



Research and Prospect on the Phenomenon of “Learning but Not Knowing” in Physical Education in Primary and Secondary Schools

Dapeng Sun

Faculty of Sports and Health Sciences, Zhejiang Normal University, Jinhua, China

Email: soldapeng@163.com

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Abstract

This paper selects the “learning but not” phenomenon in primary and secondary school physical education as the research problem. This paper believes that the reasons for the phenomenon of “learning without learning” need to consider from three aspects: schools, teachers and students, so as to conduct research and analysis on these three aspects. Finally, the future prospect is made from four perspectives: the status of physical education curriculum, scientific physical education teaching, physical education curriculum function and students’ subject status.

Subject Areas

Physical Education

Keywords

Primary and Secondary Schools, Physical Education Teachers, “Learning but Not” Phenomenon

1. Introduction

Since 2000, the Chinese Ministry of Education has revised the “Physical Education Curriculum Standards” several times, in 2001, 2003 and 2011, respectively [1]. The sports curriculum standards promulgated in 2011 fully reflect the continuous reform and development of sports disciplines under the guidance of national policies. At the National Education Conference in 2018, General Secretary Xi Jinping stated that it is necessary to establish the educational concept of health first, open full physical education classes, and help students enjoy fun, enhance physical fitness, improve their personality, and temper their will in

physical exercise [2]. On the whole, although physical education in China stipulates its own teaching content and establishes a relatively complete physical education content system, when it is practically implemented in physical education teaching, various teaching activities at the grass-roots level will appear questions.

Many scholars have said that after years of physical education, students do not have a single motor skill. For example: In 2011, scholar Mao Zhenming stated in his article that many students love to play, but a considerable number of students do not like physical education classes because they feel that physical education classes are useless; some students cannot remember what they have learned in education classes. What, let alone what I learned [3]. At the International Youth Campus Football Invitational Summit Forum in 2016, Wang Dengfeng, director of the Department of Physical, Health and Arts of the Ministry of Education, said that Chinese students have to take physical education courses for 14 years, but most of the students did not even learn a sports skill. School physical education needs to reflect on why this situation occurs. In 2020, Ji Liu, head of the National Primary and Secondary School Physical Education and Health Curriculum Standard Development Team, said in an interview with reporters: “Many physical education classes in China do not sweat. Most students have studied physical education for 12 or even 14 years sports.” [4]

Secondly, according to the “Curriculum Standards” for the compulsory education stage in 2022, the physical education class account for 10% to 11% of the total class hours in the compulsory education stage, which is after the mathematics and Chinese class hours, about 952 class hours to 1047 class hours [5]. In 2020, the Ministry of Education revised the 2017 general high school curriculum plan and subject curriculum standards, requiring that the compulsory credits of high school physical education be 12 credits, each 18 class hours is a credit, a total of 216 class hours. Therefore, the total class hours of physical education in primary and secondary schools is about 1263 class hours, which is about 118.4 days if one person studies eight hours a day [6].

From this point of view, the “learning but not knowing” of primary and secondary school students in the education stage is by no means the time required by the national policy regulations. Then, the reasons for the phenomenon of “learning but not knowing” are worthy of our research and discussion.

2. Definition of “Learning without Knowing”

The dictionary defines “learning” as learning, which refers to the process of acquiring knowledge, mastering skills, and forming cognition; The word “won’t”, which is the opposite of “hui”, is defined as “do not understand, do not know” in “Jintian Hongzheng Inscription” written by Yuan Zhen of the Tang Dynasty.

The phenomenon of “learning but not knowing” in the field of mathematics is usually manifested as: the problem has been said many times, but the students still do not know; although the students have done a lot of problems, the mathematics performance has not improved [7]. However, according to the “dose-effect

principle of exercise”, that is, within a certain degree, the higher the degree of exercise training fatigue, the more obvious the recovery from excess, and the more obvious the effect of physical fitness improvement and technical improvement. Therefore, the phenomenon of “learning but not knowing” in physical education is different from “learning but not knowing” in mathematics and other disciplines, and has the particularity of sports [4].

