). In the same year, the *Presented School Regulation* was issued (Institute of Curriculum and Textbook Research [ICTR], 2001), making the establishment of the new modern education system and consolidating the status of school PE.

In 1905, with the abolition of the imperial examination system, gymnastics courses were held at all levels of schools, mainly teaching Japanese military-style gymnastics and Swedish and German gymnastics. Inter-school, provincial, and national student sports competitions were also launched, and a system for training PE teachers was initially established. The goal and content of school PE in this period had a strong colour of 'military and national PE ideology', and the Qing government tried to achieve the purpose of 'strengthening the military' through PE, and the content of school PE was mainly military gymnastics and military skills such as wooden baton and spiked baton, and other items. In some church schools and Young Men's Christian Associations (YMCAs), physical activities were also carried out, involving competitive sports such as ball games and track and field, and various sports competitions were held from time to time (Li & Yang, 2002).

PE was institutionalised through alignment with Japanese policy, entering schools chiefly as military-style gymnastics, later supplemented by Swedish and German

systems, inter-school competitions, and initial teacher training. Although some schools promoted competitive sports, the period remained dominated by a militaristic, state-building rationale.

The Republican Period (1912–1949)

In January 1912, Sun Zhongshan established the Provisional Government of the Republic of China in Nanjing and created the MoE. The Provisional Government of the Republic of China enacted the *Provisional Measures for General Education* and the *Provisional Curriculum Standard for General Education* (Zhang et al., 2005). In September-October 1912, the MoE issued the *Decree on Schools at All Levels*, which included regulations on gymnastics and constituted the earliest regulatory document on school PE in China. During this period, school PE continued the late Qing Dynasty model: military-style gymnastics and military skills training remained the core content. The May Fourth Movement prompted the reform of comprehensive educational in schools. In 1913, Zhou Yichun, president of Qinghua University, stated that PE should be given the same importance as intelligence and morality in educating university students. Zhejiang University called on university students to participate in sports, and student performance improved in this climate (Zhang et al., 2005).

In 1919, the MoE proposed a programme to improve school PE, emphasising coordinated physical and mental development and outlining measures for curricular reform. The 1922 *School System Reform Order* (the Renxu school system) officially renamed “gymnastics” as the PE course. Its aims, content and forms were influenced

by the American “natural PE” movement, marking a major shift in the history of school PE and signalling the decline of the military-national PE ideology (Wang, 1995; Guo, 1996; Pan & Wang, 1994). Accordingly, the military-national conception of PE was progressively replaced by natural PE (Li & Yang, 2002).

In 1931, the MoE promulgated the National PE Law, stipulated that PE was a compulsory subject in high school and above; in 1932, the *National Physical Education Implementation Programme* was promulgated. Between 1931 to 1936, the MoE published a series of regulations, such as the *Standard for Physical Education Curriculum in Schools* (ICTR, 2001), which set detailed requirements for lesson time, morning exercises, extracurricular activity time, the aims of PE, curricular content, and equipment and facilities across school levels, thereby consolidating PE lessons and sports competitions as the principal components of school PE.

This period, school PE was dominated by a military-national ideology, with military-style gymnastics and martial skills as core content. Subsequent reforms reorientated provision towards “natural PE”, formalising PE courses and sports competitions as the principal components.

The Early Period of the Founding of the PRC (1949–1956)

After 1949, as health promotion became a central government priority, the rationale for raising PE standards shifted. From this point on, PE moved from a primary focus on youth fitness and health towards instrumental goals of labour productivity and national defence. The theoretical framework for reform drew heavily on Soviet Union

experience in curriculum and teaching standards, reflecting political alignment and the maturity of the Soviet Union system. Combining practices from revolutionary base areas with Soviet Union models, the MoE articulated a ‘health first’ framework that emphasised school PE knowledge education, exercise education and sports to improve students’ physical fitness and, ultimately, to strengthen national defence (Peng et al., 2019).

In 1951, Premier Zhou Enlai announced the *Resolution on Improving the Health of Students in All Grades*, which strengthened the organisation of PE in primary and secondary schools and increased time for PA, stipulating 1-2 hours per week; schools were also encouraged to organise multi-sport events (Wang, 2005). That year, the State Council issued the *Decision on Enhancing the Physical Fitness of Students at All Levels of Schools*, and in 1952 the MoE assumed responsibility for regulating school PE and other physical activities. In 1956, the MoE issued the *General University Physical Education* trial syllabus. Throughout the 1950s, guided by theories of PE learning from the Soviet Union, students were expected to master basic knowledge, techniques and skills, and to improve fitness through athletics, gymnastics and ball games; demonstrations, exercises, games and competitions were used to correct teaching errors. Socialist education followed the Soviet model, positioning PE to serve broader state objectives, with limited regard for individual student needs and a suppression of individuality (Jin, 2013). The period institutionalised PE through a centrally planned, Soviet-influenced model that prioritised uniformity, productivity and defence over learner individuality.

The Period of Exploration for Socialist Construction (1956–1966)

The development of the national PE syllabus in 1956 was strongly influenced by Soviet ideology and continued to shape policy for nearly half a century (Luo, 2015). In 1957, during the ‘Great Leap Forward’, which pursued unrealistic industrial and agricultural targets, schools replaced PE courses with physical labour (e.g., farming), a practice labelled the ‘Sihong Movement’ in 1958. With sport removed from PE, participation shifted to mass activities outside school hours. The second phase of PE reform then prioritised bringing virtually all secondary students (except those who were ill or disabled) up to athlete-level fitness, aligning with Soviet labour and national defence evaluations (He, 1998). Following the natural disasters of 1959, severe food shortages undermined child health and school-based physical labour was temporarily abolished.

In 1959, PE curricula and teaching materials were unified nationwide, and the State Sports Commission promulgated the *Physical Education System for Preparing for Labour and Defending the Motherland*, to be implemented across all school levels. A personnel training system was established: eight PE colleges and eleven PE schools were opened, and thirty-eight teacher training institutions created PE departments and institutes, producing large numbers of PE teachers. During this period, school PE remained strongly influenced by Soviet models (Zhou et al., 2000).

PE was reintroduced in schools between 1960 and 1966 under the guidance of the MoE’s Provisional Administrative Regulations (Rao & Wu, 2015). In 1960, the State Council required all levels of administration, including schools, to take care of the

health of their students and to ensure that they complied with the recommendations on sleep patterns and food intake, as well as with the prescribed timetable for PE courses (Wang, 2005). In 1961, the MoE established the goal of “enhancing the physical fitness of students” and formally incorporated martial arts into the syllabus. This syllabus marked the departure from the Soviet Union model and laid the foundation for the first generation of PE in New China (Wang, 2004). The period was marked by significant politicisation and an oscillation between labour substitution and formalised PE, which contributed to discontinuities in policy and practice.

The Period of the Cultural Revolution (1966–1976)

With the onset of the Cultural Revolution, schools fell into disarray as students, encouraged by the press, boycotted classes and joined revolutionary activities (Tsai & Zhou, 2017). In 1967, PE was widespread suspended (Peng et al., 2019). The foundations of school PE were dismantled: theoretical and leadership structures, curriculum design, the teacher workforce and teaching materials were disrupted, and training programmes, competitions and mass sports activities were cancelled (Wang, 2005). Although some courses were reinstated later in 1967, PE was replaced by military sports. Students were taught basic Liberation Army drills, such as formation, grenade throwing and bayonet use, and previous content was proscribed as “bourgeois education” (Hong, 1999). In many schools, military instruction was further replaced by labour education. Extracurricular sport largely disappeared as facilities were occupied

and equipment damaged, and students' after-school time was mainly devoted to "militia training" and "military learning activities" (Wang, 2005).

Students from urban areas contributed to the popularisation of rural sport to some extent (Lu, 2016), due to the large-scale "educated youth in the cultural revolution and going to the mountains to go to the countryside" campaign in 1968. From the late 1970s, schools gradually resumed basic teaching and learning, and universities restarted admissions (Tsai & Zhou, 2017). Throughout this period, PE was frequently substituted with productive labour, and new PE and extracurricular offerings were predominantly military programmes. In 1975, the State Council approved the *National Standard for Physical Exercise* (trial), which required schools to guarantee students one hour of physical exercise daily. Overall, the period was marked by the extreme politicisation of schooling, with PE alternately militarised and supplanted by labour, undermining curricular continuity and professional capacity.

The Period of Historical Transformation (1976–1982)

In 1979, the former State Sports Commission and the MoE issued the *Circular on the Opinions of the National Student Sports Competition System*, calling for a sport competition system to promote the popularisation and improvement of sports. In May, the "Yangzhou Conference" set directions for school PE, followed by the *Provisional Regulations on Physical Education in Primary and Secondary Schools*, which identified the fundamental purpose of school PE as enhancing students' physical fitness. Subsequently, nationwide PE activities were organised under this guiding principle, and

on 5 October the *Interim Provisions on Physical Education in Primary and Secondary Schools* and the *Interim Provisions on Physical Education in Higher Education Institutions* were issued. Since 1979, the government has periodically revised the *National Standard for Physical Exercise* to motivate sustained youth participation and to address deficiencies inherited from the Cultural Revolution (Wang, 2005). These measures re-established a coherent policy framework and signalled strong state commitment to school PE.

The Period of Reform and Opening-up (1982–1992)

In June 1982, the MoE issued the *Circular on Guaranteeing One Hour of Physical Activity for Primary and Secondary School Students Every Day*, requiring schools to ensure one hour of daily PA. At the National Conference on PE and Hygiene in Schools held in Xi'an in 1983, the conference affirmed that school PE should aim to enhance students' physical fitness. In October 1984, the Chinese government issued the *Circular on Further Development of Physical Education and Sports* to improve the national fitness and advance China as a sports nation. The PE Law stipulated that schools must organise extracurricular activities, training and competitions, and hold an annual school sports meet; with approval from the State Education Commission, higher education institutions could train elite athletes. In 1990, the State Education Commission and the Sports Commission promulgated the *Regulations on School Physical Education Work*, which incorporated PE into school entrance examinations and set requirements for the evaluation and supervision of school PE (Shu, 1994). These measures consolidated a

fitness-orientated, system-wide framework and strengthened accountability through assessment and supervision.

The Period of Exploring Socialist Market Economy (1992–2001)

In 1992, PE examination results were piloted in nine provinces as part of admission qualifications for senior secondary schools and were later extended nationwide by the MoE (Yan et al., 2021). As policy evolved, the focus of school PE changed from ‘enhancing physical fitness’ to ‘health first’ orientation (Former Ministry of Education, 1992). In 1992, the *National University Physical Education Teaching Guidelines* was promulgated (The State Department, 1993). Policy statements stressed universal provision, alignment with national PE standards and differentiated instruction, with flexibility to adapt teaching approaches for individual students (Tao & Gao, 2011).

The promulgation of the *Outline of the National Fitness Programme* in June 1995 triggered a nationwide fitness drive. The concept of lifelong PE gained prominence in schools, and the MoE’s promotion of quality education in 1997 provided a policy rationale for reform. In December 1998, the MoE issued a *Plan of Action* proposing the “*Cross-Century Quality Education Project*”, which aimed to develop a new basic education curriculum by 2000 and envisaged a decade-long, nationwide programme of pilots and trials to establish a curriculum system suited to the 21st century (MoE, 2001). The joint decision of the Central Committee of the Communist Party of China and the State Council (1999) affirmed that deepening reform and comprehensively promoting quality education were core directions for educational development, with particular

emphasis on the coordinated development of students' intellectual and physical qualities. The State Council (2001) further clarified measures for basic education reform and supported high-quality development of nine-year compulsory education and general upper-secondary schooling. In the same year, the Central Committee of the Communist Party of China (CPC) and the State Council released the *Resolution on Deepening Educational Reform and Comprehensively Promoting Quality Education*, which emphasised the importance of PE (Liang et al., 2017). This period consolidated a health first and quality-education framing that broadened PE's policy mandate beyond fitness.

The Period of Basic Education Curriculum Reform (2001–2011)

To promote the comprehensive implementation of the *Outline of the National Fitness Programme* and improve the physical fitness of children and young people, the State General Administration of Sport and the MoE decided in 2001 to launch the nationwide *Sports and Fitness Activity for Hundreds of Millions of Children and Young People*, focusing on regular fitness activities and making full use of after-school hours and holidays (MoE, 2001). In 2001, the MoE established curriculum development by establishing goals for the coordinated development of physical, mental, and social adaptability through a three-tier curriculum management system at the national–local–school level (Yang & Liu, 2019). In 2002, major innovations to the university PEH curriculum emphasised maximising students' creativity in PE teaching and learning (Zhou & Tan, 2003).

In 2003, the MoE extended PE curriculum reform to high schools within a subject-centred and teacher-centred approach. Therefore, the current round of PE curriculum reform is characterised by a shift towards discipline-centred to student development-centred, focusing on the connection between the curriculum content and students' life experiences and real-life contexts (Fan & Ma, 2017). In 2007, the MoE and the State General Administration of Sport issued the *National Physical Fitness Standard for Students*, a baseline requirement applicable to pupils in full-time primary schools, junior high schools, general high schools, secondary vocational schools and higher education institutions (MoE & SGAS, 2007). This period coupled expansive fitness initiatives and standard setting with a stated pivot to student-centred aims.

The Stage of Deepening Curriculum Reform (2011–present)

Since 2011, the MoE has issued the *Physical Education and Health Curriculum Standard for Compulsory Education (2011 Edition)* to consolidate a decade of PE curriculum reform. From curriculum development to learning evaluation, the curriculum standards emphasise students' physical and mental development, and the cultivation of independent, co-operative, and inquiry-based learning within PEH.

In 2017, the MoE promulgated the *Physical Education and Health Curriculum Standard for Ordinary Senior High Schools*, summarising reforms in general upper-secondary education since the start of the 21st century and drawing on international curriculum developments. Pedagogically, it prioritises independent, co-operative and inquiry-based learning to foster core disciplinary literacy. In 2022, the MoE

promulgated the *Physical Education and Health Curriculum Standard for Compulsory Education (2022 Edition)*, implementing the Party Central Committee and State Council's 'double reduction' policy and reaffirming a 'health first' philosophy. It signals a shift from 'knowledge- and skills-centred' to 'student-centred', seeks to create varied teaching contexts, and encourages independent, co-operative, and inquiry-based learning. Collectively, these standards articulate a coherent move towards student-centred aims and align PE with broader quality-education agendas.

3.2 Alignment of GBA with Chinese New National PEH Curriculum Standard

The new national PEH curriculum standard (2022) adheres to the 'health first' principle, prioritising students' physical well-being and fostering lifelong engagement in PA. It adopts the "teach, practice, and compete" approach, ensuring a balanced integration of instruction, skill application, and competitive experiences to enhance students' overall physical literacy. A key focus is placed on strengthening the overall design of the curriculum content to ensure a coherent and structured learning experience. In terms of pedagogical reform, the curriculum emphasises a shift from 'skill-centred' to 'student-centred' teaching, promotes the design of engaging and meaningful learning environments, and advocates integrating teachers' demonstrations and explanations with students' independent, co-operative, and inquiry-based learning. Furthermore, the curriculum highlights the importance of integrated assessment, which evaluates students' progress comprehensively rather than relying solely on traditional assessment

approaches. It also acknowledges individual differences among students by providing personalised learning opportunities that address diverse needs and abilities.

The objectives of China's PEH curriculum revolve around core literacy, which includes motor competence, health behaviour and physical integrity. Motor competence consists of three main areas: physical fitness, motor cognition and the use of skills and tactics, and sports presentation and competition. Curriculum content encompasses basic motor skills (mobility, non-mobility, and handling), physical fitness, health education, sport-specific skills (ball games, track and field, gymnastics, water or snow sports, traditional sports, and emerging sports), and interdisciplinary theme-based learning. The curriculum implementation plan calls for teachers to move away from an over-concentration on the transfer of knowledge and skills to a focus on the development of core literacy, which are the results of students' experiences, explorations, perceptions, and problem-solving in PE and health activities and contexts. In implementing the new national curriculum, teachers should avoid teaching individual movements and techniques in an isolated or static manner. Instead, they should focus on structured instruction in knowledge and skills to enhance students' holistic experience and understanding of the sports they learn, and to develop their capacity to analyse and solve problems through the application of knowledge and skills in authentic and competitive contexts.

To realise change from "teaching-based" to "learning-based", teachers need to change from an excessive focus on imparting knowledge and skills to cultivating students' core literacy and promoting the formation of their positive motivation,

learning attitudes, and behaviours. According to the learning objectives and teaching progress, students are guided to obtain rich sports experience and cognition in real and complex sports situations such as confrontation practice, sports demonstration, or competition, to improve the technical and tactical and physical fitness.

Teachers should integrate demonstration and explanation with students' independent, co-operative, and inquiry-based learning and practice. They should also combine collective, group and individual learning activities to guide students in active thinking, exploration and purposeful practice, thereby cultivating their capacity for analysis, problem-solving and innovation. Regarding assessment, teachers should implement a comprehensive, process-orientated approach that spans the entirety of students' learning experiences. Emphasis should be placed not only on the outcomes of learning but also on the processes that underpin students' growth and development.

Student-centred and inquiry-based approaches to teaching games have been shown to enhance game performance, increase motivation, and promote positive affective learning experiences (Kinnerk et al., 2018; Thomas et al., 2013; Dania & Zounhia, 2017; Evans, 2012; Light, 2014). GBA is widely recognised as a pedagogical framework that prioritises learning through gameplay rather than isolated technical drills (Light et al., 2014; Harvey & Light, 2015; Serra-Olivares et al., 2015). It emphasises understanding and skill development through modified games, using questioning to foster thinking, decision-making, and interaction. Positioned as an alternative to traditional teacher-centred pedagogies that have long dominated PE and sports coaching, GBA shifts the

focus from technique reproduction to tactical awareness and learner engagement (Light, 2002).

The new Chinese national PEH curriculum standard and GBA have many similarities in educational philosophy and teaching methods, as well as some differences.

Firstly, both emphasise student-centred approaches to teaching and learning. The new national curriculum explicitly advocates a shift from ‘skill-centred’ to ‘student-centred’, encouraging students to acquire sports skills through independent, co-operative and inquiry-based learning. GBA is a student-centred pedagogical model that engages students in critical thinking, practice, and tactical adjustment in authentic sporting contexts through game-based activities, thereby avoiding isolated technical drills. This approach not only enhances students’ motivation to learn but also strengthens their sense of participation and their capacity for decision-making in PE.

Secondly, both emphasise practice. The new national PEH curriculum adopts a “teach-practice-play” model to ensure that teaching and learning encompass theoretical instruction, skill development, and competitive experience to enhance students’ physical literacy. In contrast, the GBA focuses on learning within the context of games, where students practise their skills under varying rules and conditions, thereby avoiding mechanised and repetitive drills. Both seek to enable students to apply their learning in authentic or near-authentic sporting environments rather than limiting instruction to the mechanical practice of isolated skills.

Despite important philosophical and methodological convergences, the two differ in their approaches to teaching and learning. While emphasising active student learning, the new national curriculum retains teacher modelling and explanation as integral components, and it requires teachers to provide explicit guidance. By contrast, the GBA prioritises students' independent exploration and problem-solving in game contexts, positioning the teacher as a facilitator who uses questioning and purposeful modification of rules to promote understanding. In addition, the new national curriculum places greater emphasis on competitive experiences to develop sportsmanship, whereas GBA focuses more on the game experience and the learning process.

Overall, both the new national curriculum and GBA are committed to changing the traditional teacher-centred approach to PE teaching and promoting a more flexible and student-centred approach. The new national curriculum provides a systematic design in terms of content and framework, whereas the GBA uses games as a vehicle to empower students in PE through exploratory learning.

3.3 PETE Programmes Influence on Graduating Students

The belief systems of teachers, often referred to as educational value orientations, play a crucial role in shaping their teaching practices and approaches (Eisner & Vallance, 1974; Ennis, 1992, 1994a, 1994b; Ennis & Chen, 1993, 1995). These beliefs are typically formed and reinforced during significant periods of growth and development, heavily influenced by personal experiences and emotional connections (Pajares, 1992;

Morine-Dersheimer & Corrigan, 1997). In the context of PETE, students arrive with pre-existing belief systems regarding teaching, which have developed through their experiences as learners (Pajares, 1992). Consequently, these belief systems are often resistant to change.

Several studies have suggested that PETE programmes positively influence the beliefs and value orientations of PETE students (Solmon & Ashy, 1995; Tannehill & MacPhail, 2014; Xiang et al., 2002; Philpot & Smith, 2011). These programmes shape students by fostering a shared technical culture among faculty, emphasising teaching principles throughout the curriculum, and providing closely supervised field experiences (Curtner-Smith, 2001; Ennis, 2016; Richards et al., 2014). They also instil a foundational understanding and appreciation of PE, enhance self-esteem, and further shape professional beliefs (Goc-Karp et al., 1985).

Given that graduating students' beliefs are often deeply ingrained and resistant to change (Lortie, 1975; Lawson, 1983a; Pajares, 1992; Matanin & Collier, 2003), PETE programmes should be understood not only as vehicles for knowledge transmission but also as platforms for transforming teaching beliefs and values (Wang, 2014). This is particularly important in the context of new curricula, where consideration of teachers' beliefs and intentions is essential for effective implementation (Hyndman & Pill, 2016). Moreover, prior research indicates that many prospective PE teachers are motivated by positive personal experiences in sport, which strongly influence their decision to enter the profession (Hutchinson, 1993).

Understanding how such beliefs are formed requires attention to the processes of teacher socialisation. Templin et al. (1982) define socialisation as the process through which individuals are drawn to and choose an occupation. For PE teachers, this begins in childhood and extends into PETE programmes (Lawson, 1983b). The early stage, acculturation, starts at birth and is reinforced through experiences and significant influences that shape understandings of the profession. Professional socialisation occurs within PETE, where teachers acquire the values, skills, and knowledge essential for teaching (Lawson, 1983a). Organisational socialisation follows upon entry into the workforce and involves learning the roles and responsibilities of a given organisational context (Van Maanen & Schein, 1979).

Early acculturation and professional experiences influence how PETE students prioritise teaching and coaching in their careers (Richards, 2015; Templin & Richards, 2014). Pre-service teachers actively interpret these experiences, shaping belief structures about their professional education (Schempp & Graber, 1992). Such beliefs function as tacit assumptions about classrooms, students, and curricula (Kagan, 1992) and represent propositions held to be true, acquired implicitly or explicitly throughout life (Pajares, 1992). Moreover, socialisation into PE is affected by situational and social factors such as positive experiences with teachers or coaches, family and peer support, and individual values about PE and teaching (Dewar & Lawson, 1984; Hutchinson & Buschner, 1996; Feistritzer, 1996).

Research on pre-service teacher education indicated that students enter these programmes with strongly held beliefs about teaching that are challenging to alter

(Brookhart & Freeman, 1992; Doolittle et al., 1993; Hutchinson, 1993; O’Sullivan, 2005; Graber, 2001). Seminal studies by Lortie (1975) and later by Lave and Wenger (1991) demonstrated that student teachers’ beliefs about teaching are largely shaped prior to entering teacher education programmes, informed by extensive classroom experiences gained during their “apprenticeship of observation” (Lortie, 1975). The findings suggested that beliefs regarding the scope and outcomes of PE remain influential throughout PETE (Lortie, 1975; Ní Chroínín & O’Sullivan, 2014).

As complex cognitive and affective structures, these beliefs develop in a stable and engaging manner throughout years of observation in PE teaching, both as a school subject and a career opportunity (Lortie, 1975; Richards, 2015). Although the messages conveyed by teacher educators in PETE programmes can modify the attitudes and perceptions of pre-service teachers shaped through their apprenticeship of observation (Wallace, 2013). However, several studies indicated that PETE programmes have limited impact on the belief systems of students enrolled in these courses (Doolittle et al., 1993; Graber, 1995; Curtner-Smith, 2001; Matanin & Collier, 2003; Curtner-Smith, 2007).

While PETE programmes may influence certain beliefs, one of the most critical elements for enhancing teaching beliefs towards PE is the incorporation of field-based teaching methods and experiences within these programmes (Tsangaridou, 2008; Xiang et al., 2002). Research suggested that successful PETE programmes can significantly influence the pedagogical philosophies and practices of beginning teachers with a strong teaching orientation, shaping the future landscape of PE instruction (Curtner-

Smith, 2001). The teaching perspectives of PETE students in China are significantly shaped by the nation's traditional PE culture, which emphasises sports, skills acquisition, and direct instruction. Studies, including that of Shi and Huang (2006), highlight how this traditional framework, long held in Chinese PE, views PE as being fundamentally about physical exercise, skills, and structured play, which influences the predominantly teacher-centred approaches seen in PETE programmes. PETE curriculum provided by Chinese universities often prioritises subject matter expertise and sports skills training over learner-centred methodologies, which affects the pedagogical orientations of PETE students (Li, 2005; Zhu, 2004). Consequently, a considerable divide exists between PETE students' perspectives and the modern curriculum's emphasis on student-centred and holistic learning approaches (Wang, 2014).

The transmission-orientated focus of PETE students, which is an instructional style centred on direct, knowledge-transfer techniques, presents a barrier to the inclusive and adaptive learning goals outlined in China's evolving PEH curriculum. These transmission perspectives limit the understanding of alternative teaching methods, which PETE students see as unfamiliar and possibly irrelevant (Wang, 2014). PETE programmes traditionally encourage a coaching-based career path, with many students initially entering PETE studies due to a love for sports and aspirations to become sports coaches (Curtner-Smith, 1999; Goc-Karp et al., 1985). As a result, PETE programmes that emphasise direct teaching over reflective or developmental approaches can unintentionally promote a cycle in which students adopt a coaching-

centred perspective, prioritising performance outcomes over educational engagement (Adamakis & Zounhia, 2016; Richards & Templin, 2012).

Effective PETE programmes integrate both theoretical knowledge and practical experience, which is crucial for helping students develop a balanced approach to teaching (Wallace, 2013). Programmes that successfully reshape students' pedagogical beliefs typically have a clear and well-rounded conceptual framework that combines innovative teaching methods with regular curriculum assessments. These programmes are often led by specialised faculty with expertise in sport pedagogy rather than coaching, which has been shown to enhance students' teaching skills and reduce adherence to outdated teaching methods (Lawson, 1983a). Nevertheless, students' preconceived beliefs about teaching, rooted in their prior experiences as learners, pose a challenge for PETE programmes aiming to introduce more progressive approaches to PE. This dynamic, described by Lortie (1975) as an "apprenticeship of observation", often results in a "wash-out" effect, where students revert to traditional methods despite university training in alternative approaches (Stroot & Ko, 2006; Bronikowski, 2011).

To address the challenges discussed above, some PETE programmes have begun to introduce preservice teachers to alternative teaching methods in controlled environments, such as peer-group settings within universities, before encouraging their implementation in real-world school settings (Howarth, 2005; Moy et al., 2016). The professional development phase within PETE is therefore seen as an essential period for the adoption of innovative teaching practices (Light, 2002). However, across China, PETE curricula vary widely from one institution to another, creating inconsistencies in

teacher training quality. Such regional disparities highlight the need for a unified curriculum standard that would establish commonalities in PETE programmes nationwide and facilitate a systematic approach to teacher quality improvement (Yin et al., 2016).

Ultimately, the role of PETE programmes in China is not only to prepare PE teachers but also to shape the future of PE (Xiao & Xiao, 2025). Given the high impact of these programmes on new teachers' beliefs and practices, the quality of PETE education is instrumental to the advancement of school sports for young people across China (Tang, 2018). Addressing the challenges of traditional teaching perspectives and promoting a more flexible, student-centred approach in PETE curricula are essential to aligning with the broader goals of China's new national PEH curriculum standard.

Literature Review Conclusion

Although the different GBA were developed in different contexts and influenced by their respective educational systems and cultural backgrounds, there is a consistency in their underlying philosophies. The core feature of GBA lies in the emphasis on a student-centred approach, where students are guided to tactical thinking, decision-making and problem-solving through game situations rather than focusing solely on technical training (Light & Butler, 2005). They involve complex learning instead of reducing it to the repetition of out of context skills and technique. Although there are differences between teaching using GBA and the new national curriculum, they are both underpinned by the same philosophy of learning through physical experience and sit on very similar sets of principals. With much more research conducted on GBA globally than what has been conducted on teaching and learning with the new national curriculum the large body of GBA research provides useful insight into the findings of this study.

