

## GUIDELINES FOR ACADEMIC ADMINISTRATION IN VOLLEYBALL TEACHING TO PROMOTE EXCELLENCE IN SKILLS AND TECHNIQUES: A CASE STUDY OF CAPITAL UNIVERSITY OF PHYSICAL EDUCATION AND SPORTS IN CHINA

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### ABSTRACT

The objectives of this research were: 1) to study the current situation of academic administration in volleyball teaching to promote excellence in skills and techniques at Capital University of Physical Education and Sports in China; 2) to develop guidelines for academic administration in volleyball teaching to promote excellence in skills and techniques at Capital University of Physical Education and Sports in China. The population of this study was 386 staff members affiliated with physical education at Capital University of Physical Education and Sports. This includes 70 administrators and 316 teachers. The sample groups were divided into 2 groups: 1) 59 administrators and 173 teachers at Capital University of Physical Education and Sports; 2) 2 vice deans and 3 teachers from Capital University of Physical Education and Sports. The research instruments utilized in this study included questionnaires and a set of questions for conducting expert interview. The questionnaires were analyzed by using frequency, percentage, mean value and standard deviation; and the expert interview was analyzed by using content analysis. The findings indicated that: 1) the current situation of academic administration in volleyball teaching to promote excellence in skills and techniques at Capital University of Physical Education and Sports in China was at a high level, and 2) the guidelines for academic administration in volleyball teaching to promote excellence in skills and techniques at Capital University of Physical Education and Sports in China included 5 aspects; namely: 1) Curriculum development of educational institutions; 2) Educational supervision; 3) Innovative media and educational technology; 4) Research to improve educational quality and 5) Educational measurement and evaluation.

**Keywords:** Academic Administration, Guidelines for Academic Administration, Volleyball Teaching

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## Introduction

Physical education is crucial for the holistic development of young people, covering their mental, moral, and physical well-being. Today, it's vital to promote sports, fitness, and physical culture in educational institutions to spark students' interest and enhance their knowledge, skills, and abilities in this regard (Yuldashov, 2022). In China, higher education aims to nurture well-rounded individuals who can contribute to the "Chinese Dream," requiring universities to provide comprehensive education encompassing knowledge, practical skills, innovation, and physical fitness. Physical education (PE) plays a pivotal role in achieving these goals (Liu & Shen, 2011; Shan, 2020). However, PE administrators in universities face challenges adapting to changing circumstances and addressing student needs. They must improve the management of PE courses for greater efficiency, aligning with higher standards set by the government and educational institutions as part of ongoing higher education reforms (Shan, 2020).

Academic administration in physical education refers to the management for physical education of all school activities directly associated with teachers and students. There are many issues related to the academic administration of physical education in higher education in China. Despite some attempts at reform, many universities physical education departments fail to address the root issues, particularly the transformation of management personnel. Current students prefer modern, engaging physical education over traditional, repetitive courses. However, many universities continue to schedule outdated physical education programs year after year, neglecting the evolving interests of students. This stagnation dampens the enthusiasm of PE teachers and fails to cater to the actual interests and needs of the changing student population (Shan, 2020; Wang, 2010). Furthermore, there is widespread dissatisfaction among students and PE teachers with the physical education administrative departments. Many administrators lack a background in physical education, and their approaches are often neither human-centric nor scientific. Most are not systematically trained in education theories and PE administration, causing a significant skills and knowledge gap. For positive change, there's a pressing need to redefine the administrators' roles, emphasizing service to physical education, students, and teachers, and to provide them with comprehensive training (Chen, 2020). Additionally, Shan (2020) also identified the problem of administration on teachers in PE faculty. She stated that the teachers who are responsible for physical education need supportive administration for effective course organization and delivery. However, many administrators stick to outdated methods, putting undue pressure on teachers instead of assisting them. Moreover, while they are tasked with conveying and interpreting new policies, many simply pass these directives to teachers without proper explanation, further burdening them. This lack of responsibility and professionalism has led to widespread criticism from PE educators. Moreover, Shan (2020) and Wang (2010) both

mentioned that the current PE academic administration lacks a reasonable and effective evaluation mechanism, which makes the current education and teaching work difficult to get accurate evaluation, resulting in information errors.

