

# Construction of the Physical Education Master's Supervisor Team Both within and outside the University—A Case Study of a University in Hunan, China

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**Abstract:** The development of higher education in China has increased attention on the training mode of a master's degree in physical education. The training of physical education masters not only focuses on theoretical knowledge but also emphasises practical ability. As a result, the construction of the supervisor team has become crucial for training sports masters. However, there are several problems with the current joint training model both within and outside the school, including poor communication, unequal distribution of benefits, and imperfect management systems. These issues significantly impact the training quality of physical education masters. This paper uses the Hunan University of Technology as an example to investigate and analyse the construction of the supervisor team within and outside the school. It aims to uncover the main dilemmas in the joint training mode and propose practical solutions. The paper suggests an operational reform plan, including constructing a reasonable interest, cooperation, and motivation mechanism. The goal is to improve the overall quality and training effectiveness of the sports master supervisor team and provide a reference for other universities.

**Keywords:** Physical Education, Supervisor Team, Higher Education, Case Study

## 1. Introduction

In recent years, there has been an increase in studies focused on developing physical education mentors. Current research mainly focuses on optimising mentor teams, creating joint training models, and enhancing professional development. For instance, in the US, there is a focus on career development and training, while the UK emphasises mentor qualification and continuous training to ensure the latest industry knowledge and skills. In the United States, the approach to training for a master's degree in sports emphasises collaboration between supervisors within and outside the school, which enhances students' skills and innovative thinking. For instance, [1] Stanfield(2018)stated that deep partnerships between universities and the sports industry can offer students ample practical opportunities and enhance supervisors' guidance abilities, fostering the integration of academic research and practical application. In the United States, colleges and universities have established a rigorous supervisor qualification certification system and regular training to ensure supervisors continually improve their professional and teaching skills. Similarly, sports education in the United Kingdom prioritises the professional development of supervisors. [2] Jone's(2017)research highlights that universities in the UK have implemented a supervisor training system to enhance teaching levels and practical guidance. The UK's mentoring system includes induction, on-the-job development, and regular assessments to maintain high professionalism among supervisors. UK universities also prioritise interdisciplinary collaboration among supervisors to enhance the quality of training by involving experts from various fields to guide students jointly.

Current research focuses on the dual supervisor system's implementation, existing issues, and potential solutions. Many studies have highlighted that while the joint training of supervisors inside and outside the school offers significant theoretical advantages, it faces numerous practical challenges. For instance, [3] Guocheng Sui noted that the dual supervisor system's lack of selection and formation standards leads to unsatisfactory joint training outcomes. Similarly, [4] Chao Yang (2019) observed that the imbalance in the allocation ratio of on-campus and off-campus supervisors adversely affects training quality. [5] Jinlong Li (2015) emphasised the deficiency of in-depth communication between school enterprise supervisors, resulting in a gap between theory and practice. Furthermore, [6] Liyan Liu (2016)

pointed out that the guaranteed mechanism for the dual mentor system is imperfect, and the participation and enthusiasm of corporate mentors are insufficient, which hampers the actual effectiveness of joint training. Research on joint training for physical education master's program supervisors in China is limited. Current studies lack in-depth analysis and specific implementation plans despite acknowledging the importance of collaborative training for enhancing students' practical abilities.

## 2. Methods

This study was registered with the institutional research office and received full ethical approval (ETH2024-1923) from the Hunan University of Technology and was funded by the Hunan Provincial Degree and Postgraduate Teaching Reform Research Project (No. 2020JGZD057). It focuses on on-campus supervisors, off-campus supervisors, graduate students, and related management staff in the master's program of physical education at Hunan University of Technology. The selection criteria are as follows: on-campus supervisors (10, aged between 35 and 55 years old) are full-time teachers of the master's program with rich teaching and research experience, directly involved in guiding physical education students. Preference will be given to those supervisors who have the title of professor or associate professor or have supervised many batches of physical education master's students. External supervisors (10, aged between 30 and 60) from primary and secondary schools, sports training institutions, or relevant government departments with rich practical experience in joint training of sports master's students. Supervisors for practical teaching and mentoring skills will be selected. Graduate students (50) currently studying for a master's degree in physical education from Hunan University of Technology, having completed at least one year of study, with specific learning and practical experience, capable of providing honest feedback on the joint training mode of supervisors. Administrators (5) involved in the training of the Master of Physical Education, including the Head of the Graduate School, the School of Physical Education administrator, and the administrator overseeing the Master of Physical Education program, who can provide insights at the management and policy levels.

