



## Current Challenges and Possibilities for Improving Physical Education Management Program in a Normal University in China

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**Abstract:** This study investigates the current challenges and potential improvements in physical education (PE) management at Huanggang Normal University in the post-pandemic educational landscape. As schools transition back to face-to-face learning, the need to address the decline in students' physical health and to enhance the delivery of PE programs has become increasingly urgent. Using a quantitative-comparative-correlational research design, the study surveyed 70 PE teachers at the university, examining their assessments of existing difficulties in budget management, resource utilization, professional development, teaching strategies, and curriculum innovation. The demographic profile of respondents was also analyzed in relation to their perceptions. Findings reveal that PE management remains challenging across multiple domains, with particularly low satisfaction in areas such as funding allocation, communication of available resources, and relevance of professional development. Nevertheless, teachers acknowledged moderate possibilities for improvement, suggesting a cautious optimism toward reforming current systems. Based on the results, a development plan was proposed emphasizing financial optimization, enhanced resource access, teacher training, diversified instructional methods, and holistic wellness integration. The study provides valuable insights into the systemic issues affecting PE programs in higher education and offers practical strategies for improving the quality and effectiveness of physical education in a post-pandemic context.

**Keywords:** Curriculum Design and Innovation, Physical Education Management, Post-Pandemic Challenges, Professional Development and Training, Teaching Strategies

### Introduction

As schools begin to reopen and return to in-person learning, there is a pressing need to address the challenges faced by physical education management at Huanggang Normal University and move forward with solutions that can improve the quality and effectiveness of these programs. As a result, many students at Huanggang Normal University may have experienced a decline in their physical health and fitness, which can have long-term consequences for their overall well-being. Therefore, there is a pressing need to address the challenges faced by physical education management and implement solutions that can improve the quality and effectiveness of these programs. This includes addressing issues related to budget, resources, teacher training, and curriculum, as well as finding innovative ways to engage students in physical activity and wellness education.

Physical education is widely regarded as an important endeavor that should be undertaken to encourage students to engage in physical activity; nevertheless, the process of how to maintain a quality implementation during virtual learning has not been resolved. (Piggin, 2021). The fact that teachers are unable to keep an eye on what their students are doing while they are using online learning platforms is a major contributing factor to why this mode of instruction is regarded as less effective for the actual teaching and learning that takes place (Ilahi et al., 2021). Due to the underlying issues that have been plaguing Physical Education teachers throughout the health crisis, the purpose of this research was to investigate the difficulties and possibilities that come with managing physical education in a post pandemic setup.

The objective of this study is to examine the present condition of physical education programs in educational institutions, determine assessment of Physical Education teachers on the possibilities for addressing these challenges and propose improvement, and suggest approaches to tackle these difficulties in the domains of financial management and distribution, resource procurement and utilization, teacher advancement and training, and curriculum development and novelty at . With this, the results will be an avenue to offer direction and suggestions for enhancing physical education curricula in educational institutions, with a specific focus on the post-pandemic landscape, in order to guarantee that pupils obtain exceptional and efficient physical education.

### Statement of Problem

1. What is profile of the teacher respondents in terms of:

- 1.1. sex;
- 1.2. age;
- 1.3. length of service
- 1.4. Educational attainment

2. What is the assessment of Physical Education teachers on current challenges faced by physical education management in schools in terms of:

- 2.1. budget management and allocation;



- 2.2. resource acquisition and utilization;
- 2.3. professional development and training;
- 2.4. teaching strategies;
- 2.5. curriculum design and innovation?
3. What is the assessment of Physical Education teachers on the possibilities for addressing these challenges and improving the quality and effectiveness of physical education programs in terms of:
  - 3.1. budget management and allocation;
  - 3.2. resource acquisition and utilization;
  - 3.3. professional development and training;
  - 3.4. teaching strategies;
  - 3.5. curriculum design and innovation?
4. Based on the result, what development plan can be proposed for the Physical Education program?