Capital Sports University is the only sports-focused institution of higher education in Beijing, with its physical education major having nearly 60 years of development history. It was designated as a "National Characteristic Specialty" by the Ministry of Education as early as 2008, and in 2017, it was selected for the first batch of first-class specialty construction projects among Beijing's municipal universities. The university has the important responsibility of nurturing qualified talents and physical education teachers in Beijing. Given the goal of establishing Beijing as a first-class innovative talent city and fostering innovative talents, the university strives to enhance the effectiveness of innovative entrepreneurship education for students majoring in physical education, and cultivate innovative sports talents who can contribute their intelligence to the capital's economic construction and social development. This is the inevitable pursuit of the first-class specialty construction work in the physical education major at Capital Sports University (Dong, 2019). Volleyball is a prominent component of physical education in universities and a focal point in sports development in China. However, after undergoing academic reforms, issues related to teaching philosophy, methods, and conditions have become increasingly evident in university volleyball education. As a result, it is imperative to explore what are the guidelines for the academic administration in teaching physical education to promote excellence in Volleyball (Yang & Ni, 2023). In recent years, Capital University of Physical Education and Sports has been actively promoting the reform of volleyball education in higher education. They are exploring the integration of innovative and professional education in volleyball, making it essential to study the current state of academic administration in the teaching and learning of physical education and conduct an exploration focused on guidelines for academic administration in physical education teaching and learning to promote excellence in volleyball. As a benchmark in Chinese higher physical education, such exploration can provide valuable academic administration and serve as a reference for other universities in the field of volleyball education (Dong, 2019).

### **Objectives of Research**

1. To study the current situation of academic administration in volleyball teaching to promote excellence in skills and techniques at Capital University of Physical Education and Sports in China.
2. To develop guidelines for academic administration in volleyball teaching to promote excellence in skills and techniques at Capital University of Physical Education and Sports in China.

## Research Methodology

### 1. Research design

The researchers used mixed methods to conduct the research (quantitative research and qualitative research). Utilizing mixed methods research allows for a more comprehensive understanding than relying solely on either quantitative or qualitative approaches, as it combines the advantages of both methodologies (Creswell, 2013).

### 2. Population and sample group

#### 2.1 Population

The population for this study consisted of 386 staff members affiliated with physical education at Capital University of Physical Education and Sports. This included 70 administrators and 316 teachers.

#### 2.2 Sample Group

The sample group including 59 administrators and 173 teachers Krejcie and Morgan (1970). at Capital University of Physical Education and Sports will be used as the sample group or respondents. The respondents were selected by stratified random sampling. For the expert interview, the researcher selected 2 vice deans and 3 teachers from Capital University of Physical Education and Sports. The selection criteria are as follows: 1. person with work experience of more than 2 years. 2. person has experience in managing educational institutions for more than 2 years. 3. person who is willing to participate in this research.

### 3. Research tools

The following tools were used in the study:

#### 3.1. Questionnaires

The research employed two questionnaires tailored for administrators and teachers as its research instruments. The first questionnaire was designed to investigate administrators' opinions on current situation of academic administration in the teaching and learning of physical education in Capital University of Physical Education and Sports. The second questionnaire was aimed at exploring teachers' opinions on current situation of academic administration in the teaching and learning of physical education in Capital University of Physical Education and Sports.

The questionnaire comprised three sections: screening questions in the first part, demographic inquiries about respondents in the second, and questions related with current situation of academic administration in the teaching and learning of physical education in Capital University of Physical Education and Sports in the third section, formulated based on the five dimensions (1) curriculum development of educational institutions, (2) educational supervision, (3) innovative media and educational technology, (4) research to improve educational quality, and (5) educational measurement and evaluation of the academic administration model developed by Srisawad Prawatrungruang and Sriprasertpap (2022). The

questions in the third part were measured by 5-point Likert scale (Likert, 1932). Three experts were invited to check the content validity of the questionnaire by using Items of Objective Congruence (IOC). Furthermore, 30 members (15 administrators and 15 teachers) serve as try out group in order to analyze the reliability of the questionnaires by using Cronbach's alpha coefficient.