Additionally, we conducted interviews with internal and external mentors and administrators using a semi-structured approach to gain firsthand insights and recommendations on the joint training model. The interview topics included mentor selection and training, the implementation process of joint training, existing challenges, and suggestions for improvement. These interviews involved ten on-campus mentors, ten off-campus mentors, and five managers and lasted about an hour each. The interviews were recorded using audio and notes. Furthermore, we utilised a comparative research method to analyse the advantages and disadvantages of different joint training models and their applicability in the training of sports masters. Specifically, we compared the U-S (university-primary and secondary schools), U-G-S (universities-government-primary and secondary schools), and U-T-S (universities-industry alliances-primary and secondary schools) models. Based on the specific circumstances of Hunan University of Technology, we proposed optimisation suggestions. The interview recordings will be transcribed into text, and the content will be coded and classified using the topic analysis method. The primary analysis steps include initial reading and comprehension, identifying and coding topics, categorising and organising, extracting critical information, and generalising topics. Through the in-depth analysis of the interview data, the main problems and suggestions for improvement in the joint training model of supervisors inside and outside the school were identified.

Interview data analysis: Through qualitative analysis of interview data, we deeply understand mentors' and administrators' views and suggestions on the joint training model using theme analysis to identify key issues and improvement suggestions. This study compares the advantages and disadvantages of different joint training models for sports masters. It includes optimisation suggestions for the U-T-S joint training model at the Hunan University of Technology.

## 3. Results

### ***3.1. The current situation regarding the joint training of supervisors inside and outside the school and the specific mode of this joint training.***

The School of Physical Education at the university provides comprehensive guidance to PE students through on-campus and off-campus supervisors. These supervisors create detailed training plans, including theoretical courses, practical training, scientific research projects, and career development planning, emphasising integrating theory and practice. They maintain regular communication with students to monitor progress and jointly conduct evaluations and assessments to ensure high-quality

training.

### 3.2. *The dilemma of joint training of supervisors inside and outside the school*

#### • *Miscommunication*

The joint training model for supervisors at Hunan University of Technology faces a significant practical problem due to poor communication between on-campus and off-campus supervisors. This problem is evident in the lack of effective communication channels, leading to untimely transmission of information and disagreements in student guidance. For example, a student completing a research project under an on-campus supervisor may not receive effective practical guidance from the off-campus supervisor due to concerns about the project's practical value.

*"Our on-campus supervisors communicate through email and occasional meetings, but there are limited opportunities to interact with external supervisors. Students sometimes face challenges during off-campus internships, and our on-campus supervisors may be unable to intervene and provide assistance promptly." (Supervisor A)*

Supervisors on and off campus do not communicate frequently, leading to less guidance and feedback daily. For example, one student reported that his supervisors only had a few formal communications at the beginning and end of the semester, causing some problems in the training process that were not resolved in time.

*"I felt that there was almost no interaction between my on-campus and off-campus supervisors, and there was very little regular communication, which led to the problems I sometimes encountered in my internship that could not be solved in time." (Physical Education Master B)*

#### • *The benefits are unevenly distributed*

The joint training model presents a critical dilemma in distributing responsibilities, remuneration, and recognition for on-campus and off-campus supervisors. This imbalance is evident in the uneven distribution of tasks, leading to high work pressure for school supervisors.

*"As on-campus supervisors, we not only have to take on many teaching tasks but also to guide students' research projects, which is a challenge for our workload." (Supervisor B)*

There is a significant pay disparity between on-campus and off-campus supervisors. On-campus supervisors receive a basic salary and performance bonuses, while off-campus supervisors primarily receive low part-time allowances, making it difficult to motivate them fully.

*"Although we are very willing to participate in joint training, the existing remuneration system is unreasonable, and many off-campus supervisors put in a lot of time and energy, but the remuneration is meagre." (External Supervisor C)*

The school's evaluation system prioritises internal supervisors over external mentors, impacting motivation and willingness to participate in joint training.

*"It is hard for the work of our external supervisors to be recognised in the school's evaluation system, which makes us feel like our efforts are not being valued as they deserve." (External Supervisor D)*

#### • *The management system is not perfect*

The management system's imperfections create a significant problem in training supervisors inside and outside the school. This is evident in the lack of systematic and specific management norms, leading to unresolved problems during joint training.

*"The school has some basic management regulations, but there are still many problems in the specific operation process, such as how to deal with emergencies encountered by students in internships and the lack of clear norms and processes." (Manager E)*

The current assessment system prioritises academic performance over practical skills. There is also inconsistency in the assessment criteria for instructors within and outside the institution, making it difficult to gauge their effectiveness.