### Scope and Delimitation

The scope of the study is to investigate the assessments of Physical Education (PE) teachers at Huanggang Normal University on the challenges faced by PE management in schools, as well as their opinions on possible solutions to improve the quality and effectiveness of PE programs. The study will focus on three main aspects: the profile of the respondents, the challenges faced by PE management, and the possibilities for addressing these challenges. The profile of respondents will be determined in terms of sex, age, educational attainment and length of service. The challenges faced by PE teachers on the management will be evaluated in terms of budget management and allocation, resource acquisition and utilization, professional development and training, teaching strategies, and curriculum design and innovation. The possibilities for addressing these challenges and improving the quality and effectiveness of PE programs will be examined in terms of the same five aspects.

The study will also analyze significant differences in the assessments of PE teachers on the challenges and possibilities for addressing these challenges. Finally, based on the results of the study, development proposals will be made for the PE program. The study will focus on PE teachers in Huanggang Normal University, China and will not cover other stakeholders such as students, parents, or administrators.

### Literature Review

Based on the findings, the main obstacles were a shortage of suitable space and infrastructure, as well as inadequate training for teachers on information and communication technology. Zhu and Wang's (2020) research highlighting issues with inadequate space to engage in physical activity is consistent with these findings. However, they were compelled to start the process of transitioning to the new and prescribed system of delivery. Initially, WeChat, Weibo, Tencent QQ, and other programs were heavily utilized for communication. Others adapted by learning to acclimate, while some remained vehemently opposed to these changes.

MOOCs, e-learning, and several other applications and tools were used by educators as a means of getting past some of the challenges they faced. In fact, there were times when they were forced to rely on themselves to prepare videos for demonstrations since they did not have enough resources to facilitate the delivery of their courses. According to Huaijin et al. (2018), teachers are expected to be creative in online and offline learning activities for students and boost the innovative qualities of the PE curriculum in order to pique the interest of sports students in studying at Huanggang Normal University.

More senior teachers were proactive learners in the use of technology. As revealed in their interviews, they were able to unlock new and relevant skills for them to keep up with the situation. In fact, one could vouch for the importance of online technology even after the pandemic. In addition, several teachers have to alter their material to accommodate physical separation guidelines and restricted equipment and facilities. According to the American Academy of Pediatrics (2021), several schools had to suspend team sports and other high-contact activities, which affected class exercises and drills. Hence, to properly address these issues by setting-up new guidelines in their respective schools.

Traditional approaches to PE teaching have been limited by a focus on skills and drills, and a lack of attention to the broader educational goals of physical activity. In response, they propose a models-based approach that emphasizes the development of students' physical literacy and holistic understanding of physical activity. (Casey & Kirk 2021).

Initial scholarly investigations into online pedagogy in Physical Education Teacher Education (PETE) underscored the prospective utilization of virtual instruction, telecommunications, desktop video conferencing, and listservs as a means of dispensing modules and cultivating communication and interaction between instructors and learners. Nonetheless, apprehensions were raised regarding the insufficiency of digital competencies among educators of teachers and challenges associated with accessibility, including social stratification and gender disparity. (Murtagh, 2023)

The primary obstacles that were identified include the presence of monotony owing to restricted environmental conditions and educational content, insufficient proficiency in utilizing online content, and limited assessment techniques. The study proposes the integration of strategic learning techniques that cater to the psychodynamic and affective aspects of physical education, fostering collaboration among physical education instructors, and promoting active engagement from students as potential solutions to these concerns. The importance of investigating diverse instances of virtual physical education in order to enhance generalizability is also underscored. (Jeong & So, 2020)

There are several problems in Physical Education (PE) that have been identified by Romero-Rodríguez et al, (2020). Some of the common issues include: 1.) Lack of time and resources: PE is often considered a low-priority subject, and

schools may not allocate enough time or resources to it, resulting in limited access to equipment, facilities, and qualified teachers. 2.) Inadequate teacher training: Teachers may lack the necessary training and qualifications to teach PE effectively, leading to a lower quality of instruction and less effective teaching strategies; 3.) Limited focus on health and fitness: Some PE programs may prioritize sports and games over health and fitness, leading to a lower emphasis on promoting healthy lifestyles and physical fitness. 4.) Lack of student motivation: Students may lack motivation to participate in PE classes, which can be attributed to various factors such as boredom, lack of interest, or negative experiences in the past. 5.) Inequality and exclusion: Some students may feel excluded from PE activities due to factors such as their gender, socio-economic status, or physical abilities, leading to a negative impact on their self-esteem and sense of belonging.