In academic publications, research on GBA is more prevalent in Western countries, which may be partly due to language differences. Countries such as China and Spain often publish research in their own languages, making it more difficult for scholars around the globe to access this research. Regardless of regional differences, however, teachers and coaches around the world face similar challenges when implementing GBA, and students respond to the approach differently. Cultural context plays an important role in how GBA is adapted to curriculum standard according to socio-cultural context. For example, countries such as Singapore and Japan have reformulated

the implementation of GBA to align it with their national educational frameworks. In contrast, research on GBA in China has mainly remained at the theoretical level without delving into its core elements which makes this study so important. A review of experimental studies reveals that Chinese research has lacked attention to tactical awareness and decision-making, assessment approaches and teachers' perspectives and dispositions towards GBA.

Early Chinese PE curricula were influenced by traditional culture, and with the introduction of Western ideas and educational concepts, school PE began to be systematised, mainly under the influence of Japan, Europe, and America. After the founding of New China, school PE was highly valued. During the period of reform and opening, profound changes took place in all aspects of the economy and society, and school PE developed accordingly. As China's PE system continues to modernise, curriculum reforms aim to shift from a traditional skills-based, teacher-centred approach to a more student-centred, holistic framework. Despite the new national curriculum emphasis on student engagement, critical thinking, and active participation, which coincide with GBA principles, there are still significant differences in theoretical underpinnings, implementation strategies, and assessment approaches. A key factor influencing whether student teachers adopt GBA in their future teaching practice is the PETE programme they are enrolled in. If PETE programme does not effectively integrate GBA (e.g., tactical awareness, decision-making) and (why implement GBA and how to implement it effectively), it may be difficult for student teachers to move beyond traditional approaches to skills practice.

Chapter Four: Methodology

My study investigates PETE teachers at public universities in Kunming, specifically, universities with separate PE college and PETE programmes. To align better with the bulk of the GBA literature, it focuses on team sports such as basketball, football, and volleyball. Most of the current research on student-centred approaches (GBA) focuses primarily on team sports and less on individual sports. To better understand PETE teachers' dispositions towards teaching and learning, I used Dewey's learning theory and constructivist learning theory as the theoretical framework for this study. Dewey (1938) emphasised that genuine education must be grounded in experience, a view that has often been regarded as an important philosophical precursor to constructivist perspectives, which conceive of knowledge as actively constructed within social and cultural contexts (Guba & Lincoln, 1989). This approach addresses the central question by attempts to 'enter the mind' of the subject to understand PETE teachers' dispositions towards what I refer to as the student-centred approach to teaching and learning, which is central to the new national PEH curriculum standard.

The narrative inquiry methodology used is sometimes considered to be rooted in a constructivist perspective which makes a good match between the methodology and theoretical framework. Narrative inquiry emphasises the participants' stories and the active role they play in constructing their own understanding of experiences through their storytelling. This aligns with constructivist principles, which highlight the importance of learners actively constructing knowledge rather than passively receiving it.

This chapter discusses in detail the theoretical framework and research methods I have selected based on the research questions. First, it provides a structured overview of the theoretical framework and methodology, explaining the rationale and applicability of their selection. Second, it specifies the participant selection criteria, data collection methods, and details of the thematic analysis.

4.1 Theoretical Framework (Dewey's Learning Theory, Constructivist Learning Theory)

Dewey's learning theory

John Dewey was born on 20 October 1859 in Burlington, Vermont, USA (Day & Newton, 2016). He was raised in a family active in local civic life and was strongly influenced by democratic political ideas, experiences that helped shape his identity as an educator and philosopher (Williams, 2017). He is recognised as a founder of experimentalist philosophy and as one of the most influential educational thinkers of the 20th century (Gutek, 2014). He was also a principal proponent of progressive education in the United States, providing the philosophical impetus for later developments. In addition, Jean Piaget, Lev Vygotsky, Carl Rogers, and Abraham Maslow each had their own ideas about human development influenced by Dewey's progressive approach to education (Ültanır, 2012). Dewey's educational philosophy has influenced countless educators and is embedded in a range of learning theories, including progressive education, constructivism, student-centred teaching models, and experiential learning (Dewey, 1938; Schiro, 2012; Williams, 2017). These approaches,

unlike traditional teaching, place greater emphasis on learner agency and on the centrality of experience in the educational process.

Dewey conceives learning as a continuous, dynamic process. It is not merely the accumulation of knowledge; rather, individuals continually construct and adjust their cognitive structures through reflection and practice as they interact with their environment (Dewey, 1938). Teachers' pedagogical concepts and practices are strongly shaped by their personal histories, including sporting experiences, professional preparation, teaching practice, and socio-cultural context (Richards et al., 2014). Dewey further argues that experience is constituted through an individual's transactions with a particular environment, involving the interplay of past experience, present circumstances, and future possibilities (Dewey, 1938). Accordingly, teachers' professional growth is built upon prior learning experiences that inform their understanding of PE and influence their instructional decision-making (Pajares, 1992).

The theory of experience is an important part of Dewey's learning perspective. He advances two concepts: the continuity of experience and the interaction of experience (Dewey, 1938). Continuity holds that each experience shapes subsequent ones; learning is a cumulative, ongoing process. Interaction underscores that experience emerges from the reciprocal relation between the individual and the environment. These principles illuminate how teachers' practical knowledge develops. Prior experiences condition teachers' receptivity to new pedagogies, informing both their beliefs and instructional choices (Chen & Xie, 2024). For PETE teachers, teaching dispositions and methods are strongly shaped by prior experiences, which in turn influence the likelihood of adopting

innovative pedagogical approaches. Experience constitutes not only the foundation of professional learning but also a key determinant of its quality and effectiveness. For instance, teachers who have been socialised into traditional, skill-based methods may be more predisposed to favour direct instruction and may exhibit scepticism towards approaches such as GBA, which emphasise active learning, student exploration, and collaborative engagement.

The continuity of experience means that teachers' dispositions are not set in stone. As curricular reforms unfold, teachers accrue new experiences that can prompt reassessment of previously held views. As Dewey (1938, p. 43) notes, "An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his environment." When PETE teachers implement GBA and observe improvements in student engagement and learning outcomes, such feedback may gradually reshape their professional orientations, fostering greater acceptance and endorsement of the approach. The principle of continuity of experience provides a useful framework for understanding the dynamic process by which teachers' dispositions evolve, and how the adoption of new teaching practices contributes to their professional development.

Dewey's principle of the interaction of experience emphasises that experience arises through interaction between the individual and the environment (Dewey, 1938). Accordingly, the teaching practices of PETE teachers are influenced by their social context, cultural background, education policy, school culture, and student feedback. In many Eastern education systems, teachers are regarded as authoritative knowledge-

holders and students as passive recipients, a traditional perspective that may limit receptivity to GBA and reinforce reliance on teacher-centred methods. In contrast, the new national curriculum emphasises student-centred pedagogy, requiring teachers to consider learners' needs and interests and to promote active participation and collaborative learning. This shift necessitates ongoing professional adaptation, with teachers continually refining their practice.

Social control shapes the conditions in which experience is formed. PE teachers' dispositions are not only grounded in personal experience but are also shaped by external controls, including education policy and professional relations among teachers as well as between teachers and school leaders. Research indicates that policy frameworks can exert a substantial influence on pedagogical decisions and classroom practice; during periods of curriculum reform, teachers' attitudes and behaviours are frequently aligned with such directives (Lortie, 2020). Where policy endorses student-centred pedagogy, teachers are more likely to implement GBA. Conversely, in contexts characterised by conservative school governance or limited institutional support for GBA, teachers tend to maintain traditional, teacher-centred, skill-based methods.

Secondly, the transformation of teaching methods requires teachers to reconstruct or reorganise their teaching experience through reflective practice. By critically evaluating and adjusting their pedagogical approaches, teachers can avoid repeating past errors and progressively adapt to new methods. Coaching education and the development of athletes at all levels is a continuous reconstruction of experience, a rethinking and re-examination of concepts and experiences to meet current needs. In

this regard, athletes and coaches are active participants in learning, interacting with the sporting environment in a cyclical manner (Day & Newton, 2016). Reconstruction of experience entails learning from prior practice, thereby enhancing the capacity to make informed decisions in the future. Learning is thus conceived as a dynamic and ongoing process of experiential growth; while it may be developed continually, it remains inherently provisional and never fully complete. This conception of experience is not spontaneous but requires guidance through disciplined modes of thought and structured intellectual processes (Hlebowitsh, 2006).

Constructivist learning theory

The constructivist view of learning (Kirk & MacDonald, 1998) sees learning as a process in which learners interpret learning experiences in light of past experiences and existing knowledge (Jarrett, 2016). Both individual constructivism (Piaget, 1950) and social constructivism (Vygotsky, 1978) emphasise the learner's initiative, experience, and the active construction of knowledge through interaction with the environment, social interaction, and personal experience. In this view, knowledge is not passively received but actively constructed, combining new encounters with existing beliefs and understandings (Ciot, 2009; Cannelle & Reif, 1994; Abdal-Haqq, 1998; Richardson, 1996; Ültanır, 2012). Constructivism directly underpins student-centred approaches, requiring teachers to shift from traditional roles as knowledge transmitters to those of guides, facilitators, and co-explorers who encourage learners to ask questions, challenge ideas, and develop their own perspectives (Jonassen, 1999; Light, 2013;

Gredler, 1997; Prawat & Floden, 1994; von Glasersfeld, 1995; Grenier, 2020; Fosnot, 2013). In this process, learners actively solve problems, develop autonomy, and engage in socially contextualised learning experiences that promote deeper understanding (Ültanır, 2012).

Social constructivism highlights that knowledge is constructed within cultural and social contexts (Vygotsky, 1978). It provides a theoretical justification for student-centred pedagogies such as critical thinking, critical inquiry, and problem-based learning (Macdonald, 2013). In PE, researchers have advocated social constructivist approaches that provide authentic experiences and connect learning to the sociocultural realities of students' lives (Cothran & Ennis, 1999; Ennis, 1999, 2000; Ennis et al., 1999; Fernández-Balboa, 1997a; Azzarito & Ennis, 2003). Fernández-Balboa (1997b) further suggests that PE should engage students in ways that connect with broader sociocultural influences, encouraging them to act politically and ethically to improve schools and the profession (Azzarito & Ennis, 2003).

However, adopting social constructivist pedagogies in PE requires educators to reconsider their dispositions towards learning and skill-based teaching. To implement such a curriculum, physical educators must move away from viewing learning as the isolated performance of skills and instead conceptualise it as a socially constructed process embedded in specific contexts (Azzarito & Ennis, 2003). Furthermore, existing literature suggests that there are differences in the understanding and interpretation of GBA by teachers or coaches in different cultural contexts, especially between Western and Eastern contexts. In addition, the personal experiences and beliefs of teachers and

coaches also have an impact on their teaching practices (Light & Tan, 2006; Wang & Ha, 2009; Light & Curry, 2021). Therefore, to explore PETE teachers' dispositions and perceptions of GBA and their implementation in teaching, it is necessary to interpret and analyse them in the context of their life experiences and cultural backgrounds.

For a long time, PE in China has been influenced by behaviourism and traditional skill-based approaches, emphasising technical training and standardised assessment. In contrast, GBA is student-centred, requiring students to make decisions during the game and cultivating tactical awareness, teamwork and initiative (Light, 2013). Consequently, GBA partially conflicts with conventional Chinese PE pedagogy. To investigate how PETE teachers perceive GBA and its implementation within the context of the new national curriculum, it is necessary to consider how sociocultural factors shaping teachers' teaching beliefs and practices. For instance, the evolving expectations of the national curriculum reform, which emphasises student-centred pedagogy, have required teachers to reinterpret and adapt their teaching approaches. The promotion of GBA, however, is not a unidirectional policy implementation; rather, it constitutes a complex process of social interaction, wherein teachers' dispositions and practices are jointly shaped by professional experience, social expectations, school environment, and student feedback.

Social constructivism emphasises the role of language and social interaction in knowledge construction (Berger & Luckmann, 1966). In many Chinese schools, communication and collaboration significantly influence teaching practice. For example, if a teaching team predominantly adheres to a traditional skill-based approach, teachers

may struggle to implement GBA despite curriculum reforms, due to the pressures of group norms. Conversely, an institutional environment that supports pedagogical innovation, allowing teachers to share experiences and collaboratively explore GBA, facilitates its successful implementation. Furthermore, traditional Chinese educational culture positions the teacher as the principal authority, whereas GBA foregrounds student agency and the teacher's role as facilitator. This philosophical divergence can create challenges for teachers, particularly in lesson planning and evaluating instructional effectiveness.

China's PEH curriculum reform has gradually shifted towards a student-centred approach in recent years, encouraging teachers to adopt more diverse teaching methods (MoE, 2022). However, a persistent gap remains between policy promotion and classroom practice. From a social constructivist perspective, this gap cannot be attributed solely to teachers' reluctance to embrace new methods; rather, it reflects the necessity of situating pedagogical innovations within specific socio-cultural contexts. Within a social constructivist classroom, learning is considered to occur through interaction, negotiation and collaboration (Palincsar, 1998). Teachers assume the role of facilitators, designing cooperative learning activities that promote peer interaction and collective inquiry, while students become active participants rather than passive recipients. Teachers build upon students' prior experiences to guide their knowledge construction (Azzarito & Ennis, 2003). The degree of student engagement also exerts a reciprocal influence on teachers' pedagogical orientations: when students respond positively to GBA and demonstrate active participation, teachers are more likely to

endorse and sustain such approaches. Conversely, when students accustomed to traditional, teacher-led instruction exhibit confusion or resistance, teachers may perceive GBA as less appropriate for their learners.

Dewey's experiential learning theory and social constructivism provide a robust theoretical foundation for examining Chinese PETE teachers' dispositions towards the GBA and the influence of the new national curriculum on. Teachers' pedagogical beliefs and practices are shaped within specific sociocultural context and mediated by many factors. The promotion of GBA represents not only a curriculum reform initiative but also a process of social negotiation and cultural adaptation. Adopting a social constructivist perspective enables a deeper understanding of how PETE teachers interpret, adapt to, and enact GBA within their unique sociocultural settings, as well as how targeted support can be developed to facilitate its effective implementation.

4.2 Research Methodology (Narrative Inquiry)

Methodological contributions are significant because they enable researchers to answer new questions about how people, groups and organisations behave and perform and to revisit existing questions with greater rigour (Kuhn, 1996). Methodology refers to the systematic principles, strategies, and procedures used to collect, analyse, and interpret data. It provides the framework that guides a study, ensuring the research process is rigorous, coherent, and aligned with the research questions (Creswell & Poth, 2016). Methodology is distinct from methods: whereas methods are specific techniques for data collection (e.g., surveys, interviews), methodology encompasses the theoretical

and philosophical frameworks that inform those techniques (Silverman, 2020). Its importance lies in securing validity, reliability and consistency. A well-defined methodology justifies methodological choices, enhances the credibility of findings, and ensures that conclusions are logically derived from the data (Bryman, 2016). Furthermore, methodology plays a crucial role in shaping how knowledge is constructed and interpreted within a particular field (Guba & Lincoln, 1994). For example, qualitative methodologies such as narrative inquiry and ethnography allow researchers to explore complex human experiences in depth, while quantitative methodologies provide measurable and generalisable findings (Patton, 2014).

The central question concerns the dispositions of Chinese PETE teachers towards the GBA in the new national curriculum and the processes through which these dispositions are shaped. Narrative inquiry is an approach that emphasises individual experiences within its socio-cultural context (Clandinin & Connelly, 2000), examining how participants interpret and ascribe meaning to experience through personal stories (Riessman, 2008). This approach is well suited to the present study because participants' narratives illuminate both the nature of their current dispositions and the experiential pathways through which those dispositions developed. Narrative inquiry can illuminate how PETE teachers accept, adapt to, and implement GBA across varied social environments and educational policy contexts. The study focuses on PETE teachers because their dispositions, attitudes, and pedagogical beliefs strongly influence how their graduating students interpret the new national curriculum.

Narrative inquiry

Connelly and Clandinin (1990, 2006) argue that the development and use of narrative inquiry stem from a view of human experience in which people lead a life of stories, both individually and socially. This approach also involves reconstructing a person's relationship with others and with the social environment (Clandinin & Connelly, 2000; Clandinin, 2006). Narrative inquiry emphasises the co-constructive process between researcher and participant within particular times and places. This co-creation provides a space for the researcher to interact with the participant, enabling knowledge to be generated through dynamic dialogue (Lindsay & Schwind, 2016; Pino Gavidia & Adu, 2022). When using narrative inquiry, researcher must not only to ask questions that elicit stories but also to position themselves so that the stories can be analysed. The role of the researcher is to be an effective listener and to see the participants a storyteller rather than a respondent. Therefore, in interviews the agenda is open to development and change, depending on the story being told. Bauer (1996) argued that the object of narrative analysis is the narrative itself, as opposed to the events being narrated or the experiences of the narrator (Savin-Baden & Niekerk, 2007).

Narrative inquiry explores the stories people live and tell. These narratives emerge from the interplay between societal influences on inner life, personal circumstances, and individual's unique experiences. They are often treated in social research as reflections of significant social realities rather than as those realities themselves (Clandinin, 2006). As a research instrument, narrative enables researchers to interpret social phenomena and to gain a deeper understanding of participants lived circumstances (Clandinin, 2013). Bruner observed that storytelling is fundamental to

human life: we are a species orientated to recounting expectations and the surprises that disrupt them, and we do so through the stories we tell (Bruner, as cited in Charon, 2002). People organise everyday life through narratives about who they and others are, interpreting the past in ways that render experience meaningful. In this view, story functions as a portal through which individuals enter the world and through which their experiences are interpreted and made personally significant. Narrative inquiry, understood as the study of experience as story, is first and foremost a way of thinking about experience; as a methodology, it offers a perspective for examining phenomena by treating experience itself as the object of inquiry (Connelly & Clandinin, 2006).

Dewey's (1938, 1958) perspective on experience is cited as the philosophical foundation of narrative inquiry (Clandinin & Rosiek, 2007) and likewise serves as the starting point for other researchers' narrative research on human experience. This perspective allows for the study of experience, acknowledges the embodiment of people in the world, and follows the research of philosophers such as Johnson (1987). Narrative inquirers study individuals' experiences of the world, an experience that was storied both in the living and telling and that could be studied by listening, observing, living alongside another, writing and interpreting texts (Clandinin, 2006). In addition, paradigms and narrative knowledge (Bruner, 1986), narrative structures and coherence in life (Cole, 1986), the concepts of continuity and improvisation as responses to the uncertainties of life and the environment (Bateson, 1989, 1994), and narratives in life and teaching practice (Coles, 1989) also shape our perception of experience as narrative constructions.

Clandinin and Connelly (2000) developed a narrative view of experience grounded in Dewey's two criteria: interaction and continuity, which also underpin the three-dimensional narrative inquiry space of temporality, place, and sociality (Clandinin & Connelly, 2000). Interaction holds that individuals must be understood in relation to others and within social contexts, while continuity posits that each experience emerges from prior experience and, in turn, shapes subsequent experience; whether one attends to the present, past, or future, each temporal point is anchored in prior experience that leads forward (Clandinin & Connelly, 2000; Clandinin, 2006). Building on these criteria, narrative inquiry emphasises ongoing researcher-participant engagement and the co-construction of knowledge (Clandinin & Caine, 2013). Researchers and participants establish connections by telling, experiencing, and interpreting stories together (Connelly & Clandinin, 2006). Accordingly, in examining PETE teachers' dispositions towards GBA, this study considers not only their current practices but also their professional trajectories and the ways in which experiences within specific socio-cultural contexts have shaped their pedagogy.

Regardless of the approach, the researcher inevitably becomes part of the narrative, intertwining the participant's personal story with the researcher's own and with broader socio-cultural and institutional narratives; together these constitute the dynamic process of narrative inquiry (Clandinin, 2006). Narrative inquiry attends not only to individual experience but also to how experience is constructed, communicated, and transformed within wider social contexts. The interaction between researcher and participant shapes the inquiry and co-constructs understandings of experience (Clandinin & Connelly,

2000; Clandinin & Caine, 2013). Narrative inquiry also contributes to social action and policy justification. Although narrative researchers do not generalise from participants' accounts, they elucidate the complexity, contradictions, and inconsistencies often embedded in policies and their enactment, thereby informing policy development (Clandinin & Huber, 2010; Clandinin & Caine, 2013). Accordingly, when PETE teachers share their experiences, their narratives reveal both individual dispositions towards GBA and the influence of social culture on teaching practice.

Narrative inquiry in PETE is principally concerned with understanding subjective lived experience within broader events and contexts (Dowling et al., 2015). It has been used to interrogate and reconstruct values, beliefs, and pedagogy (Dowling et al., 2012; Legge, 2011; Lisahunter, 2011), despite these concerns being comparatively neglected in PE research (Dowling et al., 2015).

In PETE and school PE, the focus of narrative inquiry has been the understanding of individual subjective life experiences in the context of wider events and situations (Dowling et al., 2015). Richards et al. (2014) summarised previous research, highlighting some commonalities across each type of socialisation and noting that the transition from PETE to school PE often represents a 'reality shock' for new teachers. This theoretical framework has also been applied to the Swedish context, where new teachers often feel marginalised, isolated, and dependent on building relationships with colleagues and students to cope with the demanding psychosocial work environment (Richards et al., 2014; Ferry & Westerlund, 2023; Westerlund & Eliasson, 2022; Tolgfors et al., 2025). MacPhail and Hartley (2016) suggested that pre-service teachers

both shape and are shaped by their educational context (Tolgfors et al., 2025). Walters et al. (2023) conducted a narrative inquiry into the perspectives of a pre-service teacher, an in-service teacher, and a PETE educator on PE assessment. Through the stories of these participants, the researchers critically engaged with the complex task of assessment. Similarly, we focus on the same settings but from the perspective of an individual as he or she moves from the PETE context to the teaching practice of school PE (Tolgfors et al., 2025).

Rationale for use of narrative inquiry

Narrative inquiry emphasises individual experiences and stories and is particularly suitable for studying teachers' professional development and educational beliefs (Clandinin & Connelly, 2000). According to constructivist learning theory, learners 'use prior experience and knowledge to interpret and learn from experience and gain meaning from it' (Light & Georgakis, 2007). Teachers' pedagogical beliefs and practices are constantly constructed and adjusted during their growth process. The method essentially focuses on how PETE teachers interpret GBA from the perspective of personal experience and how they shape and develop this approach during their careers. Therefore, narrative inquiry provides an appropriate framework to capture the complexity and evolution of teachers' experiences.

The Chinese education system has a unique cultural background, and schools and teachers often lack autonomy in curriculum decisions (Tan, 2016). In this context, PETE teachers' acceptance of the GBA may depend on personal experience, school environment and policies. PE teaching in China has long been influenced by traditional

teaching methods and the authoritative role of teachers (Wang & Ha, 2009). In the process of accepting the new national curriculum, PETE teachers not only have to face their own teaching habits and values but also deal with pressures from schools, parents and the policy. Light and Tan (2006) pointed out that the implementation of GBA in different socio-cultural contexts may be significantly influenced by cultural norms and education systems, which in turn affect teachers' interpretation, use and effectiveness of GBA. Therefore, PETE teachers' dispositions towards GBA and its development process are highly individualised, and narrative inquiry methodology can reveal how they understand, accept, or reject GBA by recording their stories and experiences and reflect the factors that influence their teaching beliefs (Coulter & Smith, 2009). In addition, narrative inquiry provides a reflective practice lens that enables teachers to revisit their teaching beliefs through telling their stories (Loughran, 2002). When teachers narrate their GBA-related experiences, they may become aware of their own underlying biases, contradictions or shifts in beliefs. This approach not only reveals the dynamic changes in individual dispositions but also helps researchers gain a deeper understanding of how external factors influence PETE teachers' use and decision-making regarding GBA.

In mainland China, research on GBA such as TGfU has focused more on skills and tactics and less on the emotional experiences, social interactions of PETE and PE teachers or whole game understanding (King & Ho, 2009). PETE teachers may experience a process of change when adopting GBA, from scepticism to acceptance, and may also change their dispositions towards GBA due to teaching effectiveness,

student feedback or external pressure. The narrative inquiry methodology can present this dynamic development process by collecting teachers' personal stories.

Interview method in narrative inquiry

Narrative inquiry is a qualitative methodology in which stories constitute the primary data (Bleakley, 2005). Narrative data are commonly generated through interviews, oral or life-history elicitation, and autobiography or biography writing (Hoshmand, 2005). Interviews are frequently the principal mode of data collection in narrative inquiry (Creswell, 2013; Heilmann, 2018) and are used to obtain data and develop knowledge from individuals. Kvale (1996) defines interviews as an exchange of views between two or more people on a topic of mutual interest, seeing the centrality of human interaction to knowledge production and emphasising the social situatedness of research data. As a relatively naturalistic and less structured tool, the interview can broaden understanding of the phenomenon under study (Alshenqeeti, 2014; Monday, 2020). Narrative interviews are inherently contextual, constructed at a particular time and occasion, within a particular interactional setting and perspective; their framing concerns both the interview context and the wider circumstances of the narrator's life and situation (Horsdal, 2016).

In this study, life history interviews were employed to explore participants lived experiences across their personal and professional trajectories. This approach enables participants to narrate their experiences in their own words and timelines, revealing how their beliefs and practices have evolved over time (Goodson & Sikes, 2001; Goodson, 2011). Unlike structured interviews, life history interviews allow for deeper

reflection and contextualisation, encouraging participants to connect individual experiences with broader social, cultural, and institutional influences (Atkinson, 1998; Hagemaster, 1992). Moreover, such interviews illuminate the continuity of experiences across time, providing insight into how teachers' professional dispositions are constructed through accumulated life events and situated within historical and cultural contexts (Goodson & Sikes, 2001).

Reflexive statement

My bachelor's and master's degrees are in sports training, with a specialisation in table tennis from primary school through university, followed by work as a university PE teacher. This long-standing experience initially orientated me towards teacher-centred practices, and before this study I had limited exposure to student-centred approaches. I therefore entered the research as both an insider and an outsider. As an insider, my shared disciplinary background and professional experience with PETE teachers facilitated rapport and a nuanced understanding of their contexts. As an outsider, my own practice had been shaped by traditional, skill-based approaches, and I was only beginning to engage with student-centred pedagogy. This dual positioning required careful reflexivity, particularly in recognising how my preconceptions might shape data interpretation. Trust was established and sustained through transparency about my background, active listening during interviews, and treating teachers' accounts as authentic representations of their lived experiences.

4.3 Research Design (Setting, Participants, Sampling)

This study was conducted in Kunming, the capital city of Yunnan Province, China. Yunnan Province, in the south-west of China, with its capital Kunming. Yunnan, abbreviated as “Yun” or “Dian”, lies on the south-western frontier of China between latitudes 21° 08’ and 29° 15’ north and longitudes 97° 31’ and 106° 11’ east, with the Tropic of Cancer crossing its southern part. The province covers about 394,100 square kilometres, accounting for roughly 4.1 per cent of China’s total land area. It borders Guangxi and Guizhou to the east, Sichuan to the north across the Jinsha River, Tibet to the north-west, Myanmar to the west, and Laos and Viet Nam to the south and south-east. Yunnan has one of the longest international land borders in China, comprising eight prefecture-level regions and twenty-five border counties adjoining Myanmar, Laos and Viet Nam (Yunnan Yearbook Editorial Committee, 2024). Figure 1 shows the geographical location of Yunnan Province in China.

Figure 1 Map of China



I have highlighted the locations of Yunnan Province and Kunming City in red.

Figure 2 Map of the Kunming with the locations of the six universities



There are 52 higher education institutions in Kunming, including 20 universities and 32 colleges. There are seven public universities with independent PE colleges and six universities offering PE programmes. These universities are Yunnan University, Yunnan Normal University, Yunnan Minzu University, Yunnan Agricultural University, Kunming University and Southwest Forestry University.

