

The Probe into the Application of Intelligent Bracelet in the Teaching of Children's Physical Activities

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Abstract: the application of intelligent bracelet in physical education teaching has been paid close attention to by educators, this paper combs the present situation of the development of intelligent sports bracelet and sums up its main characteristics, analyzes on the significance of introducing intelligent bracelet into children's physical activity teaching, and puts forward the application paths of intelligent bracelet in preschool sports teaching, real-time monitoring of sports status in class and analysis of after-class sports data. The teaching of children's sports activities based on intelligent sports bracelet realizes the deep integration of people and intelligent bracelets as well as the classroom. It can not only improve the enthusiasm of students to participate in the classroom, but also promotes the individualized teaching of children's physical activities and improves the teaching of children's physical activities. Evaluation system realizes, to achieve a new way of interaction between young children and science and technology.

1. Introduction

With the rapid development of "Internet + education", Internet of things Things technology has been widely used and developed in school teaching, . among whichFor example, the introduction of intelligent bracelet equipment in children's sports activities is a typical representative. According to the characteristics of young children, organize vividly, interersting and interesting, various forms of sports activities, introduce intelligent sports bracelet into the curriculum of children's sports activities, and attract young children to actively participate in activitiesattract children to take the initiative to participate in activities, in order to explore a new way of interaction between children and science and technology, and provide each child with exclusive and personalized sports health services.

2. The Bbasic Functions and Main Characteristics of Intelligentintelligent Bracelet

At present, there are all kinds of intelligent bracelets on the market. Most, most of them have such basic functions, such as: exercise data monitoring, intelligent alarm clock, fitness step monitoring, sleep monitoring, vibration wake-up, related mobile phones, etc., A few number of intelligent sports bracelets have the function of heart rate measurement, call reminder, record nutrition status, health reminder and other functions.a small number of smart exercise bracelets also have heart rate measurement, call reminders, record nutrition, health reminders and so on. Gudong bracelet, Xiaomi bracelet and, Huawei bracelet and so on,ect. are all the representative products of intelligent bracelet. The main characteristics of intelligent bracelet are as follows: (1) Pportable wearable. Intelligent sports bracelet is small and lightweight, making itSmart sports bracelet is small, lightweight and easy for people to carry. It can be used anytime, anywhere in daily life. (2) Operatively associated with mobile phone.Association Mobile phones are operable. Some smart sports bracelets can be associated with mobile phone APP, to calculate calorie intake and consumption. Other bracelets are added to the Internet of things Things technology, which can be used to control home air conditioners, televisions, and consumer payments. (3) Information

visualization. All the data recorded by intelligent motion bracelet can be transmitted to the cloud. Cloud resources push the data to users, provide providing users with visual images and information, and makemaking personalized motion schemes for users.

3. The Significance of Introducing Intelligentintelligent Bracelet into the Teaching of Children's Physical Activities

The practice density and physiological load index of physical education class are not only the key indexes to measure the quality of a physical education class, but also the key to whether physical education can promote the physical quality fitness of students. ^[1] inIn recent years, with the rapid development of science and technology, 360 child guardsChild Guards, small geniusLittle Genius, Abachi Abardeen and other children's products have attracted the attention of the market. The development of technology has stimulated researchers and educators to expand the concept of learning and the design of learning environment. ^[2] peoplePeople are committed to integrating science and technology into teaching to make our teaching more scientific. Intelligent sports bracelet can stimulate students' interest in learning, better master sports technical movements, and better evaluate teaching quality and improve the modern teaching mode.. And perfect the modern teaching mode. ^[3] theThe introduction of intelligent sports bracelet into the classroom of children's physical activities can not only enhance students' participation in sports activities, promote individualized teaching in children's physical education classroom, but also improve the teaching evaluation system of children's physical activities.