The COVID-19 pandemic has brought to light inadequacies in the public school education system, particularly in the areas of teacher training and leadership development for managing a remote workforce. Additionally, it has highlighted the importance of ensuring equitable access to technology and internet connectivity for all students. Short-term measures include a move to virtual learning to prevent the loss of up to a third of the current school year. It is imperative that educational districts offer adequate assistance to their educators and establish rational anticipations for pupils and households in order to counterbalance the influence of COVID-19 on the realm of education. (Young & Donovan, 2021)

### **Research Design**

The research design for this study will be a quantitative-comparative-correlational research design, with the purpose of investigating the assessments of Physical Education teachers on current challenges faced by physical education management in schools and possibilities for addressing these challenges and improving the quality and effectiveness of physical education programs. The study will utilize a survey questionnaire to collect data from Physical Education teachers at Huanggang Normal University, specifically focusing on their assessments of budget management and allocation, resource acquisition and utilization, professional development and training, teaching strategies, and curriculum design and innovation. The survey will also gather information on the profile of the teacher respondents at Huanggang Normal University in terms of their sex, age, educational attainment and length of service.

The selected quantitative-comparative-correlational research design is suitable for this study as it facilitates a methodical and unbiased exploration of the viewpoints of Physical Education instructors regarding the present obstacles encountered by physical education administration in educational institutions and the potential avenues for mitigating these challenges. The aforementioned design is suitable for gathering quantitative data pertaining to the perspectives of educators. This data can be subjected to statistical analysis to ascertain the presence of noteworthy variances among various groups.

### **Locale of the Study**

The locale of this study will be at Huanggang Normal University. Huanggang Normal University (HGNU) is a four-year undergraduate university with a wide range of disciplines and is regarded as the No.1 institute of higher education in Huanggang, a city with a population of 7.3 million.

HGNU originated from the Prefecture School of Huangzhou in 1905. Over the past century, HGNU has developed into a multi-disciplined institute of higher education covering eleven fields of different specialties which includes science, engineering, agriculture, economics, literature, law, education, management, art, medicine and two levels of education covering postgraduate and undergraduate.

### **Population, Sample, and Sampling Technique**

There are currently 1,191 full-time teachers, including 163 senior teachers, 409 deputy senior teachers, and 503 doctors; there are more than 100 national and provincial honorary experts.

The respondents for this study will be coming from Physical Education teachers at Huanggang Normal University. Total enumeration, also known as a census, is a research method in which the entire population or target group is included in the study. This means that every individual or element in the population is considered a participant in the research. Total enumeration is an effective method of collecting data when the population is small, manageable, and accessible. (Frankfort-Nachmias, & Nachmias, 2008).

The researchers will include 70 teachers in the study.

### **Research Instrument**

The research instrument to be used in this study will be a self-administered questionnaire. The questionnaire will be divided into three parts. Part 1 will collect information on the demographic profile of the respondents, including sex, age, educational attainment and length of service. Part 2 will ask the respondents about their assessment of the current challenges faced by physical education management in schools, including budget management and allocation, resource acquisition and utilization, professional development and training, teaching strategies, and curriculum design and innovation. This section will use a 4-point Likert scale, where 1 represents strongly disagree, 2 represents disagree, 3 represents agree, and 4 represents strongly agree. Part 3 will ask the respondents about their assessment of the possibilities for addressing the challenges identified in Part 2 and improving the quality and effectiveness of physical education programs. This section will also use a 4-point Likert scale.

### **Ethical Considerations**

The study will adhere to ethical principles in order to safeguard the rights and interests of the participants. The researcher will first secure informed consent from all study participants prior to their involvement in the research. Subsequently, the participants will receive information regarding the study's objectives, the methodology employed for data collection, measures taken to ensure confidentiality, and other relevant details. The confidentiality and privacy of participants'

personal information will be ensured by the researchers. The collected data shall be exclusively accessible to authorized individuals and utilized solely for the intended research objectives.