As shown in figure 2: Yunnan University, Yunnan Normal University, and Yunnan Minzu University all have two campuses, located in Chenggong District and Wuhua District. Yunnan Agricultural University and Southwest Forestry University are both located in Panlong District, while Kunming University is in Wuhua District.

Participants

First, the selection criteria for the participants in this study were that participants must: 1) be teaching at a public university in Yunnan (with a separate college of PE and a PETE programme); 2) be teaching team sports (such as basketball, football, volleyball, etc.); 3) have studied the PETE programme or other sports-related programmes. There were 12 participants in this study.

The selection of participants was divided into two stages, including purposive sampling and snowball sampling. The first two participants were selected using purposive sampling. Purposive sampling (Miles & Huberman, 1994) is a technique widely used in qualitative research to identify and select informative cases to make the most effective use of limited resources (Patton, 2002). Purposeful sampling is deliberate selection due to the attributes possessed by the participants (Etikan et al., 2016). Researchers decide what they need to know and set out to find people who can and will

provide information through their knowledge or experience (Bernard, 2002). I studied for my master's degree at Yunnan Agricultural University, and the two participants (Grace and Abner) are PETE teachers I know, who meet the screening criteria for this study and whom I know have sufficient relevant experience to draw on. I have WeChat (a Chinese app, like WhatsApp) with these two teachers, and I contacted them through this app and asked if they would like to participate in this study.

I then used snowball sampling to find the remaining participants. Snowball sampling is a convenience sampling technique typically used when it is difficult to access subjects with the target characteristics. In this method, existing subjects recruit future subjects from among their acquaintances. Sampling continues until data saturation (Grove, 2008; Naderifar et al., 2017). I asked Grace and Abner, and they helped me find other suitable participants because they were familiar with PETE teachers at other universities. They directly helped me contact the participants. In this process, once I was notified that a participant was willing to participate, I used the phone number they provided to communicate with the participant and then sent a text message with the basic information about the study to determine the time and place for the first interview. The 12 participants taught the following subjects (basketball, football and volleyball), and three of them were female teachers (Grace, Kate and Aurora). Female teachers were chosen to ensure diversity and comprehensiveness in the study and to explore the dispositions of PETE teachers towards student-centred approaches from a gender perspective. In addition, female teachers may face different challenges in PE teaching than male teachers, such as student acceptance and

professional development. Including the perspective of female teachers helped to more fully understand teachers' teaching practices and the opportunities and challenges they encounter in the teaching process.

Specific information about the participants:

Before introducing the basic information about the participants, these definitions need to be clarified:

Professional athletes in China usually start at the grassroots level during the selection process and progress through the ranks of the youth sports school, amateur sports school, city team, provincial team, and national team. The selection process mainly relies on competition results at all levels and recommendations from coaches. Outstanding young athletes usually achieve good results in city or provincial competitions and are selected by coaches to train with the professional team. Junior sports schools and amateur sports schools combine academic studies with sports training. After joining a professional team, athletes undergo closed-door, high-intensity specialised training and are regularly assessed and selected. Those with outstanding performance could be promoted to a higher-level team. Usually, national-level athletes must achieve outstanding results in national or international competitions to secure a spot on the national team.

The sports-orientated university entrance examination is an important part of the general university entrance examination, but it differs in terms of the format of the examination and the admission criteria. Candidates for the sports-orientated university

entrance examination are generally students with a certain background in specialised sports training or sporting expertise. The subjects for which they apply usually include PETE, sports training, social sports guidance and management, martial arts and traditional Chinese sports. Candidates need to take both the general university entrance examination's cultural subjects' examination and the specialised sports examination, and the results of both parts together determine the candidate's final admission result.

Sports special recruitment refers to the preferential policies given by sports universities and general universities based on athletes' performance. For example, national and international-level athletes can enter universities directly through exemptions-usually these athletes do not go to university because they must continue competing, while first- or second-level athletes will use low-scoring admissions to enter universities directly. This policy aims to encourage athletes to continue their studies and improve their academic performance after retirement.

Aurora was once an elite kayaker, and her best performance was winning the Asian championship. She lived in a rural town and started playing volleyball at the city sports school in the fifth grade of primary school. She continued playing until the second year of junior high school. In the second year of junior high school, she was selected by her coach to join the provincial team and started to practice kayaking. Later, she was admitted to university through China's sports special recruitment examination and chose to retire in her second year of university to focus on her university studies. She majored in PETE at the university. After graduating from university, she successfully found a job as a university PETE.

Kate was a former basketball player who lived in the city. She started playing basketball at the city sports school when she was 12 years old and left the school at the age of 16 to prepare for the university entrance exam. In 1981, she passed the sports-orientated university entrance exam (Gaokao) and was admitted to a sports university, where she majored in PETE. After graduating from university four years later, she was assigned to a university in her province as a PETE teacher in 1985. In 2008, Kate began coaching the school's women's basketball team and later became the coach of the men's basketball team.

Grace lives in the city. From 1989 to 1995, she participated in sports at primary school with the PE teacher. From 1996 to 1998, she trained professionally at the provincial sports vocational and technical school. In 1996, she passed the sports-orientated university entrance examination and was admitted to the sports university, majoring in PETE. During her time at the university, she represented the school in many competitions. After graduating from university in 2003, she successfully found a job as a university PETE teacher through personal efforts.

Wyatt started playing football at school in the second grade, and at the age of 13 he joined the city sports school, training while still going to school. While at the city sports school, he did not choose to join a professional team due to family circumstances. He then entered university through the sports-orientated university entrance exam, majoring in PETE, and did not participate in any competitions during his time there. After graduating from university in 1992, he became a PETE teacher at a university, teaching football courses while also actively participating in refereeing. In 1995, he

became a national referee, and in 2000, he was promoted to international assistant referee and is now an international referee.

Samuel was born in the city and started playing football at school in the fourth grade, continuing through junior middle school and high school. Later, he was admitted to university through the sport-orientated entrance exam, majoring in PETE. While at university, he joined the school team and represented the school in many competitions. After graduating from university in 2003, Samuel became a PETE teacher.

Abner was born in the city and started playing football at the city sports school from the fifth grade of primary school but left the city sports school in the second year of junior high school. Later, he was admitted to university through the sports-orientated university entrance examination. During his time at university, he actively participated in the training and competitions of the school football team. After graduating with a bachelor's degree, he was recommended to study for a postgraduate degree at another school due to his outstanding academic performance. After graduating with a postgraduate degree, he began working as a PETE teacher in 2016. At the beginning of his career, he was a PETE teacher and then gradually became the head coach of the school's football team and has led the team to achieve outstanding results many times.

Edison was born in the countryside. He entered the sports school in the second grade of primary school and continued his training until junior high school, accumulating more than six years of training. In high school, he left the sports school. Later, he passed the sport-orientated university entrance examination and was admitted

to university, where he studied PETE. After graduating from university, he stayed on as a PETE teacher.

Miller was a professional footballer who lived in the city. In 1994, when he was 14 years old (in the second year of junior high school), he was selected for the city football team and began professional football training. He was then selected for the youth team of the local football club in 1996 and embarked on a professional football career. However, he retired due to injury in 1999. After retiring, he was admitted to university through special sports entrance examinations and studied sports training. While at university, he continued to train with the university team and actively participated in university football competitions. After graduating from university in 2003, he became a PETE teacher.

Jett used to be a professional footballer. Living in the city, he loved football from an early age and started playing in kindergarten. He continued to train and play in school during primary school. In 1997, at the age of 12, he joined the city team for football training. In 1999, at the age of 15, he joined the youth team of the local football club. In 2001, at the age of 17, Jett retired due to injury. In 2002, he was admitted to the sports university through a specialised sports examination, majoring in sports training. While at university, he represented the university in training and competitions. After graduating from university in 2006, Jett became a PETE teacher.

Daniel was born in the countryside and has no professional team or sports school experience. From the fourth grade of elementary school (age 10), he joined the elementary school sports team and participated in track and field training and

competitions until he graduated from elementary school. In junior high school, he joined the school's track and field team, football team, and basketball team and represented the county in regional sports competitions. In high school, he continued to train on the school's track and field team and football team and represented the school in regional competitions. He took the sport-orientated university entrance examination and was admitted to university. During his time at university, Daniel continued to train and compete while also receiving formal sports teaching and systematic professional training. During his undergraduate studies, he specialised in social sports management and switched to PETE during his postgraduate studies. After graduating in 2006, Daniel became a PETE teacher at a private university. In 2021, he was transferred to a public university as a teacher and became the head coach of the school football team. In 2023, Daniel was promoted to deputy dean of the sports college.

Lucas lived in the city and started professional sports training when he entered the youth sports school in the second grade of primary school. In the third grade of junior high school, he successfully entered the city team and represented the city team in many competitions. However, due to two injuries, he was forced to retire early. After retiring, Lucas decided to take the sport-orientated university entrance examination and was successfully admitted to university. After graduating from undergraduate school, he was assigned to a local sports school as a coach, responsible for the training of young athletes. With a growing interest in the theory of PE and training, Lucas decided to study abroad for a postgraduate degree and doctorate. After completing his doctorate, Lucas returned to China and became a PETE teacher.

Noel lives in a rural town. In 1984, when he was in the second year of junior high school, he entered the local sports school and began professional training. In 1988, he was selected to train with the provincial team. However, due to external factors, he chose to leave and continue his high school education. In 1989, Noel took the sport-orientated university entrance examination, but as he was not satisfied with the results, he decided to repeat the exam. In 1990, he took the exam again and successfully entered the provincial normal university, where he began studying PETE. During his time at university, Noel represented the school in competitions at all levels. After graduating in 1995, Noel was assigned to the university as a PETE teacher. In the early stages of his teaching career, he focused on teaching and constantly improved his professional skills. In 2010, he began to take on administrative duties for group competition training and was responsible for student activities, competition organisation, and the training and competition management of various sports teams on the campus. With his wealth of experience and leadership skills, he was appointed as the deputy dean of the sports college in 2020.

Figure 3 Participant Information Summary

Name	Gender	Major	Teaching Programme	Teaching experience (years)
Aurora	Female	PETE	Volleyball	22
Grace	Female	PETE	Basketball	22
Kate	Female	PETE	Basketball	39
Noel	Male	PETE	Football	30
Abner	Male	PETE	Football	8
Wyatt	Male	PETE	Football	33
Samuel	Male	PETE	Football	22
Lucas	Male	PETE	Football	30
Daniel	Male	PETE	Football	19
Jett	Male	Sports Training	Football	19
Miller	Male	Sports Training	Football	22
Edison	Male	PETE	Football	33

4.4 Data Collection (Life History, Focused Interviews, Noted Observations)

This study produced data through three methods: 1) in a single life history interview of 60-90 minutes, 2) a shorter, focused interview of 15-20 minutes and 3) Noted observations of a practical class. Both interviews were audio recorded. I interviewed 12 PETE teachers (9 males and 3 females) who taught the subjects of football, basketball and volleyball and had many years of teaching experience.

Life history interview

The life history approach is both a theoretical and methodological framework that situates personal experience within broader social, cultural, and institutional contexts (Goodson, 1992; Goodson & Sikes, 2001; Plummer, 2001). It involves collecting written and/or oral narratives that describe an individual's life through dialogue and reflection, producing rich qualitative accounts for analysis (Bertaux, 1981; Olive, 2014). Rather than focusing on isolated events, life history research traces continuity across a lifetime, revealing how experiences in domains such as education, work, and family intersect to shape identity and practice (Plummer, 2001; Goodson & Sikes, 2001). Through in-depth interviews, researchers can explore how individuals interpret and construct meaning from their experiences and how these understandings evolve over time (Atkinson, 1998, 2002).

Life history interviews therefore address the whole of an individual's life, eliciting memories of social change and participants' interpretations of those changes in ways that structured questioning cannot achieve (Goodson, 2011; Cole, 1994). In this study, participants were asked to reflect on when they first considered becoming PE teachers. This method invites respondents to narrate their lives in their own words and timelines, enabling researchers to examine how events, behaviours, and decisions shape personal and professional trajectories. Because of their personalised and reflective nature, such accounts provide deeper insight into how and why particular choices are made. By

tracing life histories, important events and ‘turning points’ can be mapped over time (Goodson et al., 2016), as was the case with several participants in this study.

In this study, participants were first invited to recall when they began to consider becoming a teacher. This approach supports exploration of how events and behaviours influence subsequent choices and actions, and its inherently subjective character provides deeper insight into why particular decisions were made. Several participants’ accounts allowed key events and turning points to be plotted along a timeline, illustrating the interaction of personal trajectories with broader socio-historical contexts.

I was in contact with the participants from September 2023 and agreed on a rough time for the interviews with all participants at the beginning of January 2024. The life history interviews took place from 22 to 28 January 2024, over the course of one week. Through the interviews, I encouraged the participants to share their complete life histories, although most focused primarily on their senior school and university years.

Using the life history method provided participants with the opportunity to express themselves freely, recount stories they considered significant, and articulate their thoughts and reflections. This required me to continually assess their responses in order to grasp the full meaning of their narratives without interrupting their natural flow. I was not a passive recipient of information; rather, I actively engaged by clarifying meanings, identifying inconsistencies, encouraging participants to elaborate, and maintaining focus on the research objectives throughout the process (Coolican, 2009). The interviews explored their journeys from childhood sporting experiences to their present professional lives. All participants expressed enthusiasm about taking part,

noting that the experience was novel and unlike any interview they had previously undertaken. During the interviews, I generally avoided interrupting participants' narratives; however, when clarification or further elaboration was needed, I raised questions or sought explanations at appropriate points.

In total, six universities were involved in the study, with two teachers recruited from each institution. The end of January marks the conclusion of the semester at Chinese universities, a period during which teachers are typically very busy. Consequently, all interviews were conducted on campus. To ensure the timely completion of interviews, it was occasionally necessary to visit two universities in a single day. As the interviews were audio-recorded, participants elected to hold them in their offices. Given that PETE teachers seldom have individual offices, doors were closed during the interviews to prevent interruptions. All participants received two forms to sign before the interview (Participant Information Statement and Participant Consent Form).

After the interviews, I was surprised to find that most participants wanted me to send them the translated text as soon as possible for review. I told them that after receiving the text, they should read it carefully and let me know in time if there were any errors or places that needed to be revised. Afterwards, I transcribed the interview recordings into Word documents, a widely used and accessible software. The transcripts provided a complete and unannotated record of the interview content. I returned these documents to each participant to ensure that only information they consented to share was analysed. Protecting participants from potential harm was a fundamental ethical

consideration throughout the study. To this end, I used member checking, a process in which I verified the data with participants to enhance the credibility of the findings (Birt et al., 2016). Most participants suggested minor amendments, which I incorporated and subsequently returned for further review.

Focused interview

Focused interview is a qualitative method designed to collect detailed information about specific events experienced by participants. Unlike unstructured interviews, which explore a wide range of topics, focused interviews address predetermined themes related to events, media messages, or phenomena (Merton & Kendall, 1946). The focused interview aimed at eliciting in-depth and detailed information on specific topics or social processes. It involves asking respondents a series of carefully prepared, focused, yet open-ended questions. Unlike standardised questionnaires, these questions are not fixed in wording or sequence but are designed to guide the interview flexibly according to the flow of the conversation and the participant's responses (Merton et al., 1990).

Focused interviews were used to explore themes and ideas emerging from analysis of the life stories of the participants. The interviews focused on the main themes and were semi-structured to provide a more open and exploratory space for communication, exploring in depth teachers' dispositions towards the student-centred approach and new national curriculum, the challenges encountered in the teaching process, and how to adapt to or resist these challenges. This approach allowed the participants to express

their thoughts freely in a more relaxed atmosphere, while the researcher could explore further the factors influencing teachers' dispositions, such as policies, school support, and personal teaching philosophies, through guiding questions.

When the participants had positive dispositions towards student-centred teaching I was able to gain an in-depth understanding of the reasons behind it. For example, I asked whether they have attended relevant training, whether they have the support of school leaders, and whether they have been influenced by other teachers. Teachers' beliefs are formed gradually over the course of their long-term professional development and are influenced by society, culture, policies and personal experiences. In the context of new national curriculum, teachers may experience a process of questioning and adopting a wait-and-see attitude, followed by gradual acceptance and even active participation in the reform. Focus interviews can reveal the dynamic process of disposition formation and analyse the factors influencing this process. Through the semi-structured questioning I collected data on personal experiences, contextual factors and professional development perspectives, making the research more comprehensive and specific.

The focus interview was on 22 June 2024 for a period of one week. As I was unable to return to Kunming in time, I used one of the Chinese meeting software, Tencent Meeting (similar to Zoom). I communicated with them via WeChat and sent them the link in advance once I had set up the time. Each interview lasted about 15-20 minutes, which allowed me to gain insight into the participants' backgrounds and understand the specific experiences that have influenced their career development. My main objective

was to fill in the gaps in the information I had previously collected and ensure that I fully understood their perspectives and motivations.

These questions were broadly grouped into the following areas:

1. Major events and people in their sporting career: I wanted participants to reflect on their sporting experiences and identify key moments or people who had a significant impact on them. This could include key events such as major tournaments, career-defining injuries or the guidance of a particular coach or teammate.

2. Unforgettable teachers and their teaching methods: I asked participants about the teachers and coaches in their sporting careers who had made a lasting impression on them, particularly those whose teaching methods they felt were effective or ineffective. My aim was to understand whether these methods and the relationships they had with influential teachers had had a lasting impact on the way they viewed teaching, particularly in their own educational practice.

3. University experiences shaped their perspectives: many participants had received PETE or related sports majors at university, so I asked about their university experiences and how they had influenced their current teaching practices. This could include their studies in the PETE programme, the influence of peers and professors, or specific courses and programmes that helped them view teaching from a new perspective.

4. In addition to these core topics, I also asked follow-up questions based on their responses to encourage them to think more deeply about how these experiences had influenced their career. Through this process, I collected rich, high-quality data on the

participants' personal and professional experiences, which provided a nuanced understanding of the factors that influenced their dispositions towards teaching and the new national curriculum.

Noted observations

Observation has long been a hallmark of anthropological and sociological research, and qualitative research in education is increasingly using participatory observation to gather information (Kawulich, 2005). Observation is the process by which researchers learn about the activities of those being studied through observing and participating in their activities in their natural environment. It provides the context for developing sampling and interview guides (Dewalt & Dewalt, 2002; Kawulich, 2005). Dewalt & Dewalt (2002) argued that the goal of research design using participant observation is to develop as objective and accurate a holistic understanding as possible of the phenomenon under study, while considering the method's limitations. They suggested using participant observation can improve the validity of research because observation can help researchers better understand the context and phenomenon of the study (Kawulich, 2005).

Cooper and Schindler (2001) suggest that observation can be considered in three dimensions:

1. Whether the observation is direct or indirect: the former requires the presence of the observer, and the latter requires recording devices (e.g., video cameras).

2. Whether the presence of the observer is known or unknown (overt or covert research).

3. whether the researcher is concealed (e.g., through a one-way mirror or hidden camera) or partially concealed, i.e., the researcher is seen but not known to be a researcher (e.g., the researcher assumes a visible role in the school) (cite Kumar & Sharma, 2023).

Gorman and Clayton define observational research as ‘the study of systematically recording observable phenomena or behaviour in natural settings’ (Gorman & Clayton, 2005; Kumar & Sharma, 2023) and observation as careful looking in a scientific way. In observational research, the current state of a phenomenon is determined not by asking questions but by observing it (Powell, 1997; cited Kumar & Sharma, 2023). Researchers do not have a predefined set of categories of behaviour.

Through the analysis of life history and focused interviews, I identified 10 specific scoring criteria for assessing the extent to which each teacher’s behaviour is consistent with the views they express. These criteria help to assess in a clear and objective manner the extent to which teachers use student-centred approaches in the classroom, considering factors such as student engagement, teacher-student interaction, the use of active learning strategies, and the overall dynamics of the classroom. The 10 criteria are based on the characteristics of student-centred approaches (GBA). They are as follows:

Figure 4 Observation instrument

	Statement	5	4	3	2	1
1	Emphasised dialogue between students					
2	Emphasised dialogue between students and teacher					
3	Reflection was encouraged					
4	Questioning used for learning					
5	Modified games were used for learning					
6	Significant use of small-sided games					
7	Lessons inquiry based					
8	Promotes small group discussion and team meetings					
9	Believed in the class sharing and discussing ideas					
10	Emphasised thinking					

I observed one practical class of each participant to compare their views with their teaching behaviour. This allowed me to verify whether there were any differences between what the teachers said in the interviews and what they implemented in the classroom. The observation class started on 11 September 2024 and lasted for two weeks. I used WeChat to confirm the time and place of the class with the participants in advance. This started the week before, to avoid the participants having to prepare in advance for the observation class. Some teachers asked me if I needed to introduce myself as an observer before the class, but I said no. I explained that I wanted to observe

the class as it was and that I was a transparent observer. In addition, I took unstructured notes during the classroom observation to record teaching aspects that may not be able to be fully classified into predefined categories. For example, I recorded the teacher's body language, the classroom atmosphere, students' feedback to the teacher, interactions between students, and interactions between students and the teachers. These unstructured notes allowed me to record important details that may have been overlooked to gain a more comprehensive understanding of the entire classroom experience.

4.5 Data Analysis (Thematic Analysis, Constructivist Grounded Theory)

Thematic analysis

Thematic analysis was used for analysis as a method for identifying, analysing and interpreting patterns of meaning (themes) in qualitative data. It is unique among qualitative research methods in that it offers a method that is not limited by a particular theoretical framework and can be applied across different theoretical frameworks and research paradigms (Braun & Clarke, 2022). Although thematic analysis is often considered a relatively flexible method of analysis, in practice, it requires considerable conceptual work before beginning the research (Willig, 2013). Brown and Locke (2017) pointed out that thematic analysis allows researchers to analyse the thematic content of qualitative data without being subject to strict methodological constraints, which helped make it appropriate for this study. However, Braun and Clarke (2022) emphasised that reflective research practice is essential during the process of thematic analysis (e.g., Elliott et al., 1999; Levitt et al., 2017; Yardley, 2015; Braun & Clarke, 2022). Thematic

analysis is widely used and can be applied to different types of data, including interviews, focus group discussions, qualitative surveys, and story completion methods (Braun & Clarke, 2013). Thematic analysis can be inductive (data-driven) or deductive (theory-driven) and is able to identify both explicit (manifest) and implicit (tacit) meaning in the data (Braun & Clarke, 2019).

Different versions of thematic analysis are appropriate for different research paradigms. For example, some versions have been developed for (post) positivist frameworks, emphasising the reliability of coding (e.g., Boyatzis, 1998; Guest, MacQueen & Namey, 2012), while others are geared towards the qualitative paradigm, emphasising the reflective practice of the researcher (Braun & Clarke, 2006, 2013, 2022). In addition, the focus on positivism in empirical psychology has also influenced the development of some versions of thematic analysis (Friedman, 2008).

The analysis aimed to distil a small number of core themes from the interview and observation data. Meaningful patterns were identified inductively and related to teachers' experiences in educational practice to understand how these shaped their dispositions towards student-centred approaches (GBA) within the new national PEH curriculum. Following Braun and Clarke's (2006, 2022) and Smith, Sparkes and Caddick's (2014) frameworks, I engaged in a cyclical process of listening to interviews, reading transcripts, and annotating emerging ideas to become thoroughly familiar with the data. This iterative process enabled the identification of salient meanings and the refinement of initial descriptive codes into more conceptually focused ones.

Building on this, the interpretative stance of Smith, Flowers and Larkin (2009) guided the movement from inductive coding to the construction of core themes. Rather than merely summarising participants' views, the analysis sought to interpret how teachers made sense of their professional experiences and how their values, beliefs, and practices reflected relationships with key aspects of their professional contexts. For example, the recurring description that "school evaluation systems prioritised technical proficiency and adherence to prescribed standards" was first coded as "teaching to the test". These were subsequently consolidated into the focused code assessment pressure, which, when interpreted through Dewey's notion of the continuity of experience, became part of the core theme institutional assessment constrains GBA uptake. This process illustrates how inductive insights were progressively refined through theoretical interpretation.

Throughout the analysis, attention was paid to interactions among teachers, students, and workplace settings to capture how pedagogical beliefs emerged and evolved within specific contexts. Thematic analysis provided an interpretative yet systematic account of participants' experiences and served as the foundation for subsequent interpretation through constructivist grounded theory, where the broader theoretical framing is elaborated.

Constructivist grounded theory

Constructivist grounded theory, as proposed by Charmaz (2017), is a qualitative research method that emphasises the process of meaning co-construction between the

researcher and the participants, aiming to understand how individuals construct their reality within their social and cultural context. At the core of this theory is the idea that knowledge and understanding are constructed through interaction, dialogue and engagement, rather than being derived from objective facts external to the researcher. Researcher positionality, question-setting, questioning and data analysis all influence the research findings (Charmaz, 2017). It emphasises the perspectives and experiences of the participants rather than the researcher's preconceptions. In other words, it means that I must focus on how the participants understand their own experiences, rather than imposing interpretations using an external theoretical framework. This theory as drawn upon in this study to generate initial codes and focus codes.

Charmaz (2006) describes initial coding as the process of examining each line of data and defining the actions or events that occur within or are represented by it. Coding involves breaking down textual or visual data into smaller categories, identifying patterns across different data sources, and assigning appropriate labels to these codes. Filtering data is essential in qualitative research, as not all information is relevant or useful; some may need to be discarded to maintain focus and analytical clarity (Wolcott, 1994; Creswell, 2013).

During the initial coding stage, I read the interview transcripts line by line and assigned short, specific codes to each segment of text. Constant comparison was used to examine similarities and differences across codes, ensuring that they captured the underlying meaning of the data rather than merely describing surface content. As analysis progressed, initial codes were refined, merged, or redefined to form more

abstract focused codes, which represented key patterns across participants. Memo-writing throughout this process helped trace analytical insights and relationships between categories. Each participant's data was analysed iteratively, allowing interpretations to evolve through ongoing engagement with the data. Finally, through theoretical comparison across the 12 PETE teachers, a small number of core themes were constructed to represent the shared yet contextually nuanced ways in which pedagogical beliefs were shaped within their professional and cultural settings.

4.6 Ethics Considerations

Protecting individuals who participate in interview-based research is the primary responsibility of the researcher, as in all studies involving human subjects. Professional research associations recognise the rights of participants to make informed decisions about taking part in a particular project, to be treated with sensitivity throughout the research process, and to have their personal responses and identities kept confidential throughout the process (e.g., Ethical Standards of the American Educational Research Association, 1992). Qualitative interviews require special consideration because they often involve a close personal relationship between the researcher and the participant, and the direction of the conversation can sometimes be unpredictable as the project progresses (Howe & Dougherty, 1993; Brenner, 2012).

This project was approved by the Human Research Ethics Committees of the University of Sydney on 21 December 2023. As this research requires participants to tell their personal stories, covering their experiences from participating in sports as

children to becoming PE teachers, these stories not only involve their life trajectories and growth processes but also key events, people, and important moments they have experienced in their sports careers. The content, details and people presented in each story have a profound meaning and impact on the participants, so ensuring the privacy and safety of the participants is of paramount importance. To respect the personal experiences of the participants and protect the security of their information, I maintained a high degree of responsibility and caution throughout the research process. After confirming all participants, I asked each participant to sign two forms: the Participant Information Statement and the Participant Consent Form, before beginning the first interview. These forms provide details of the purpose of the research, the methods, the rights of the participants and their role in the research. All signed forms will be kept by me securely, ensuring that no personal information is disclosed. By signing the consent form, participants are fully volunteering to participate and can withdraw from the research at any time without fear of any detriment.

To further protect the privacy of the participants, I avoided using any personally identifiable information in the data report. When presenting regions or geographic locations, I used vague descriptions such as 'county' or 'urban area' instead of specifying the city or neighbourhood. All participants have presented their personal stories anonymously, and any details that could lead to their identification have been omitted or replaced. These measures ensure that participants can maintain their privacy when providing personal information and do not suffer unnecessary risks when the research results are published.