3.1 Improveimproving the Enthusiasm of Students for Class Participateto Participate in the Classroom

Although the bracelet is small, it shines brightly in the physical education classroom, enhances the interest of the physical education classroom teaching, stimulates the enthusiasm of the students' sports sports, and improves the efficiency of the physical education classroom teaching. ^[4] mostMost of the traditional children's physical education teaching likes a pot of cooking-mixed teaching together.is a pot of cooking. The intelligent sports bracelet is applied to the children's physical education teaching activities, which changes the traditional teaching mode, makes the classroom more vivid and interesting, and improves the students' enthusiasm for classroom participation.Theparticipation. The classroom of children's sports activities, based on intelligent sports bracelet, can greatly improve the enthusiasm of students in class participation,of students to participate in the classroom, which is mainly reflected in these aspects: (1) Intelligent sports bracelet can monitor students' heart rate in the classroom of children's sports activities in real time, so that teachers can understand learn about students' sports situation in real time, and they can give students appropriate help in time. (2) Intelligent sports bracelet helps teachers to collect, analysis and process students information,collect students' information. Analysis and processing of student information, so that the design of teachers' teaching activities becomes more scientific, which makes students' movements more standard, postures more beautiful and participations more frequent during exercises.students in exercise movement is more standard, posture is more beautiful, students' participation in the classroom is greatly increased. (3) Intelligent exercise Bracelet itself is more attractive to students, because students are very interested in science and technology electronic products, t. Therefore, the introduction of intelligent sports bracelet into children's sports physical activities classroom has a strong interest and increasing participation in the classroom.students' interest, participation in the classroom is also increased. (4) theThe students' sports data recorded by intelligent sports bracelet will be fed back to the students in real time, students so that they can see their own sports data at any time, . Because children have strong curiosity, so they will compare their own data with others. When feeling that they cannot catch up with others sports time, students will have a sense of competition, so they will be more involved in the classroom and improve their enthusiasm for participation in physical class.and children's curiosity is strong. Will compare their own data with the data of other students, feel that they do not have other people's sports for a long time, students will have a sense of competition, so they will be

more involved in the classroom, improve students' physical education class The enthusiasm of the hall to participate.

3.2 Promoting Individualized Teaching of Children's Physical Activities

The teacher platform has the sports data of each student. The teacher can analyze the data of each student to know whether the student exercise amount is up to standard, and Through the analysis of the data of each student, the teacher can understand whether the amount of exercise of the student is up to standard, analyze whether the student's action has a standard, the, The teacher can appropriately remind the student of correcting their actions and adjust his teaching design according to the real-time data of the students. properly remind and correct the action of the student, and adjust his teaching design according to the real-time data of the students. Through the analysis of the students' data, according to the different situation of each student, the teacher can put forward more reasonable suggestions for the students' exercise after class. The teacher can feedback the analyzed data to the students, and the students can do appropriate exercise according to their own situation, so that the students can learn to manage themselves healthily. Take care of health. In addition, teachers can also analyze the data to know the students' intensity, train their sports specialty according to their hobbies and develop their sports spirit. to understand the intensity of sports, according to the interests of students to carry out sports specialty training, the development of sports spirit.

3.3 Improving the Teaching Evaluation System of Children's Physical Activities

Scientific, objective and reasonable evaluation of modern physical education classroom teaching can promote quality education to be truly implemented in physical education classroom teaching. [5] while While the traditional teaching evaluation mainly depends on teachers' classroom observation. As for students,, for students, such evaluation will sometimes make students feel unfair, especially the large number of students in class. Teacher's ignorance will make students feel that they are not valued so that the evaluation is unfair. the class size is large, teachers do not notice, will make students feel that teachers do not attach importance to him, evaluation is unfair. The intelligent sports bracelet records the sports data of each student before, during and after class. By analyzing the data of each student, the teacher can compare the students horizontally and compare them with each student in the class. To see whether the performance is excellent or not, to observe whether their performance is excellent or not. we We can also compare it vertically with each previous performance of the student to see if there is any progress, so as to evaluate the students objectively. In the evaluation, according to the data analysis, the problems of the student can be pointed out, and we can propose specialized sports plan and make appropriate sports program for him. we can point out the problems existing in the student, put forward separate sports suggestions for him, and make an appropriate sports program for him. In this way, teachers' evaluation of students is fairer and more accurate. When students find their own problems, they will also have greater more passion for sports.

4. Application Design of Intelligent Bracelet in Children's Physical Activity Teaching

The classroom of children's sports activities based on intelligent sports bracelet embodies the modern educational concepts such as “student-centered”, “teachers play a leading role”, “ and “individualized learning” and so on. According to the main characteristics of intelligent sports bracelet and its application prospects in the field of physical education, we have some ideas for children's sports activities based on intelligent bracelet. Through the introduction of intelligent sports bracelet, real-time acquisition of learners' sports status, such as heart rate, the number of steps, sleep status, etc., etc. Also with the help of high-speed Internet, cloud platform and big data for data analysis and processing, teachers through pre-class data analysis to formulate the corresponding physical activities teaching plan, through the class The the real-time data analysis in the class to judge whether the students' movement is standard, judges whether the students' movement is standard, whether the amount of exercise is up to standard, whether the intensity of

exercise is too large, and whether the time allocation is reasonable, so as to further guide the students to carry out physical education. After class, teachers can analyze the personal data and class overall data, reflect on whether their teaching activity design is reasonable, adjust the teaching activity design, and the teacher can feedback the data to the students. So that students can personally choose their favorite way of exercise. Teachers analyze the class students' personal data and class overall data, reflect on whether their teaching activity design is reasonable, adjust the teaching activity design, and the teacher can feedback the data to the students. So that students can personalized choice of their favorite way of exercise.