In the field of physical education, physical education teachers in primary and secondary schools, while exerting their own dominance, impart knowledge or skills to students who are the subjects of learning. After learning, students can transform the content taught by teachers into their own knowledge or skills. This process is “learning to learn”. “Learning without knowing” is the exact opposite, that is, teachers teach skills or knowledge, students learn, but students do not learn the knowledge or skills taught by teachers.

3. The Status of Primary and Secondary School Sports

Although physical education is included in the sequence of the senior high school entrance examination, some schools have deep-rooted wrong attitudes towards physical education courses, and they still do not pay as much attention to physical education courses as literature subjects. There is an inequality on the learning efficiency problem, namely $8 - 1 > 8$. It means using one hour of physical exercise and the remaining seven hours of study, the learning effect is better than the effect of all eight hours of study. That is, the relationship between physical exercise and learning is mutually reinforcing rather than opposing [8].

As a result, there is a problem with the attitude of physical education teachers towards physical education classes, and the indulgence of the phenomenon of occupying classes may even lead to the phenomenon of giving up classes. The reduction of class hours will lead to a serious squeeze on skill learning time. At the same time, students hold cultural lessons. It is not uncommon for textbooks to go to the track and field. Especially near the end of the term, the results of physical education courses will not be taken seriously, and non-cultural subjects have to make concessions for cultural subjects, resulting in serious shortening of the teaching time of physical education courses, or even cancellation [9]. Not to mention the grades approaching graduation, all non-cultural subjects have to make concessions for the high school or college entrance examination. Therefore, in physical education classes, students want to relax their bodies and brains that are oppressed by cultural courses. Even if students are in physical education classes, cognitive and physical exercises cannot meet the requirements, not to mention the “learning” of motor skills.

In order to participate in or hold certain competitions in primary and secondary schools, such as aerobics competitions, radio gymnastics competitions, etc., physical education teachers in primary and secondary schools will be appointed to train or guide students. Lessons will be forced to become competition training and competition time. In order to achieve quality education and to

demonstrate the school's sports culture, other forms of school sports activities also emerge in an endless stream. In order to get a good place in the school competition, the head teachers of all grades can only turn their attention to the physical education classes conducted by physical education teachers. This kind of forced change of teaching content is not accidental in grass-roots teaching. Therefore, the students' "meeting" is only aimed at the skills desired by the school or the head teacher, not the physical skills and knowledge arranged by the physical education teachers in primary and secondary schools according to the textbooks.

4. Analysis of Related Factors of Physical Education Teachers in Primary and Secondary Schools

Physical education teachers are guides and edifiers of students' physical and mental health and moral cultivation, and have dual identities of physical education and moral education. The special identity of physical education teachers and their own moral quality play an equally important role in the cultivation of students' moral quality. Physical education teachers are the implementers of physical education courses, participants in the design of physical education courses, and responsible for completing teaching tasks, and play a leading role in the process of physical education teaching.

4.1. Insufficient Teaching Time for Physical Education Teachers

In physical education, we inevitably find that some physical education teachers teach each item for a very short time, and even change one item in a class, which is like a little bit of water [3]. In the actual physical education teaching, the implementation of a sports skill or teaching unit by primary and secondary physical education teachers generally takes 3 to 4 hours, but according to the actual situation of the students, such 3-4 class hours can not learn any difficult technology at all. If the physical education class is divided into three parts: preparation, foundation, and end, excluding the preparation part of the classroom routine and the time for warm-up activities, the time for managing classroom discipline, the time for commenting and encouraging, the time for the organization and mobilization of formations, and the finishing of the end part Summarizing the time, if considering the limitations of the school teaching environment, the differences in students' athletic ability, and the uneven level of physical education teachers, there is not much time left for students to really study.

At the same time, "spotting the water" teaching will also lead to the phenomenon of "low-level repetition", that is, the content of physical education is always repeated at a low-level in the physical education teaching of primary and secondary schools, and many more. We often hear things such as "China's universities, middle schools and elementary schools are teaching squat start", "Chinese students roll forward from elementary school to university and roll all the way to the end" [3]. Physical education teachers and students in primary and

secondary schools are very dissatisfied with this low-level repetition.