Chapter Five: Findings

This chapter outlines the findings from analysis of the data generated from the life history interviews, focused interviews, and noted observations. The life history interviews generated detailed stories that provided the “high degree of sensitivity” to understanding participants’ dispositions toward student-centred approach (Goldman et al., 2003, p. 576). The four themes below were established and are discussed in this chapter. They are listed and discussed in order of importance from the most prominent to the least prominent.

1. Belief in the pivotal importance of mastering skill, separate from the game.
2. The powerful influence of exposure to player-centred coaching overseas.
3. Professional and elite-level coaching before and during university.
4. Institutional assessment and policy.

5.1 Belief in the Pivotal Importance of Mastering Skill, Separate from the Game

Belief in the central importance of mastering skill and technique was the most prominent theme, even for those who had changed from believing in the primacy of skill drills to championing student-centred pedagogy. This belief reflects the continuity of participants’ early experiences in skill-based sport environments, where technical mastery was regarded as the foundation of effective teaching and learning. Within this theme there were degrees of belief in skill mastery that can be grouped into those with:

1. Total belief in the unquestioned importance of the traditional skill drill approach.

Unquestioned belief in skill mastery/traditional teaching was expressed through most

of the participants' division of professional PE and public PE courses. Most had preference for a focus on skill when teaching professional PE as a 'serious' form of sport. Some also said that skill mastery should be the focus of public PE teaching.

2. Strong belief in the pivotal importance of skill but with recognition of some advantages of student-centred teaching for public PE courses. These participants felt that student-centred teaching was more suitable for public PE courses because it was not competitive.

3. A view that skill must be prioritised while recognising how the traditional approach can create problems with motivation but mostly focused on public PE courses. Sometimes there was a hint that this might sometimes apply to professional PE but much more toward public PE.

They are not presented as distinctly separate groups because there is no identifiable point of difference and there is significant individual variation that supports the choice of methodology and generating data through the stories of their lives.

Participants with belief in the primacy of correct skill were confident that skill was the core concern of teaching and coaching for all students. For example, Jett said that,

“Technical proficiency is a prerequisite for flexibility in competition. Only when students have consistent technical skills can they effectively execute complex tactical arrangements...I think it's also important to not ignore the students' mastery of skills, because they can only have a basic understanding and knowledge of football once they have basic technical and tactical skills” (Jett interview 1, 23/01/2024).

For public PE courses, Jett prefers traditional teaching methods, believing that technical explanations are relatively simple and undemanding and that they can effectively help students master one to two lifelong sports. In professional PE courses, Jett tries to combine traditional teaching with student-centred approaches. However, he believes that student-centred teaching is a challenge for both students and him. It is also important to note how he does not seem able to effectively implement the student-centred approach. He pays particular attention to the accuracy and standardisation of movements, a focus that stems from his own practical experience as an athlete. He said that through rigorous technical training, students can quickly master skills, laying the foundation for flexible adaptation and tactical execution in competition. He was convinced that technique had to be mastered before students could play games and this was point of tension between his belief in needing to master technique and his interest in student-centred teaching. For him, skill drill is far easier to teach than the student-centred approach.

The participants all spoke about a lack of interest in sport as a major problem and especially for learning skill and technique in university public PE courses. Kate believes that stimulating students' participation and letting them experience the fun of basketball are the most important aspects of teaching. She had been using traditional teaching methods to help students master the basic movements through guidance, explanation, and demonstration, as well as the cycle practice method. She believes that the traditional method allows students to develop a clear understanding and knowledge of basketball

skills. Kate said that if students fail to master the basic skills, it is difficult for them to truly understand the tactics and game of basketball.

“I am favouring the traditional teaching method in my teaching because the students’ basic football skills are very poor, and there is no way for them to develop a deep understanding of football if they can’t even master the basic skills” (Lucas interview 1, 26/01/2024).

In the focused interview with Lucas, I followed this up and he confirmed this view.

“For those students who do not have a background in football training, I need to teach them from scratch, and the traditional teaching method is still my focus because this method is very effective for technical and tactical practice. Many university students have poor physical fitness and coordination, and they also have a vague understanding of the movements and basically can’t complete the movements I teach them” (Lucas interview 2, 07/06/2024).

Lucas only takes professional PE courses where he feels that his students do not have a good enough grasp of football skills. There is a clear division here between the demands of practical teaching versus what he sees as being just hollow theory. It is underpinned by the traditional view that skill must be taught before playing any game, modified or not. He said that students in the professional PE courses should not only master the basic theories, technical and tactics of football but also be able to teach, especially because most of their future employment is as PE teachers in primary and secondary schools. He said that because the students’ basic football skills are weak, the teacher needs to rely more on traditional teaching methods, believing that only when

they have mastered the basic skills can the students have a deeper understanding of football and the ability to teach in the future.

“The professional PE courses require students to be proficient in football technique and tactics and how to teach them, so technical teaching is a major part of the programme. Most students in public PE do not like sports (any sports), especially girls, but they are required to earn credit for the course because it is one of the compulsory courses at the university” (Miller interview 1, 22/01/2024).

Miller said that most of the students of professional PE courses will be PE teachers in the future, while the students of public PE courses only need to learn two sports and promote habits of lifelong participation in PE and other movement. Miller told me that most of the PE teachers have very low requirements for the students of public PE and mainly focus on stimulating student interest because the students do not love sports and are not physically fit. He said that “This is because students in public PE courses are not athletic and have poor physical fitness” (Miller interview 1, 22/01/2024). He strongly agrees with the use of student-centred teaching but believes that the technical and tactical aspects of football are also important, so he includes repetitive and intense exercises in his teaching to allow students to improve their skills.

“I only teach professional PE courses, and I am also the head coach of the women’s football team at the school. Football courses and training sessions are different; during football courses, I select promising students to join the football team. Football techniques are very important, and in my courses, I place greater emphasis on students’ ability to master technical skills. However, during training sessions, I focus more on

encouraging students to engage in independent discussion and critical thinking. Regardless of the teaching method, I believe that technical instruction is undoubtedly one of the most important aspects” (Abner interview1, 23/01/2024). Abner highlighted the importance of mastering skills, particularly in football courses. He believes that regardless of the teaching method employed, technical skills are one of the most essential aspects of instruction.

Volleyball is a sport seen to have essential skills that must be mastered before playing the game and often seen to be unsuitable for GBA. This was Aurora’s view and linked to her emphasis on mastering skills before playing any games.

“Volleyball is a sport that is unique in that students cannot practice in groups if they do not know the basic techniques. Usually in the first 8 weeks of teaching, I teach the students the basic techniques, and then I organise teaching games. In professional PE courses, I mainly use traditional methods; I must teach students techniques and tactics first and do a lot of repetitive training through different techniques and tactics, and this method was also used by my previous coaches” (Aurora interview 1, 23/01/2024).

Aurora said that students must first master the basic techniques and practice them with a lot of repetition before they can move on to group work or inquiry-based learning. Her teaching schedule focuses on teaching basic skills for the first 8 weeks, followed by organised teaching games. This aims to have students equipped with the necessary skills to better participate in teamwork and actual games but follows the traditional idea of mastering skill before playing the game. For professional PE courses, Aurora’s

teaching follows the professional development programme, while for public PE courses, she tries to adopt student-centred approaches to boost students' interest. In her opinion, technique is not a primary concern for students in public PE courses, as they possess limited technical knowledge and the standards expected of them are comparatively low.

Daniel emphasised the importance of traditional teaching for both professional and public PE courses and arguing that public PE students still need to master technique and skill before being exposed to student-centred teaching.

“Teaching a public PE course is different from a professional class, especially a co-educational class, which poses a challenge for me. I must focus on increasing students' interest, especially the girls, by guiding them to participate through kicking competitions and small-sided games. I usually use the traditional teaching method to teach the basic skills of football, which I find to be very effective and simple to teach (for professional PE courses). Students also prefer this method, as they have been brought up as passive learners” (Daniel interview 1, 25/01/2024).

Daniel faced challenges getting students to engage and learn in public PE courses, especially co-educational courses. This is why he focuses on raising the interest of students, especially girls, by encouraging participation in sports through competitions, small-sided games, and student-centred pedagogy.

Daniel said that student-centred teaching is adopted on the basis that students have already mastered the basic skills and set tactics. This reflected how even when using student-centred, inquiry-based approaches, he maintained belief in mastering technique and skill first. He believed that students need a certain technical foundation before they

can give full play to their respective strengths in group exercises. “These student-centred approaches are used after the students have been taught the basic skills and tactics” (Daniel interview 2, 07/06/2024).

“The use of traditional teaching methods, which emphasise the improvement of technical movements among students in public PE courses, present significant disadvantages. However, for students in professional PE courses, mastering the basic techniques and skills of football is important for their future employment because most of them are PE teachers in the future, and the most important teaching content is to teach students the basic football skills” (Edison interview 1, 24/01/2024).

Edison believes that technique skill is important, but that traditional teaching methods can lead to students not being able to perform their technical and tactical skills in games because they lack independent thinking. He said that for students in professional PE courses, most of them are future PE teachers, and the most important thing they teach is to teach students basic football skills. This is why he said that must use traditional teaching to teach students basic football skills and tactics.

“Regardless of the sport, students vary greatly in their abilities. When I teach professional basketball courses, I will encourage students to learn and solve problems on their own through movement demonstrations and question guidance based on their mastery of basic skills. But if it’s the public PE course, I can only teach them basic basketball skills in the traditional approaches” (Grace interview 2, 07/06/2024). Grace believes that for students in professional PE courses, mastering basic skills is the priority, and when they have mastered the skills, they will try to allow them to engage

in discussion and problem-solving on their own. However, for public PE courses, she uses traditional approaches and mentions the specificity of basketball.

Many of the participants had a belief in the benefits of the student-centred approach to teaching that conflicted with their embedded belief in the need for the mastery of skill and technique as Noel suggests.

“I only teach professional PE courses, and since 2008, I have been trying to combine student-centred approaches with traditional methods. First, most of the students in professional PE courses already possess basic football skills, so I don’t need to spend much time emphasising these fundamentals. Second, their future careers will be as PE teachers or coaches, so mastering skills is extremely important for them. They not only need to master the skills themselves but also need to know how to teach them” (Noel interview 1, 25/01/2024).

Noel emphasised the importance of mastering skills, not just focusing on performance in games. He believes that a solid foundation in basic football techniques is crucial for students’ future career development. This not only enables them to better teach and impart skills as PE teachers or coaches but also enhances their competitiveness in the job market.

While many participants insisted on the importance of skill and technique some, such as Kate, recognised the problems this could encounter and particularly for students in public PE.

“There are a lot of students inside the public PE courses who do not like sports. I first need to stimulate their interest and guide them to participate in sports and then

teach them basic basketball skills. The idea of teaching public PE course is to let people understand basketball, and through the teaching of basic techniques, let them experience the joy that basketball brings them” (Kate interview 1, 25/01/2024). When following up on this in the focused interview she said that:

“If the students are beginners in basketball, I use teacher-centred approaches, through guiding, explaining and demonstrating, after that, I would use the cycle practice method, so that they would be proficient in the technical movements. I think the traditional approach must be used in the mastery stage of basic techniques so that students can have a clear understanding of basketball techniques. I take the competition method after the students have some basketball fundamentals; if the students don’t know the basic skills, they can’t understand the tactics and coordination of basketball” (Kate interview 1, 25/01/2024; interview 2, 07/06/2024).

Among the participants who believed in the need for the mastery of skill detached from the game, some such as Wyatt seemed to understand that the mastery of skill separated from the game does not necessarily make them better players.

“I only teach professional PE courses. I believe that just because a student has mastered the skills and techniques does not mean that they will do well in competition. Because competition and training are different” (Wyatt interview 1, 24/01/2024). Wyatt said that although many students have strong technical and tactical football skills, they often struggle to perform at their best during games.

While believing in the need for the traditional skill drill approach Samuel taught his public PE courses for fun and enjoyment.

“The teaching method for the public PE courses is based on having fun and exercising, but for the professional PE courses, I focus on competitions as they often go out to represent the school. I would focus on guiding the students to actively think about problems in my teaching. For example, I ask questions in class and let them kick the game; once there is a problem, I stop and let them think about what it is on their own” (Samuel interview 1, 24/01/2024). This approach aligns well with GBA. At the time of the interview, he had been trying to apply it in professional PE courses but struggled due to the imbedded experiences students have from being taught by teachers using traditional approaches.

5.2 The Powerful Influence of Exposure to Player-Centred Coaching Overseas

The Yunnan Provincial Department of Education selected 16 football coaches from various universities in Yunnan for three-months football education training in Liverpool, UK from May to August in 2016. The programme aimed to promote substantial cooperation between Yunnan Province and the UK in the field of football education and help improve the competitiveness of local football and football training capacity. The nine participants were all football teachers from six different Yunnan universities, of which eight were involved in the China-UK (Yunnan) Football Coach Development Programme. Samuel stayed in France for a while to attend a competition. Interviews revealed that seven participants (not Lucas) had a clear preference for athlete/student-centred teaching/coaching after attending the training.

This shift, arising from the overseas training experience, suggests that exposure to new pedagogical models prompted teachers to reflect on and re-evaluate their existing coaching and teaching beliefs, leading to a gradual change in their teaching orientation. Although the programme lasted for only around three months, it appeared to have a surprisingly strong and lasting influence on seven participants, as revealed through observations and subsequent focused interviews. Their growing inclination toward team sport pedagogy was further reinforced by the implementation of the new national curriculum and the professional discussions surrounding it.

“The new national curriculum focuses on students’ independent, co-operative, and inquiry-based learning, so that students are equally capable of performing physical activities without being told what to do by teachers” (Daniel interview1, 25/01/2024).

Noel said that,

“...student-centred, I remember it was proposed by the MoE in 2016, but at that time it didn’t attract a lot of attention from schools, and there was no corresponding management plan. In recent years, schools at all levels have begun to gradually promote student-centred approaches” (Noel interview1, 25/01/2024).

This theme focuses on nine participants’ UK and European learning experiences, how it influenced their pedagogical beliefs and how they have changed their pedagogical beliefs.

Abner attended the China-UK (Yunnan) Football Coach Development Programme for three months. His experiences of learning how to play and teach football in the UK seems to have significantly shaped his pedagogy and pedagogical beliefs over the two

years leading up to this study. At first, he was confused but as he began to understand, he was inspired. He particularly liked the way it offered a way of avoiding direct instruction and allowing for a better understanding.

“If I tell a student a tactic directly, it may be difficult for him to understand. But if I create a scenario for him where a technical tactic will happen and let him make his own choices, they will understand it more easily” (Abner interview 1, 23/01/2024).

Although he was impressed with the student-centred approach he struggled to let go of his belief in the importance of skill and technique.

“...there are drawbacks to such teaching methods; students need to have enough understanding and knowledge, and if they can’t understand, there is no way the teacher can guide the students to get what they want” (Abner interview 1, 23/01/2024).

Although Abner was exposed to student-centred approaches in 2016, he said he only really started learning how to do by putting it into practice over the two years before the interview. Like most of the participants who had positive dispositions towards student-centred and inquiry-based teaching he believed that teachers should not rely on a single teaching method. He and many others believed that teachers should combine a variety of teaching methods. He strongly endorsed the student-centred teaching philosophy he experienced in the UK. He most liked the use of dialogue and reflection.

Abner felt that if students only experience traditional direct instruction methods, they rely too much on the teacher for all the answers to challenges. They will lose their way when there is no one left to provide them with knowledge. He read how student-

centred approaches are effective in developing students' self-learning skills and making them more independent learners and liked this idea. The main changes he made in his teaching were to emphasise questioning and guide students to think independently. During the technical and tactical sessions, various scenarios were set up for students to practice and respond to.

Although he began to use student-centred approaches in his teaching, Abner still believed in the importance of students and players mastering the basic techniques, especially in professional PE courses, where he would teach the techniques first. He believes that students cannot carry out the implementation of the method if they do not know anything about football because they will not respond to the teacher, and the lessons and training will not take place.

Daniel embraced traditional teaching methods after starting university (2002-2006) in 2002 and had been using them as a teacher since graduating (2006-2016). In 2016, his experiences in the UK and player-centred coaching made him want to move to student-centred teaching. However, on his return to China, he found many challenges in implementing student-centred approaches to teaching and has been wavering since then (2016-2024).

During his experiences in Liverpool, UK he was surprised by how the teachers would ask the students what they wanted to achieve and then leave them to figure out what they could do to do it. This is what he said he most learnt from training in Liverpool. When he returned to China, he began making some changes to his teaching, such as giving some topic tasks for students to discuss. After the discussion, he asked

them to exchange and summarise them in a gathering. What he thought was most important was building good relationships and in-depth communication between students and between the teacher and students. Group practice is important in team sports, especially football.

“I usually start by explaining what a lesson is about and have the students practice in groups. I will be watching how they interact and how they go about accomplishing the classroom tasks. I want them to be highly focused and have fun while interacting” (Daniel interview 1, 25/01/2024).

Daniel used student-centred approaches after the students had been taught the basic skills and set tactics. He said that student-centred teaching is more demanding for teachers than traditional teaching but has advantages. These include developing students’ ability to think independently, but when he returned to teaching, found that students were not receptive to the student-centred approach because they were accustomed to traditional teaching.

Early experiences of independent learning the influence of his father led Daniel to favour a student-centred approach to teaching before university. However, after entering university through sport, he switched to embrace traditional teaching (2002-2006). This meant that he entered university PE teaching after graduation as a full believer in direct teacher-centred teaching (2006-2016). His 2016 experience in the UK and player-centred coaching refreshed him and moved him back toward student-centred teaching. When back in China, the dominance of teacher-centred approaches led him to again believe in the need for skill mastery before any group work/games for

professional PE. From 2006 to 2024 he oscillated between teacher-centred and student-centred teaching. At the school he had been in up to the interview, he was strongly influenced by it, trying to convert its teachers from teacher-centred to student-centred approaches as a means of aligning with the pedagogy of the new national curriculum. The timing made a big contribution to his development of student-centred teaching and favouring the approach of the new national curriculum.

Edison had been positively influenced by his UK experiences and told me that the best way to get students to accept the teacher's opinion is to encourage them first and then bring up their shortcomings for them to consider and discuss. He pointed out how this contrasts with traditional Chinese education, where teaching is very strict with the teacher chastising them if they don't meet the standard requirements. His UK experience inspired him.

“This inspired me because I felt much better as a learner. I slowly began to change my own teaching methods, focusing on group discussions and communication with students” (Edison interview 1, 24/01/2024).

Using small group activities, Edison posed problems for his students to think about and solve on their own through discussion and dialogue. This is something he learnt while attending coaching development training in Liverpool. He used training games and modified them to improve their football skills and tactics in a game environment. He said that he noticed in his regular teaching that “when students interact with each other, they are very active and happy” (Edison interview1, 24/01/2024). He said that he

tries to guide his students to think and then teaches them together with traditional teaching methods (Edison interview 2, 05/06/2024).

When Edison attended a 2018 FIFA training course it emphasised group discussion and diverse classroom settings which aligned well with what he had learned in Liverpool. It advocated ‘encouraging students before pointing out deficiencies’ to promote learning. This teaching philosophy contrasted sharply with traditional direct instruction in China and inspired him to gradually change his teaching method and focus more on group discussion, and student interaction. Edison often uses games without and with balls and group practice in his teaching, encouraging students to solve problems through discussion and cooperation.

The UK and FIFA coach training had a strong impact on Edison and moved him toward a student-centred approach to teaching. He continues to develop student-centred approaches and exploring other teaching methods. He now pays more attention to student guidance, discussion, questions, and summaries in all his teaching he recognizes how it aligns with the new national curriculum. He tries to combine traditional teaching methods with guided teaching, encouraging students to think more through questioning and inspiring them to develop their independent learning abilities. He does this to more successfully have students accept and see the value of student-centred teaching and related teaching such as inquiry-based learning.

Jett never questioned the traditional approach he was taught when growing up, but this changed in 2016. He was selected in the China-UK (Yunnan) football Coach Development Programme that was held in Liverpool. He describes his exposure to the

student-centred approach as focusing on student thinking and subjectivity. Jett said that what he experienced in Liverpool was totally different to the traditional teaching in of Chinese PE courses.

He described the Chinese approach as based on the teacher's monologue and students' mastering of techniques. He said it contrasts with the teaching he experienced in the UK which is based on dialogue, focused on student subjectivity and communication. He said that coaches in the UK replace criticism with advice and encouragement rather than simply pointing out mistakes and being critical.

Miller tried the student-centred approach in his teaching by gradually reducing the number of students playing games from eight to six and then to four (more touches) in multiple small groups. Instead of a "boring monologue" he tried asking questions and having them form discussion groups. This was slow to show results in engagement because it was so different to what they were used to, and he had not yet developed skill in questioning. The results of his teaching fell short of his expectations. He said that this is because his students have long been influenced by the traditional teaching methods and are used to passively accepting knowledge, instead of thinking and learning independently. At the time of the interview, he was focusing on interaction and communication which he said is beginning to work.

In 2001, Miller attended a football coaches' training course, mainly for U18 age athletes, with an instructor from Germany. The point that surprised and impressed him the most was the player-centred approach of the course. He said that he saw it as common sense. The teacher focused on players solving problems and thinking about

what they were doing. He emphasised the importance of understanding the character, physiology, and psychology of the athletes and the different performances in stages. Miller's involvement helped him gain a new understanding of how to focus on player learning in game situations by adopting a player-centred coaching approach. Miller said that "it is very important to understand the students and players and to relate to them" (Miller interview 2, 10/06/2024).

Even though Miller strongly agrees with the use of student-centred teaching and is committed to developing it, he believes that the technical and (fixed) tactical aspects of football cannot be overlooked. To teach them he goes back to the repetition of skill and technique.

The 2016 Liverpool, UK for football coach development training, an experience that dramatically shifted Noel's view of football teaching. He originally thought that the role of coaches was only to teach students techniques and tactics, but he saw how in the Premier League, being a coach required not only the ability to teach techniques and tactics. He said he saw how it also required the ability to be a manager and operator, helping the club to generate revenue and leading the team to achieve good results. He said that this contrasted with Chinese football training methods that he referred to as 'secret'. In his opinion the lack of open communication between coaches and between coaches and students or players hinders the opportunities for mutual learning and progress.

Noel's 2016 trip to the UK dramatically changed his pedagogical approach and made teaching sport far more complex than he had thought it was. His three months of

training as a football coach in the UK had a powerful influence on him. In his own words, “It turned my view of teaching and training football upside down. That experience was very emotional for me.”

Before his trip to the UK, Wyatt had wanted to engage students more and have them enjoy his teaching. During his training in the UK, he was surprised by his introduction to more purposeful and psychologically integrated games designed to stimulate holistic thinking and the habit of active questioning. He said that although he gradually began to devise themes for his students to think about, he had not expanded the games enough and had not been able to innovate more pedagogically due to his limited energy and knowledge.

Wyatt believes that 14 years of international refereeing experience and participation in FIFA training programmes had a significant impact on his approach to teaching. By interacting with coaches from different countries, he gained valuable coaching and teaching insights. He has since incorporated these teaching methods into his teaching practice and said that he is confident that he will continue to innovate in his teaching philosophy and approach.

The biggest influence on Samuel’s pedagogical beliefs was a trip to France while at university. This was sent on behalf of Chengdu City to participate in a football competition. While he was there, he observed a local primary and secondary school PE course that impressed him. His observations of teaching exposed him to pedagogy that he had not seen before, and which had a big impact on him. He found that the local teaching atmosphere was relaxed and the relationship between teachers and students

was harmonious, in contrast to what he referred to as the ‘serious’ teaching style in China.

“The teachers were very friendly and communicated with the students, and the atmosphere in the classroom was very relaxed. However, in China, there is a distance between the teachers and the students; the teachers are very serious, and the classroom atmosphere is very strict. After that, I felt the importance of communication between teachers and students” (Samuel interview 1, 24/01/2024).

Samuel was raised in an environment in which the traditional approach of emphasising the mastery of skill was prioritised. This was changed by a high-level football trip to France where he was immensely impressed with that coaching approach in local clubs and the importance placed on developing and maintaining positive relationships. At the same time, he also observed local PE classes. This experience had a powerful and lasting influence on his coaching and his pedagogical beliefs. It aligned his beliefs about the new national PEH curriculum, giving him a strong alignment with it.

“The process of changing my teaching was long, and the teacher’s educational knowledge system or teaching content needs to be constantly updated to adapt to the needs of today’s students. Since 2014, I have been very interested in the knowledge of physical training, which prompted me to go out and attend a lot of trainings. I have used this knowledge to incorporate it into my football courses, and I have found it to be very effective for the students in my professional courses” (Samuel interview 1, 24/01/2024).

Samuel said that he emphasises thinking in practical courses and in the classroom for understanding and to motivate students by using games, but he hangs onto the importance of skill, technique and set tactics.

“For those students who do not have a background in football training, I need to teach them from scratch, and the traditional teaching method is still the focus as this method is very effective for technical and tactical practice. Many college students have poor physical fitness and coordination, and they also have a vague understanding of the movements and basically can’t complete the movements I teach them” (Samuel interview 2, 07/06/2024).

Lucas travelled to the UK for three months of football coaching development training and spent two months in Korea studying at the Korean National football Association as a visiting scholar. He said that he thought the educational concepts of football training methods in the UK, Korea, and China were broadly the same, with only differences in the details. Despite similar educational concepts, he said that the implementation in the UK and Korea is significantly better than in China. In his view, this is not just a matter of individual ability but also involves wider implementation details and system issues. Although he has had a lot of experience studying abroad, He favours traditional teaching methods and the central importance of skill mastery. Unlike the others in this study who went overseas and seemed converted to player-centred coaching, it had little effect on him. As the same time, He recognises how games are more engaging for students with good enough skill and technique but makes no mention of modifying games for specific learning.

Samuel was influenced by his training in France but hung onto his core beliefs in the importance of skill mastery. Lucas was the only one of the eight participants who did not change at all and continued to use traditional teaching methods. In his opinion, the students' football skills were too weak to implement student-centred approaches. The other seven participants (including Samuel) had made some changes after the training with all being challenged when trying to implement student-centred teaching back in China. Their knowledge of the student-centred approaches all started with the overseas training where they found the pedagogy novel and interesting.

Most of the participants mentioned that the things they changed the most were 1) more emphasis on questioning and guiding the students to motivate them to independent thinking, 2) focusing on group discussions and group practice, 3) the importance of teacher-student and student-student communication, 4) encouragement as the main focus, and 5) setting up a scenario-based teaching and learning environment with an emphasis on the use of techniques and tactics. Even so, all participants were unanimous in their beliefs about the predominance of technique. On the other hand, all participants mentioned that Chinese students are less receptive to student-centred teaching methods, which are challenging for both teachers and students. The fact that students are used to relying more on direct instruction from the teacher makes it difficult to achieve immediate results from the method.

5.3 Professional and Elite-Level Coaching Before and During University

Four of the twelve participants in this study (Aurora, Miller, Jett and Lucas) were former professional athletes. The remaining participants had been exposed to sports at a young age, and five of them (Abner, Kate, Wyatt, Edison and Noel) had attended a junior or city sports school for a period but had ultimately chosen not to continue the athlete path due to the busy high school schedule. In addition, nine participants in this study majored in PETE in university, while the remaining participants majored in sports training. Some participants (Abner, Kate, Miller, Jett, Edison, and Noel) continued to compete on behalf of the university in college. Having competed at a high level, participants were consistently exposed to traditional forms of coaching, which led them to regard this as the only legitimate method. This acceptance appeared to result from prolonged engagement in performance-orientated training environments where success was associated with strict discipline and technical mastery, thereby reinforcing the belief that effective teaching should follow the same model.

Aurora provides an example of the hard, traditional coaching she experienced in kayaking during a training camp. Her coach had strict requirements for technical movements, and if she did not meet them, she was punished. She usually had to get up at five a.m. to train all day except for meal breaks and was abused if she made any mistakes.

