

Integration of “Internet+” Teaching for Physical Education and Health Course: A Case Study of Jingdezhen Ceramic Institute

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Received 13 September 2020; accepted 27 October 2020

Published online 26 December 2020

Abstract

Under the background of “Healthy China 2030”, this research introduces the Wechat platform into the university Physical Education and Health course, creates the Wechat group and the Wechat official account, and carries on the teaching fusion attempt through the sports APP. The results show that endurance, speed and muscle strength of students have been improved significantly, and the physique of students is greatly improved through the integration of “Internet+” teaching attempt.

Key words: Internet+; Physique; Teaching integration

Li, L. Y. (2020). Integration of “Internet+” Teaching for Physical Education and Health Course: A Case Study of Jingdezhen Ceramic Institute. *Canadian Social Science*, 16(12), 24-26. Available from: <http://www.cscanada.net/index.php/css/article/view/11981>
DOI: <http://dx.doi.org/10.3968/11981>

INTRODUCTION

According to the “Healthy China 2030” program and the requirement of related documents, combined with the current status of Physical Education teaching and the college students’ physique, this study optimizes course setting and promotes the integration of “Internet+” teaching through the introduction of Wechat platform which gives full play to the interactive role of the Internet, and establishes an communication platform between teachers and students. Through the new curriculum model, the “Internet+” teaching plays a good effect on improving the physique of college students, promoting the socialist core value system of physical education, realizing the

lifelong physical learning for all, forming the sharing of high-quality resources, and improving the quality of physical education.

1. RESEARCH METHODS

1.1 Literature Method

According to the content, purpose, and task of the research, the author has consulted the relevant documents, curriculum theories, “Internet+” teaching modes, Physical Education and Health course evaluations in the periodical network and in the library. Then the literature is categorized and analyzed, to facilitate the later study.

1.2 Statistic Method

Using statistical software package SPSS22.0, the author makes statistical analysis on the physique of university students in different teaching modes, in order to objectively describe the teaching quality of “Internet+” teaching.

2. RESULTS AND ANALYSES

2.1 Integration of “Internet+” Teaching

The research subjects in this study are freshmen. Based on the traditional once-a-week course of Physical Education and Health, Wechat and the sports APP have been introduced into the teaching of the course, and the course has been endowed with the characteristics of mobility and socialization. With the help of the Internet platform to achieve the transformation of traditional teaching, Physical Education and Health course has no longer the absolute restriction of time and place, which has effectively enhanced the teaching flexibility. It has been prove that “Internet+” teaching can provide more comprehensive and timely guidance for college students on sports and health, and “Internet+” instruction is more popular with the students.

2.1.1 Introduction to Wechat Platform

Physical Education and Health course is an important part of college education, and the course is an elective one in Jingdezhen Ceramic Institute. In JCI, a Physical Education and Health class is made up of students from different schools of the institute and the class meets once a week only, which deepens the unfamiliarity between teachers and students; therefore, professional knowledge exchange is more difficult to carry out. With the rapid development of the Internet, Wechat has become an indispensable means of communication for contemporary university students, and its functions are constantly improving to meet the needs of young people. The introduction of Wechat into teaching has thus played a great role to improve the communication between teachers and students.

In this study, two physical education classes were randomly selected to carry out the experiment of “Internet+” teaching integration. Once the class has been started, a Wechat group is established by the teacher. In addition to the once-a-week offline teaching on the playground, the teacher posts sports content, sports intensity and sports requirements on the Wechat group, and instructs the students on line at any time. It’s convenient for students greatly and makes up for the lack of offline teaching time, so that teachers and students can communicate more conveniently, frequently, and rapidly than offline teaching only.

2.1.2 Means of “Internet+” Teaching Integration

2.1.2.1 Sports APP

This research introduces teaching based on Wechat platform. At the same time, it also employs the sports APP in the teaching process and KEEP APP is used in this study. Through KEEP APP, teachers formulate the sports content, the intensity, and the time step by step. According to the student physique condition, teachers use the action demo in KEEP, and post it on the Wechat group. Students are required to complete the exercise within the specified period, and the amount of exercise should be adjusted every two weeks. While the basic teaching is being carried out in class, teachers evaluate the effect of students’ exercise online and correct the students’ wrong actions offline. The APP has a sports recording function, which can prevent some students from slacking off.

2.1.2.2 Wechat Official Account

To spread the notion of physical health and scientific exercise is one of the purposes of this study. For this reason, the author has created a Wechat public account to provide combinations of different physical exercises and popularize some sports health knowledge. It will reduce the probability of sports injuries among university students, and teach students to deal with simple sports injuries.