As per the established protocol, the researchers will ensure that they uphold the dignity, rights, and privacy of the participants. It is imperative that the research does not result in any adverse effects on the physical or psychological welfare of the subjects. The research will ensure that no person or group is subjected to discrimination on the basis of their gender, race, ethnicity, or any other demographic characteristic. Ultimately, the investigators will furnish the subjects with debriefing details upon the culmination of the investigation. The study's outcomes and their potential impact on the domain of physical education will be communicated to the participants.

## Results and Discussion

### I.Profile of the Respondents

Table 1 presents the profile of the teacher respondents in terms of sex, age, educational attainment, and years of service.

Table 1

Frequency Distribution of the Teacher Respondents' Profile

Profile	Frequency	Percentage
<b>Sex</b>		
Male	38	54.30%
Female	32	45.70%
<b>Total</b>	<b>70</b>	<b>100.00%</b>
<b>Age</b>		
20-25 Years Old	13	18.60%
26-30 Years Old	12	17.10%
31-35 Years Old	16	22.90%
36-40 Years Old	19	27.10%
41 Years Old and Above	10	14.30%
<b>Total</b>	<b>70</b>	<b>100.00%</b>
<b>Educational Attainment</b>		
Bachelor's Degree	26	37.10%
Master's Degree	22	31.40%
Doctorate Degree	22	31.40%
<b>Total</b>	<b>70</b>	<b>100.00%</b>
<b>Years of Service</b>		
Less than 5 Years	20	28.60%
5-10 Years	15	21.40%
11-15 Years	15	21.40%
16-20 Years	10	14.30%
More than 20 Years	10	14.30%
<b>Total</b>	<b>70</b>	<b>100.00%</b>

Table 1 shows that thirty-eight (38) or about 54.3% of the teacher respondents are male; whereas, thirty-two (32) or about 45.7% are female. This shows that the majority of the teacher respondents are male.

Additionally, thirteen (13) or about 18.6% of the teacher respondents are between 20-25 years old, twelve (12) or about 17.1% are between the ages of 26 and 30 years old, sixteen (16) or about 22.9% are between 31-35 years old, nineteen (19) or about 27.1% are between the ages of 36 and 40 years old, and ten (10) or about 14.3% of the teacher respondents are 41 years old and above. This reveals that the majority of the teacher respondents are between the ages of 36 and 40 years old.

Also, twenty-six (26) or about 31.7% of the teacher respondents are Bachelor’ s Degree holders only, twenty-two (22) or about 31.4% are Master’ s Degree holders, and twenty-two (22) or about 31.4% of the teacher respondents are Doctorate Degree holders. This goes to show that the majority of the teacher respondents are Bachelor’ s Degree holders only. Finally, twenty (20) or about 28.6% of the teacher respondents have less than 5 years of service, fifteen (15) or about 21.4% have 5-10 years of service, fifteen (15) or about 21.4% have 11-15 years of service, ten (10) or about 14.3% have 16-20 years of service, and ten (10) or about 14.3% of the teacher respondents have more than 20 years of service. This indicates that the majority of the teacher respondents have less than 5 years of service.

### Budget Management and Allocation

Table 2 presents the assessment of the PE teacher respondents of the current challenges faced by PE management in schools in terms of budget management and allocation.

Table 2

PE Teacher Respondents’ Assessment of the Current Challenges Faced by PE Management in Schools in Terms of Budget Management and Allocation

Budget Management and Allocation	Mean	SD	Qualitative Description	Interpretation	Rank
1. I feel that there is adequate funding for physical education programs in my school.	2.31	0.94	Disagree	Challenging	4
2. I believe that budget constraints have a negative impact on the quality of physical education programs in my school.	2.37	0.89	Disagree	Challenging	2
3. I think that there is fair distribution of resources for physical education programs in my school.	2.36	1.01	Disagree	Challenging	3
4. I believe that the allocation of funds for physical education programs is a priority in my school.	2.39	0.91	Disagree	Challenging	1
5. I feel that the school administration adequately communicates the budget for physical education programs.	2.13	0.9	Disagree	Challenging	5
<b>Composite Mean</b>	<b>2.31</b>	<b>0.73</b>	<b>Disagree</b>	<b>Challenging</b>	

