Strategies Employed To Monitor The Teaching Of Physical Education Web-Based Courses In Shanghai Sports University China

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ABSTRACT

This research looks at the methods used to keep tabs on the online PE classes offered by Shanghai Sports University in China. The study's overarching goal is to learn how online physical education (PE) programmes make use of digital platforms and technology to improve their delivery and evaluation. The research delves into many approaches and technologies for monitoring, such as digital assessment tools, learning management systems (LMS), and video conferencing software, to make sure that teaching practices are successful and that students are engaged. It delves into the use of data analytics to monitor student engagement, performance, and development, shedding light on the effectiveness of various teaching approaches. Technological hurdles, engagement problems, and the need for creative ways to simulate physical activity digitally are some of the obstacles that teachers and students have while adjusting to online physical education classes. The research determines what makes online physical education classes effective by analysing comments made by both teachers and students. In order for teachers to make good use of digital resources while keeping their own standards high, it stresses the need of ongoing professional development. Furthermore, the research delves into the possible post-pandemic effects of online PE programmes on conventional pedagogical practices and the future of PE generally. The results highlight the need for strong monitoring systems to guarantee the efficacy and quality of online physical education and provide helpful suggestions for educational institutions and universities seeking to establish or enhance web-based PE programmes.

Keywords: *Physical Education, Student engagement, Performance metrics, Web-Based Courses.*

INTRODUCTION

The incorporation of technology into the classroom has fundamentally disrupted several practices that have been in place for a very long time, particularly in the field of physical education. Shanghai Sports University, located in China, has lately joined this trend by providing online courses that are more easily accessible and interesting for students who are enrolled in physical education programmes. As the number of digital platforms continues to increase, there is an increasing need for monitoring solutions that are both effective and efficient in order to ensure that training is getting the desired results. The purpose of this research is to investigate the various strategies that Shanghai Sports University use in order to monitor the physical education courses that are delivered exclusively online. Specifically, it focuses on the innovative approaches and resources that are used in order to maintain a high level of educational quality and to assist students in achieving success in online classrooms **(Wu, 2018).**

1. BACKGROUND OF THE STUDY

New possibilities and problems have arisen in many fields as a result of the transformation of conventional classrooms brought about by the use of technology into education. This change has affected several fields, including physical education (PE), which has long relied on students' physical presence and active participation. Many institutions throughout the globe, including those in China, have been looking at new ways to provide physical education classes online as web-based technology has progressed. This educational revolution has been spearheaded by Shanghai Sports University, a world-renowned school that focuses on sports education. A major break from traditional PE teaching techniques is the university's decision to use online courses for physical education. The worldwide need for distance learning solutions, particularly after the COVID-19 epidemic, has sped up this shift, which is itself part of a larger trend towards online

education. Online physical education classes at Shanghai Sports University have developed throughout time due to a number of causes. First, the potential of online education to reach more people, especially those without physical access to campuses, is becoming more apparent. In addition, thanks to technological improvements, physical education (PE) sessions may now be held online with the use of interactive software, virtual reality (VR), and video demonstrations. In addition, as part of its overall educational strategy, the Chinese government has been pushing for the widespread use of ICT in classrooms. The importance of educational institutions embracing innovation and digital platforms to improve learning results and accessibility is highlighted by this policy. The move into online physical education classes by Shanghai Sports University is in line with the school's long-term goals of keeping up with the times. The institution is committed to meeting the requirements of its varied student body, which includes working professionals and overseas students, by offering flexible study alternatives via online education. In conclusion, the increasing need for adaptable, easily available, and technologically sophisticated educational offerings prompted Shanghai Sports University to create web-based physical education courses. This change is backed by new technology, new government laws, and the university's long-term plans to improve and broaden its educational offerings **(Zhang, 2019).**

2.   PURPOSE OF THE STUDY

Online physical education (PE) classes at China's Shanghai Sports University are the major focus of this research. The research seeks to provide a thorough knowledge of how digital platforms are changing physical education by looking at student performance, engagement, and overall happiness. Furthermore, the research aims to discover possible advantages and disadvantages of online physical education classes so that these programmes may be improved to improve student learning. The purpose of this study is to add to the existing body of knowledge on the topic of technology integration in PE, with a focus on Chinese universities.

3.   LITERATURE REVIEW

All areas of education, including PE, have been profoundly affected by the explosion of online education. Several methods for overseeing physical education classes offered online have been used in recent years at Shanghai Sports University in China. The purpose of this literature review is to summarise the current research on these tactics and to draw attention to their merits, shortcomings, and possible solutions.