### 3.2. Semi-structured interview

Expert interview was the second research tool for this research. Based on the results of the current situation of academic administration in volleyball teaching to promote excellence in skills and techniques at Capital University of Physical Education and Sports in China, generate interview questions to conduct interviews with 2 vice deans and 3 teachers from Capital University of Physical Education and Sports. Through the interview, the researcher summarized the guidelines for academic administration in volleyball teaching to promote excellence in skills and techniques at Capital University of Physical Education and Sports in China. The IOC scores for each question in the interview form were also tested by three experts.

## 4. Data Collection

The researcher collected research data using a combination of online and offline questionnaire distribution methods. The questionnaires began with screening question to filter out respondents who are not affiliated with the Capital University of Physical Education and Sports as administrators or teachers. The questionnaire distribution and collection period are estimated to span approximately 2-3 weeks. For the interview, the researcher designed an interview form to gather the data from 2 vice deans and 3 teachers affiliated with Capital University of Physical Education and Sports. The researcher using a semi-structured interview form. The researcher conducted interviews to obtain information about Guidelines for Academic Administration in Volleyball Teaching to Promote Excellence in Skills and Techniques.

## 5. Data Analysis

5.1 The researcher employed statistical analysis as follows: the frequency and percentage were calculated to assess the respondents' demographic data; the arithmetic mean and standard deviation were utilized to evaluate the current situation of academic administration in volleyball teaching to promote excellence in skills and techniques at Capital University of Physical Education and Sports in China.

5.2 For the interview data, the researcher employed content analysis to summarize the guidelines for academic administration in volleyball teaching to promote excellence in skills and techniques at Capital University of Physical Education and Sports in China.

## Research Results

The results of this research can be summarized as follows:

Part I: The demographic data of the respondents

In the surveyed group of 59 administrators, 55.9% are male and 44.1% are female. Regarding age distribution, 45.8% are between 36 to 50 years old, 35.6% are 51 years or older and 18.6% are in the 23 to 35 age range. In terms of academic administration experience on physical education, 39.0% have 11 to 20 years of experience, 35.6% have 21 years or more, and 25.4% have 1 to 10 years of experience.

Among the 173 teachers surveyed, 54.9% are male, and 45.1% are female. In terms of age, 38.2% are in the 23 to 35 age group, 45.7% are in the 36 to 50 age category, and 16.1% are 51 or older. In their physical education teaching experience, 43.4% have 1 to 10 years of experience, 45.1% have 11 to 20 years, and 11.5% have 21 years or more of experience.

Part II: Results of the respondents' opinions towards the current situation of academic administration in the teaching and learning of physical education to promote excellence in volleyball in Capital University

Both administrators and teachers agreed that the current situation of academic administration in the teaching and learning of physical education to promote excellence in volleyball in Capital University was at high level. Administrators and teachers both agreed that 'Innovative Media and Educational Technology' was at a highest level among five aspects. 'Educational Supervision' was at the lowest level among five dimensions according to the results from both administrators and teachers.

**Table 1** Current situation of academic administration in volleyball teaching to promote excellence in skills and techniques (administrator)

Variables:	$\bar{x}$	S.D.	Interpretation
1. Curriculum Development of Educational Institutions	4.23	0.78	High level
2. Educational Supervision	4.09	0.67	High level
3. Innovative Media and Educational Technology	4.38	0.82	High level
4. Research to Improve Educational Quality	4.17	0.65	High level
5. Educational Measurement and Evaluation	4.23	0.76	High level
<b>Total</b>	<b>4.22</b>	<b>0.74</b>	<b>High level</b>

**Table 2** Current situation of academic administration in volleyball teaching to promote excellence in skills and techniques (teacher).