Legend: 3.51-4.00 Strongly Agree/Not Challenging; 2.51-3.50 Agree/Slightly Challenging; 1.51-2.50 Disagree/Challenging; 1.00-1.1.50 Strongly Disagree/Very Challenging

Table 2 shows that the PE teacher respondents disagree that the allocation of funds for physical education programs is a priority in their school, with the highest mean of 2.39, which demonstrates that making the allocation of funds for physical education programs a priority in my school is challenging. Furthermore, the teacher respondents disagree that budget constraints have a negative impact on the quality of physical education programs in their school, with a mean of 2.37, which illustrates that mitigating the negative impact of budget constraints on the quality of physical education programs is challenging. Moreover, the teacher respondents disagree that there is fair distribution of resources for physical education programs in their school, with a mean of 2.36, which exhibits that ensuring a fair distribution of resources for physical education programs in my school is challenging.

In addition, the teacher respondents disagree that there is adequate funding for physical education programs in their school, with a mean of 2.31, which depicts that securing adequate funding for physical education programs in my school is challenging. Lastly, the teacher respondents disagree that the school administration adequately communicates the budget for physical education programs, although garnering the lowest mean of 2.13, which conveys that ensuring that the school administration adequately communicates the budget for physical education programs is challenging.

Overall, the teacher respondents disagree that the school’s budget management and allocation processes effectively support physical education programs, with a composite mean of 2.31, which highlights that budget management and allocation are challenging.

Table 3

PE Teacher Respondents' Assessment of the Current Challenges Faced by PE Management in Schools in Terms of Resource Acquisition and Utilization

Resource Acquisition and Utilization	Mean	SD	Qualitative Description	Interpretation	Rank
1. I believe that the school has adequate resources to support physical education programs.	2.37	0.95	Disagree	Challenging	3
2. I think that the school effectively utilizes the available resources for physical education programs.	2.40	1.07	Disagree	Challenging	2
3. I feel that the school provides a variety of resources to support physical education programs.	2.51	0.85	Agree	Slightly Challenging	1
4. I believe that the school administration effectively communicates the availability and utilization of resources for physical education programs.	2.36	0.93	Disagree	Challenging	4.5
5. I feel that the resources available for physical education programs are appropriate for the needs of the students.	2.36	0.95	Disagree	Challenging	4.5
<b>Composite Mean</b>	<b>2.40</b>	<b>0.72</b>	<b>Disagree</b>	<b>Challenging</b>	

Legend: 3.51-4.00 Strongly Agree/Not Challenging; 2.51-3.50 Agree/Slightly Challenging; 1.51-2.50 Disagree/Challenging; 1.00-1.50 Strongly Disagree/Very Challenging

Table 3 shows that the teacher respondents agree that the school provides a variety of resources to support physical education programs, with the highest mean of 2.51, which reflects that providing a variety of resources to support physical education programs is slightly challenging. What is more, the teacher respondents disagree that the school effectively utilizes the available resources for physical education programs, with a mean of 2.40, which suggests that effectively utilizing the available resources for physical education programs is challenging. Besides this, the teacher respondents disagree that the school has adequate resources to support physical education programs, with a mean of 2.37, which manifests that ensuring that the school has adequate resources to support physical education programs is challenging.

Finally, the teacher respondents disagree that the school administration effectively communicates the availability and utilization of resources for physical education programs, and that the resources available for physical education programs are appropriate for the needs of the students, although both garnering the lowest mean of 2.36, which shows that ensuring that the school has adequate resources to support physical education programs, and effectively utilizing the available resources for physical education programs are challenging.

Overall, the teacher respondents disagree that resource acquisition and utilization for physical education programs are effective, with a composite mean of 2.40, which reveals that resource acquisition and utilization are challenging.