“Dragonfly on the water” teaching has led to the school physical education curriculum becoming a perfunctory superficial work. Physical education teachers in primary and secondary schools teach physical education in order to complete the teaching work. Students’ skills and physical health knowledge cannot be satisfied, and students’ physical and mental health is comprehensive. Development will also be limited because of this, which loses the real meaning of physical education.

4.2. Teachers’ Teaching “Steady State” Controls the Imbalance

Classroom discipline has always been emphasized in primary and secondary school teaching, not only for better teaching, but also for students to develop self-discipline and standardized behavior. If physical education teachers in primary and secondary schools have an unbalanced control of classroom discipline, too much will restrict students’ nature, and too little will indulge students’ wanton behavior.

Primary and secondary school students are lively and active by nature and have poor self-discipline. Some physical education teachers in primary and secondary schools will strictly control classroom discipline, and students will be uniform at the request of teachers. This undoubtedly stifles the enthusiasm of students, and the teaching effect will rebound, causing rebellious behavior in students’ classrooms. If we consider that the teachers’ own professional ability is relatively weak, the teaching content and teaching methods arranged are too monotonous, it is difficult to effectively stimulate the enthusiasm and interest in sports learning of the student group, and students are expected to listen to the lectures in a standardized way, then in this case, the control of classroom discipline is even more serious.

If the physical education teachers in primary and secondary schools are too indulgent to the students, that is, the control of classroom discipline is too light, then the students will completely liberate their own nature, the self-control ability of primary and secondary school students is relatively weak, and the students who like to play will have a great sense of space and freedom. Free yourself on the playground. Even if the physical education teacher is teaching, while the students are listening on the surface, their inner attention is already on playing with their friends, and finally a “sheep-herding” classroom will be formed. The mockery of “all free” is not empty talk [9].

5. Questions about Student Body

In the process, students as the main body of learning learn the content of physical education under the teaching, guidance and guidance of physical education teachers. The physical and psychological development of primary and secondary school students are in a very sensitive period, which is the fastest growth period, and between 7 and 16 years old, boys’ physical quality improves the fastest; girls

between 7 and 13 years old have the fastest growth rate of physical fitness [10]. Students' psychological state and their own foundation determine their attitudes and acceptance of sports knowledge and skills. What students receive in school is not only cultural education, but also the exercise and improvement of students' cognitive ability, as well as the enhancement of physical quality.

5.1. Student Escape Movement

The distinguishing feature of physical education courses different from other courses is the physical activity. The spiritual understanding cannot be directly reflected in the physical action and behavior. It needs continuous practice to form the action memory, which eventually becomes a standard action skill. In the physical education teaching of primary and secondary schools, we will inevitably find that some students do not engage in physical activities during the practice time of physical education classes. Even if teachers arrange independent activities, some students will only gather in groups to chat or Read culture textbooks; some students will take advantage of teachers' sympathy and lie about their illnesses in order to get fake notes and so on.

5.2. Cognitive Development of Students

Cognitive scholars believe that people have different internal modes of receiving information, processing information, and using information at different stages of cognitive development teaching program. Education must follow the law of children's development, and must not impose the content of transcendence and lag on children [11]. According to the survey, the cognitive ability of students in primary and middle schools in physical education is uneven. Some students have formed the foundation under the early education, but some students only have preliminary concepts. We must admit that students are individuals with independent significance, and they cannot be transferred by the teacher's will, so the concept of teaching students in accordance with their aptitude will also be proposed and implemented. The cognitive ability of the students cannot be transferred by the will of the teacher. When the students cannot accept the content they have learned, without a lot of time for the cognitive process, the skills they have learned cannot be mastered.

During the period of education, the cognitive ability of primary and secondary school students continues to develop, and the ability to accept the teaching content of physical education teachers is also constantly improving. However, if the content taught by physical education teachers in primary and secondary schools is contrary to the laws of cognitive development of students, students will not be able to make correct judgments and responses. Although they follow the guidance of physical education teachers to study, the results must be unsatisfactory.

6. Outlook

The emergence of the problem of "learning but not knowing" is not accidental,

but it is actually a result of years of physical education. It is not that the grassroots physical education teachers have not discovered this problem, but they are gradually working hard to solve it under the pressure of the school, teachers and students. Any problem will have a corresponding solution, and it only takes time.

