

Research on Teaching Mode Reform and Innovation in our School—Breakthrough and Innovation: Health and Physical Education Teaching Mode Reform and Discussion

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Abstract: From 2020, the physical level of Chinese college students will be affected to a certain extent. For physical education, students learn through online teaching for a long time and lack exercise, so the physical health of most students will be affected. Through the investigation and research of the current situation of physical education teaching in our school, this paper finds the following deficiencies in teaching: (1) the teaching objectives are not clear (2) the teaching content does not meet the needs of students (3) the teaching method is not flexible (4) the teaching evaluation is not comprehensive. According to these problems, combined with the sports resources of our school, with "health first" as the guiding ideology, the construction of health physical education teaching mode in our school is explored, which provides the theoretical basis and development direction for the reform of health physical education teaching mode in our school.

1. Introduction

1.1 Research background

The main task of college sports course is to teach students sports knowledge, enhance student's physical quality, cultivate students' lifelong sports consciousness, and for most students, college sports class is the last stage of students to accept school sports, therefore, college sports teaching for students to set up lifelong sports consciousness, develop good sports habits has an important role. In the long-term traditional higher education in China, there are problems of more attention to student's professional skills and less attention to students' physique and their healthy development, which are reflected in the less time and content arrangement of students' physical exercise in physical education classroom teaching. At present, with the implementation of the strategy of "healthy China" in China, the social attention to students' physical health continues to rise, the reflection of college students' physical health level decline more and more strong, the voice of sports reform in colleges and universities, the physical classroom teaching reform in colleges and universities, so as to enhance students' physique, promote the students' physical health development is imperative. In addition, in

the face of the increasing intelligent era of electronic equipment, many students have become "phubbers", developing unhealthy, unscientific and unreasonable lifestyles, resulting in the increasing number of sub-health people. In the context of healthy China, under the traditional school-running mode and under the strategy of "healthy China construction", health management is a social responsibility and the key to ensure that "characteristics do not fade". Our school "health school construction" is becoming a school characteristics, vigorously support the teaching research team, submitted the first national "healthy school construction" declaration, highlights the school to maintain the health of teachers and students and determined to our school to breakthrough innovation, health sports teaching mode reform into the comprehensive discussion, health sports teaching research hotspot, teaching content, mode put forward the opinions of the development and reform[1].

1.2 Research significance

1.2.1 Theoretical significance

At present, the relevant papers on the teaching research of physical education and health in colleges and universities still show a rapid rising trend, which shows that the teaching reform of physical education and health in China is still in the stage of rapid and sustainable development. Through the investigation of the teaching status and teaching mode of our school, as well as the interview results of students and teachers, this paper analyzes the current physical education teaching mode of our school relying on the construction of "health institute", which points out the direction for the reform of physical education teaching in our school, and provides the theoretical basis and practical experience for the future reform of physical education in the university[2].

1.2.2 Practical Significance

The physical fitness and health level of Chinese students are generally improving, and the lung capacity level is being slowly improving. However, on the whole, the physical health problems of college students are still relatively serious, and the physical quality levels such as endurance and speed of college students are still declining. By the beginning of 2020, due to the impact of COVID-19, college students' participation in physical exercise and sports competitions will be greatly affected, which aggravates the physical health level of Chinese college students. For physical education, students learn through online teaching for a long time and lack exercise, so the physical health of most students will be affected. Through the study of school teaching reform, this paper found the problems existing in the current teaching mode, and students' health of physical fitness, targeted Suggestions, make our sports teaching mode suitable for our students, through the reform of sports teaching results at the same time, also can improve the student's interest in physical exercise, cultivate students' healthy exercise habits, so as to cultivate students' lifelong sports consciousness.