The application of intelligent sports bracelet in the teaching of children's physical activities is divided into three parts: pre-class, during in-class and after class, that is, pre-class data acquisition, real-time monitoring of sports status in class and analysis of after-class sports data. ^[6]

4.1 Acquisition Obtaining of Pre-School Data for Young Children

The collection of information is the first link of the whole information work. Only when the information is collected in a timely, extensive and accurate manner, the subsequent timely, extensive and accurate collection of information, the follow-up work of each link can be carried out smoothly. [7] Intelligent sports bracelet has a lot of basic functions, which can record students' heart rate, the number of steps, sleep status and other data, and push it to the cloud platform for data analysis and processing. Carry on data analysis and processing, teachers obtain students' pre-class exercise data, such as exercise intensity, exercise density, and personal heart rate, etc. Compare horizontally: compare the amount of exercise of each student, analyze and measure the exercise intensity and average intensity of the whole class. Also, compare vertically: compare the difference between different classes, formulate the appropriate teaching plan and define the design goal. Horizontal comparison, compare the amount of exercise of each student, analyze, measure the intensity and average intensity of the whole class, compare the differences between the class and the class, and formulate the appropriate teaching. Learn to plan and define the design goal.

4.2 Monitoring the Amount of Exercise in Children's Class

With intelligent sports bracelets, our physical education class has become more scientific. In the class, the intelligent sports bracelet monitors the student's movement status and then feedback it to the teachers' platform in real time so that the teacher can always pay attention to the student's dynamics. With the collected data information, the teacher can provide the reference for the teaching according to the different data information. The movement status of the students in real time, feedback the motion data to the teacher platform in real time, the teacher always pays attention to the student dynamics, has the collected data information, the teacher can provide the reference for the teaching according to the different data information. According to the pre-class data information and the individual characteristics of the students, the teacher can set the early warning value for each classmate before class, that is, the maximum exercise load that the student can achieve. Once the student reaches the early warning value or the maximum exercise load will be soon exceed, the alarm will ring. In this way, teachers and the students are promoted to prevent the student from exercising excessively and causing physical damage. Once the student reaches the early warning value, the maximum exercise load will soon exceed the maximum exercise load, the alarm will ring, thus prompting the teacher and the student to prevent the student from exercising too much. Quantity can cause physical damage, and damage. And it can also help teachers to observe and find out the exercise limits of different students and their different sports needs. Different data can provide different references for teachers, and teachers can combine data information with their own teaching experience. At present, the classroom structure of physical education is basically carried out in accordance with the three major sections of preparatory part, the basic part and the ending. At present, the classroom structure of physical education is basically according to the starting preparation part, the basic part and the end part. The part. The theoretical basis is the movement law of human physiology, that is, "the body is ready to enter the working state-the body enters the working state-the body relaxes relaxed". ^[1] Most of the teachers rely on their own teaching

experience and classroom time to arrange and allocate, so that the students' exercise is relatively not scientific enough. The data provided by intelligent sports bracelet can enables teachers to make reasonable arrangements, according to the actual situation of students, reasonable allocation of time, flexible and flexible organization of activities which makes our sports activities become more scientific and the classrooms more efficient. Let our sports activities become more scientific, make our classroom more efficient.

4.3 Analysis Analyzing of the after-Class Exercise Data

Intelligent sports bracelet can transmit, store, process and display all kinds of information generated in teaching activities in real time. After-class analysis and the After class analysis, the processed data can be transmitted to the teacher platform and the student platform in real time with the help of the cloud platform of the Internet. From the beginning of the exercise to the end of the exercise, the teacher can compare the movement status of each student through horizontal comparison. According to the changes of the student exercise intensity, we can see if each student in this class of their exercise quantity, exercise intensity is up to standard, and observe the whole class. According to student's exercise intensity curve and the analysis of the class's average exercise intensity in what position, teachers can analyze themselves Whether their design of teaching activities is reasonable or not. Teachers can also compare each class vertically, that is, each class can compare with each other, so that they can make different teaching activity designs according to the different exercise intensity of each class. For example, the exercise intensity of one class is higher than that of the other class, then the teacher can design different activities for two classes during teaching, and the class with higher exercise intensity can carry out a slightly more strenuous exercise. Another class can design a slightly moderate exercise. The teacher can compare the movement status of each student through horizontal comparison, from the beginning of the exercise to the end of the exercise, the student's exercise intensity changes, to see if each student in this class their exercise quantity, exercise intensity is up to standard, observe the whole class. Their exercise intensity change curve, analysis of the class's average exercise intensity in what position, can analyze themselves Whether the design of teaching activities is reasonable or not. Teachers can also compare each other vertically, that is, each class can compare with each other, and make different teaching activity designs according to the different exercise intensity of each class. For example, the exercise intensity of one class is higher than that of the other class, then the teacher can design different activities for two classes during teaching, and the class with higher exercise intensity can carry out a slightly more strenuous exercise. Another class can design a slightly slower exercise.

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