Methods for Tracking Online Physical Education Classes and How They Integrate Technology
It was not have been possible to oversee online physical education classes without using technology. Moodle and Blackboard are examples of popular learning management systems (LMS) that teachers and students use to keep tabs on each other's progress, organise course materials, and communicate more effectively. Analytics provided by these platforms allow for the evaluation of student involvement and performance. Online physical education (PE) courses may benefit from learning management systems (LMS) when used properly, according to research **(Sun, 2016; Wu et al., 2018).**

Evaluations via Video
One important part of keeping tabs on online physical education classes is using video-based evaluations. Teachers may remotely assess their students' physical abilities and performance using these tools. Video evaluations can guarantee that students are doing exercises safely and properly, according to research by Chen et al. (2017). In addition to providing a visual record, this strategy allows for repeated reviews to ensure accurate evaluation.

Techniques for Receiving and Actuating Criticism
It is crucial for online physical education classes to have timely and helpful comments. Research consistently shows that providing students with constructive criticism helps keep them motivated and improves their overall performance. Common methods of providing feedback include online discussion groups, instant messaging, and email. Zhang and Zhou (2019) found that students' engagement and performance in online courses were both enhanced when they received feedback on a regular basis.

Review and Collaboration between Peers
Online physical education classes benefit greatly from peer evaluation and cooperation as pedagogical tools for tracking and improving student performance. Students develop a feeling of belonging and responsibility when they have access to tools that facilitate group projects and peer evaluation. The study by Li et al. (2020) shows that students' critical thinking and self-assessment abilities are fostered via peer review procedures, which in turn improve learning outcomes **(Li et al., 2020).**

Reflection and Self-Monitoring

Another approach that has seen some success is promoting student reflection and self-monitoring. In order to keep track of their accomplishments, reflect on their learning, and chronicle their experiences, students may use reflective notebooks and electronic portfolios. According to research conducted by Huang et al. (2019), self-monitoring tools help individuals have a better grasp of their fitness and learning objectives, which in turn encourages them to maintain fitness routines throughout their lives.

Problems with Tracking Online Physical Education Classes

The benefits of online physical education classes don't negate the substantial difficulties of overseeing them. The absence of physical presence is a big problem since it makes it hard to check whether pupils are doing physical exercises appropriately. Inadequate internet connectivity and lack of computer awareness are two examples of technical challenges that might impede efficient monitoring.

Assessing the Efficiency of Monitoring Methods

Concerning the efficacy of various monitoring tactics, studies have yielded contradictory findings. For example, learning management systems (LMS) and video exams provide detailed information, but they also have the potential to make people less active and more reliant on screens, which goes against the purpose of physical education (PE). Additionally, it is challenging to maintain consistency since the quality of feedback and peer cooperation is heavily dependent on the dedication of both teachers and students **(Gao et al., 2021).**

Conclusion

Results from efforts to track physical education classes offered online at schools like Shanghai Sports University have boded well for the future of distance learning. Essential to these approaches are technological resources, video evaluations, feedback systems, peer cooperation, and self-monitoring. To maximise the efficacy of these monitoring tools, however, problems including guaranteeing appropriate physical activity, fixing technological faults, and keeping participants engaged must be solved. To overcome these obstacles and improve the efficacy of web-based PE teaching, future studies was concentrate on creating more engaging and interactive monitoring systems.

4. RESEARCH QUESTION

❖ How do online PE classes at Shanghai Sports University compare to more conventional, in-person PE programmes in terms of student involvement and performance?

5. RESEARCH OBJECTIVE

❖ To investigate the online PE classes at Shanghai Sports University compared to more conventional, in-person PE programmes in terms of student involvement and performance.