2. Health and PE teaching mode and the construction of health communication institute

2.1 Physical education teaching mode

Teaching mode is not only a simple teaching type. According to the definition of teaching mode by Joe Jones and Weir, teaching mode is a model or plan, which has a guiding role in the composition of curriculum and content and the selection of teaching materials. According to the structure of the whole teaching activity, the teaching mode can also be regarded as a stable teaching program established according to the teaching guiding ideology. In essence, the design and reform of the teaching mode are based on the specific guiding ideology, so the teaching mode between different subjects is also different [3]. Because the physical education course is obviously different from other

majors in the process of development, there are many differences between the teaching mode of the physical education course and other courses. The specific differences mainly lie in the sports of sports activities, the diversity of sports items, the requirements of sports venues and equipment, and the rules of students' physical and mental development, the requirements of students' physical health status and the relevant regulations of physical education class. In the definition of the healthy physical education teaching mode, we should consider both the essence of the teaching mode and the special requirements of physical education teaching. In this study, the health physical education teaching mode is defined as a fixed teaching form based on the guiding ideology of health, the reality of students' physical health and combined with the integration of school teaching resources [4].

2.2 Construction of the health communication hospital

"Construction of health communication school" is the development strategy of our school for the physical and mental health development of students and for the school sports resources. In addition to the rich teaching infrastructure, "one school one product", "one school many products" full sports meeting, zero point sports, characteristic extracurricular sports activities, school high-level sports team and sports club construction, traditional sports into the campus and other forms are also the foundation of the construction of health hospital. In the process of teaching implementation and teaching related research, the "Yincui" health promotion club and the teaching team and "zhi" enjoy sports and health science innovation research team as the research foundation are mainly used for the research and reform of the teaching mode[5].

2.2.1 "Duzhi" to enjoy the sports and health science innovation research team

"Duzhi" pleasing sports and health science innovation research team mainly takes sports and health as the core idea, and lays a solid foundation for the school to carry out evaluation and promote construction ", " health communication hospital construction " and other strategies. Its main objectives and contents are as follows: First, sports and health scientific management is not only an arduous national strategic task in the new era, but also the fundamental guarantee for the realization of the "healthy Chinese Dream". At the same time, it is also one of the important starting points for our school to "welcome evaluation and promote construction", "construction of health communication hospital", especially "characteristic development and management". Health is an eternal topic of mankind. Given the current colleges and universities almost no such institutions or rarely carry out the specialized work based on related professional integration, we will be by establishing "sports and health science innovation research team" this platform, gradually establish perfect and docking "sports and health science research institute", "Benedict" yue enjoy health teaching team and "sports and healthy growth club" matching organization. Second, through the collective wisdom of the sports research team, give full play to the research advantages of the team, promote the transformation of research results, and serve the society and the school talent training. Set up the "management benefit view". Focus on research and development direction; emphasize the unity of quantity and quality benefit; advocate harmonious interpersonal relationship and individual healthy development; and create highly recognized team spirit. Third, on the basis of existing conditions, through the virtual introduction of industry professionals to make up for the lack of team practice experience, strengthen the depth of the communication between the school and social professional department, establish society, schools, research groups, all kinds of resources sharing talent training and scientific research mode, rapidly improve team talent growth speed and team overall practice ability. Fourth, with intelligence as the carrier, to form the multiplication effect matrix of "health education, health promotion, health management and sports improvement" with "health communication hospital construction" as the beacon, and to "create characteristics, create highlights and brand" to help the

school to welcome the evaluation and promote the construction work [2].

2.2.2 "Yincui" Health Promotion Club teaching team

The teaching team of "Yincui" Health Promotion Club is mainly built for the teaching development of our school. The main construction objectives include: first, the team building is based on the establishment of high-quality teaching staff; the goal of building the high-quality and research-oriented teaching team; focus on the training of backbone teachers; continuously improve the educational level of team members, carry out thematic research, and the ability to use modern educational technology to assist teaching and management, and ensure the healthy and high level development of team building. Second, according to the needs of team building, carry out the related work of teacher team building, such as the goal, time, measures, assessment and evaluation of team building. At the same time, the team semester teachers work to carry out targeted organization, guidance and scientific evaluation. Third, according to the existing rules and regulations on the construction of teachers and teaching team construction and the relevant requirements of the Public Sports Department, improve the system and mechanism of team building, and constantly improve the effect of team building. The main contents of the construction are as follows: first, establish the goals and work plans of team building and development, formulate plans and measures to promote the training of backbone teachers and characteristic teachers, and carry out targeted teacher training. Second, combined with the dynamic development of team building, in line with the original intention of promoting teacher development and promoting the improvement of teaching quality, establish and improve the teaching evaluation system to promote the construction and development of teachers. It mainly includes: evaluation of the effect of teachers' participation in training, evaluation of teachers' scientific research ability, evaluation of teachers' phased teaching ability, evaluation of improvement of teachers' ethics, teachers' self-evaluation and students' evaluation of teachers. Third, on the basis of the original scientific research and research results, the team strives to create a good academic atmosphere, actively carry out sports scientific research, write academic papers with high professional standards, and compile textbooks in line with the actual applicability of students. At the same time, we should promote the formulation of young teachers and mentors, play the role of leading the new with the old, promote the improvement of sports scientific research ability, and timely conduct phased feedback and summary[6].