“Once when I was practicing paddling, I failed to meet his requirements due to my short stroke and the limited distance the kayak moved, so he criticised me. He gave me a lecture and demonstration in a very stern and threatening tone. I had to keep practicing until I reached the standard he required” (Aurora interview 1, 23/01/2024).

Aurora started playing sports at the age of 10, initially playing volleyball, then switching to kayaking four years later, and then kayaking professionally for nine years. As a very successful competitor she placed in the top three in kayaking in China more than twenty times and won the Asian Kayak Championships in Korea in 1997. Her ongoing experience as a professional athlete has led her to stick to the traditional approach of skills training and mastering basic skills before any competition. This did not provide her with sufficient reason to change her methods. This early experience and the nature of the sport of volleyball with the importance of skill led her to strongly believe in the teacher-centred approaches.

Kayaking is also a sport that suits the mastery of skill teaching approach through its isolated repetition. However, there are student-centred approaches (Light & North, 2017) that can be applied to kayaking, but this is not well known. It was not only kayaking that made Aurora accept traditional coaching but also other elite level sport at university and after.

The following quote from Grace is typical of the participants' experiences and views on the efficacy of direct instruction, teacher-centred teaching.

“Our university is full of athletes who have won national championships and work as teachers at the university after they retire. These teachers were my role models, and their teaching methods were based on training and competition, so when I first started teaching, I followed their traditional teaching methods. My experiences during university have had a profound impact on my current teaching” (Grace interview 1, 25/01/2024).

Grace hadn't been exposed to good athletes going to school in Yunnan but when she enrolled in Sports University this changed. Many of her teachers had been high-level athletes who had previously won national championships. They adopted traditional methods for teaching with an emphasis on drilling technique and skills that challenged what she had learnt from her father about pedagogy. This meant that when she first became a PE teacher, she took teacher-centred, direct instruction methods with her. The main influence on her pedagogical beliefs seems to be from her sports university teachers, who used traditional approaches.

Kate had experience as an athlete before becoming a university PE teacher. She said that she was not taken seriously when she made the varsity team in university but proved herself through her hard work. Experiencing success as the varsity basketball team coach she believes that to play well players must have excellent skills and must be taught using a traditional approach. Experience as a professional athlete and as a university coach influenced her teaching and her strong disposition toward traditional, direct instruction. It was further supported by her success as varsity coach.

“My former coach was my role model; she gave her life to basketball and brought up many players. I do not doubt her teaching and have always followed her methods in my coaching” (Kate interview 1, 25/01/2024).

Daniel was first exposed to professional football training in 2002 while at university. Up to then, he had largely taught himself to play but his teachers used a traditional teaching method. They focused on the repetitive practice of basic skills and strict discipline. Because he didn't have the opportunity to receive professional training

as a child, he had not mastered the basic skills of football, but he had a good feel or sense for the game and was creative. To make up for his technical deficiencies, he continued to learn from his teachers and classmates. After university, Daniel became a PE teacher. When he first started teaching, he subconsciously imitated the teaching methods of his university teachers, strictly requiring his students to practice basic movements repeatedly. He believed that through the traditional teaching method students could effectively master the basic skills of football.

“When I first started teaching, I relied on the teaching knowledge I learnt in university to teach, focusing on basic soccer training and emphasising the achievement of the high standard and completion of technical movements” (Daniel interview 1, 25/01/2024).

Edison was influenced by his previous coaches and teachers to teach skill-based instruction, even though he was exposed to a student-centred approach and saw worth in it. He started playing football at the age of eight and went to a junior sports school where the teachers used teacher-centred and skill-based approaches to teach him. He said that there was no good atmosphere for football training at that time. When he went to university, he practiced football for four years, was a member of the varsity team, and often represented his school in tournaments.

“My former teachers and coaches had a deep influence on me, and although I have my innovations in teaching methods, I still basically use traditional teaching methods in my classroom regularly” (Edison Interview 1, 24/01/2024).

When Jett was an athlete, coaches were known for their rigour, particularly in terms of technical and tactical training and attitude to the game, with an emphasis on discipline and execution that had a profound impact on his later teaching. Although the intensity of training at the university level was less than when Jett was an athlete, he still relies heavily on traditional teaching that focuses on skill transfer and technical instruction. His teaching is heavily influenced by his time as an athlete and his university years.

“The teaching I used to receive in China was teacher-centred. The students do whatever the teacher says, and they don’t have their own ideas” (Jett Interview 1, 23/01/2024).

Jett said he pays particular attention to the accuracy and standardisation of movements, a focus that stems from his own practical experience as an athlete. He said that through rigorous technical training, students can quickly master key skills, laying the foundation for flexible adaptation and tactical execution in competition. He was convinced that skill had to be mastered before students could play games and this was a point of tension between his belief in needing to master technique and his interest in student-centred teaching.

Lucas’ insistence on teacher-centred approaches is due to his experience as an athlete as well as a coach.

“I was born in the 70’s, when the football atmosphere in China was better, especially in the schools in the Northeast. I started playing football when I was 9 years

old, and I went to play every day after school, and then I went to a junior sports school to become a professional athlete” (Lucas interview 1, 26/01/2024).

He gave up playing football because of an injury and chose to go back to school but after passing the entrance examination and entering university, he changed his mind to play football again. After he graduated from university, there was an allocation system, that meant he was directly assigned to a sports school where traditional teaching was common sense. He said that “of course, my coaches’ method of teaching definitely had an influence on my teaching.”

Miller’s long experience as a professional football athlete led him to favour traditional teaching methods.

“I started to learn football in my second year of junior high school because my PE teacher thought I had good explosive power, and since there was a shortage of goalkeepers, he asked me to be a goalkeeper.”

In the second semester of his junior year, during a tournament, he was selected by the Kunming Football Association to join the professional team. Yunnan province had its first division team in 1996. He was then selected to join this professional team, which was a transition from professional to elite player, from 1996 to 2000, with a 4-year contract. After that, he retired due to injuries and went to university. Throughout his sports training from primary school to university, the coaches and teachers were much more likely to use the traditional lecture and demonstration methods of teaching. Because of his experience as a professional football athlete, he had the shadow of my

former coaches on me. They emphasised more repetitive exercises, with a very high volume of training, until we had muscle memory” (Miller interview 1, 22/01/2024).

Noel grew up being taught at school using traditional approaches, and apart from a few teachers he liked because of his relationship with them, he could not suggest anyone who had a strong influence on his preferred pedagogical approach. On reflection in in (Noel interview 2, 24/06/2024), he suggested it was the traditional teaching method with an emphasis on drilling skill. Noel initially taught using approaches influenced by the teacher-centred, direct approach of his experience in professional sport.

“When I first started, teaching it was all centred on me. I was young and impulsive and had a strong personality and experience with professional sports teams.” He was once selected by the coaches of the junior sports school but didn’t go the first two times because of problems with transport and accommodation. It wasn’t until 1984 that two coaches went to his house and invited him to join the junior sports school. They wanted to help him transfer to another school, after which he entered the sports school.

“Every teacher and coach had a profound impact on me. Whether it was their care and love for the students or their teaching, it had a profound effect on me” (Noel interview 1, 25/01/2024).

Wyatt’s commitment to traditional teaching methods is due to his previous varsity experience as well as his university experience. He was selected by his school to join the school football team when he was in the third grade and has been training consistently ever since then. He had the opportunity to enter the Kunming Junior Sports

School, but he didn't choose to follow the path of a professional athlete. Later, through the college entrance examination, he entered university and chose to major in PE. His PE teachers in primary and secondary school used to take his team to competitions and training where they achieved good results. In those days, most teachers used traditional teaching methods, and their dedication had a big impact on him. During his four years of bachelor study at university, courses in a variety of sports had a big impact on him, with his own pedagogy mimicking the methods of his former coaches because he learned solid football skills through them. He said that "I think there's something to be said for traditional teaching being around for so many years" (Wyatt interview1, 24/01/2024).

Samuel's training experiences during his university years had a strong influence on him. "I got into university through a sports exam, specialising in football, as I loved playing with my friends as a child. I often represented my school at university, and because I hadn't experienced professional football training as a child, I took training very seriously during my time at university. The coaches at that time were very strict, and the teaching methods were skill-based, which I found very useful. For a student like me, who had a very poor football foundation, skill acquisition was the most important thing. Later, in the years when I first became a PE teacher, my teaching methods were also mainly teacher-centred. I think it's because I've experienced it myself, and I think that approach works as well" (Samuel interview 1, 24/01/2024).

Abner said that when he first started teaching, he was mainly teacher-centred because the method he had always been taught as a student, and an athlete was the

traditional method. “The method I received all through school was the traditional method of teaching; when I was an athlete, my coach was rigorous, and if I didn’t follow his orders, I was scolded, and he didn’t give us time to talk or think. When I entered university, my coaches were the same. They deeply impacted me, and I was also a teacher when I first stepped into my position” (Abner interview1, 23/01/2024).

This theme confirms the dominance of traditional approaches across China at professional level and above. At these levels teacher-centred, direct instruction was unquestioned by the participants. It had a long-lasting influence on them that for many, was still strong at the time of the study. This is not at all surprising because the traditional approach is the status quo, and not only in China. Exposure to and belief in traditional skill mastery and the unchallengeable importance of technique seemed to embed belief in teacher-centred, direct instruction approach but it did not prevent some of the participants such as Miller embracing the student-centred, inquiry-based approaches they were exposed to in the UK and Europe. To different extents, the influence of playing professional and elite level sport interacts with other experiences to shape the participants philosophy and pedagogical preferences.

5.4 Institutional Assessment and Policy

Most participants mentioned the school’s talent cultivation programme as one of the main factors holding up the implementation of student-centred approaches for them. This was because the teaching content needed to be aligned with the talent cultivation created a clash between it and student-centred teaching. Most of the PE students’ future

employment would be as PE teachers in primary and secondary schools, so the new national curriculum was important for them. The new national curriculum is student-centred, but many participants felt that they were not elaborated in enough specific detail for them to fully understand and implement them. According to some participants, most school PE teachers are puzzled by this and do not understand what student-centred teaching is. They see this as a major problem. This confusion appears to reflect a gap between policy rhetoric and practical understanding, where teachers are required to adopt student-centred pedagogy without sufficient experiential or institutional support to make sense of what it means in their specific teaching contexts.

The talent cultivation programme in the university where Daniel teaches is closely linked to the new national curriculum standard. They provide training mainly for future PE teachers. Schools attach importance to curriculum norms; teachers must teach according to the standards and regulations. Teaching assessment and supervision also needs to follow the relevant requirements. Talent cultivation programme and syllabi are based on teaching materials, and these regulations are mandatory. This was a common theme in interviews such as with Daniel.

“Schools and the new national curriculum now require us to be student-centred, but implementation is difficult. The main reasons for this are: 1) student testing and assessment still focus on technical skill mastery, and 2) students are used to traditional teaching, and it is difficult to change” (Daniel interview1, 25/01/2024).

Jett’s attempts to change teaching methods were also constrained by the requirements of the university where he works, which has clear rules for teachers on

what and how to teach, especially in terms of examinations and assessments. The current examination system focuses mainly on students' technical mastery and ignores their overall ability and performance in competitions.

“Our teaching must not only be in line with the educational philosophy of the university but must also be implemented in strict accordance with the training programme and syllabus set by the university. The implementation is often restricted by school regulations and examination requirements. This is mainly in terms of examination criteria; the current examination system focuses more on the assessment of students' technical skill mastery than on the correlation with their overall ability and performance in actual competitions. The existing examination standards favour technical skill specifications and lack a comprehensive evaluation of students' comprehensive ability and actual game ability” (Jett interview 1, 23/01/2024).

Kate said that the university syllabus is revised every few years, but it is mainly about the monitoring of university students' physical fitness and health because tests are conducted every year, and the state needs to keep statistics on the passing rate of students in the tests. She said that she cannot cater for all students' interests and can only teach to the requirements and standards of the syllabus and talent cultivation programme to ensure that the course objectives are met.

In her interview Kate identified a mismatch between the school's talent cultivation programme and the new national curriculum. Although the new national curriculum advocates a very advanced concept of student-centred and all-round development of students, she said that it has not been fully implemented in teaching practice. The

reasons she gave for this are the excessive number of students in the classroom, the limited space, and the limitations of assessment and evaluation methods, which make teachers tend to continue using traditional teaching methods.

“While traditional teaching has been very effective in helping students master technology, it has often neglected the development of active thinking skills. I believe that this limitation leads to a contradiction between teaching practices and the new curriculum concepts and hinders the further advancement of teaching reforms” (Kate interview 1, 25/01/2024).

In Samuel’s interview, he said that the MoE of China takes sports and physical fitness of university students very seriously, and as a result, many documents have been issued. He said that university teachers make some changes according to the school’s curriculum requirements, but he believes that no matter what the changes are, students’ attitudes toward PE courses are not good. He suggested that this is because:

“Chinese students are brought up to be guided by the idea that culture courses are the focus, so they have a bad attitude towards PE courses. Teaching should be implemented according to the school’s talent cultivation programme, but how it is implemented is something that teachers can innovate. Although the school has been promoting student-centred teaching in recent years and teachers are expected to innovate their pedagogy, we have tried to implement it, and the students were unable to give positive feedback. Teaching assessment is also based on the acquisition of students’ skills and physical fitness” (Samuel interview 1, 24/01/2024).

Wyatt said that the new national curriculum transformed the concept of student-centred into a mandatory requirement in practice, not only in terms of conceptual changes but also in terms of hidden factors that affect teaching and learning. This method focuses more on process assessment than on the traditional summative assessment. Although student-centred teaching helps to enhance student engagement and personalised development, He felt that large courses need to be replaced by smaller ones so that teachers can focus more on the individual needs of their students. “Nowadays, we all use the final end-of-term examination to examine how much students have learnt, and it is difficult to change teaching under such an assessment system” (Wyatt interview1, 24/01/2024).

Miller was very positive about the new national curriculum’s implications for PE and happy about how teachers in primary and secondary school are being trained to implement it. However, he was critical of how universities have not changed to align with it. He feels that the new national curriculum provides a good guide for PE teacher training in universities. It requires future PE teachers to acquire more theoretical knowledge and knowledge of other disciplines, which means that one cannot be a PE teacher just by playing football; they need to possess more other abilities. He is unhappy with how university programmes don’t align with the new national curriculum and particularly with talent cultivation programme. “In my opinion, the PE colleges of universities should organise teachers to study the new national curriculum, and in particular, leaders in charge of teaching should have a clear understanding of the talent cultivation programme” (Miller interview 1, 22/01/2024).

Noel said that in 2016, the MoE introduced the concept of ‘student-centred’, but at that time, it was not widely regarded by schools, and there were no corresponding management measures. It was an idea that seemed good to him, but there was not enough guidance on how to do it. It is only in recent years that schools at all levels have begun to advocate for this method, which he strongly agrees with. Although he taught strictly according to the syllabus, he felt that the teaching was not effective in practice. With the accumulation of teaching experience, he gradually changed from teacher-centred to student-centred. Noel’s early teaching was “always in accordance with the original syllabus, but in practice, the teaching effect was not good” (Noel interview 1, 25/01/2024).

Noel believes that the promulgation of the new national curriculum has had a major impact on the organisation and management of teaching in schools, but not on the specific teaching methods. He points out that there is no clear definition of ‘physical literacy’ in the new national curriculum, which allows for some flexibility in implementation. He argued that the reason for not changing much in national education is that there is a great deal of variation from place to place, so the new national curriculum is more like a broad framework of guidance, and teachers only need to adapt their teaching to their individual circumstances to ensure that they are in line with the new national curriculum.

Edison said that the content of the school’s curriculum was mainly based on the syllabus and talent cultivation programme and that many of the standards and requirements could not be changed by teachers. He said that schools claim they are

doing student-centred teaching, in the teaching practice and learning process, students' participation is still relatively passive. Despite Edison's efforts to try to get students more actively involved, the current standards and framework limit the flexibility of teaching styles, making it difficult to fully understand the concept of student-centred teaching. This limitation also affects student autonomy and the effectiveness of classroom interactions.

“The course content is decided according to the syllabus and talent cultivation programme, and there are some standards and requirements that the teacher cannot make changes to. Although the university is also promoting student-centred teaching and learning, students are still passive in the teaching process” (Edison interview 1, 24/01/2024).

The school's teaching philosophy and curriculum reform prompted Grace to think about students' physical and mental health and overall development rather than just pursuing the improvement of sports skills. It encouraged her to think about a more holistic approach to teaching and learning in PE.

“Also, the school's teaching philosophy and curriculum reform encouraged me to focus on students' physical and mental health and their comprehensive quality of development rather than focusing just on athletic ability” (Grace interview 1, 25/01/2024). “If the school implements teaching reforms, it will be conveyed to the faculty, and each teaching and research group will adjust the talent cultivation programme accordingly” (Grace interview 2, 07/06/2024).

Aurora said that the faculty she is in conducts frequent class inspections. She is required to always carry her lesson plans, syllabus, examination syllabus, and attendance rolls in class. Although teaching methods are usually determined by the teachers, the assessment criteria are strictly controlled by the faculty. She said that most teachers adopt teacher-centred approaches to meet the assessment requirements. How they teach is influenced by the importance of students passing their examinations.

“The rules of the Academic Affairs Office and the university are mandatory, and they don’t give a free hand to the teachers. Although the pedagogy can be decided by us, the assessment criteria and content are set by the faculty. Since both teachers and students need to complete the assessment criteria, most teachers still adopt teacher-centred approaches” (Aurora interview 1, 23/01/2024).

Aurora said that the school’s talent cultivation programme does not match the new national curriculum and that it is usually updated once every two or three years. She believed that using student-centred approaches would make it impossible for her to meet the school’s teaching and assessment requirements. This significant interference with the implementation of student-centred teaching and learning is identified clearly by Aurora.

“I will not be able to meet the school’s teaching assessment requirements if I teach using student-centred approaches. University PE is a compulsory course and must be taught in accordance with the school’s syllabus and examination syllabus” (Aurora interview 1, 23/01/2024).

She also repeatedly mentioned the pressure to pass exams and the time constraints of teaching, which limit the time and motivation to implement a fully student-centred approach. It encourages her to favour more teacher-centred approaches.

“I think it’s great to be student-centred and want to implement it and sometimes differentiate the teaching process according to the individual student’s ability. But it’s important to consider the student’s exam pass rates. I have 16 courses a semester, one class a week, and I must teach three volleyball skills to 50 students, which is difficult” (Aurora interview 1, 23/01/2024).

The current assessment still focuses mainly on the ability to perform specialised, technical skills, but Aurora incorporates elements of student-centred teaching to foster cooperation, independent thinking, and teamwork to enhance their overall ability. Her favouring of teacher-centred teaching was due to meeting the curriculum requirements of the school’s talent cultivation programme and the school’s Academic Affairs Office placed pressure on Aurora to stick with a focus on learning skills separate from the game before playing games of any kind.

Some ideas or Discussion

The reasons for switching to student-centred approaches are as follows:

1. Eight participants were very interested in new pedagogical approaches after their overseas training and thought they could try to implement student-centred approaches in their teaching. Their dispositions were influenced by the need to understand the new national curriculum.

2. Because of the new national curriculum, schools would require teachers to conduct student-centred teaching and promote independent, co-operative, and inquiry-based learning.

3. Most of the participants were coaches of the school's varsity team, and they attributed their students' poor performance on the field of play to the influence of traditional pedagogies.

4. Drawing on the participants' stories for data emphasised that despite similarities the influence of the four themes combined to influence each participant differently.

5. Although most participants did not talk much about their childhood their stories suggest how Dewey's continuum of experience can help explain what they've learned about sport and pedagogy but also the development of their dispositions towards coaching/teaching and the philosophy underpinning the new national curriculum.

6. For most of the participants, there was tension between what they had grown up to understand as the traditional approach and the new idea of student-centred teaching.

7. This study suggests that such a significantly different sport pedagogy as student-centred teaching and learning needs to be better explained. It also suggests that contradictions in university PETE programmes needs to be attended to.

Chapter Six: Discussion

6.1 Introduction

This study explores twelve PETE teachers' dispositions towards the student-centred approaches (GBA) in the new national PEH curriculum standard and what influenced them. The narrative inquiry methodology used was effective for identifying four themes in the analysis but even more effective in suggesting how each one of the participants' dispositions were shaped by their individual life experiences. The four themes are:

1. Belief in the pivotal importance of mastering skill, separate from the game.
2. The powerful influence of exposure to player-centred coaching overseas.
3. Professional and elite-level coaching before and during university.
4. Institutional assessment and policy.

Within each of these themes there was significant variation between individuals that was particularly noticeable in theme one but evident in all of them. When life experience is considered as learning, as in narrative inquiry, the methodology is sometimes considered as a constructivist approach (Clandinin & Connelly, 2000). Narrative inquiry aligns well with the core tenets and ideas of constructivism, which emphasises how knowledge is constructed by individuals through their experiences and interactions with the world. In narrative inquiry, researchers explore how individuals construct meaning from their lived experiences by examining their stories and narratives and this is what I have done in this study.

From a constructivist perspective learning as a continuous process shaped by experience, social interaction, and context (Vygotsky, 1978; Bruner, 1996). From this

perspective, teaching beliefs and practices are developed through processes of negotiation, reflection, and experience in the interactions between teachers and students, colleagues, educational policies and socio-cultural contexts. This means that the participants' beliefs and dispositions were developed through personal experiences, social interactions, and cultural influences over their lives. It also reflects the emphasis placed on the role of experience and reflection in professional learning according to empiricist theory (Dewey, 1938). The four themes identified in the study run through the participants' experiences and development at different stages of life, education and careers, demonstrating how they constantly reflect on, adjust and shape their teaching beliefs and methods in practice and how their beliefs and dispositions were affected at a non-conscious level. They reveal the formation and transformation of their teaching dispositions over time, and how educational background and personal experiences affect their acceptance and practice of student-centred approaches. The following discussion focuses on different themes, providing an in-depth analysis of the process of how teachers' dispositions towards student-centred teaching are developed and shaped.

6.2 Belief in the Pivotal Importance of Mastering Skill, Separate from the Game

As the strongest theme in the analysis this study found very strong belief in the primary objective of PE courses being to teach mastery of basic sports skills. Most participants believed that traditional, skill-based approaches are essential for enhancing students' technical proficiency. This belief in the prime importance of skill and the need to teach it through repetitive drilling separate to the game is widespread in the GBA literature

(Light, 2013; Kirk, 2009; Stolz & Pill, 2014). He (2012) and Meng et al. (2021) observed that skill-based teaching methods typically perceive teachers as transmitters of knowledge. From this perspective teachers' work is evaluated according to its effectiveness in improving the mastery of isolated sports skills. These findings also reflect a broader and deeply ingrained teaching belief in educational practice regarding the importance of mastering skills (Tsangaridou, 2006; He, 2012; Meng et al., 2021).

This study confirmed the global dominance of skill-based approaches, with Chinese PETE teachers reflecting a broader international trend. Despite extensive research on GBA across diverse contexts, skill-based approaches remain the default practice. In the United Kingdom, for example, Harvey et al. (2015) reported that PE teachers often misunderstand the relationship between 'skill, technique, and games' and struggle to implement constructivist-informed pedagogies, instead reverting to traditional behaviourist models. Similarly, Silva et al.'s (2021) review of European and North American studies identified three recurring barriers to GBA implementation: (1) teacher-related challenges (e.g., pervasive beliefs, occupational socialisation, managerial and instructional factors); (2) student-related challenges (e.g., resistance to active participation in GBA); and (3) external challenges (e.g., contextual and environmental constraints). Kinnerk et al. (2018) further argued that in-service teachers find GBA particularly difficult because it conflicts with their long-standing professional socialisation experiences. These findings resonate strongly with the present study, in which both novice and experienced Chinese PETE teachers described how their

formative experiences as students and athletes reinforced teacher-centred, skill-based practices, shaping their current dispositions towards GBA (O’Leary, 2014, 2016).

As a few participants suggested, traditional teaching methods may result in learners lacking decision-making abilities or the capacity to adapt their behaviour in complex situations (Renshaw et al., 2010). Placing skill learning within representative contexts and integrating the ‘perception-decision-execution’ process is essential for achieving functional and adaptive skill development, rather than through isolated practice (Renshaw et al., 2010). More importantly, the learning of team sports goes far beyond technical development; it also includes how to collaborate with others, communicate under pressure, and understand complex game structures (Light, 2008). As Light and Clarke (2021) argued, team sports are far more complex than the traditional skill-drill approach suggests. MacPhail et al. (2008) emphasised that skills such as passing and receiving should be viewed as relational skills, which rely on players’ anticipation, decision-making, and non-verbal communication (MacPhail et al., 2008). However, this study found that these critical abilities were not incorporated into the teaching objectives of the PETE teacher system, reflecting that current classroom instruction remains limited to individual technical performance.

The implementation of GBA also shows notable variation across different types of team sports. The participants in this study primarily taught football, basketball, and volleyball. While football and basketball are well suited to GBA, volleyball poses greater challenges because of its high technical demands (Light, 2013). Accordingly, this theme is discussed separately for each sport. Aurora argued that volleyball, as a

distinctive team sport, requires students to master fundamental techniques such as passing, setting, and spiking in order to participate effectively in group drills and practical exercises. Other scholars, such as Light (2013a), contended that although a certain level of skill is necessary to play the game, skills should always be learned in game contexts. In volleyball, this may involve modifying techniques to make them less demanding—for example, replacing the challenging skill of digging with a catch-and-toss to enable play to continue.

For many researchers, as well as most teachers and coaches, volleyball and other technically demanding sports require systematic instruction and repetitive training to improve performance. For example, Silva et al. (2020) observed that in school volleyball, directive teaching methods remain dominant, with teaching priorities placed on basic techniques such as overhead passing, forearm passing, and spiking (Lola & Tzetzis, 2020). However, alternative perspectives have been proposed. MacPhail et al. (2008) noted that due to volleyball rules restricting players from holding the ball, the effectiveness of skill execution depends on students' ability to perceive the behaviour of teammates and opponents within the game environment. This suggests that single-skill training lacking real-game interaction may fail to effectively enhance students' adaptability to complex dynamic environments, thereby impacting the development of their tactical understanding and response strategies. Similarly, Mitchell et al. (2020) argued that volleyball training should not only focus on technical skill development but also strengthen tactical awareness and decision-making abilities. Light (2013a) further contrasted the skill drill approach focuses only on skill execution while GBA focuses

on the whole game. Harrison et al. (1999) and Sgrò et al. (2021) also highlighted the limits of a focus on isolated skills by pointing out how skill-based teaching methods may slow down the development of key skills across multiple components of volleyball competition. Other studies have shown that applying GBA in volleyball instruction not only improves students' skill performance but also enhances body fat levels, physical fitness, and participation attitudes (Kirk & MacPhail, 2002; Batez et al., 2021; Stojanović et al., 2023).

Although basketball is highly suited to GBA (Light, 2013). Grace and Kate both emphasised the importance of focusing on training the fundamental techniques of basketball during the initial stages of instruction, particularly in professional PE courses. These technical skill exercises are abstracted from overall activities and detached from specific contexts. Kirk (2009) refers to this as whole-part-whole learning. In professional PE courses, Grace used action demonstrations and guided questioning to encourage students to engage in self-directed learning and problem-solving; in public PE courses, she tended to use traditional lecture and demonstration approaches. Kate used teacher-centred approaches when working with beginners, such as explanations, demonstrations, and repetitive drills, to ensure mastery of technical movements; once students mastered the basics, she introduced competitive methods to help them understand basketball tactics and teamwork.

Kate also emphasised the importance of sparking students' interest, especially in public PE courses, where students may refuse to participate in basketball due to their inability to learn the techniques. This aligns with the research of Casey and

Quennerstedt (2015), which found that using traditional approaches during the early stages of PE may lead students with slower motor skill development to feel excluded, causing them to abandon PE participation prematurely (Wallhead et al., 2014). Furthermore, research indicated that TGA is more effective in basketball instruction, particularly in enhancing tactical decision-making and skill execution compared to traditional approaches (González-Espinosa et al., 2021).