Variables:	$\bar{x}$	S.D.	Interpretation
1. Curriculum Development of Educational Institutions	4.06	0.77	High level
2. Educational Supervision	4.06	0.65	High level
3. Innovative Media and Educational Technology	4.41	0.80	High level
4. Research to Improve Educational Quality	4.14	0.68	High level
5. Educational Measurement and Evaluation	4.15	0.71	High level
<b>Total</b>	<b>4.16</b>	<b>0.72</b>	<b>High level</b>

### Part III: Results of the expert interview

Based on the results of the guidelines for academic administration in physical education teaching and learning to promote excellence in volleyball at the Capital University of Physical Education and Sports, several key themes were developed for each dimension:

#### 1. Curriculum Development:

Capital University of Physical Education and Sports should implement a systematic and structured approach to curriculum development, commencing with a comprehensive student needs assessment. Furthermore, the university should prioritize the integration of multidisciplinary subjects, such as sports physiology and biomechanics, into the teaching of practical volleyball techniques. Additionally, it should allocate resources to develop high-quality courses and diversify teaching methods, all while ensuring alignment with contemporary educational principles.

#### 2. Educational Supervision:

Capital University of Physical Education and Sports should prioritize a comprehensive approach to curriculum development. This involves incorporating both formative and summative assessments, including feedback from peers, students, and teachers. Additionally, it should adopt a student-centered curriculum that adheres to national standards while remaining adaptable to regional needs. To ensure the highest quality, the university should uphold stringent quality control measures through evaluations, leadership engagement, and structured management systems. Lastly, the university should establish collaborations with external volleyball organizations to tailor teaching methods that encompass technical, tactical, and psychological aspects of the sport.

#### 3. Innovative Media and Educational Technology:

Capital University of Physical Education and Sports should adopt a forward-thinking approach to education. This includes embracing a blended learning model that incorporates

both online and offline modules, particularly in situations like pandemics where adaptability is crucial. Furthermore, the university should consistently refresh content on platforms such as "Ai Classroom" and incorporate innovative tools like VR and holographic 3D technology to enrich the educational experience. Additionally, leveraging multimedia resources like videos, animations, and AR can provide students with comprehensive, interactive, and tailored learning experiences.

#### 4. Research to Improve Educational Quality:

Capital University of Physical Education and Sports should consider several key strategies on research to improve educational quality. First, it should prioritize the integration of the most recent research findings, particularly those relevant to elite volleyball teams, into its teaching curriculum. Secondly, practical experiments and current research should be incorporated into teaching materials to ensure students receive up-to-date knowledge. In addition, the university should embrace innovative teaching methods such as the flipped classroom to create a dynamic learning environment. Lastly, it should actively promote faculty development through research projects, seminars, and collaborations with industry experts.

#### 5. Educational Measurement and Evaluation:

For educational measurement and evaluation, Capital University of Physical Education and Sports should follow these guidelines. Firstly, it should align its evaluation methods with the benchmarks set by China's Ministry of Education, while also taking into account global educational trends. Secondly, the university should embrace technology-driven and adaptable assessment methods that can gauge technical skills, decision-making abilities, and overall game performance. Additionally, the university should actively solicit feedback from students, faculty, and university leaders to refine both teaching methodologies and assessment strategies. Lastly, the institution should ensure clear teaching objectives and well-defined assessment criteria, all while investing in the ongoing professional development of its faculty.

### Research Discussion

The research findings will be discussed based on the objectives of the study and the results obtained from the research tools employed for the study.

The questionnaire survey of both administrators and teachers in the current situation of academic administration in volleyball teaching to promote excellence in skills and techniques at Capital University of Physical Education and Sports in China revealed a number of shared ideas and some divergent perspectives.

For the shared ideas, administrators and teachers both agreed that 'Innovative Media and Educational Technology' was at a highest level among five aspects. This emphasized the perceived value of innovative technology in the delivery of physical education curriculum,

especially in the domain of volleyball. In the questionnaire, both sides emphasized that the innovative media and educational technology currently used by the university can meet the current and future physical education of volleyball. This finding was consistent with McVicker (2018), she noted that incorporating technology in physical education offers individualized experiences, reduces physical stress, boosts confidence, enhances efficiency, and integrates other subjects like geography or math. Various tools, including mobile tech, wearables, apps, gaming systems, virtual classes, and trackers, empower educators to improve students' physical skills and overall learning. Woo (2017) also supported that educational technology encompasses a wide array of digital tools, applications, and software aimed at facilitating the teaching and learning process. It empowers educators to craft individualized learning journeys, evaluate student advancement, and cultivate collaborative learning environments. According to the results, the Capital University of Physical Education and Sports indeed provides faculty and students with a diverse range of innovative media and educational technology tools, and faculty members acknowledge the University's investment in innovative media and educational technology in volleyball education.