3. Research methods

3.1 Literature data method

By China to search, with "health" and "physical education" as the theme, search 5062 related literature, literature number rising rapidly since 2000, reached the highest value in 2019, the annual literature published 308, falling after 2019, but the annual number is also at a high level.

3.2 Questionnaire survey method

According to the preliminary investigation and study of the students of Yellow River Transportation College, the Questionnaire on Physical Education Teaching Status was developed. Through the principle of anonymous filling, on-site survey was conducted in the physical education class, 300 questionnaires were distributed, 300 were collected, and 286 valid questionnaires were collected, with an effective recovery rate of 95.33%.

3.3 Mathematical statistics

Statistics and analysis of students' physical health status and questionnaire survey information through E XCEL, and the descriptive statistical analysis of the physical education status of Yellow River Transportation College.

4. Research on the current situation of physical education teaching in Yellow River Communications College

4.1 Physical and health status of the students of the Yellow River Communications College

Through the Yellow River transportation college students physical health test results are analyzed, understand the Yellow River transportation college students physical health status, due to the outbreak, the overall data in 2020, and for the junior and senior students and no physical education courses, therefore, this study only use freshman and sophomore physical health test results. According to the national physical health test standard, the students' physical health status is divided into four standards, which are excellent (90 points above) good (80~90 points, including 80 points not 90 points) pass (60~80 points, including 60 points not 80 points) fail (90 points below). According to the test results, the following table 1.

Table 1 Statistical table of physical health test results for freshmen and sophomores

mark	Number of persons (in unit: person)	Percentage (in unit:%)
outstanding	36	0.57
good	892	14.03
pass a test	4832	76.02
fail	596	9.38
amount to	6356	100

Can be seen from table 1, most of the students' physical health level only at the level of passing, the number of failing is close to 10% of the proportion, visible, students' physical health level is still in a poor state, and achieve the excellent proportion is only 0.57%, small, so, the vast majority of students' physical health also need to improve. According to the proportion of students' physical health scores at different levels, the students in this test were sampled. A total of 100 students were selected and the physical health test was conducted. According to the test results, the overall physical health status of these students also decreased slightly. The specific changes are shown as follows Table 2:

Table 2 Survey form of the changes of students' physical health level after the epidemic situation

mark	The 2020 proportion is (%)	The proportion of post-outbreak sampling results is (%)
outstanding	0.57	2
good	14.03	9
pass a test	76.02	66
fail	9.38	23

Only the proportion of excellent and failing has increased, and the proportion of good and passing has decreased to a certain extent. However, because the proportion of excellent and the number of samples is small, the change of the proportion of excellent is not the main reference for the change of the overall physical health level. The proportion of failing students showed a significant increase, which also reflects that the physical health level of students has decreased to a certain extent after the epidemic.

4.2 Current situation of physical education teaching in Yellow River Communications College

Combined with the "construction of health communication institute" of our school, there are still some deficiencies in the physical education teaching reform of our school, mainly including teaching objectives, teaching content, teaching methods, teaching evaluation and other aspects.

4.2.1 Current Status of teaching objectives

From the teacher's point of view, according to the survey and interview of physical education teachers, teachers proposed the main teaching objectives and importance of order is: improve the level of students' physical health, set up the guiding ideology of "health first", master motor skills, cultivate students' good quality, help students set up the lifelong sports view. According to sort can be seen, the current school's main teaching goal is to want through sports skills learning to promote students' physical health level, for will quality and the formation of the lifelong sports goal is not obvious, it can also be from the side in the guiding ideology of school sports teaching "health first" and "sports skills teaching", and "quality education" and "lifelong sports thought training" is small[7].