PE teachers from different countries hold contrasting views on the applicability of GBA in volleyball and basketball. Many participants in this study believed that technical training should be prioritised in the early stages of physical development to prepare for later tactical instruction. However, research shows that integrating GBA into volleyball can enhance skill performance, decision-making, and tactical awareness, while also fostering active learning and collaboration. The preference of these participants for traditional skill-based approaches reflects their formative experiences in PE and professional socialisation, which, from a social constructivist perspective, have shaped their dispositions towards GBA.

In terms of football coaching, all nine participants expressed a high degree of agreement with the teaching philosophy of 'prioritising skills mastery' during the interviews. Although most of them had similar athletic backgrounds, this skill-based teaching philosophy often overlooks the inherent complexity of football, particularly in terms of team collaboration, tactical judgment, and adaptability to game situations. Some participants also reflected on this. Edison and Wyatt argued that traditional teaching methods can lead to students being unable to demonstrate their technical and

tactical skills in football games due to a lack of independent thinking. Additionally, mastering basic skills does not guarantee their application in games, as games and isolated skill drill training are fundamentally different. This aligns with the findings of Holt et al. (2006), who noted that a skill-based approach fails to prepare athletes for game situations, lacking the transfer from practice to game. Football players' behaviour in competitive games depends on their opponents' actions; they can never predict what their opponents will do at any given moment, so they must adjust their actions based on the constantly changing game environment (Práxedes et al., 2018). However, skill exercises in traditional training that are detached from real competitive environments struggle to cultivate this ability.

GBA has been shown to enhance football players' tactical awareness and decision-making abilities, particularly for actions with high tactical demands. Harvey et al. (2010) conducted a 12-session TGfU intervention study to test the effectiveness of this teaching method in defensive training for adolescent football players. Additionally, small-side games have been shown to have unique advantages in technical development, particularly in passing and dribbling skills (Fernández-Espínola et al., 2020) with some participants successfully using the small-sided games approach. A significant number of participants saw the potential of GBA/student-centred approaches to engage the less interested or motivated students. This type of game format is not only enjoyable but also serves as an effective teaching strategy tool for instructing offensive and defensive tactics, effectively guiding players to develop more reasonable and structured positioning awareness during matches (Coutinho et al., 2019). However, this was not

emphasised by many participants, most of whom continued to prioritise skill mastery for professional PE student.

The GBA/students-centred approach also helps players clearly recognise their role as part of a team (Firmana et al., 2023). Research has demonstrated the advantages of GBA in improving players' tactical awareness, teamwork skills, and independent decision-making abilities (eg., Harvey, 2009; Farias et al., 2018). In this study, participants generally agreed with the potential value of GBA in interviews. They believed that GBA it is more closely aligned with games but could not give up on the pivotal importance of skill mastery.

Some participants mentioned in interviews that traditional skill-based teaching methods have certain drawbacks, particularly in terms of their limitations in competition applications. However, they still primarily use traditional teaching methods in their teaching practices. In the absence of adequate training and teaching support, teachers often revert to familiar teaching methods (Armour & Duncombe, 2004). This aligns with the findings of Chen, Sun, and Ennis (2012), who noted that when faced with new teaching concepts, teachers may struggle to transition their teaching practices even if they acknowledge the value of these new ideas, especially if they lack sufficient theoretical understanding and practical experience. For this study a lack of clarity with the student-centred approach added to problems involved in using it in practice.

A small number of teachers in this study attempted to introduce GBA into football teaching, particularly through small-sided games but their students initially struggled to adapt to GBA. This led to classroom chaos, with some students lacking

understanding of the game rules and participation awareness. This aligns with Light's (2013b) research findings, which indicate that during the initial implementation of GBA, teachers often face challenges such as difficulties in classroom management, significant differences in student abilities, and the complexity of designing teaching tasks. Effectively implementing GBA not only requires strong classroom management skills but also the ability to design teaching activities that facilitate students' construction of tactical understanding and decision-making through the game. From a constructivist perspective, teachers' and students' difficulties with GBA stem from long-term socialisation into traditional PE, which has shaped their beliefs about what teaching and learning should look like. Drawing on Dewey's theory of experience viewpoint, separating skills from games disrupts the continuity of experience and reduces opportunities for reflection and adaptation. Without meaningful game contexts, student engagement is limited, and teachers tend to revert to familiar skill-based approaches that feel safer and easier to manage.

Most participants mentioned that students, especially girls, have low levels of interest in participating in PE courses. Therefore, fostering students' interest in PA has become one of the most important aspects of their daily teaching. Previous research has shown that traditional teaching methods often fail to motivate students, especially those who already lack interest (Ferraz et al., 2023; García González, 2020; Arantes et al., 2025). However, in PA and PE, enjoyment is a main factor in motivating PA and fostering active participation (Yli-Piipari et al., 2009; Sallis et al., 2000). Research indicated that one of the crucial prerequisites for student participation in PE courses is

whether they enjoy the classroom experience. If teachers cannot provide an enjoyable learning experience, students may lack motivation to participate in PE, especially during games and sports activities (Ewing & Seefeldt, 1988; Chen & Hypnar, 2015; Phillips & Silverman, 2015). Students' level of enjoyment of PE courses influences their attitude toward such courses, which in turn affects their willingness to participate in PA (Woods et al., 2012; Özkan, 2015; Silverman & Subramaniam, 1999). Additionally, if PE courses lack positive learning experiences, peer connections, and emotional and psychomotor fulfilment, students will find it difficult to maintain a positive attitude toward PE courses (Zhang et al., 2012).

When participants attempted to introduce GBA, students responded negatively, which in turn discouraged teachers. This challenge appeared to result from both teachers' and students' limited understanding of the approach, creating a significant barrier to its implementation. According to Light and Clarke (2021) this is where teachers abandon implementing the more complex GBA and revert to the very simple skill drill approach. In situations where students have weak PE foundations and classroom discipline is challenging to manage, participants often tend to favour traditional teaching methods because it is easy to understand and follow. This phenomenon suggests that whether PETE teachers adopt GBA is closely related to their perceptions of students' participation abilities and learning adaptability. Whether in Western or Asian countries, PE teachers' adoption of GBA depends not only on their teaching beliefs and professional training but is also significantly influenced by

students' classroom responses (Goodyear et al., 2014; Hordvik et al., 2019a; Casey & Kirk, 2020).

This theme highlights that PETE teachers' beliefs in skill-based teaching are among the most critical factors influencing their dispositions towards GBA. They believe that mastering sports skills is the most important aspect for students to participate effectively in games and achieve learning objectives. As much research over the past few decades has identified, this belief remains a major hurdle to overcome globally. The same challenge exists in China and continues to hinder the implementation of the new national curriculum. Taken together, these findings illustrate that beliefs in the primacy of technical skill mastery are shaped by teachers' prior schooling and professional socialisation and, from a constructivist perspective, can be understood as products of socially mediated learning experiences.

6.3 The Powerful Influence of Exposure to Player-Centred Coaching Overseas

This study found that eight of the twelve participants' initial exposure to GBA originated from their participation in overseas training. For most of them it was in a three-month football coaching training course in the UK, with one participant gaining exposure through observing PE courses and coaching approaches in French clubs. They mentioned that it was during this training that they were exposed to GBA and impressed. Through observing and participating in real teaching scenarios, they recognised the potential of GBA for enhancing student engagement, tactical awareness, and

autonomous decision-making. This sparked their keen interest in GBA and served as a pivotal opportunity for a shift in their teaching beliefs and practice.

As is well known, in traditional Chinese PE, teachers are regarded as authoritative transmitters of knowledge, with classrooms centred on skill imitation and technical repetition. Students are expected to follow instructions and reproduce standardised movements, which sidelines their agency in the gym and classroom (Kirk, 2009). In contrast, GBA emphasises problem-solving through discussion, collaboration, and reflection in games and modified games. Here, teachers act as facilitators of learning while students actively co-construct meaning (Breed et al., 2024; Jess et al., 2011). In Dewey's experiential terms, traditional approaches disrupt the continuity of experience by separating skill acquisition from meaningful activity, thereby limiting opportunities for inquiry and reflective growth. By contrast, GBA situates skill development within authentic, game contexts, supporting the continuity of experience and the integration of thinking, acting, and reflecting. This fundamental philosophical difference led participants in this study to undergo a strong cultural and educational paradigm shift during and after their overseas training.

Wright et al. (2005) noted that teachers' teaching beliefs are constructed through continuous practice and cultural interaction, rather than being fixed cognitive structures. In cross-cultural teaching environments, the introduction of new teaching concepts triggers 'cognitive conflict' within teachers' existing knowledge structures, leading to reflection on and reconstruction of their teaching practices. This cognitive challenge often marks the first step in educational reform. However, whether these ideas can be

internalised into stable teaching behaviours depends on the practical support and institutional safeguards teachers receive subsequently. Therefore, teachers are the key to bringing about genuine change, and their professional and interpersonal skills, as well as their beliefs about themselves, adolescents, their subject, and education, will determine the ease or difficulty of such change (Locke, 1992). Participants in this study who engaged in short-term overseas training were exposed to GBA and began to undergo changes in their teaching beliefs. During the training, they demonstrated strong learning motivation and gradually constructed an initial understanding of GBA. This process aligns with Piaget's (1970) description of the 'assimilation process', that is, through questioning and reflecting on existing beliefs, absorbing new information, and adjusting original cognition.

Social constructivist theory views knowledge as embedded in cultural practice and social interaction. As Wertsch (1991) emphasised, knowledge is not simply transmitted from one person to another but is actively constructed through mediated action in specific sociocultural contexts. Participants' engagement with GBA was therefore not merely the result of observing its effectiveness but arose from deeper cognitive transformation within cross-cultural contexts. Immersion in a foreign educational culture challenged their existing teaching beliefs and prompted reflection and redefinition of practice. Rogoff (2014) pointed out that learning occurs through shared endeavour and participation in community activities under the guidance and support of others. In this sense, learning is not an isolated mental process but a socially and culturally embedded activity. Korthagen (2017) likewise argued that learning to teach

is not simply the acquisition of theoretical knowledge, but a complex developmental process shaped by emotions, prior experiences, and social context; durable changes in teachers' beliefs and practices arise through reflection on experience within supportive communities. Similarly, Meng et al. (2021) pointed out, in the process of knowledge transfer across borders, culture plays a central role in the local acceptance, adaptation, and reinterpretation of foreign educational concepts. In this study, the teaching approach observed in the overseas programme was characterised by 'encouraging students to express their views', 'understanding students and players and building connections is very important', 'encouraging teachers to flexibly design activities', and 'allowing failure as part of the learning process', thereby creating an inclusive teaching environment. This environment stands in stark contrast to the traditional Chinese PE classrooms, which emphasise order, discipline, and outcome-centred instruction, prompting reflection on participants' long-held beliefs about conventional teaching practices.

This study found that many participants also served as university team coaches, which provided them with sustained opportunities to recognise the limitations of traditional approaches for fostering tactical understanding and teamwork. Similar observations have been made in prior research, which highlights that effective learning in team sports requires players to 'read the game,' make decisions, and act accordingly-the perception-decision-action cycle that underpins tactical competence (Gréhaigne et al., 2005). Teacher-centred, skill-isolated approaches often fail to support this process, as they separate skills from their contextual settings and limit opportunities for

communication and collaboration, thereby constraining teamwork (Harvey & Jarrett, 2014). In Dewey's terms, this separation disrupts the continuity of experience, limiting learners' ability to transfer skills into meaningful game situations. By contrast, GBA situate learning within authentic play and have been shown to more effectively foster tactical awareness, co-operative skills, and problem-solving abilities (Pill, 2016).

The first and most evident shift reported by participants was a greater emphasis on questioning to guide students' independent thinking, rather than simply telling them what to do and when. This aligns with previous research highlighting the pedagogical value of questioning in developing learners' autonomy and critical capacities. For instance, Light (2004) observed that Australian coaches viewed questioning as central to fostering players' independent thinking, while Pill (2015) emphasised its role in promoting active engagement and reflection. Similarly, Oslin and Mitchell (2006) argued that effective questioning encourages learners to examine their own performance, thereby enhancing problem-solving and decision-making. Further studies show that questioning supports the development of critical thinking (Wright & Forrest, 2007) and metacognitive awareness (Cazden, 2001).

The second most common feature of the GBA coaching in which the participants were involved was the group discussion and communication through dialogue. Harvey (2009) pointed out that when TGfU is adopted in courses, students are more willing to engage in tactical discussions, offer suggestions, and negotiate decisions with peers during group activities, thereby enhancing classroom interaction. Pill (2016) also found that players demonstrated stronger expression and reflection skills in a GBA teaching

environment, particularly in peer feedback and team tactical discussions. Casey and Goodyear (2015) emphasised that GBA fosters a ‘dialogic’ classroom atmosphere, where students develop higher-level communication skills and tactical awareness through reflection and collaborative knowledge construction. From a constructivist perspective, questioning and dialogue are not merely techniques but core practices through which learners construct meaning and develop deeper engagement, reflection, and collaborative understanding. However, as participants noted, such dialogic interaction is difficult to enact in contexts where students are accustomed to teacher-led instruction, underscoring the challenge of translating these constructivist principles into practice.

Participants also noted how GBA prioritises encouragement and establishes a context-based and positive teaching environment. Light (2013a) highlighted how GS encourages player-centred learning, emphasising understanding through games, with positive reinforcement and encouragement being the core elements for enhancing player motivation and engagement. Similarly, Harvey and Jarrett (2014) pointed out that teachers guide students to independently analyse problems, formulate strategies, and collaborate with peers to solve issues through positive feedback and encouragement.

The research suggests many benefits of using GBA/student-centred approaches with the participants who trained overseas, typically impressed but also spoke about the difficulty of implementing with student responses a major concern. All participants emphasised that Chinese students are less receptive to student-centred approaches, creating challenges for both teachers and learners. This is consistent with research

indicating that students in teacher-centred cultures are accustomed to relying heavily on direct guidance, waiting to be told what to do and when, which often limits independent thinking and fosters resistance to GBA (Howarth, 2005; Barrett & Turner, 2000). Low student engagement and weak feedback loops further undermine the enactment of GBA (Roberts, 2011; Harvey & Atkinson, 2017). Viewed through a social-constructivist lens, such resistance is shaped by cultural and institutional norms; accordingly, successful adoption of GBA requires pedagogical adaptation and the gradual re-socialisation of learners into participatory, dialogic practices.

Teaching resources and training courses are often considered the preferred methods for supporting practitioners in learning and understanding GBA. Although teachers and coaches generally recognise the value of these resources, their quality is frequently questioned (Díaz-Cueto et al., 2010). Reid and Harvey (2014) suggested that sports coaches also desire more opportunities to apply GS in training courses, and similar findings have been reported among teachers (Rossi et al., 2007). Dania and Zounhia (2017) also found that while teachers believed resources and training programmes could support their use of TGfU to some extent, the structural and coherence of the resources themselves still needed improvement. Additionally, current training systems are predominantly short-term onboarding programmes with insufficient support and lack follow-up, which fails to effectively promote the development of teachers' content knowledge (Wright et al., 2009). This study also highlighted that short-term overseas training alone is often insufficient to ensure PETE

teachers develop a comprehensive understanding of GBA or address practical application challenges in teaching.

Although PETE teachers in this study were initially introduced to GBA through overseas training and expressed both willingness and confidence to apply it, implementation in practice remains highly challenging, particularly in the Chinese context. Despite voicing strong support for student-centred concepts, their classroom behaviours continued to reflect entrenched skill-based beliefs, which proved resistant to change through short-term training. As Kirk (2009) argued, the persistence of skill-based approaches in PE is not simply the result of teachers' reluctance to adopt alternatives, but rather of professional development structures and institutional cultures that continually reinforce these practices. Light (2008) noted that the epistemological assumptions underpinning constructivist pedagogies such as GBA often conflict with teachers' existing knowledge frameworks, creating tensions that hinder effective adoption. This tension was evident in the present study: participants praised GBA during their overseas training and acknowledged its educational value, yet they reverted to familiar skill-based approaches upon returning to their home contexts.

This theme highlights that although overseas training can foster PETE teachers' openness towards student-centred pedagogies, sustainable change depends on long-term professional development and systemic support rather than brief exposure to new ideas. Drawing on Dewey's theory of experience, professional growth is contingent upon continuity and reflection, suggesting that short-term interventions are unlikely to

reshape the deeply embedded dispositions developed through teachers' prior schooling and professional socialisation.

6.4 Professional and Elite-Level Coaching Before and During University

The 12 participants in this study received rigorous physical training during their adolescence or university years. Among them, four were former professional athletes, five received systematic training at city and youth sports schools from primary school to junior high school, and the rest underwent professional sports training during their university years. These experiences led them to unanimously believe that the core of PE lies in accurate demonstration, rigorous correction, and high-intensity training, with teachers holding absolute authority and control. This skill-based approach is constructed through a series of repetitive training exercises, a hierarchical system, and obedience requirements, which are internalised through practical interactions over time.

In high-level competitive sports, training objectives are often more performance-orientated, and training methods must emphasise efficiency, discipline, and results. This leads participants to recognise traditional teaching methods as the most effective in practice. Evans (2012) studied elite rugby coaches in New Zealand and Australia and found that long-term accumulated experience plays a role at an unconscious level, significantly influencing coaches' coaching philosophies and attitudes (Hassanin & Light, 2014) which is consistent with the findings of this study. Aguiar and Light (2018) proposed that teachers' teaching tendencies often stem from the training methods they experienced as student athletes, and this experience is constructed at an unconscious

level. Poulou (2005) also emphasised that individuals' experiences in early sports can profoundly influence the values and beliefs related to teaching that they form later in life. These early experiences become part of teachers' "tacit knowledge", guiding their immediate judgements and decisions when faced with teaching situations (Woolfolk Hoy, 2000). In this study, such patterns were evident, as the training methods participants encountered during adolescence continued to shape their professional practices in adulthood, often in implicit and unconscious ways.

The importance of this theme for shaping the participants' dispositions towards student-centred learning in the new national curriculum is supported by the literature. Both domestic and international studies consistently indicate that the teaching orientations of PE teachers or coaches are deeply influenced by their early athletic experiences at a subconscious level (Curtner-Smith, 2001). This suggests a degree of consistency and universality across cultural contexts, while also indicating that such strong influences may hinder participants' dispositions towards the new national curriculum. Through the lens of Dewey's experiential theory, early sporting encounters form part of the continuity of experience, meaning that orientations shaped in youth continue to influence professional practice in adulthood. This enduring influence creates challenges for the adoption of student-centred approaches in the new national curriculum, as long-standing dispositions may conflict with new pedagogies.

The professional training experiences gained during their university education further reinforced the participants' understanding of traditional teaching methods. Among the twelve participants in this study, nine were PETE students, and the

remaining three were from the sports training programme. Practical courses in China's PETE programmes emphasise the development of sports skills so that student teachers can demonstrate these skills in their future teaching (Li et al., 2019; Meng et al., 2021). The sports training programme also focuses on the technical and movement norms of different sports. During their university courses, participants continued to receive teaching methods that emphasised technical and skill training, and this experience further consolidated their existing teaching beliefs. PE teachers who have grown up in such a sports culture environment often have teaching philosophies that are deeply influenced by traditional approaches, which manifest themselves in their high degree of dependence on traditional approaches. This not only reflects the continuation of historical experience but also the reproduction of cultural values.

Furthermore, professional learning experiences at the university level not only failed to challenge the beliefs formed early on but also reinforced them to a certain extent. In this process, traditional approaches are not only inherited as a continuation of 'experience' but are also rationalised and institutionalised as a manifestation of 'professionalism'. As Curtner-Smith (1999) pointed out, PE teachers' teaching concepts are largely dependent on their own athletic experiences, which also profoundly influence their understanding of PE courses (Elliot et al., 2013).

In contrast, evidence from Western PETE programmes highlights a different trajectory. Light and Georgakis (2005) investigated the first PE experiences of undergraduate students majoring in primary education in Australia over one semester. Participants experienced GS as learners in workshops and practiced it as teachers in

team teaching, thereby gaining a deep and positive understanding of the teaching method. Most were strongly influenced by their learning experiences which they found effective and meaningful and were able to apply it confidently. Similarly, long-term studies have shown that, with appropriate support, new teachers can successfully implement TGfU in primary schools (Light, 2004). Walton-Fisette and Mitchell (2015) noted that PETE students in the United States had not yet fully mastered the teaching theory of TGM in their early courses. However, through participation in content courses and internship teaching, students gradually developed an understanding and acceptance of the method and were able to confidently and effectively apply it in teaching by the time of graduation.

Taken together, the evidence underscores significant differences between PETE programmes in China and Western countries. Western programmes explicitly integrate GBA into teacher education, providing pre-service teachers with opportunities to construct an understanding of the method through guided practice and learning. In Dewey's terms, such integration ensures continuity of experience, allowing student teachers to link theory with practice. By contrast, the dominance of skill-based approaches in Chinese PETE reproduces traditional orientations and limits opportunities for student teachers to develop alternative, student-centred pedagogies.

Extensive research has highlighted how PE teachers' beliefs are shaped during their early years, such as when they were students themselves or through other life experiences during their development (e.g., Pajares, 1992; Placek et al., 1995; Fang, 1996; O'Sullivan, 2005; Matanin & Collier, 2003; Harvey & O'Donovan, 2013).

Consistent with this study, the course structures and content participants encountered during their university education provided further opportunities to consolidate their understanding of PE theoretical knowledge, teacher beliefs, and teaching practices. Green (2002) argued that values, beliefs, and knowledge primarily stem from a teacher's personal experiences and the culture they have been exposed to, which in turn lead teachers to develop deeply ingrained tendencies or habits based on their prior experiences (e.g., Calderhead, 1996; Behets, 2001; O'Sullivan, 2005; Harvey & O'Donovan, 2013). Lortie (1975) proposed that before entering teacher education programmes, student teachers had already spent over 13,000 hours observing and participating in schools from kindergarten to K-12. Their beliefs about teaching had already been formed, and in most cases, these beliefs were difficult to change.

Early socialisation experiences therefore exert a strong influence on teachers' beliefs and practices, both before and during their professional preparation (Cushion et al., 2003; Lawson, 1983b; Curtner-Smith, 1999). Studies have consistently highlighted that pre-service teachers' K-12 experiences play a crucial role in the formation of their beliefs about PE and remain largely stable over time (Stroot, 1996; Graber, 2001; Tsangaridou, 2006). Moy et al. (2014) also emphasised that this process of socialisation through past school experiences has a profound impact on pre-service PE teachers' values and conceptions of PE even before they begin PETE. These findings illustrate how teacher beliefs are not simply the product of individual choice but are socially constructed through early participation in school and sport cultures. This aligns with the findings of the present study, which demonstrate that participants' beliefs were

deeply shaped by their early PE and sporting experiences and further reinforced by their university-level learning and coaching.

The participants in this study have all experienced skill-based approaches in their PE and sports learning and training. These approaches are rooted in their practice and teaching, shaping their understanding of 'effective teaching'. Therefore, when they first started teaching, even when faced with new educational concepts or diverse teaching needs, they tended to choose teaching methods that were consistent with their personal past experiences and widely accepted culturally. This reflects their reliance on past experiences, which are often shaped by the interplay of socio-cultural backgrounds and personal experiences (Lortie, 1975; Calderhead, 1996). From a social constructivist perspective, this reliance on skill-based teaching methods represents a belief structure that has been gradually formed through prolonged social interaction and cultural embeddedness. PE teachers' teaching beliefs and practices do not stem from purely rational judgements but are gradually constructed and internalised through their early PE and sporting experiences and professional socialisation (Lawson, 1983b; Tsangaridou, 2006).

Research indicated that teachers tend to replicate the teaching styles they have previously experienced rather than actively choosing new teaching methods (Curtner-Smith, 1999). In the participants' early PE and sports learning and training, they all received teacher-centred, skill-based teaching methods. This method not only shaped their physical experiences but also constructed their understanding of the essence of teaching. In their view, the purpose of teaching is to impart correct technical movements

and skills to students and improve their athletic performance. In this study, PE and sports studies at the university did not break this experiential structure; rather, it reinforced it. Whether in PETE or sports training programmes, course content mostly revolved around skill teaching and technique, with traditional teaching methods predominating. For many participants, these courses and practices were not only a process of acquiring knowledge but also a reaffirmation of their ‘professionalism’, making them even more convinced that the training methods they had received as students were correct (Curtner-Smith, 2001). Meanwhile, participants’ experiences in university sports competitions further deepened their reliance on traditional approaches. In the context of high-level competitions, the importance of technical skills is seen as a key component in improving athletic performance (Casey, 2014).

This theme focused on understanding how PETE teachers gradually develop teaching beliefs and teaching methods during their growth process. This formation process is influenced by a combination of factors such as personal growth experiences and social environment. Understanding these factors provides clearer insight into the reasons for their dispositions towards GBA, which will provide a reference for future PETE teachers as well as curriculum and help teachers move from relying on skill-based approaches to more reflective and critical thinking about teaching and learning, thus promoting the reform of PE teaching.

6.5 Institutional Assessment and Policy

In this study, one of the most influential factors restricting the implementation and teaching of GBA/student-centred teaching in university PE programmes was formal assessment based on skill execution and talent cultivation programmes. Most participants believed that the content of university PE courses is primarily determined by the curriculum guidelines and talent cultivation programmes. PETE teachers have limited decision-making authority over course content, teaching objectives, and evaluation criteria. The regulations and rules established by the academic affairs office and the university administration are mandatory and restrict PETE teachers' autonomy in course design. When assessment and content contradict the student-centred emphasis of the new national curriculum this operates against using pedagogy that is consistent with the new national curriculum.

Although teachers have autonomy in selecting teaching methods, the standards and content of course assessment are typically determined by the department. This constraint has discouraged PETE teachers from adopting GBA/student-centred teaching practices. Some participants indicated that they were unfamiliar with the new national curriculum and had limited understanding of student-centred approaches. This aligns with the findings of Chen and Chen (2017), who noted that many Chinese university PE teachers lack awareness of changes in national PE policies, thereby often finding themselves in a passive role during curriculum reforms. Additionally, Tinning (2009) argued that PE teachers are often positioned as implementers of educational policies rather than designers of curricula, with their professional judgment and teaching creativity marginalised. Hardman (2008) further noted that in most countries,

PE curricula have long been uniformly planned by the MoE (or equivalent), with course content and methods largely controlled by higher authorities. PE teachers primarily responsible for executing pre-set teaching syllabi, lacking the flexibility to adjust them according to student needs.

The content of university PE courses is also influenced by the school's talent cultivation programme. The talent cultivation programme is a guiding teaching plan for the school's talent cultivation work, mainly including cultivation objectives, basic specifications, and course settings. The talent cultivation programme is the school's implementation of the overall requirements of the Party and the state regarding education. It is a concrete manifestation of the talent cultivation objectives and a normative document for organising and carrying out teaching activities and educational tasks (Qin, 2017). Taking sport-related majors as an example, the PETE major requires students to comprehensively master the basic theories, techniques, and skills of PE. It requires them to develop specialisations based on comprehensive development, so that they can be judged to be competent in school PE teaching, extracurricular sports training, sports department management, and scientific research after graduation (Tao, 2025). On the other hand, the training objectives for the sports training major require students to master the basic theories and methods of professional sports teaching, training, and competition. They need to possess strong specialised sports skills, the ability to guide sports training and organise competitions, and be capable of undertaking specialised sports teaching, training, and competition organisation work (MoE, 2025). The educational objectives and talent cultivation programme of different specialisations

are distinct. This indicates that China's PETE programmes primarily aim to cultivate a pool of primary and secondary school teachers responsible for PE courses and activities, while sports training focuses on developing a pool of school coaches responsible for competitive sports activities.

This study found that there is a significant mismatch between the talent cultivation programme of schools and the new national curriculum. The current assessment approaches for university PE courses primarily focus on students' mastery of technical movements, while neglecting their comprehensive abilities demonstrated in games. This assessment method emphasises skill standardisation but lacks assessment of students' tactical understanding, decision-making, and teamwork skills. Research has pointed out that skill mastery remains the primary assessment approach, but this approach often fails to reflect course outcomes or achieve the overall objectives of PE, such as enhancing students' physical literacy (Melagrano, 2007; Walters et al., 2023).