Based on the results of the interview on 2 vice deans and 3 teachers, they suggested that the university should adopt blended learning, using online and offline modules, particularly during unpredictable events like pandemics. It should update content on platforms like "Ai Classroom" and incorporate VR and holographic 3D tech for improved learning. Additionally, multimedia resources like videos, animations, and AR should be utilized for interactive and personalized education.

Additionally, both administrators and teachers agree that 'Educational Supervision' is an area that needs to be strengthened. This points to a widespread view that more structured instruction, supervision and mentoring are essential to improving the quality of physical education teaching. This was supported by the researchers who conducted studies in this area. Jahanian and Ebrahimi (2013) noted that educational supervision is a key responsibility in the effective management of the academic system. Acedo (2011) and Alila et al. (2017) argued that educational supervision plays a key role in repositioning the key contributors in the field of education and steering the trajectory of the educational institutions to the right path.

The respondents in the interview suggested that the university should focus on comprehensive assessments, including feedback from peers, students, and teachers. It should adopt a student-centered curriculum aligning with national standards and regional needs. Quality control should be rigorous, involving evaluations, leadership, and structured management. Collaboration with external volleyball entities is essential for tailored teaching across technical, tactical, and psychological aspects of the sport.

For the divergent perspectives, administrators and teachers hold difference in perception of 'Research to Improve Educational Quality': Among five dimensions, administrators ranked this dimension at fourth place, while teachers ranked it more highly (ranked #3). This disparity might suggest that teachers value the contribution of research to the enhancement of volleyball teaching and learning more than administrators do. This finding is consistent with Blogger's (2020) that teachers have an obligation to use research findings as a guiding light to avoid tempting but ineffective teaching pathways. The lower recognition of this dimension than others by both administrators and teachers may indicate dissatisfaction with how the school's research efforts translate into educational quality improvements. Bridging the gap between research and practical application is crucial.

'Curriculum Development of Educational Institutions' seems to be given slightly less weight by teachers than by administrators. This suggests that while administrators view the curriculum as the foundation of a high-quality education, teachers may prioritize practical tools and just-in-time teaching methods over curriculum revisions. O'Neill (2010) argued that curriculum development is a process in which all educational stakeholders should be involved and that administrators and teachers should work together to ensure the quality of curriculum development. Looking specifically at curriculum development, administrators felt that the objectives of the curriculum in volleyball education were not sufficiently clear and well-defined. This is consistent with the findings of Ornstein and Hunkins (2009), who believed that curriculum development includes the planning, implementation, and evaluation of the curriculum, as well as the people, processes, and procedures involved, so objectives need to be identified throughout the process. Teachers felt that it was a pain point in curriculum development to adapt the curriculum to the current needs of the students. This aligns with Aydin et al. (2017), who argued that the generation gap among today's students is widening, making it increasingly challenging to tailor curricula to students' current circumstances. Additionally, teachers considered it somewhat difficult to incorporate research outcomes into their teaching. Sung (2023) shared a similar perspective, emphasizing that a significant challenge lies in the fact that educational research frequently produces intricate and nuanced results that can be challenging to translate into practical implementations.

Based on the interview results, the guidelines for the Capital University of Physical Education and Sports include implementing a structured curriculum development process, integrating multidisciplinary subjects into volleyball techniques, emphasizing continuous improvement, investing in high-quality course development, and diversifying teaching methods in line with modern educational principles.

### Research Body of Knowledge

To improve the quality of academic administration in volleyball teaching to promote excellence in skills and techniques, it is necessary to focus on and promote the following aspects: Curriculum development of educational institutions; Educational supervision; Innovative media and educational technology; Research to improve educational quality; and Educational measurement and evaluation. The research body of knowledge was constructed as shown in Figure 1.