From the student's point of view, to the teacher sports teaching objectives as an option, students according to their classroom learning focus on the teaching goal, the final choice from high to low in order: proficiency motor skills, improve students' physical health level, cultivate students' good quality, set up the guiding ideology of "health first", help students set up the lifelong sports view. The order of importance felt by students is different from the order of importance chosen by teachers. According to the observation of practical teaching, students mainly choose according to the content emphasized and valued by teachers in the classroom.

4.2.2 Current status of physical education teaching content

Teaching content, the current teaching content mainly according to the school venues, equipment and teachers as the main factors, with the choice of students to planning the secondary factors, the specific project from more to less proportion for tai chi, basketball, badminton, martial arts, volleyball, table tennis, cheerleading, football, sports dance, yoga, track and field. The specific proportion of the project is shown in the following table 3:

Table 3 Proportion of people selected for PE courses in different programs

project	proportion (%)
taijiquan	27.03
basketball	20.10
badminton	9.47
wushu	8.28
volleyball	7.98
table tennis	7.86
cheerleading	7.61
soccer	4.09
sports dance	3.54
Yoga	3.10
track and field	0.94

It can be seen from the table that the number of people participating in Tai Chi and basketball is significantly higher than other projects. According to the school teaching arrangement, Tai Chi is a compulsory course for freshmen. Therefore, students 'choice of Tai Chi has no important reference value for the study of factors affecting students' choice of projects. According to the survey of students 'favorite sports found that at present, our school boys' favorite sports is basketball, followed by badminton, volleyball, girls like the most is badminton, yoga, boys, girls choose the least project for

track and field events, then the number of martial arts project is less. For the projects not currently conducted, students want to offer courses including tennis, swimming, roller skating, taekwondo and other programs. According to the survey results, among the reasons for students to choose the current physical education courses, the number of students who choose the full number of favorite courses, no hobby courses and a relatively relaxed course account for a certain proportion. It can be seen that the current courses of the school cannot meet the needs of students. The main reason is that the school is not perfect in the integration of related resources such as teachers, site equipment and students' hobbies[8].

4.2.3 Current situation of PE teaching methods

The teaching methods often used by teachers are classified according to their characteristics, which can be divided into teaching methods based on language telling, teaching methods based on action demonstration (including video learning), teaching methods based on skill practice, teaching methods based on competition activities, and teaching methods based on inquiry activities such as games. According to the survey of teachers, it is found that in classroom teaching, mainly the action demonstration and skill practice, language narration is only a whole description and introduction of the current learned content, games and competitions are more used in the preparation activities and warm-up, which is not strongly related to the main content to be told. On the whole, it can be seen that in the teaching process of teachers, the traditional teaching methods are not innovative, and in the process of action demonstration and skill practice, teachers are mainly led by the lead, which also leads to the lack of independent learning ability of students.

4.2.4 Current status of physical education teaching evaluation

The evaluation method of physical education teaching in our school is mainly composed of comprehensive results based on the students' usual performance and the final examination results, and the final examination is divided into quality test and skill test. In the comprehensive scores, the normal score accounts for 20%, the quality test accounts for 30%, and the skill score accounts for 50%. Moreover, according to the survey results of teachers, it is found that the main reference basis for teachers when evaluating the normal scores is the attendance rate of students. It can be seen that in the process of teaching evaluation, teachers mainly focus on objective quantitative evaluation, and the overall evaluation process focuses on summary evaluation, ignoring diagnostic evaluation and formative evaluation[9].

5. Research on the reform of healthy teaching mode

According to the current teaching situation of our school and the resources related to physical education teaching, the teaching reform can be carried out by integrating the physical education related information and material resources from the two aspects of students and teachers, so as to achieve the effect of improving the teaching results, enhancing students' physical health and cultivating students' lifelong physical education awareness.

5.1 The establishment of the student sports information platform

5.1.1 Establishment of electronic records of student health

"Health first" as an important guiding ideology of physical education teaching, the health status of students cannot be ignored. In the whole process of teaching, teachers should always be able to pay attention to and grasp the health information of students, so as to reasonably arrange the teaching

content and change the teaching methods in teaching. Establish students' health electronic archives, first of all, to establish a basic file, before the teaching activities, to the students' physical health diagnostic evaluation, refer to the national physical health standards, according to the individual grades and comprehensive scores, respectively, is divided into good, good, pass, failed four grades. In the teaching activities, according to the physical health status of students, on the one hand, can improve the teaching effect, reduce students' sports injury, on the other hand, students can also exercise or choose learning projects according to their own health conditions. Secondly, after the establishment of the basic files, the health status of students should be observed, and the health records should be updated regularly according to the law of students' physical health development.