6.1. Correct the Status of School Sports

First of all, Liu Yandong emphasized at the National Symposium on Sports Work in Primary and Secondary Schools on September 3, 2017 that it is necessary to effectively implement General Secretary Xi Jinping's important expositions on building a strong country in sports and education, promote the reform and development of school sports, and strengthen physical education and physical fitness., to promote students' physical and mental health, strong physique, and all-round development, and cultivate builders and successors of the socialist cause with Chinese characteristics [12]. Therefore, in order to achieve this goal, we must attach importance to school sports work and strengthen the emphasis and investment in school sports.

Secondly, after the implementation of the policy of incorporating sports scores into the total score of the senior high school entrance examination, the emphasis on sports courses in junior high schools has increased unprecedentedly. One of the reasons is that sports scores can be obtained only through physical exercise, rather than mental activities like cultural classes. After the implementation of the policy, calls for sports to be included in the college entrance examination also followed. In this regard, it is necessary to ensure that physical education classes are carried out on time and according to the teaching arrangement, correctly view the physical education results, and clarify the benefits of physical education classes.

6.2. Scientific and Innovative Physical Education Teaching

In the new era, the Central Committee of the Communist Party of China and the State Council have attached unprecedented importance to school sports work, and issued a series of documents. Each of these documents has rich connotations, fully explaining the importance of the school's physical education curriculum, the arduousness of the task, and the necessity of reform, innovation and exploration [13]. The scientific and innovative nature of physical education teachers' teaching has a crucial impact on the physical education classroom. Scientific and innovative physical education teaching can reasonably impart the content of physical education teaching to students, so as to avoid "students like sports but dislike physical education". Only when the phenomenon occurs can the "big cycle" and "small cycle" be arranged more reasonably. We need to uphold the spirit of advancing with the times, reform and innovation, have the courage to practice exploration, deepen curriculum reform, and improve the quality of education and teaching [14]. In response to students' curiosity, the

original teaching methods were improved and innovated, so that participation in physical education classrooms became the active behavior of students. We should look for case studies from the past physical education activities, find teaching obstacles, identify key links, clarify innovative methods, and achieve accurate and scientific teaching.

6.3. Give Full Play to the Function of Physical Education Courses

The essential function of school sports is to educate people. “School Physical Education Course” believes that, as an important content of school curriculum, physical education curriculum has some special functions of its own in addition to the same educational function as other courses. Cultivate students’ sports interests and specialties, and lay a solid foundation for lifelong sports; cultivate good personality and promote students’ mental health; strengthen teamwork, competition awareness, social adaptability, etc. [15]. Physical education is not only a physical activity course, but also a course for students to learn emotions and skills. The full play of the functions of physical education courses can not only reduce learning pressure and promote mental health, but also cultivate students to have a healthy physique, lay the foundation for lifelong sports, cultivate a sound personality, cultivate teamwork and competition spirit, and improve social adaptability.

6.4. Respect for the Dominant Position of Students

The object of students’ urgent care in school sports is also the active subject in sports activities, and it is the dialectical unity of object and subject [15]. The teaching of physical education teachers should reflect the new concept of “people-oriented” physical education, provide students with more personalized choices as much as possible, respect and inspire students’ thinking, and change the tradition from many aspects, angles and ways. It creates a democratic and harmonious sports learning atmosphere, gives full play to the subjectivity of students, stimulates their potential, and enables them to obtain a happy emotional experience.

In a word, on the basis that the school attaches great importance to physical education courses, teachers’ scientific physical education teaching, exerts the functions of the courses, and respects the dominant position of students, it should deal with the problems of mutual extrusion and mutual blocking among teachers, students and schools. The development of sports will surely conform to the development of the times, so that my country will take a solid step on the road of building a “sports power” in an all-round way.

7. Conclusion

The phenomenon of “learning but not knowing” in the physical education curriculum of primary and secondary schools is caused by the three parties of the school, teachers and students, so it is necessary to coordinate the three parties.

While paying attention to the status of school physical education in the school curriculum, it's necessary to give full play to the role of teachers in physical education teaching, the role of promoting the formation of students' motor skills and the overall development of physical and mental health.

Conflicts of Interest

The author declares no conflicts of interest.

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