Edison pointed out that the current curriculum standard and framework in schools largely restrict the flexibility of teaching methods, making it difficult for teachers to understand and implement the 'student-centred' teaching philosophy. This restriction weakens students' learning initiative and the effectiveness of classroom interaction. Other participants in this study expressed similar views, arguing that without support and resource guarantees from schools, curriculum reform is often difficult to implement in teaching practice. This has also been verified in other studies. Although many PE teachers are positive about curriculum reform, they often lack institutional support in

its implementation, making it difficult to translate reform into practical (Wang & Ha, 2013b; Ha et al., 2014).

PETE teachers in China often continue to rely on skill-based teaching methods to meet the existing teaching and assessment requirements of schools. This further validates the view proposed by Black and Wiliam (2018) that teaching, and assessment are inseparable, and any teaching strategy that lacks assessment support is unlikely to produce lasting learning outcomes. Especially when PETE teachers attempt to apply take GBA/student-centred approaches in classroom practice, if assessment is not adjusted in tandem, it will not only weaken teachers' motivation for reform but also directly impact the effectiveness of teaching implementation. Aurora, a participant in this study, explicitly stated that while she recognised the educational value of GBA, the limitations of the school's assessment approaches meant that using GBA would not meet the requirements for evaluating teaching performance. This issue not only highlights the disconnect between teaching methods and assessment approaches but also indicates that inconsistencies between course content and assessment standards are significant factors influencing teachers' implementation of GBA.

As emphasised by Tolgfors (2019) and Walters et al. (2023), effective PE teaching should flexibly adjust teaching methods and assessment approaches based on students' specific needs and learning backgrounds, while focusing on individual differences and students' comprehensive development. However, this study found that some PETE teachers not only faced the issue of unresponsive student feedback when implementing GBA but also encountered disconnects between talent cultivation programme, school

assessments, and new national PEH curriculum standard. As Light (2013b) pointed out, in educational cultures such as those in East Asia, where discipline, control, and mechanical repetition are highly valued, the introduction of GBA is not merely an issue for individual teachers but also involves broader cultural and institutional barriers. Additionally, the effective implementation of GBA depends not only on teachers' acceptance and transformation of teaching philosophies but also on sustained professional development support. True transformation in teacher practice is not merely about learning a new set of teaching strategies but also involves reflecting on and reconstructing their teaching beliefs and daily practices (Light, 2014).

Large class sizes, limited teaching space, and assessment approaches are the main obstacles faced by PETE teachers in attempting to implement GBA. These factors were frequently mentioned in participants' narratives, indicating that they have a significant influence on teachers' instructional decisions. PETE teachers generally stated that in large courses, how to effectively organise students, maintain classroom order, and ensure student safety are their primary concerns. Especially in the absence of adequate space or resources, the implementation of GBA faces practical difficulties. Previous research also supports this finding. For example, in the Chinese educational context, the complexity of teaching organisation and safety concerns are considered important factors hindering teaching innovation (Huang et al., 2019). In this study, some PETE teachers expressed doubts about the effectiveness of GBA in large-class settings. This concern forms the basis for teachers' reservations toward GBA. Deeper influences also stem from socio-cultural factors. Under the authoritarian educational traditions deeply

rooted in China's traditional educational culture, teachers tend to maintain high control over the classroom and reduce student-led teaching activities (Kipnis, 2011; Yin & Buck, 2015; Meng et al., 2021). These values are not only deeply embedded in the educational system but also shape teachers' professional identity and teaching preferences.

In related international research, Casey and Dyson (2009) conducted an experiential study on in-service PE teachers' use of TGfU in tennis. They found that teachers faced dual pressures in lesson design and implementation, particularly about teaching methods and time allocation. Although teachers expressed positive attitudes towards TGfU, many reported anxiety and uncertainty in practice. One teacher even remarked that a short crash course was needed to help students adapt to the approach. Other studies have similarly identified inadequate equipment, limited facilities, large class sizes, irregular attendance, distractions, and students' weak retention of prior content as constraints on GBA implementation (Brooker et al., 2000; McNeill et al., 2004). Collectively, these findings suggest that PE teachers internationally encounter similar challenges when adopting GBA: first, organising complex games in overcrowded classes with limited space and resources; second, managing insufficient lesson time to incorporate all stages of GBA, such as game set-up, questioning, reflection, and discussion; and third, addressing students' limited understanding of or reluctance towards GBA. Such constraints remain key factors influencing teachers' willingness and ability to adopt GBA both in China and abroad.

Most participants pointed out that students majoring in PETE are likely to become primary or secondary school PE teachers in the future; therefore, familiarity with the new national curriculum is essential for their professional development. However, the findings revealed that the current university talent cultivation programmes have yet to incorporate the new national curriculum as a compulsory component for PE students. This omission poses a significant barrier to the effective implementation of the national curriculum. Such a limitation may hinder students' understanding of curriculum objectives and pedagogical philosophies, thereby influencing the formation of their teaching beliefs and preferences for instructional approaches.

Lin (2018) identified a persistent mismatch between the current supply of PE graduates from Chinese universities and the needs of basic education, reflected in the disconnection between training objectives, course content, and the realities of school-based teaching practice. Similarly, Cui and Zhang (2013) emphasised that resolving this contradiction requires universities to re-examine the structure and intent of PETE curricula and strengthen the alignment between higher education and school-level PE. They further proposed that training goals should be informed by the actual demands of PE teaching in schools, with course structures optimised and practical teaching competence prioritised. These findings highlight a long-standing structural disconnect between higher-education curriculum design and the pedagogical requirements of school PE, which continues to impede the preparation of teachers capable of implementing the aims of the new national curriculum.

From a social constructivist perspective, knowledge and belief formation are socially mediated rather than individually acquired. PETE students' understanding of student-centred teaching is continually shaped through course interactions, communities of practice, and assessment norms. When university curricula fail to embed the principles and practices of the new national curriculum, students lose access to the contextualised activities and socialisation processes that enable coherent pedagogical development, such as dialogic classrooms, inquiry-based tasks, peer collaboration, and formative feedback. Genuine internalisation of student-centred values requires sustained participation, reflection, and feedback within practice communities; without such curricular embedding, this resocialisation process is weakened.

School and university teachers' dispositions towards GBA are not determined solely by the pedagogical merits of the approach itself but are shaped by a range of contextual and institutional factors, as reinforced by the present study. This theme identifies three interrelated influences on PETE teachers' dispositions towards GBA. First, large class sizes and limited teaching resources restrict teachers' capacity to adopt student-centred approaches. Second, inconsistencies or even contradictions between assessment approaches and student-centred principles undermine teachers' confidence in applying GBA. Third, the misalignment between university talent cultivation programmes and the requirement of the new national curriculum constrains the effective implementation of GBA in school settings. Taken together, these findings illustrate that teachers' pedagogical dispositions and practices are socially constructed

through their interactions with institutional policies, assessment regimes, and professional preparation.

To address these factors requires coordinated action between schools and teachers. First, schools should optimise the teaching environment by improving provision for teaching in large classes, expanding facilities and equipment, and ensuring that teachers have adequate space to enact GBA. Second, assessment should be aligned with the national curriculum standards, shifting from a narrow emphasis on skill-based testing to diversified, formative evaluation that foregrounds students' holistic development. Third, universities should embed the new national curriculum as compulsory modules within PETE talent cultivation programmes and provide sustained, practice-embedded learning opportunities that foster dispositions towards GBA prior to graduation.

Chapter Seven: Conclusion

7.1 Answering the Central Question

China's new national PEH curriculum standard explicitly emphasise that teachers should shift from teacher-centred approaches to student-centred approaches, advocating the integration of teachers' demonstration and explanations with students' independent, co-operative, and inquiry-based learning. This is to enhance students' ability to solve problems independently and to be active learners. However, in teaching practice, the implementation of this approach still faces many challenges. The research question of this study is: What are the dispositions of PETE teachers in Kunming City, China, towards the student-centred approach (GBA) proposed in the new national PEH curriculum standard, and how are these dispositions shaped?

This study used a narrative inquiry methodology to examine participants' dispositions towards student-centred teaching and learning within the context of the new national curriculum. It also sought to identify the major factors influencing the formation of these dispositions, specifically how the participants were disposed towards student-centred teaching. This involved tracing the individuals who had a significant influence on them, their personal growth trajectories, professional socialisation processes, and challenges faced in teaching practice by the 12 PETE teachers in the study. It further explored how they interpreted and responded to student-centred teaching in the new national curriculum.

Narrative inquiry emphasises understanding experience as stories. Through the telling and retelling of experiences individuals continuously construct their

understanding of the world and the meaning of their actions (Clandinin & Connelly, 2000). It highlights how individuals continuously assign meaning to their experiences within social and cultural contexts, thereby helping to reveal the connections between teachers' interpretations and choices of teaching methods and their dispositions in social and cultural contexts. Understanding teachers' professional lives requires delving into personal experiences, social backgrounds, and the professional cultural environment in which they operate (Goodson, 1992) with it facilitated by the methodology used. This study analysed teachers' life narratives to uncover the factors influencing the formation and evolution of PETE teachers' dispositions towards GBA described in the Findings.

The use of narrative inquiry provided what seems to be a very realistic perspective on the 12 participants' dispositions towards student-centred teaching. It is data that cannot be reduced to precise percentages to provide the clear results that many are likely to want. Instead, the findings reflect the complex way that the participants viewed student-centred teaching and with individual contradiction for many of them. They demonstrated a range of dispositions towards the 'student-centred' philosophy proposed in the new national curriculum. For many of them there was a big difference in dispositions towards student-centred teaching at an individual level. It seemed to be the result of a difference between their deep and unquestioned beliefs developed from practice and the new idea of student-centred coaching at a theoretical level.

The findings demonstrate that PETE teachers' dispositions towards student-centred teaching are formed and reshaped through an ongoing process of reflection grounded in lived experience, consistent with Dewey's theory of experience. Their

beliefs evolved through the interaction and continuity of personal, professional, and contextual experiences, highlighting how exposure to new pedagogical ideas prompted reflection on long-established practices. Viewed within a social-constructivist framework, these processes are not purely individual but socially mediated, shaped by cultural context, institutional policies, and teachers' professional development trajectories. Together, these theoretical perspectives illuminate how teachers' dispositions develop through the interplay between experiential learning and socially constructed meanings.

Although I did not attempt to quantify the findings, I loosely grouped them into three broad dispositions that are discussed more fully later in this section.

1. Strongly against student-centred teaching, even at public PE level

This small group of participants believed in the central importance of skill mastery when teaching sport at any level. They were all convinced that in professional PE all teaching should focus on skills but some accepted that student-centred teaching could help motivate public PE students.

2. Reluctant to let go of traditional skill drill pedagogy but accepted the advantages that student-centred teaching offered and particularly for public PE courses.

This group was the largest and could be described as relatively neutral. Most of these participants believed in the importance of teaching skill first and particularly for professional PE courses but many were open to what student-centred teaching had to

offer for its teaching. Most of them thought that student-centred teaching had a lot to offer in public PE courses.

3. *Very positive disposition toward student-centred teaching but still seeing skill mastery as the most effective way of teaching for professional PE courses and high-performance sport*

In this group there was strong belief in the benefits of student-centred teaching for public PE courses and not just for student motivation. This group was distinguished by the powerful influence that attending player-centred football training camps in the UK and France had on them. Analysis suggested that this influence was strengthened by the implementation of the new national curriculum and how their overseas training provided understanding of it and ideas on how to implement it.

Most participants in the study held relatively positive dispositions towards GBA (i.e., student-centred teaching), while many still prioritised skill training.

They believed that GBA could enhance students' participation, tactical understanding, and collaborative skills. Those convinced of its benefits often expressed dissatisfaction with the traditional skill-based approaches they had experienced as students, arguing that such approaches focused narrowly on technical proficiency without necessarily improving competitive performance. Several participants reported incorporating group collaboration and competitive activities into their lessons to encourage independent thinking among students. As one participant explained, "The drawback of traditional teaching is that it only teaches students technical skills, but they are unable to apply those skills effectively in competitions."

Participants with neutral dispositions generally endorsed with the principles of GBA but reported difficulty implementing them in practice due to practical constraints such as large class sizes, school assessment regimes, and students' responses. They described a persistent tension between intention and capacity. Several PETE teachers noted, "Although I recognise the positive role of GBA in students' holistic development, current assessment approaches focus primarily on technical mastery, which makes it difficult for students to meet the assessment requirements." This belief-practice dissonance engenders ambivalence: the teachers endorse GBA in principle while hesitating in classroom enactment. Their dispositions are shaped by external teaching conditions and assessment regimes.

Most PETE teachers who display negative dispositions towards student-centred teaching (GBA) have backgrounds as professional athletes and were socialised through traditional, skill-based pedagogies. Across both their athletic and teaching careers, they hold strongly commitments to teacher-led, skill-based instruction. During their professional socialisation, opportunities to learn about and practise GBA were limited. Consequently, they regard GBA as overly idealistic and potentially detrimental to students' performance in PE assessments. Accordingly, these teachers tend to rely on traditional approaches and are reluctant to experiment with GBA in their classroom practice.

Among the 12 PETE teachers, only a small number demonstrated strong positive dispositions towards GBA, while the majority displayed contradictory or ambivalent attitudes. This complexity represents an important dimension that narrative inquiry is

uniquely able to capture. Narrative inquiry not only enables researchers to attend to teachers lived experiences but also provides deeper insight into the processes through which their teaching dispositions are formed and re-shaped. Overall, PETE teachers' dispositions towards GBA cannot be categorised as simply supportive or resistant; rather, they represent an ongoing process of adjustment and reconstruction within teaching practice. The findings further indicate that these dispositions are shaped by multiple, interrelated factors, including early PE and sporting experiences, prevailing skill-orientated teaching beliefs, overseas training, teaching experiences before and after university, school-based assessment practices, limited resources, and student feedback. Practical experience also plays a significant role: several teachers reported that, after experimenting with GBA, they felt discouraged by students' reactions and subsequently reverted to traditional teaching methods.

7.2 What Influenced the Development of Dispositions?

This study found that PETE teachers' dispositions towards GBA are shaped by multiple factors that can be divided into the three categories of: individual, social, and institutional.

At the individual level, the main factors include participants' early experiences in PE and sport (such as PE courses and professional team training), their learning experiences during university, and their teaching practices before and after employment. At the social level, the key influences shaping participants' dispositions were overseas training and the impact of significant others. At the institutional level, the primary

factors were examinations and assessment practices, talent cultivation programmes, and the new national curriculum. Although some PETE teachers indicated that their early PE and sporting experiences initially influenced their teaching philosophy, most emphasised that their university coursework and subsequent teaching experiences played a more substantial role in shaping their attitudes, beliefs, and dispositions towards student-centred teaching.

At the individual level, all PETE teachers expressed a strong consensus around the belief that mastering skills is central to learning to play sport. They generally believed that technical proficiency as the primary goal of PE and tended to separate skill training from games, emphasising that students should first acquire a solid technical foundation before participating in games. This disposition is deeply rooted in their early experiences of PE and sport, including PE courses during childhood or training in professional teams. Such experiences shaped not only their understanding of PE but also their beliefs as future educators. For these participants, the principle of skill mastery through repetitive drills was taken for granted and rarely questioned. This aligns with Dewey's theory of the continuity of experience, which posits that embodied and often unexamined prior learning shapes subsequent thinking and professional decision-making.

The participants' belief that skill acquisition should be the primary focus of PE teaching was further reinforced during their university education. Many of them undertook coursework and teaching internships that were largely grounded in traditional, skill-based pedagogies. Through this process, they gradually internalised

such approaches as their preferred teaching methods, considering them more effective for achieving instructional objectives. Furthermore, upon entering the teaching profession, the beliefs shaped by their early experiences and university education were further reinforced through practice. Consequently, despite current educational policies advocating student-centred teaching and emphasising students' holistic development, the inertia of prior experiences continues to influence teachers' dispositions, reflecting a strong link between their professional beliefs and earlier socialisation processes.

At the social level, some PETE teachers who participated in overseas training experienced a certain shift in their teaching philosophy. During these programmes, they were introduced to player-centred approaches and developed an initial appreciation of their potential to foster student initiative and holistic development. Such experiences encouraged the teachers to reflect critically on their existing beliefs about teaching. In their subsequent practice, they sought to incorporate strategies such as group collaboration, dialogue, gamified scenarios, and questioning into their lessons. However, achieving meaningful transformation through practice proved challenging.

Although the participants demonstrated generally positive dispositions towards student-centred teaching, they encountered considerable challenges in practice. Many sought to introduce innovative methods within institutional contexts still dominated by conservative, skill-based pedagogies. This pattern reflects a common issue identified in the GBA literature: student teachers and early-career teachers often lack specific training in GBA and face resistance from entrenched pedagogical traditions (Curtner-Smith et al., 2008; Harvey & Jarrett, 2014; Casey & Goodyear, 2015; Silva et al., 2021).

Additional barriers such as school culture, curriculum constraints, and limited resources, including insufficient space, facilities, and equipment-further restrict the implementation of GBA (Cushion, 2013; Harvey et al., 2015; Cruz et al., 2012).

Many participants also noted the formative influence of key figures, such as their former PE teachers and coaches, whose instructional approaches were emulated and internalised as professional norms. These socialisation processes demonstrate how cultural and institutional contexts perpetuate teachers' reliance on traditional methods, thereby limiting their receptivity to GBA. This aligns with social constructivist theory, which emphasises that teachers' beliefs and practices are shaped through culturally and socially situated interactions.

At the institutional level, schools' assessment approaches, talent cultivation programmes, and related policies were the main factors influencing PETE teachers' dispositions towards GBA. Several participants observed that current university PE assessments primarily measure students' technical skill proficiency, neglecting broader dimensions of learning in team sports such as cognitive development, emotional engagement, and social interaction. This single-dimensional, skill-orientated assessment approach has significantly influenced the selection of teaching content and methods, limiting the diversification of teaching organisation. Because teachers' instructional content is directly tied to students' academic performance in practice, they often adopt traditional, skill-based approaches to ensure that students meet assessment standard. In addition, some PETE teachers reported that when attempting to implement GBA, students' responses were insufficiently proactive, leading them to abandon the

approach. This reflects the social constructivist perspective that teachers' professional decisions are shaped by the institutional and cultural contexts in which they work.

The four core themes identified in this study represent the key factors influencing participants' dispositions towards GBA. These themes are interrelated rather than independent, interacting dynamically throughout the professional growth and teaching practice of PETE teachers to collectively shape their pedagogical orientations. For example, the findings suggest a correlation between skill-based teaching beliefs and the competitive training PETE teachers experienced as students (Tinning, 2002; Richards et al., 2019). Early PE and sporting experiences familiarised many teachers with traditional, skill-orientated pedagogies, reinforcing a preference for technique-focused instruction that was further consolidated during their university education.

Although overseas training exposed some participants to player-centred pedagogies and encouraged experimentation with elements of GBA such as collaboration and questioning, their efforts were often constrained by assessment regimes and institutional expectations. When faced with practical challenges, including assessments focused predominantly on technical skills, limited student engagement, and insufficient teaching resources, teachers tended to revert to traditional methods (Goodyear et al., 2014; Harvey et al., 2015).

Thus, PETE teachers' dispositions are not shaped by a single factor but emerge from the interaction of multiple influences operating at individual, institutional, and societal levels. This interplay explains the hesitation that many PETE teachers exhibit towards GBA (Curtner-Smith, 1999; Richards et al., 2014). While they may endorse the

approach in principle, they frequently find its implementation challenging due to entrenched cultural expectations and structural constraints.

Narrative inquiry offers an effective means of exploring how PETE teachers' teaching dispositions are shaped through the interaction of individual experience and sociocultural context (Clandinin & Connelly, 2000). By recounting their learning and teaching experiences, participants revealed how dispositions develop gradually through long-term educational socialisation across multiple settings, including PE courses, professional training, and teaching practice.

This approach also captures key 'turning points' in teachers' professional growth that prompt reflection and belief transformation (Tsangaridou, 2006; MacPhail & Tannehill, 2014). For instance, several participants first encountered player-centred pedagogies during overseas coaching programmes, which contrasted sharply with the traditional, skill-based approaches prevalent in China and encouraged critical reflection on their existing practices.

The findings illustrate that teachers' beliefs are rarely transformed by a single course or training experience (Pajares, 1992; Wideen et al., 1998) but are continuously reinforced, challenged, or reconstructed through accumulated experience in different cultural and institutional contexts (Tsangaridou, 2006). In this study, some teachers accepted GBA in principle but reverted to traditional methods due to misaligned assessment regimes, limited resources, and low student engagement. Overall, the study demonstrates that teachers' pedagogical dispositions evolve incrementally through the interaction of multiple contextual factors.

7.3 Implications

7.3.1 The Influence of Participants' Dispositions on PE Teaching

This study supports the view that in the process of educational reform, teachers are not merely passive implementers of curriculum reform. They are interpreters of curriculum change and the teaching philosophy that underpins it. As constructivism (Fosnot, 2013) and the work of Dewey (1938) suggest, learning is a process of interpretation that is shaped by prior experience. This was clearly what happened with the 12 participants and what is very likely to happen with their students. Teaching beliefs, dispositions, behaviours and experiences collectively influence the implementation of curriculum change such as the new national curriculum (Fullan, 2007). In PETE programmes, where most students are prospective PE teachers, the teaching methods and practices to which they are exposed exert a significant influence on the construction of their teaching beliefs (Zeichner & Gore, 1990). Teachers' beliefs that are developed over time guide their teaching behaviour and interpretation of new national curriculum and the practical decisions based on them (Pajares, 1992).

For PETE students, learning to teach involves more than the cognitive acquisition of knowledge conveyed through verbal instruction. It is also subtly, yet powerfully, shaped at a non-conscious level by the teaching methods and classroom behaviours of their instructors. This form of non-conscious learning is particularly significant within GBA and, more specifically, in the context of Positive Pedagogy (Light, 2017; Light & Harvey, 2019).

PETE teachers' dispositions towards GBA serve as an important reference framework for PETE students' understanding of the new national curriculum (Tinning, 2009). PETE teachers with a positive disposition created a classroom environment broadly supportive of the philosophy underpinning the new curriculum; however, because their practice often continued to prioritise skill acquisition, students struggled to fully grasp the principles of GBA. PETE teachers with a neutral disposition tended to favour traditional methods, influenced by factors such as personal experience, resource availability, and assessment requirements. By contrast, those with a negative disposition were more likely to impede students' understanding and acceptance of the new curriculum through continued reliance on conventional, skill-based approaches.

Participants who held relatively positive dispositions towards GBA generally believed that it enhances students' tactical awareness, co-operative skills, and engagement. In their teaching, they experimented with strategies associated with GBA including group discussions, open-ended questions, and games. They indicated that, to some extent, these approaches encouraged students to adopt a more proactive role and to engage cognitively in PE, thereby fostering tactical understanding and social skills (Light, 2008). Nevertheless, despite their theoretical support for GBA, these PETE teachers' practices continued to prioritise the mastery of fundamental techniques. This reveals a tension between pedagogical philosophy and practice that may have ambivalent effects on students. On the one hand, the use of co-operative and inquiry-based approaches supported the development of problem-solving and teamwork, thereby strengthening students' positive dispositions towards PE (Casey & Kirk, 2020).

On the other hand, the continued emphasis on skill training and technical performance reinforced a traditional conception of PE as technique imitation and competitive display, thereby neglecting cognitive, emotional, and social aims in PE (Curtner-Smith, 1999).

Some participants held neutral dispositions towards GBA, although they acknowledge its educational value in theory. In teaching practice, they were constrained by factors such as class size, facility limitations, and teaching assessment, making it too difficult to truly implement student-centred teaching. Participants' choices of teaching methods, assessment, and classroom behaviour may inadvertently weaken students' understanding of the new national curriculum and make it less likely for them to take a positive view of the new national curriculum. When PETE teachers repeatedly emphasise skill mastery and proper movements while neglecting students' active thinking, collaboration, or decision-making, students find it harder to grasp the core principles of GBA (Light & Harvey, 2015).

A small number of participants held negative dispositions towards GBA. Most had an athletic background and experienced traditional instruction focused on skill training and competitive outcomes prior to entering teacher education. These experiences significantly influenced the formation of their professional identity (Beauchamp & Thomas, 2009). Consequently, this background reinforced a narrow or misconceived understanding of PE, constraining its aims to easily observable movement norms and technical performance. In such classrooms, students often become passive executors of prescribed techniques, with limited appreciation that PE aims extend beyond technical mastery. This skill-based approach not only contradicts the core objectives of the new

national curriculum, but also further restricts students' opportunities for participation and expression, inhibiting the development of their agency in and through PE. This has also become a significant obstacle to the implementation of the new national curriculum.

It is worth noting that if PETE students are consistently exposed to skill-based approaches during their studies, they are likely to perpetuate these traditional methods when they become PE teachers. Such continuity constrains the development of comprehensive physical literacy among the next generation of students. When PETE programme fails to translate the student-centred philosophy of the new national curriculum into concrete teaching practices, these limitations risk being reproduced cyclically between teachers and students. This cyclical reproduction not only impedes the sustainable development of PE but also restricts the deeper progression of curriculum reform and limits the learning potential achievable through PE.

The deeply embedded dominance of skill mastery as the primary aim of PE teaching is a global concern, not one limited in China. As this study and others have suggested (Light, 2017), this emphasis represents one of the most significant barriers to the adoption of student-centred pedagogy and philosophy in PE. This issue is specifically addressed in Section 7.3.2. Successfully implementing the promising new national curriculum may require PETE teachers to adopt radical changes. These may include actively abandoning traditional approaches that place excessive emphasis on the imitation and repetition of movement techniques. Such methods should be replaced with meaningful learning experiences that encourage students' active engagement.

Simultaneously, PETE teachers need to engage in ongoing professional learning and critical reflection to enhance the quality of PE teaching.

In this study, several participants indicated that they were not sufficiently familiar with the content of the new national curriculum and lacked the necessary knowledge base to help students appreciate its benefits. This limited understanding has, to some extent, reduced their capacity to respond effectively to teaching reforms and constrained innovation in pedagogical concepts and practices. Educational policies represent the state's overarching framework for the development of PE. When policy discourses and accountability frameworks shape PE practice, teachers may struggle to align pedagogy with the intended direction of reform, thereby risking a narrowing of PE provision (Penney & Evans, 2005).

Not all participants held positive dispositions towards student-centred teaching; consequently, their students are unlikely to develop an understanding of or appreciation for this approach and the emphasis it receives in the new national curriculum. Students taught by teachers who recognised certain benefits of student-centred pedagogy may hold more favourable dispositions, although these remain limited. To implement GBA effectively, PETE and PE teachers must first acquire a sound understanding of its theoretical foundations and core principles (Light, 2013). Those who strongly supported student-centred teaching are most likely to cultivate graduates who both understand and seek to apply the new national curriculum in their future practice.

I observed each participants teaching a practical course; however, the primary aim of this study was to identify their dispositions towards student-centred teaching. This

means that my ability to comment on their teaching practices, but not possible approaches to teaching that might improve their ability to help students understand and implement the new national curriculum.

7.3.2 Skill Mastery's Influence on Students' Interpretation of GBA

Current research on GBA has predominantly focused on Western educational systems such as those in the United Kingdom, Canada, Australia, New Zealand, and the United States. Although interpretations and enactments of GBA vary markedly across countries, cultures, and regions, comparative research on these differences remains limited (Li & Cruz, 2008; Light & Tan, 2006; Wang & Ha, 2009; Wright et al., 2009; Nathan et al., 2018). Such variation reflects disparities in educational systems and curriculum policies, while also highlighting the influence of sociocultural contexts, teacher socialisation processes, professional development structures, and long-standing pedagogical traditions on PETE teachers' practices.

Teachers and coaches face similar challenges when implementing GBA across contexts (Harvey et al., 2015; Cruz et al., 2012; Light et al., 2014). Research shows that teachers' beliefs shape how GBA is understood and enacted, as well as how those beliefs themselves are constructed (Butler, 1996; Jarrett & Harvey, 2014; Light, 2002; Light & Tan, 2006; Light & Evans, 2013; Couto de Aguiar, 2018). A widely acknowledged barrier to implementation is the deep-rooted belief in the primacy of skill mastery, which inclines teachers towards traditional skill-based pedagogies (Light & Fawns, 2003; Harvey & Jarrett, 2014).