After the establishment of the health records, the health records can be made public to teachers and students. Teachers can observe and modify the health information of the students in the class, and students can watch and modify their own health information, but the health information is not linked to the students' grades, so as to avoid the students from modifying the health information falsely. At the same time, with the help of the teaching team of "Yincui" Health Promotion Club and the members of "Happy" sports and health science innovation research team, according to the influencing factors of students' physical health status, we designed different health improvement plans to help students with poor physical health level to exercise.

5.1.2 Establish a platform for student sports participation

For the improvement of students' physical education performance and physical health level, physical education classroom teaching is only the basic way to learn how to exercise better and more correctly. However, due to the time limit of classroom teaching, the improvement effect of students through classroom exercise is not significant. At present, there are still many problems in sports activities in our school. Although many sports competitions, including sports meeting, badminton, basketball and other events, these competitions are only a small part of students participate in, and cannot play a role in promoting students' overall participation in sports. Therefore, the establishment of some platforms to promote students' sports participation is an effective way to promote students' sports participation, which can be carried out from both online and offline aspects. Online sports communication platform for students. First, it can provide a place for students to communicate on sports-related issues. Second, students can use the school's existing site and equipment resources, students can apply to borrow the school site equipment through the Internet. Third, sports related knowledge and sports competitions can be publicized with the help of the platform, and sports injury knowledge can also be uploaded through the platform, so that students can correctly understand sports injuries, conduct reasonable treatment, and avoid students' aversion and fear of sports caused by sports injuries. Offline, related clubs and sports-related associations can be used. Although there are some sports clubs in our school, the number is relatively small, the projects are not rich enough, and the management is not perfect enough. Therefore, the offline construction of student communication platform can be carried out from improving the management of student associations. First, integrate similar school sports associations, enrich related sports programs, and increase the selectivity of students. Second, the essence of the activities carried out by sports-related associations and other associations has certain differences. Therefore, sports associations can be established on the basis of sports-related associations to be responsible for the activities of sports-related associations on the whole. Third, change the activity form, at present our school sports community is mainly organize club members related games, it also makes part of the unskilled students lack of opportunity to participate, therefore, sports community can regularly related project teaching activities, by the guidance teachers and skilled students to guide students. Fourth, when the club carries out some competitions, it can apply for the venue to the school in advance, and invite students from each class to watch, so as to improve the appreciation of sports competition, help more students understand this

sport, improve students' interest in sports, so as to promote students' participation in sports. Both the establishment of online teaching and offline platforms should rely on the current resources of our school, and need practical guidance and monitoring from relevant teachers.

5.2 Construction of the teaching reform system

5.2.1 Establishment of a teacher promotion platform

In the process of teaching, the function of teachers is very important. Although students' subjective initiative should be improved, teachers should also lead the direction of the whole teaching. The establishment of teacher promotion platform can further improve the teaching effect by improving teachers' ability level. A communication platform can be established based on the foundation of the "zhi" Enjoy Sports and Health Science innovation research team. The specific content can be carried out from the following aspects. First, through the platform, to provide teachers with relevant training services to improve teachers on their theoretical knowledge base. Second, the published literature of teachers and the related research on the development of physical education in our school can be shared through the platform to provide a theoretical basis for the following research and teaching reform. Thirdly, various survey results and physical health results of our students can be input into the platform to facilitate the collection of teachers' scientific research data. Through the exchange of scientific research and the enrichment of data, teachers can improve the understanding of the students in our school, so that the introduction can improve the teaching effect.