*"The assessment mechanism places more emphasis on student's academic performance, but less on practical ability, which also affects students' motivation in internships." (On-campus supervisor C)*

The school lacks sufficient support services for off-campus practical training.

*"During the internship, the school's support services were minimal, such as transportation, accommodation, and practical guidance, and students often felt helpless." (PE student D)*

• ***Insufficient training and development of mentors***

Professional development and training for on-campus and off-campus mentors are lacking, impacting their effectiveness as educators. Additionally, a lack of structured supervisory programs within and outside the institution limits mentor access to professional development activities.

*"Our usual training is mainly focused on academic research and teaching methods, and there are few trainings that are specifically focused on practical guidance and joint training." (Supervisor F)*

Career development paths for mentors, both inside and outside the school, are uncertain. This is especially true for external supervisors, as their participation in joint training may not be acknowledged for career advancement.

*"Although we participate in joint training, these experiences are difficult to recognise and value in our career development assessment." (External Supervisor G)*

The school's insufficient investment in training and developing instructors leads to poor outcomes due to insufficient funds and resources.

*"We do have limited resources in terms of training and development, and we need more support and investment." (Manager H)*

The lack of professional development and training for mentors inside and outside the school is a significant issue in joint training. On-campus supervisors lack practical guidance and industry integration skills, while off-campus supervisors lack systematic education and teaching methods. Schools should implement comprehensive mentor training plans, provide more opportunities, and support participation in professional training activities. Additionally, schools should clarify the career development path for mentors, include joint training experience in career assessments, and provide recognition and rewards. These measures can enhance supervisors' professional level and guidance ability, improving the training quality and students' career development.

• ***Student engagement and feedback mechanisms are inadequate***

Student participation and feedback in collaborative training are inadequate, hindering the reflection of students' actual needs. Limited opportunities for participation make it challenging for students to engage in their mentors' guidance and training fully.

*"Sometimes we feel like we are just being coached and rarely have the opportunity to actively participate in the development and adjustment of our development plan." (Student F)*

The lack of an effective mechanism makes it difficult for students to provide timely feedback and address the problems and suggestions encountered during the training process.

*"The problems we encountered during the internship were often difficult to give feedback to the mentor promptly, and the feedback channel was not smooth enough." (Student G)*

Due to limited opportunities for engagement and feedback, students' motivation is lacking, affecting training effectiveness.

*"Sometimes we feel that our opinions and suggestions are not taken seriously, and we are not motivated to participate." (Student H)*

The current level of student participation and feedback in joint training is inadequate, which hampers the effectiveness of the training and diminishes student enthusiasm. To address this, schools should facilitate regular communication between students and supervisors within and outside the school to understand students' needs and challenges. A dedicated feedback channel should also be created to enable students to provide timely feedback and seek solutions to any issues they encounter. These measures aim to enhance student participation and enthusiasm, ultimately improving the quality and effectiveness of the training.

#### **4. Discussion**

The joint training model of supervisors inside and outside the school has theoretical advantages but encounters practical difficulties related to communication, interest, management, cooperation, and power

mechanisms. By analysing the root causes and proposing solutions based on relevant literature, we can enhance the training quality of physical education masters.

Poor communication mechanisms, including the lack of effective channels for supervisors within and outside the school, lead to delayed information sharing and inconsistent guidance, impacting student training quality. Research has shown that poor communication often results in significant deficiencies in project implementation[7]. Consider using modern technology to create a real-time communication platform for supervisors within and outside the school. In addition, regular joint meetings should be organised to promptly address the problems encountered by students during joint training through face-to-face communication and discussion.[8] An uneven distribution of benefits between on-campus and off-campus supervisors affects joint training effectiveness and enthusiasm. The literature suggests that fair remuneration and recognition mechanisms can significantly increase mentor motivation and engagement [9]. To improve this situation, Schools should reevaluate the remuneration system for supervisors inside and outside the school to ensure a balanced workload. Additionally, a unified evaluation and recognition system should be established to include the work performance of external supervisors in the evaluation scope and ensure they receive due recognition and rewards [10]. Imperfections in the management system negatively impact the effectiveness of joint training. The current management system lacks systematic management norms and assessment mechanisms, which leads to unresolved issues during joint training. An effective management system is crucial for efficient operations and quality improvement [11]. It is suggested to establish comprehensive and specific management norms, clearly define the responsibilities and processes of all parties involved, improve the assessment mechanisms, focus on enhancing students' academic performance and practical abilities, standardise assessment criteria for both in-house and external supervisors, and accurately evaluate their effectiveness[12]. Furthermore, it is important to enhance the school's support services during the joint training process, especially during off-campus practice sessions, by providing necessary support such as transportation, accommodation, and practical guidance to ensure that students receive adequate guidance and assistance during internships[13].