All participants in this study demonstrated belief in the importance of skill mastery ranging from those who believe it is necessary for all teaching to those who think it holds back enjoyment and motivation in public PE courses. This belief in skill-based teaching, rooted in early PE and sporting experiences as well as learning and coaching before and after university, has become a global barrier to the effective dissemination, understanding, and practical implementation of GBA. This phenomenon manifests in different ways across cultural contexts.

In China, the dominance of skill-based pedagogy is particularly pronounced and functions as a key barrier to pedagogical innovation. This dominance is sustained by a long-standing examination-orientated education system and by traditional cultural norms that privilege order, compliance, and visible technical performance (Tan, 2015). As a result, PE instruction remains largely focused on technical training, emphasising movement accuracy and skill proficiency, and teachers commonly regard skill mastery as the principal indicator of student competence. Other dimensions of learning in team sports, such as tactical awareness, decision-making and collaboration, receive comparatively little attention. Light and Harvey (2019) argue that the reductionist logic underpinning skill-based pedagogies renders teaching and coaching deceptively straightforward and easily communicable; however, it fails to account for the complexity involved in coaching team sports.

This study highlights that while technical instruction remains an important component of PE, the dominance of skill-based approaches can undermine students' engagement and holistic development, particularly in public PE settings. Participants

noted that repetitive, decontextualised drills often lead to disengagement and reduced motivation, especially among less confident or less motivated students, consistent with previous research (Ennis, 1996; Ntoumanis, 2005). Although such methods may help students attain competence in isolated techniques, the absence of participatory learning and reflective teaching limits their ability to transfer these skills to authentic game contexts. Students consequently struggle to make tactical adjustments, think independently, and make timely decisions in dynamic play situations, thereby restricting the development of game understanding.

Extensive research on GBA has demonstrated that tactical knowledge and decision-making are best developed in interactive, game-like environments where learners construct meaning through experience (Gréhaigne et al., 2005). However, participants acknowledged that traditional skill-based pedagogies continue to prioritise technical mastery at the expense of cognitive, emotional, and social learning outcomes. In such models, teachers act primarily as transmitters of knowledge rather than facilitators of learning, focusing on content coverage rather than the cultivation of reflective, autonomous learners (Kirk, 2009).

From a theoretical perspective, the persistence of these approaches reflects both the continuity of teachers past experiences and the social construction of professional beliefs through interaction with institutional and cultural norms (Lortie, 1975). The pedagogical inertia produced by these long-standing practices leads teachers to display resistance or avoidance when confronted with innovative, student-centred approaches such as GBA. Implementing game-based instruction requires a significant shift in

professional competence. Teachers must continuously interpret students' responses, assess understanding, and adjust tasks to promote learning at both tactical and cognitive levels (Light & Fawns, 2003). This transformation demands advanced organisational and questioning skills, as well as the ability to facilitate inquiry and dialogue effectively, which are competencies that take time and institutional support to develop (Harvey & Light, 2015; Karagiannis & Pill, 2017).

At the same time, students who have been socialised into skill-based learning environments tend to adopt passive learning habits. They are accustomed to following instructions rather than engaging in active decision-making, collaboration, or reflective inquiry, which limits their capacity to participate meaningfully in student-centred pedagogies (Light, 2008; Kirk, 2009; Casey & O'Donovan, 2015). This pattern highlights the reciprocal nature of pedagogical reform: both teachers and students require re-socialisation into new modes of teaching and learning.

Institutional structures further reinforce these patterns. Examination-orientated assessment regimes in China continue to emphasise technical proficiency, subtly reproducing traditional pedagogies (Green, 2008). Within university PE courses, instruction is often reduced to skill training aligned with exam requirements (Wang & Ha, 2013b), restricting teachers' ability to design lessons that are open, collaborative, and exploratory (Tinning, 2002). Consequently, the implementation of GBA is constrained not only by individual dispositions but also by the broader educational culture and policy environment.

These findings demonstrate that pedagogical change in Chinese PE requires more than methodological reform; it necessitates the reconstruction of the cultural and institutional foundations that shape both teacher and student dispositions. From a Deweyan and social-constructivist perspective, this transformation involves reconfiguring the experiential and social conditions under which teaching and learning occur, enabling both teachers and students to engage in inquiry, reflection, and shared meaning-making.

7.3.3 Need for More Clarity About Student-Centred Teaching, a Better Understanding of What It Is, and Its Benefits

In the current context of global education reform, student-centred teaching philosophy has been widely advocated and gradually integrated into the teaching practices of various disciplines (Weimer, 2013). Traditionally, PE teaching has been teacher-centred, focusing primarily on the transmission of motor skills from teacher to student. While this approach has improved students' technical proficiency to some extent, it presents clear limitations in several areas: (1) stimulating students' interest and motivation to learn, fostering collaborative and independent thinking skills; (2) developing understanding of games and learning how to play them; (3) enjoying movement as a meaningful experience.

It was clear from the data in this study that none of the participants had a deep understanding of student-centred teaching and they often complained about a lack of

clarity. It seems to me that the government needs to make it very clear what student-centred teaching is, why teachers should teach this way and how to do it.

What is student-centred teaching?

Student-centred teaching in PE and coaching is collectively conceptualised under the umbrella of GBA, which include models such as TGfU, GS, and others. GBA emphasises the integration of physical, cognitive, and social dimensions of learning, focusing on the holistic development of the learner. It is grounded in a constructivist view of learning, whereby learners construct understanding through experience and social interaction in authentic contexts (Light, 2013). Learning is therefore viewed as an active, contextualised process shaped by participation and dialogue (Harvey & Light, 2015).

Within this framework, student-centred teaching promotes learners' active engagement, sense of responsibility, and decision-making in the learning process. Teachers are no longer positioned as sole transmitters of knowledge or classroom authorities but act as facilitators, mentors, and supporters of learning (Casey & Goodyear, 2015). In practical application, teachers employ a range of strategies such as heuristic questioning, collaborative group work, and the design of game-based tasks to foster meaningful learning (Light, 2013). These learning experiences not only enhance students' understanding and engagement but also contribute to their social, moral, and personal development within a supportive and empowering environment (Sheppard & Mandigo, 2009).

How should I teach it?

The literature suggests that effective use of student-centred pedagogy in PE requires teachers to develop a clear understanding of the theoretical and philosophical foundations of GBA (Light & Light, 2021). Without such grounding, “student-centred” teaching is easily misunderstood as a vague ideal rather than a principled pedagogical orientation. Previous research has shown that teachers and coaches may be uncertain about what student-centred learning entails, how it should be enacted, and what its underlying purpose is (Reid & Harvey, 2014). These uncertainties include both conceptual misunderstandings of approaches such as GS and practical uncertainty about how to design and facilitate learning environments that promote inquiry, decision-making, and tactical understanding.

Placing learners at the centre of the process also imposes substantial professional demands on teachers. GBA requires careful design of lesson content, structure, and progression, and represents a significant departure from traditional direct, teacher-led instruction. One recurring misconception is that student-centred teaching simply allows learners to “do what they like” and reduces teacher control, resulting in unstructured activity with no clear objective (Kirk & MacPhail, 2002). In contrast, GBA is a problem-based and highly purposeful pedagogical approach. It relies on the systematic use of modified games and contextualised tasks to support the step-by-step construction of tactical awareness, strategic thinking, and skill execution in realistic performance environments (Light & Evans, 2013; Light & Clarke, 2021).

Within this approach, the role of the teacher is not withdrawn but transformed. Teachers are responsible for designing learning tasks of appropriate complexity,

adjusting these tasks in response to learners' understanding, and guiding reflection in ways that help students make sense of what they are doing. Central to this is the use of high-quality questioning, which directs learners' attention, prompts analysis of decision-making, and encourages them to articulate and refine their understanding (Harvey & Light, 2015). In this sense, GBA requires not only content knowledge but also pedagogical skill in orchestrating dialogue, supporting collaborative problem-solving, and managing progression within game-based learning environments.

What are its benefits?

The literature consistently highlights that GBA foster a comprehensive understanding of the game and how to play it. By structuring learning in contexts that closely resemble real games, GBA enables students to develop tactical awareness, decision-making, and skill application in authentic performance environments (Casey & Kirk, 2020). Through a range of pedagogical strategies, teachers help students strengthen their understanding of sporting situations, improve collaboration, and enhance their capacity for problem-solving and judgement. In such settings, students often demonstrate greater motivation and deeper cognitive engagement as they learn within meaningful and challenging activities.

This pedagogical shift moves the focus of instruction from isolated technical execution to tactical reasoning and decision-making in dynamic contexts. It also nurtures intuitive or non-conscious learning that emerges from playing and reflecting within modified games (Light, 2013). Questioning, discussion, and guided reflection are central to this process: when teachers ask purposeful questions and facilitate

dialogue, they stimulate critical thinking, enhance students' metacognitive awareness, and deepen understanding (Harvey & Light, 2015). Such interaction also strengthens emotional connections and social relationships, helping to create a supportive and positive learning climate.

Incorporating GBA within the curriculum can further promote peer learning and the co-construction of knowledge (Jarrett, 2022). Students typically exhibit higher levels of autonomy and emotional engagement in GBA classrooms, contributing to a more motivating and inclusive learning environment (Light, 2021a; Kinnerk et al., 2018; Casey & Goodyear, 2015). Moreover, GBA challenges traditional teacher-student hierarchies by positioning teachers as facilitators and learners as active participants. This restructuring of classroom power relations encourages mutual communication and respect, leading to richer student-to-student and student-to-teacher interactions (Light, 2012; Ribeiro, 2024).

7.3.4 Need for Universities to Stop Contradicting the Curriculum by Aligning Assessment and PE Programme Content with the Pedagogy Preferred for the New National Curriculum

This study highlights that contradictions between the school's talent cultivation programme, the teaching assessment, and the new national PEH curriculum standard create substantial barriers to implementing student-centred pedagogies such as GBA. Misalignment across these levels presents persistent challenges in teaching practice and influences teachers' dispositions towards reform. When university regulations and

course structures diverge from the principles promoted in the new curriculum, teachers often face a dilemma between policy expectations and institutional realities.

Although schools increasingly advocate student-centred teaching, implementation remains difficult. Instruction must align not only with institutional philosophies but also with programme specifications and syllabi determined by the university. Teachers are further constrained by assessment frameworks that privilege quantitative indicators, such as technical skill mastery and task completion rates, rather than students' overall cognitive, emotional, and social development (Hay & Penney, 2012). Such skill-orientated regimes reinforce traditional, teacher-centred approaches and discourage experimentation with pedagogies that prioritise inquiry, reflection, and collaboration.

Institutional regulations also limit pedagogical flexibility. Course content, progression, and assessment are often pre-determined, while classes are monitored through supervision systems that emphasise compliance. Consequently, even teachers who support student-centred teaching frequently feel obliged to maintain skill-based approaches due to pressures from timetabling, prescribed schemes of work, and assessment demands (Green, 2008). These patterns reflect long-standing institutional cultures and policy structures rather than teachers' personal resistance (Tinning, 2002).

The persistence of traditional talent cultivation models further constrains reform. Many schools have not yet updated their curriculum structures, learning objectives, or teaching content to reflect the principles of the new national curriculum, resulting in a clear disconnect between policy and practice. Without coherent alignment across curriculum design, assessment standards, and institutional priorities, teachers are left

without clear pedagogical direction, leading to fragmented implementation and misinterpretation of policy intentions. In such cases, educational reform risks remaining rhetorical rather than transformative, existing primarily within policy discourse rather than classroom reality (Penney & Evans, 1999).

In addition, practical conditions such as large class sizes, limited facilities, and insufficient teaching resources make it difficult to create interactive, game-based environments. Limited space restricts the use of contextualised game scenarios essential to GBA, while resource shortages hinder sustained implementation (Tan et al., 2012; Goodyear et al., 2014). Large class sizes also complicate observation, feedback, and organisation, often compelling teachers to revert to more controllable, traditional approaches to maintain order and meet institutional objectives (Harvey et al., 2010; Casey & O'Donovan, 2015).

Several participants emphasised the need for systematic training and professional learning to strengthen teachers' understanding of the curriculum's philosophy and pedagogical intent. Many currently engage with the curriculum only at a superficial policy level, lacking opportunities to translate its principles into practice. Schools can play a crucial role in bridging this gap by fostering professional dialogue, collaborative lesson study, and peer observation, supported by expert guidance and institutional encouragement.

Ultimately, teachers' capacity to enact curriculum reform is closely tied to the quality and continuity of their professional development (Guskey, 2002; Armour & Yelling, 2004). Sustainable change depends not only on national policy but also on the

internal development of institutional culture and professional learning communities within schools (Casey, 2010). Effective reform requires coherence among the national curriculum, assessment approaches, and talent cultivation programmes. The curriculum should define overarching goals and learning principles; assessment must align with these aims by valuing process and holistic learning; and talent cultivation programmes should provide the structure and support for teachers to realise these goals in practice. Only when these three components operate in concert can the aims of student-centred education be fully achieved.

7.4 Contributions to Knowledge in the Field of PE

Although GBA has been widely advocated across Western countries, numerous studies have identified the challenges encountered by teachers, schools, and institutions implement it, both in Western and Asian contexts. A main contribution of this study is how it clearly identifies the problems created by a global belief in the pivotal importance of skill mastery for learning to play sport. It is not ground-breaking but makes a valuable contribution to the field of PE pedagogy, and specifically to knowledge about GBA. In this study, the belief in the importance of teaching skill was progressively reinforced through participants' personal experiences in PE and sports, as well as through their professional socialisation. This belief subtly shaped their dispositions towards GBA, becoming a significant barrier to its promotion and implementation. By focusing on the dispositions of Chinese PETE teachers, this study

provides a deeper insight into the reason why GBA has not been more widely adopted globally and enriches the existing literature in this field.

This study highlights the influence of cultural factors on the development and implementation of GBA. The acceptance and effectiveness of GBA vary significantly across different countries, and these differences are closely related to cultural contexts. In China, traditional culture emphasises discipline and collective norms, combined with a strong emphasis on technical skills in traditional PE instruction, which often leads teachers to a lack of confidence in implementing GBA. From a social constructivist perspective, these cultural and institutional norms shape teachers' professional beliefs and practices, constraining pedagogical innovation and, by extension, the broader progress of educational reform. By conducting an in-depth analysis of Chinese PETE teachers' dispositions towards GBA, this study provides a better understanding of how culture and teacher beliefs intertwine to influence GBA practice. Furthermore, this study addresses the scarcity of relevant research in the Asian and the limited availability of English-language literature on Chinese studies.

This study demonstrates the value of narrative inquiry as a methodology for exploring the complexity of teaching and learning in PE. Previous research has also applied narrative inquiry in the study of GBA (Dowling et al., 2015; Casey & Schaefer, 2016; Walters et al., 2023) but this study suggests its valued for identifying, understanding and exploration of the complexity of teaching and learning (Light & Clarke, 2021). Narrative inquiry methodology enables an understanding of teachers lived experiences across their professional lives and provides insight into how they

negotiate educational reforms within culturally specific environments. The methodological contribution of this research lies in its capacity to reveal how cultural traditions and institutional norms mediate teachers' professional beliefs and practices, offering a theoretically informed account of resistance to pedagogical innovation in Chinese PE.

In theoretical and empirical terms, this study makes a distinctive contribution to the field of PE pedagogy and the wider body of research on GBA. It provides a culturally grounded, English-language account of how Chinese PETE teachers' dispositions towards student-centred teaching are shaped within specific institutional and sociocultural settings. Moving beyond the predominance of experimental studies in Chinese-language publications, it offers a qualitative, interpretive perspective that deepens understanding of the contextual and cultural complexities influencing pedagogical practice. By integrating Dewey's theory of experience with a social constructivist lens, the study illustrates how teachers' beliefs are continuously reconstructed through interaction with their environments. In doing so, it extends international scholarship on PETE and teacher disposition theory, offering an empirically informed explanation of the cultural and institutional challenges surrounding the implementation of GBA in China.

7.5 Study Limitations

The narrative inquiry methodology adopted in this study enabled the achievement of its aims by providing an in-depth understanding of PETE teachers' dispositions towards

the student-centred approach promoted in China's new national PEH curriculum standard, as well as the major factors influencing these dispositions. Although the study involved only twelve participants from a single city, it generated rich, contextualised insights into the experiences of those responsible for educating future PE teachers who must interpret and enact the new national curriculum in their professional practice. These findings therefore hold important implications for teaching and learning in Chinese PE, some of which have been discussed earlier.

This was an intentionally small-scale, focused study designed to provide a deep understanding of PETE teachers within one local context, and its findings are not intended to be generalised beyond that setting. Nonetheless, the research offers a valuable foundation for future inquiry and could inform larger-scale studies examining the reconstruction of teacher dispositions and the implementation of student-centred approaches across different regions and institutional contexts.

7.6 Further Research

This study is among the few qualitative investigations of PE in China and offers context-rich insights into PETE teachers' dispositions towards student-centred pedagogy. Building on these findings, future research should aim to deepen theoretical explanation while extending empirical scope. Theoretically, further work could examine how dispositions are shaped and reshaped across different provincial and institutional contexts, with close attention to regional cultures, programme structures, and assessment regimes. Longitudinal research following pre-service teachers from

entry into PETE through induction and the early years of practice could illuminate how dispositions are reconstructed over time, clarifying how curriculum intentions are translated, and at times resisted, into everyday practice. Comparative studies across national systems would also help to distinguish culturally specific mechanisms from more generalisable processes. Such theorisation should also connect teacher dispositions to student outcomes, including game understanding and cognitive, affective, and social learning, drawing on Deweyan perspectives on experience and social constructivist accounts of learning.

Methodologically, future studies should move beyond single-site projects and employ multi-site, mixed-methods designs that allow both explanation and broader claims. Large-scale surveys and measures of performance and engagement could identify patterns across settings, while interviews, classroom observations, and analyses of teaching materials could add depth and contextual understanding. Longitudinal case studies and design-based research would be well suited to examining PETE innovations linked to GBA and student-centred goals over time. Cross-case synthesis and qualitative comparative analysis could further identify combinations of factors that facilitate effective implementation. In addition, teachers' reflective journals could provide fine-grained evidence of how beliefs and practices evolve through ongoing professional experience.

Policy and practice also warrant sustained attention. Future research should evaluate pilots programmes that align curriculum, assessment, and talent cultivation programmes with student-centred objectives, examining their effects on teacher

practice and student learning. Further investigation into professional development models is also needed, particularly those that are school-embedded approaches and combine expert guidance with peer learning communities. Such models should focus on the design of GBA courses, formative assessment for game understanding, and classroom management in large classes. Finally, research on policy translation across provincial, municipal, and school levels could identify leverage points for narrowing the persistent gap between policy and practice.

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Appendices

Appendix A – Participant Consent Form



Participant Consent Form

Research Study: Chinese PETE teachers' dispositions towards the student-centred approach in the new national physical education and health curriculum standard and what shapes them.

Emeritus Professor Richard Light (Responsible Researcher)
 School of Education and Social Work / Faculty of Arts and Social Sciences
 Phone: +61 490849295 Email: richard.light@sydney.edu.au
 Wanyu Huang(PhD student) Email: whua2059@uni.sydney.edu.au

Participant Name _____

I agree to take part in this research study. In giving my consent, I confirm that that:

- The details of my involvement have been explained to me, and I have been provided with a written Participant Information Statement to keep.
- I understand the purpose of the study is to investigate the dispositions, inclinations, and intentions of PETE teachers in China, how they were developed over time, and how they might influence pre-service teachers' attitudes toward the new national curriculum.
- I acknowledge that the risks and benefits of participating in this study have been explained to me to my satisfaction.
- I understand that in this study I will be required to conduct personal life history interviews, focused interviews, and noted observations.
- I understand that my participation may be audio and/or videotaped.
- I understand that my information may be used in future research, for example in publications, and in presentations at conferences.
- I understand that being in this study is completely voluntary.
- I am assured that my decision to participate will not have any impact on my relationship with the research team or the University of Sydney.

- I understand that I am free to withdraw from this study at any time and that I can choose to withdraw any information I have already provided (unless the data has already been de-identified or published).
- I have been informed that the confidentiality of the information I provide will be protected and will only be used for purposes that I have agreed to. I understand that information identifying me will only be told to others with my permission, except as required by law.
- I understand that the results of this study may be published. Although every effort will be made to protect my identity, I may be identifiable in these publications due to the nature of the study or results.
- I confirm the following:

I consent to recordings (audio/video/photographic) Yes No

I would like to review my interview transcripts Yes No

I consent to being contacted for future studies Yes No

I consent to my data being used in future research Yes No

I would like feedback on the overall results of this study Yes No

If you answered yes, please provide your preferred contact details (email/telephone/postal address):

I understand that after I sign and return this consent form it will be retained by the researcher, and that I may request a copy at any time.

Participant Name _____

Signature _____

Date _____

Appendix B – Participant Consent Form



Participant Information Statement

Research Study: Chinese PETE teachers' dispositions towards the student-centred approach in the new national physical education and health curriculum standard and what shapes them.

Emeritus Professor Richard Light (Responsible Researcher)
 School of Education and Social Work / Faculty of Arts and Social Sciences
 Phone: +61 490849295 Email: richard.light@sydney.edu.au
 Wanyu Huang(PhD student) Email: whua2059@uni.sydney.edu.au

1. What is this study about?

We are conducting a research study to explore the dispositions of PETE teachers in Kunming toward game-based approaches (GBA), and the principles underpinning the new national PEH curriculum standard, and how were they developed. This study will have inform for the implementation of the new national curriculum and add to the large body of research on GBA. It will help to develop knowledge of both how GBA might be encouraged in China and how teachers interpret the new curriculum. Taking part in this study is voluntary.

Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

2. Who is running the study?

Professor Richard Light and Wanyu Huang is conducting this study as the basis for the degree of Doctor of Philosophy at The University of Sydney.

3. Who can take part in the study?

We are seeking public university PETE teachers with at least three years of teaching experience and appointed at lecturer level or above.

4. What will the study involve for me?

If you decide to take part in this study, you will undertake one personal life history interviews (60-90 minutes), one focus interviews (15-20 minutes) and I will observe you teaching one practical class.

Can I withdraw once I've started?

Being in this study is completely voluntary and you do not have to take part. Your decision will not affect your current or future relationship with the researchers or anyone else at The University of Sydney.

If you decide to take part in the study and then change your mind you can withdraw at any time by contacting the researcher directly by email or letting me know face-to-face.

The following statements about study data

If you take part in an interview you may refuse to answer any questions that you do not wish to answer.

If you choose to withdraw, we will not collect any more information from you. Please let us know at the time you withdraw what you would like us to do with information we have collected about you up to that point.

5. Are there any risks or costs?

Aside from giving up your time, we do not expect that there will be any risks or costs. associated with taking part in this study.

6. Are there any benefits?

There are no financial benefits.

7. What will happen to information that is collected?

By providing your consent, you are agreeing to us collecting information about you for the purposes of this study.

Any information you provide us will be stored securely and we will only disclose identifiable information with your permission, unless we are required by law to release information. We are planning for the study findings to be published.

You will not be individually identifiable in these publications.

Interviews with participants and observations of practical sessions will be conducted. The interviews and noted observations will be audio recorded. The purpose of the recordings is to allow us to accurately recall the discussion for analysis.

Participant details will not be accessible to other people during or after the study.

During the study period, electronic and hard copy information will be stored on the same USB stick.

At the end of the approved retention period, electronic and hard copy information will be deleted.

8. Will I be told the results of the study?

You have a right to receive feedback about the overall results of this study. (Please provide your email if you would like the overall results). This feedback will be in the form of a brief lay summary.

9. What if I would like further information?

When you have read this information, the following researcher/s will be available to discuss it with you further and answer any questions you may have:

Wanyu Huang, whua2059@uni.sydney.edu.au, +86 18856769991.

10. What if I have a complaint or any concerns?

The ethical aspects of this study have been approved by the Human Research Ethics Committee (HREC) of The University of Sydney according to the *National Statement on Ethical Conduct in Human Research (2007)*.

If you are concerned about the way this study is being conducted or you wish to make a complaint to someone independent from the study, please contact the University:

Human Ethics Manager

human.ethics@sydney.edu.au

+61 2 8627 8176

We have a local contact who is Wanyu Huang's Master's supervisor and is the Associate Dean of the School of Physical Education at Yunnan Agricultural University. If you would like to connect to a local contact, please contact: Professor Shaohua Li

Email: 1540762725@qq.com

Appendix C – Ethics Approval



Research Integrity & Ethics Administration

Human Research Ethics Committee

Thursday, 21 December 2023

Prof Richard Light

Education; Faculty of Arts and Social Sciences

Email: richard.light@sydney.edu.au

Dear Richard,

The University of Sydney Human Research Ethics Committee (HREC) has considered your application.

After consideration of your response to the comments raised your project has been approved.

Approval is granted for a period of four years from **21/12/2023** to **21/12/2027**

Project No.: 2023/875

Project Title: Chinese PETE educators' dispositions towards the new national curriculum. A case study in Kunming city, China.

Authorised Personnel: Light Richard; Georgakis Steve; Huang Wanyu.

First Annual Report due: 21/12/2024

Documents Approved:

Date Uploaded	Version number	Document Name
16/12/2023		interview questions
16/12/2023		participants consent statement
16/12/2023		participants information statement
20/11/2023		Observation instrument
02/11/2023		Safety Protocol
31/10/2023		email to prospective participants

Special Condition/s of Approval

It will be a condition of approval that the following amendments are made to the participant

information statement:

Please include Emeritus Professor Richard Light in section 2.

Section 8 says, "During the study period, electronic and hard copy information will be stored on the same USB stick." Please note that LabArchives should be the primary data storage location; storage of research data on a USB stick does not align with the University's Research Data Management Policy. Please amend this sentence to state that all data will be stored on LabArchives.

Condition/s of Approval

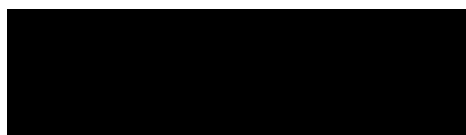
- Research must be conducted according to the approved proposal.
- An annual progress report must be submitted to the Ethics Office on or before the anniversary of approval and on completion of the project.
- You must report as soon as practicable anything that might warrant review of ethical approval of the project including:
 - Serious or unexpected adverse events (which should be reported within 72 hours).
 - Unforeseen events that might affect continued ethical acceptability of the project.
- Any changes to the proposal must be approved prior to their implementation (except where an amendment is undertaken to eliminate *immediate* risk to participants).
- Personnel working on this project must be sufficiently qualified by education, training and experience for their role, or adequately supervised. Changes to personnel must be reported and approved.
- Personnel must disclose any actual or potential conflicts of interest, including any financial or other interest or affiliation, as relevant to this project.
- Data and primary materials must be retained and stored in accordance with the relevant legislation and University guidelines.
- Ethics approval is dependent upon ongoing compliance of the research with the *National Statement on Ethical Conduct in Human Research*, the *Australian Code for the Responsible Conduct of Research*, applicable legal requirements, and with university policies, procedures and governance requirements.

- The Ethics Office may conduct audits on approved projects.
- The Chief Investigator has ultimate responsibility for the conduct of the research and is responsible for ensuring all others involved will conduct the research in accordance with the above.
- The Clinical Trials Support Office has been notified as outlined in the University's Clinical Trials Policy where a clinical trial is being undertaken.

This letter constitutes ethical approval only.

Please contact the Ethics Office should you require further information or clarification.

Sincerely



Associate Professor Haryana Dhillon
Chair
Human Research Ethics Committee (HREC 3)

The University of Sydney HRECs are constituted and operate in accordance with the National Health and Medical Research Council's (NHMRC) current National Statement on Ethical Conduct in Human Research (2018) and the NHMRC's current Australian Code for the Responsible Conduct of Research (2018).

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