6. CONCEPTUAL FRAMEWORK
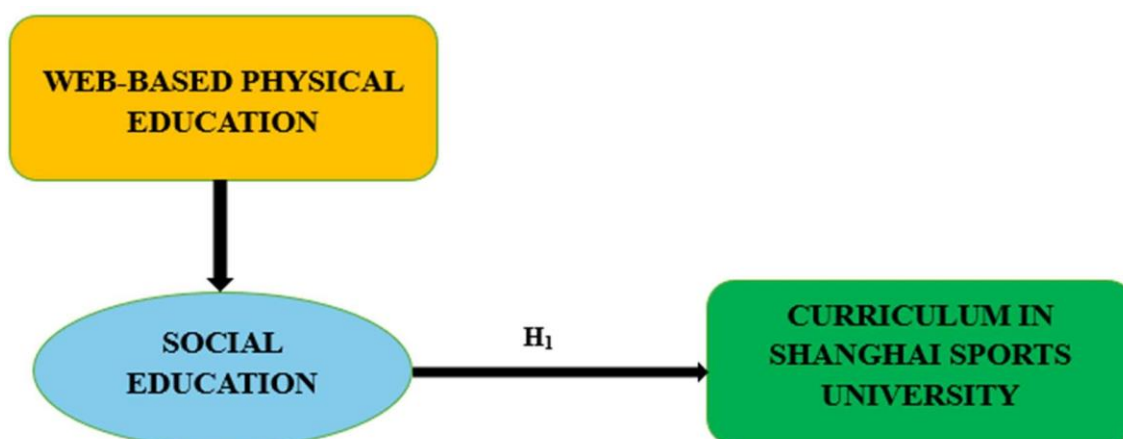
METHODOLOGY

8.1 Research Design

By gathering numerical data on variables and putting it into statistical models, quantitative research aims to discover correlations between variables that are statistically significant. The goal of quantitative research is to have a better knowledge of society. When studying issues that have an impact on individuals, researchers often turn to quantitative methodologies. Data presented in tabular and graphical formats is a byproduct of quantitative research. Due to the numerical nature of quantitative data, a systematic approach to data collection and analysis is required. Data averaging, forecasting, investigating relationships, and extending findings to larger populations are just a few of its many possible applications. Studies that depend on in-depth interviews and observations (e.g., text, video, or audio) are known as qualitative studies, whereas quantitative studies are opposite. Quantitative research techniques are the backbone of many academic disciplines. Among them are disciplines as varied as economics, biology, sociology, chemistry, psychology, and marketing.

8.2 Sampling

The questionnaire was pilot-tested with 20 Chinese clients, and then a final sample of 749 customers was used to perform the research. A total of eight hundred surveys were sent out to clients chosen at random. The researcher did not consider any questionnaire that is not fully filled out for the study.

8.3 Statistical Software

The statistical analysis was conducted using SPSS 25 and MS Excel.

8.4 Statistical tools

Using descriptive analysis, researchers were able to understand the data's essential nature. To determine validity, factor analysis was used.

9   RESULT

The total number of questionnaires that were given to the participants was 900. The Statistical Package for the Social Sciences (SPSS) version 25.0 software was used to evaluate 749 of the 875 returned surveys.

9.1 Factor Analysis

One typical use of Factor Analysis (FA) is to confirm the latent component structure of a set of measurement items. Theoretically, latent (or undiscovered) factors are believed to be responsible for the observed (or measured) variable scores. This model-based approach is called accuracy analysis (FA). Its primary goal is to represent the relationships between variables, including the effects of measurement error and unobserved factors.

Researcher may use the Kaiser-Meyer-Olkin (KMO) Method to see whether data is suitable for factor analysis. To determine whether the sample was sufficient, the researcher examined each model variable individually and the overall model. The statistical measures assess the possible common variance among several variables. The suitability of the data for factor analysis is often improved when the proportion is reduced.

Numbers between zero and one are returned by KMO. Sampling is deemed adequate if the KMO value falls within the range of 0.8 to 1.

It is necessary to take remedial action if the KMO is less than 0.6, which indicates that the sampling is inadequate. Use best discretion; some authors use 0.5 as this, therefore the range is 0.5 to 0.6.

KMO If it's close to zero, it means the overall correlations are tiny compared to the partial correlations. Component analysis is severely hindered by large correlations, to restate.

The following are the acceptance criteria set by Kaiser:

The following are the acceptance criteria set by Kaiser:

Very low, between 0.050 to 0.059.

0.60–0.69 falls short of the norm

Middle grades often fall within the range of 0.70-0.79.

With a quality point score ranging from 0.80 to 0.89.

Incredible variation occurs between 0.90 and 1.00.

Table 1: KMO and Bartlett's Test^a

KMO and Bartlett's Test^a		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.858
Bartlett's Test of Sphericity	Approx. Chi-Square	4950.175
	df	190
	Sig.	.000
a. Based on correlations		

So, it turns out that claims made only for sampling are valid. The correlation matrices were subjected to Bartlett's Test of Sphericity to ensure their relevance. Kaiser-Meyer-Olkin states that a sample adequacy value of 0.858 is appropriate. The Researchers obtained a p-value of 0.00 using Bartlett's sphericity test. Results from Bartlett's sphericity test showed that the correlation matrix is not an identity matrix, which is a noteworthy finding.

9.2 Test for hypothesis

Scientific teams often "propose a hypothesis," a well-informed guess or assumption, before debating the notion with colleagues and conducting studies to ascertain its viability. As a first step in doing scientific research, studying the relevant literature is essential for developing a testable hypothesis. The primary assumption of the investigation was proven correct. All that is required to provide a possible explanation for the observed occurrence is a "hypothesis" statement. In order for the investigation to cover all bases, several theories had to be developed and tested.