The lack of cooperation between school supervisors inside and outside the school is a significant problem due to the absence of a clear role coordination mechanism and a straightforward cooperation process. Research suggests establishing clear roles and suitable collaboration mechanisms can greatly enhance cooperation. Training and communication are essential to ensure clarity, prevent duplication and oversight, and align goals between on-campus and off-campus supervisors. A coordination group should also be established to facilitate communication and coordination between supervisors inside and outside the school to ensure effective information sharing and guidance during joint training [14].The absence of dynamic mechanisms is vital for an effective collaborative culture. Instructors and students need motivation for shared training, both in and out of school, to ensure quality and impact. Research has shown that clear incentives and opportunities for engagement can significantly increase the motivation of both mentors and students [15]. To enhance the enthusiasm of supervisors and students, it is recommended that their engagement in joint training within and outside the school be improved by optimising the compensation system, distributing responsibilities sensibly, and unifying the evaluation system [16]. An effective mechanism for student participation and feedback should also be established to ensure active student involvement in joint training and provide timely feedback to enhance their motivation and enthusiasm for participation[17].To address the problems, we need to focus on two key aspects. First, we must optimise the selection criteria for supervisors, ensuring they have a strong academic background, teaching experience, and practical skills. Second, we should improve communication by using modern technology to establish a real-time communication platform for supervisors inside and outside the school. Regular joint meetings for supervisors from both inside and outside the school should be organised to address student issues through face-to-face exchanges and discussions, improving the effectiveness of project implementation[18].

Improving the assessment mechanism is crucial. Establishing comprehensive assessment standards that consider academic performance and practical ability is essential. This ensures consistent assessment standards for mentors and fair allocation of teaching and guidance tasks based on actual workload and responsibilities. This involves re-evaluating the remuneration system and fully mobilising mentors' enthusiasm. Fair benefit distribution has been found to improve mentor motivation[19].When managing joint training, it is important to establish clear management norms, responsibilities, and processes. Evaluating academic performance and practical ability, unifying assessment standards for mentors, and improving support services during off-campus practice is crucial. Improving management systems has been shown to significantly enhance the effectiveness and quality of education programs[20]. Cooperation mechanisms must be strengthened, with clear responsibilities to prevent duplication and omissions in guidance between on-campus and off-campus mentors. Training and communication are

vital to align the roles of mentors, and a special coordination group has been established to facilitate communication and ensure strong guidance during joint training. The literature highlights the importance of improving cooperation mechanisms for successfully implementing the project [21]. To achieve this, we must strengthen the motivation system, enhance supervisors' enthusiasm, and improve their participation in joint training. This can be done by optimising the remuneration system, distributing responsibilities fairly, unifying the evaluation system, and enhancing student participation with an effective feedback mechanism. Research indicates that improving the dynamic mechanism can significantly enhance the motivation of project participants [22].

The U-I-S joint training model integrates universities, industry alliances, and schools to enhance students' training quality through cooperation. It includes establishing alliances, selecting mentors, developing training plans, implementing joint training, and providing support services for improvement. The literature suggests that the multi-party cooperation joint training model significantly improves students' training quality [23].

## 5. Conclusions

In a study of the joint training mode of supervisors within and outside the master's program of physical education at Hunan University of Technology, several problems were identified, including poor communication, unequal benefit distribution, and lack of a well-functioning management system. The study proposes solutions such as refining mentor selection criteria, enhancing communication, and improving benefit distribution to address these issues. It also introduces an implementation plan for a joint training model to enhance student training and career development through multi-party collaboration. Additionally, the study introduces the implementation plan of the U-T-S (University-Industry et al. School) joint training model, which aims to enhance the quality of students' training and career development through multi-party collaboration.

## 6. Limitation

The paper has made progress in studying the joint training model of supervisors inside and outside the school. However, there are limitations. The study's sample size is small and limited to the master's physical education program at Hunan University of Technology. Additionally, due to limited time and resources, the paper relies mainly on literature analysis and interview surveys, lacking large-scale quantitative data support. Further verification and evaluation are needed for the proposed solution strategy and implementation scheme.

## 7. Future research directions

Based on the findings, future research can expand the scope to include more universities and majors, delve into the practical effects of different joint culture models, enhance supervisors' communication and collaboration efficiency, and focus on students' participation experience and impact in joint training with a comprehensive evaluation system.

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