5.2.2 Establishment of a teaching feedback platform

In the process of teaching reform, it is necessary to constantly modify and adjust each element of teaching. Therefore, the establishment of the teaching feedback platform is very important to the teaching reform, which can be mainly divided into the following steps. First of all, a teaching feedback platform should be established according to the teaching elements. The main feedback content can be divided into teaching objectives, teaching content, teaching methods, teaching evaluation and other aspects. The second step requires the participation of all teachers. All the problems arising in the teaching process or the high-quality teaching methods can be sent to the relevant problems according to the feedback category, and the teachers can discuss according to the relevant problems to improve the teaching situation. The third step is to regularly summarize all kinds of problems. Through the teaching and research team, the problems can be summarized and studied and uploaded to the teaching feedback platform, and relevant literature can also be published to enrich the scientific research of the school. Finally, through the continuous modification and adjustment of the teaching objectives, teaching content, teaching methods, teaching evaluation and other aspects, a new teaching mode is finally formed.

6. Conclusion

6.1 Physical education teaching goal is not clear

According to the importance of teachers and students on teaching objectives, teachers mainly to health as the primary teaching objectives, and students through classroom observation that the primary goal is the skills of learning, followed by health, the teaching goal and students set by observation that the current teaching goal importance order has certain gap, it can be seen that the teacher's teaching goal is not clear, teachers in the process of teaching, should pay attention to students' and cognitive theory of learning.

6.2 Physical education teaching content does not meet the needs of students

At present, the projects of physical education courses are mainly set according to the school site equipment and teachers' special projects. Before course selection, no pre-investigation is conducted on students. As a result, due to the phenomenon that students have few or no courses, some students lack sports interest or physical reasons and choose courses for random reasons. In the formulation of courses, a pre-investigation should be conducted based on the school resources, students' interests and physical conditions, and the final project arrangement should be determined.

6.3 The flexibility of PE teaching method is insufficient

In the teaching process, the methods of action demonstration and language explanation are mainly adopted, while the teaching process is mainly led by teachers, and the main position of students cannot be reflected. In the teaching of different projects, diversified methods and flexibility are not changed according to the teaching content and the characteristics of students, which cannot achieve the expected teaching effect.

6.4 The evaluation mode of physical education teaching is single

At present, the main summary evaluation method is, which calculates the score of students' physical quality and the final examination results. In the teaching process, summary evaluation can only measure the level that students can finally reach, and the feedback on the teaching effect is too one-sided, lacking of diagnostic evaluation and process evaluation, which cannot be implemented in teaching according to students' conditions, and teaching cannot be adjusted through real-time feedback. Therefore, when the current physical education teaching evaluation mode is single, it is an important factor that limits the development of physical education teaching.

References

- [1] Ministry of Education of PRC. *The Outline of the "Healthy China 2030" plan proposes to add health education to the national education system* [EB / OL]. (2016-10-26) [2018-09-01].<http://www.moe.gov.A.cn/jyb-xwllh/x6052/moe-838/201610/t20161026-86160.html>.
- [2] Liu Ji. *Thinking and construction of Health and Physical Education Curriculum mode in China* [J]. *Journal of Beijing Sport University*, 2015, 38 (9): 72-80.
- [3] Liu Mou, Liu Shangli. *Application of integrated teaching mode inside and outside class in public physical education teaching in colleges and universities* [J]. *Journal of Southwest Normal University (Natural Science Edition)*, 2019 (44): 144-148.
- [4] Liu Ji. *Restudy of the theoretical and practical problems of health PE curriculum model in China* [J]. *Journal of Beijing Sport University*, 2019, 42 (6): 12-22.
- [5] Chen Tianxia, Chen Xinhua, Huang Chuansheng, and so on. *"Integration of both inside and outside the class" curriculum mode* [J]. *Journal of Beijing Sport University*, 2004 (1): 90-91.
- [6] Li Yong, Feng Wei. *Discussion on higher vocational PE teaching mode based on "Internet +"* [J]. *Vocational and Technical education*, 2018, 39 (26): 39-41.
- [7] Xiao Erdun. *Exploration of the mixed learning mode of physical education teaching in colleges and universities under the background of "Internet +"* [J]. *China Audio-visual Education*, 2017 (10): 123-129.
- [8] Zhang Wanbao. *Analysis of college PE teaching mode under the background of "Internet +"* [J]. *Sports World (Academic edition)*, 2020 (3): 157-160.
- [9] Liu Ji. *The key to deepening the reform of basic education, physical education and health curriculum in China* [J]. *Journal of Chengdu Institute of Physical Education*, 2013, 39 (10): 1-6.