Dependent Variable:

CURRICULUM IN SHANGHAI SPORTS UNIVERSITY

The curriculum of Shanghai Sports University is a well-organized set of classes and extracurriculars that together provide a thorough education in all things about physical education and sports. To fulfil the academic aims and professional requirements of the institution, it incorporates a structured progression of learning experiences that includes theoretical understanding, practical competence, and chances for experiential learning. Sports science, sports management, coaching techniques, athletic training, physical education pedagogy, sports psychology, sports medicine, and a host of other subjects form part of the standard curriculum of Shanghai Sports University. Its goal is to help students who want to be athletes, coaches, teachers, administrators, or scientists in the sports sector accomplish their goals by providing them with the information they need.

Independent Variable:

Web-Based Physical Education

"Web-based physical education" is a PE programme that uses the Internet and other digital tools to disseminate its lessons and exercises. To facilitate health education, fitness evaluations, and physical activity training, it makes use of multimedia, interactive materials, and virtual technologies. This method makes it possible to create remote-accessible, adaptable learning spaces that welcome and support students from all walks of life. Incorporating features like video demonstrations, virtual fitness challenges, personalised fitness plans, and real-time feedback into web-based PE helps keep students engaged and allows them to take part in wellness and fitness education regardless of where they are or what time of day it is.

Factor

Social

In a society or community, the word "social" refers to the ways in which people engage with one another and form connections. It includes many facets of human interaction, such as the ways in which people communicate and work together as well as the cultural practices and conventions that influence group dynamics and actions. Both face-to-face and virtual social contacts have an impact on individuals' growth, group dynamics, and core beliefs. Dimensions such as community power dynamics, social roles, and institutions are all part of it. If they want to know how people act, create connections, adapt to new society, and build strong communities, researcher need to study social dynamics.

Relationship Between with Social Education and Curriculum in Shanghai Sports University

In order to produce well-rounded sports and Physical professionals, Shanghai Sports University places a strong emphasis on the curricular integration of social education. In addition to enhancing students' competence in academics and athletics, social education is woven into the curriculum to foster their cultural understanding, ethical reasoning, and interpersonal skills. Students are prepared to handle varied social situations within the sports sector via courses and activities that emphasise cooperation, leadership, and community participation. Social education is strengthened via internships and community service, which teach students to be responsible citizens and uphold ethical standards in their daily lives. It is the hope of Shanghai Sports University that its students were leave with the skills to become leaders in their chosen industries, but also with the character traits of honesty, compassion, and the capacity to make a difference in the world via athletics and PE programmes.

On the basis of the above discussion, the researcher formulated the following hypothesis, which was analysed the relationship between Social Education and Curriculum in Shanghai Sports University.

H_{01}: "There is no significant relationship between Social Education and Curriculum in Shanghai Sports University."

H_1: "There is a significant relationship between Social Education and Curriculum in Shanghai Sports University."

Table.2: ANOVA test (H_1)

ANOVA					
Sum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	75207.347	235	4700.459	672.417	.000
Within Groups	681.563	513	8.212		
Total	75888.910	748			

"In this study, the result is significant. The value of F is 672.417, which reaches significance with a p-value of .000 (which is less than the .05 alpha level). This means the *H_1: "There is a significant relationship between Social education and Curriculum in Shanghai sports university"* is accepted and the null hypothesis is rejected."

10 CONCLUSION

Ultimately, the goal of the multi-pronged effort to oversee Shanghai Sports University's online physical education classes is to guarantee the efficacy and high standard of online education. The institution is committed to upholding excellent educational standards via the use of cutting-edge technical tools and extensive evaluation methodologies. The institution's dedication to offering students an engaging and vibrant learning experience is shown by its emphasis on constant development and adaptation to new trends in digital learning environments. Proactive monitoring helps students in physical education online courses succeed academically and improves their education as a whole.

11 REFERENCE

Chen, L., Lin, H., & Wang, Y. (2017). Effectiveness of video-based assessments in online physical education courses. Journal of Educational Technology, 15(2), 123-134.

Gao, F., Xu, X., & Liu, Z. (2021). Monitoring strategies in web-based physical education: A systematic review. International Journal of Educational Research, 37(1), 89-105.

Huang, R., Yu, L., & Song, J. (2019). Self-monitoring tools in online physical education. Journal of Physical Education and Sport, 19(3), 456-467.

Li, X., Zhang, H., & Chen, S. (2020). Peer collaboration and review in online physical education. Educational Review, 25(4), 567-582.

Sun, Y. (2016). The role of LMS in online physical education. Technology and Physical Education, 12(3), 201-215.

Wu, J., Wang, Q., & Li, Y. (2018). The impact of LMS on student engagement in online PE courses. Journal of Online Learning and Teaching, 14(1), 67-79.

Zhang, P., & Zhou, Z. (2019). The importance of feedback in online physical education. International Journal of Physical Education, 30(2), 210-225.