The combination use of Wechat platform, Wechat public account and KEEP APP has played a great role

in promoting the development of university students’ physical health. Many students take screenshot from time to time to share their sports achievements and feedbacks of physical exercise, which helps them to experience the fun of sports. To a large extent, the integration of “Internet+” teaching has stimulated the initiative of students’ physical exercise.

2.2 Influence of “Internet+” Teaching Integration Mode on Students’ Physique

In this study, students from two classes (30 students per class) participated in a semester of “Internet+” teaching integration experiment. There were 28 boys and 26 girls left excluding those who failed to stick it out because of changing classes or some other reasons. As to the selection of physique index, the endurance is 1000 meters for boys and 800 meters for girls, the speed is within 50 meters, the lower limbs strength is standing long jump, the upper limbs strength is pull-up for boys, and the waist and abdominal strength is sit-up for girls. All scores are converted to a 100-point scale according to the national health standards for college students.

2.2.1 Comparison of Students’ Physique Before and after “Internet+” Teaching Integration Mode

Table 1
Comparison of male students’ physique before and after “Internet+” teaching integration mode (n=28)

	1000 meters	50 meters	Standing long jump	Pull-up
before	55.37±16.09	58.56±13.38	87.79±13.54	59.32±27.24
after	60.09±15.07*	67.24±11.56**	90.33±9.69	70.28±22.35**

Note: *P<0.05 **P<0.01 ***P<0.001

Table 2
Comparison of female students’ physique before and after “Internet+” teaching integration mode (n=26)

	800 meters	50 meters	Standing long jump	Sit-up
before	55.63±15.02	47.17±15.48	73.44±14.09	70.36±16.47
after	65.09±10.62**	60.58±14.08***	86.55±10.05**	83.58±15.01***

Note: *P<0.05 **P<0.01 ***P<0.001

2.2.2 Analysis of Students’ Physical Condition Before and after “Internet+” Teaching Integration Mode

The study data show that the boys’ average scores of 1000m, 50m and pull-up were all failed before the “Internet+” teaching integration attempt, which indicates poor endurance, speed and upper limb muscle strength, while lower limb explosive power was the best and at a good level. Girls failed in 800m and 50m, showing poor endurance and speed, which is similar to boys. Girls’ leg power and waist abdominal muscle strength is good; the average score is in the middle of the national standard.

Current research shows that in the past ten years, the overall physique of university students has significantly decreased, especially the endurance and speed are too poor, and strength needs to be improved. Many students

even cannot run a lap of the standard 400-meter track, or it takes more than five minutes to complete 1000-meter endurance test. Some students even cannot get up from the first pull-up or sit-up, because their muscle strength is rather weak. The overall physique of college students needs to be improved.

Table 1 shows that the students’ physique has been improved obviously after the “Internet+” teaching integration based on Wechat platform. Compared with the data before “Internet+” teaching integration, the results of 1000m, 50m and pull-up of male students have improved and achieved a passing grade or above. The endurance is improved significantly ($P < 0.05$), and the speed and upper limb strength is also improved significantly ($P < 0.01$). The results of standing long jump have been improved, reaching excellent level; but there is no statistical significance ($p > 0.05$). It may be the result of a better starting score or the students’ psychology of passing the final examination. It is advised to strengthen the training of their muscle explosive force after an improvement in overall quality.

Table 2 shows that the overall quality of female students has also been improved obviously after the new teaching mode. The results of 800 meters are improved significantly ($P < 0.01$), and the results of 50 meters are also improved ($P < 0.001$). The endurance and speed are both improved to the qualified level, the explosive power of lower limbs is improved greatly ($P < 0.01$). The results show that the improvement trend of female students’ quality is slightly better than that of male students. It may be related to the high expectation of female students for body figure which needs further studies.

The research shows that 54 college students’ physique

has improved significantly after a semester of “Internet+” teaching integration on WeChat platform, and all of them have reached the qualified level or above, resulting in a qualitative leap. On this basis, students can get further improvement, and then carry out other exercise to meet the requirements of physical beauty.

CONCLUSION

Blended online and offline teaching has its unique advantages. The attempt to apply “Internet+” teaching integration in Physical Education and Health course has significantly improved the physique of college students, including speed, endurance, upper and lower limb strength, waist and abdomen strength. Thus the “Internet+” teaching mode should be actively tried in public-course teaching in colleges and universities, which is the future education trend and is of great benefit to the teaching of public courses.

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