Table 4

PE Teacher Respondents' Assessment of the Current Challenges Faced by PE Management in Schools in Terms of Professional Development and Training

Professional Development and Training	Mean	SD	Qualitative Description	Interpretation	Rank
1. I believe that the school provides adequate training for physical education teachers.	2.51	1.00	Agree	Slightly Challenging	1
2. I think that the school supports the professional development of physical education teachers.	2.43	1.00	Disagree	Challenging	3
3. I feel that the school administration values the professional development of physical	2.46	1.07	Disagree	Challenging	2

education teachers.					
4. I believe that the training and development opportunities for physical education teachers are relevant and useful.	2.30	0.97	Disagree	Challenging	5
5. I think that the school provides opportunities for physical education teachers to learn and adopt new teaching strategies.	2.41	0.99	Disagree	Challenging	4
<b>Composite Mean</b>	<b>2.42</b>	<b>0.78</b>	<b>Disagree</b>	<b>Challenging</b>	

Legend: 3.51-4.00 Strongly Agree/Not Challenging; 2.51-3.50 Agree/Slightly Challenging; 1.51-2.50 Disagree/Challenging; 1.00-1.50 Strongly Disagree/Very Challenging

Table 4 shows that the teacher respondents agree that the school provides adequate training for physical education teachers, with the highest mean of 2.51, which goes to show that providing adequate training for physical education teachers is slightly challenging. Correspondingly, the teacher respondents disagree that the school administration values the professional development of physical education teachers, with a mean of 2.46, which indicates that ensuring that the school administration values the professional development of physical education teachers is challenging. Likewise, the teacher respondents disagree that the school supports the professional development of physical education teachers, which demonstrates that supporting the professional development of physical education teachers is challenging.

Not only that, but the teacher respondents disagree that the school provides opportunities for physical education teachers to learn and adopt new teaching strategies, with a mean of 2.41, which illustrates that providing opportunities for physical education teachers to learn and adopt new teaching strategies is challenging. Lastly, the teacher respondents disagree that the training and development opportunities for physical education teachers are relevant and useful, although garnering the lowest mean of 2.30, which exhibits that offering relevant and useful training and development opportunities for physical education teachers is challenging.

Overall, the teacher respondents disagree that professional development and training opportunities for physical education teachers are adequate and effectively supported by the school, with a composite mean of 2.42, which depicts that professional development and training are challenging.

## Conclusions and Recommendations

Based on the comprehensive analysis of teacher assessments at Huanggang Normal University, this study concludes that the management of physical education (PE) programs continues to face significant challenges in the post-pandemic educational environment. The findings indicate persistent issues in budget allocation, resource availability, teacher training, instructional strategies, and curriculum innovation. PE teachers reported insufficient funding, limited access to appropriate resources and facilities, and inadequate support for professional development, all of which hinder the effective delivery of quality PE instruction.

Despite these challenges, respondents expressed a cautious yet consistent recognition of the potential for improvement across these areas. Their assessments suggest that with targeted reforms and institutional support, it is possible to enhance the effectiveness of PE programs. Notably, the similarity in responses across various demographic profiles indicates that these issues are systemic and not confined to specific teacher subgroups.

The study underscores the urgent need for a comprehensive development plan that addresses both the structural and pedagogical aspects of PE management. This includes increasing budget transparency and prioritization, upgrading physical and digital resources, providing relevant and ongoing professional training, integrating modern teaching methods, and reimagining the PE curriculum to align with students' diverse needs and post-pandemic realities.

## Recommendations:

Based on the conclusions derived in this study, the following are the recommendations:

1. Optimize Financial Planning and Support: Prioritize funding distribution to improve sports facilities, equipment, and instructional resources. Establish partnerships with local organizations, sponsors, and community stakeholders to secure additional financial assistance.

2. Improve Access to Equipment and Facilities: Conduct needs assessments to determine gaps in available sports tools and venues. Implement cost-effective solutions, such as repurposing materials and integrating technology for virtual training.

3. Advance Educator Skill Enhancement: Organize regular capacity-building workshops to equip teachers with the latest trends in movement science and instructional techniques. Encourage collaborative learning and mentorship programs among educators to share expertise and teaching innovations.
4. Diversify Instructional Methods for Engagement: Incorporate modernized approaches, such as gamified activities, digital tools, and experiential learning in PE sessions. Adapt personalized learning techniques to cater to students with varying levels of ability and interest in physical activities.
5. Revamp Activity Planning and Program Structure: Integrate holistic wellness programs, including recreational activities, mental well-being strategies, and lifelong fitness habits. Align physical education programs with real-life applications, promoting overall health, teamwork, and resilience in students.

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