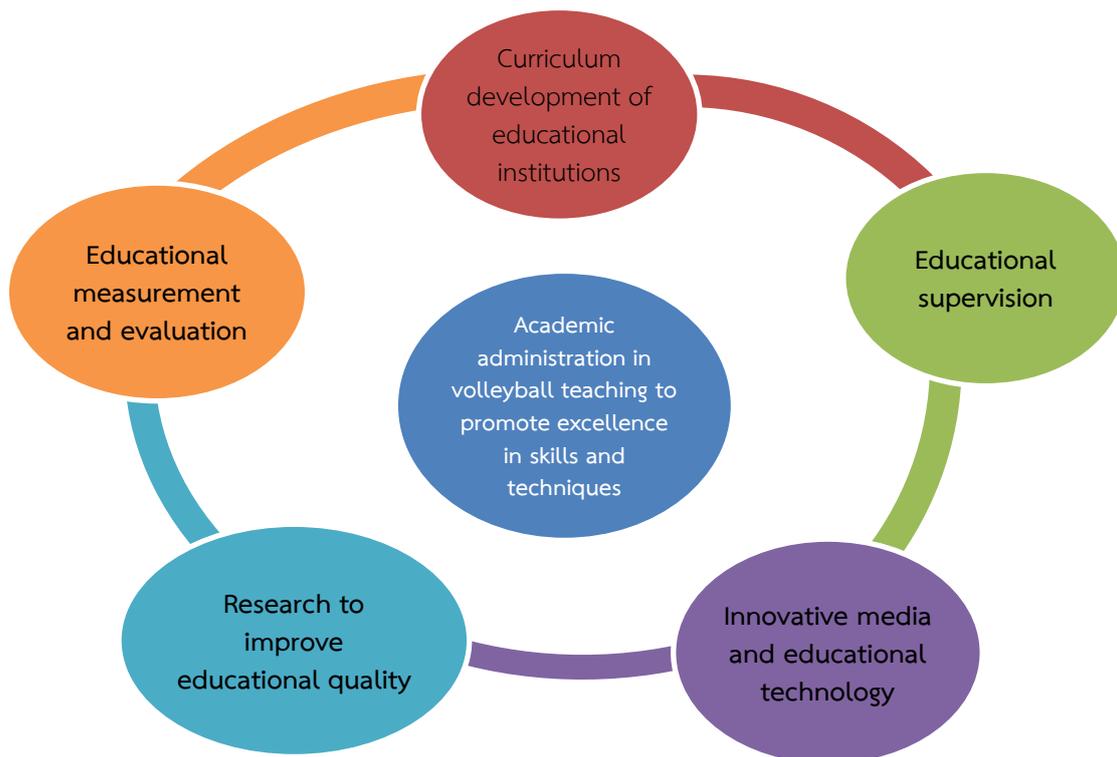


Figure 1 Research Body of Knowledge

### Research Suggestion

1. Suggestions for practice.

To improve the quality of academic administration in the teaching and learning of physical education to promote excellence in volleyball, all aspects should be taken into account based on the research findings:

1.1 The institutions should invest in innovative media and educational technologies. Prioritize the quality of both online and offline education. Universities should actively embrace VR and holographic 3D technologies to enrich student learning. Teachers must also adapt and acquire proficiency in using these innovative educational tools.

1.2 Educational institutions need to address three issues for curriculum development: the clarity of course objectives, relevance to student needs, and effective

communication with stakeholders. In order to tackle these challenges, involving teachers and administrators in the curriculum development and review process can be beneficial to ensure improved course quality and applicability.

1.3 Given that the quality of education relies heavily on current research findings, especially in a dynamic field such as physical education, it is crucial to find systematic and effective ways of integrating new research findings into practice.

1.4 With regard to the education supervision, educational institutions should focus on improving monitoring mechanisms, which can play a key role in ensuring the quality of teaching and providing adequate support to educators. The university should prioritize comprehensive assessments with feedback, rigorous quality control, and external collaborations to enhance teaching quality in volleyball.

## 2. Suggestions for research.

2.1 The future research can extend the case study to other universities or educational institutions to discern universal patterns or institution-specific nuances in promoting excellence in volleyball.

2.2 Future researchers could focus on how to improve the quality of curriculum development or the quality of educational supervision in academic administration to promote excellence in volleyball.

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