Research Article

Implementation of Embedded Microprocessor in Optimal Teaching of Physical Health in the Internet Era

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The emergence of the online media environment has made the social environment faced by contemporary students more complicated. How to adapt to the rapid development of the network media environment, correctly grasping yourself in the complicated network world, not indulging in the network, is one of the focuses of many families and schools. As a media environment, the network has the advantages of rapid dissemination, large amount of information, strong interactivity, and rapid release. Especially through the integration with traditional media and new mobile media, it has become an important source of people’s access to massive information. It has had a profound impact. For college sports health science, how to guide students to use online sports health resources for independent learning is an important topic in the reform of college sports health education in the new era. How the university sports health science under the Internet environment can help the development goals of the healthy China in the new era becomes the theoretical problem of the in-depth study of sports health care in colleges and universities in China. This paper studies the optimization and implementation of the teaching principles of sports health in the Internet era. It integrates all the teaching principles of sports health since the reform and opening up and then produces questionnaires. The professors of the teaching of health education are the subjects of the survey. They conducted three rounds of questionnaire survey on the integrated teaching principles of 51 sports health education and analyzed the statistics of each round by mathematical statistics and logic analysis. After the logic unit consumption optimization, the microprocessor performance has been greatly improved and the critical path delay performance optimization maximum value has been increased from 4.69 to 8.24.

1. Introduction

Sports health is a conscious, purposeful, and organized social activity that uses physical activity as the most basic means to follow the scientific methods and techniques to improve the physical fitness and skill level of the practitioner. At the same time, sports health as a cultural phenomenon needs to be widely disseminated in order to be popularized and improved [1–3]. This has created a close connection between sports health and the media. With the advent of online media, the advantages of large information content and fast spread speed have broken the monopoly of traditional Internet on the dissemination of information. The information about sports health care spreads through the network and makes the relationship between the Internet and sports health science. Closeness also provides a broader platform for the rapid development of sports health-related industries. At this stage, the number of professional sports health education websites in China is increasing [4, 5], such as Tigers Sports Health, Sina Sports Health, Live, Octopus TV, 310 Live, 7M Live, A Live, Snow Mart, LeTV Sports health care, wow sports health, 24 live broadcast, and daily live broadcast. The content covers all aspects of sports health. It enables people to watch sports health education games anytime and anywhere through the mobile Internet and can also learn more about domestic and international sports health education information more quickly and accurately. You can also use the online event playback feature to watch sports health games that you do not see when people miss an exciting event. By browsing the Sports Health Science website [6–9], you can quickly and easily get the news information about sports health care. The rich sports
health network information resources can provide users with a variety of sports health science knowledge, sports health care, sports health lectures, sports health education reviews, sports health star introductions, and so on [10–13]. Principles of physical education refer to the criteria that physical education must follow, which reflects the objective laws of physical education. The basic principles are as follows: the principles of consciousness and enthusiasm, the principle of intuition, the principle of starting from the actual departure, the principle of step-by-step progress, the principle of comprehensive development of the body, and the principle of rational use of exercise load, consolidation, and improvement principles.

The processor under the single-core architecture executes multiple instructions concurrently, not in parallel, so only one process or thread runs at the same time, which cannot fundamentally improve computer performance. One of the most important advantages of multicore processors over single-core processors is that they are easy to optimize and expand. Embedded microprocessors have a wide range of applications in industrial control, personal consumer electronics, communications, and military industries. Many early computers adopted the von Neumann structure, which is not commonly used now. Modern processors widely use the Harvard structure to meet the increasing demand for performance. Among them, the ARM series microprocessor occupies the largest market share in the mobile market and is in a leader position [14–16].

The Internet has entered the education industry. The concept of "Internet +" has pointed out the direction for the development of our traditional education industry. Yang Zhiyong pointed out in his book that the Internet has provided new development opportunities for the development of traditional education because of the traditional secondary vocational position. The teaching method of sports health education in schools has been unable to meet the personality development of students, and students' ability to learn independently is also limited. We need to provide new development channels for traditional education development and indicate new directions for development. Similarly, Li Yanqin also coincides with Yang Zhiyong's views in his work. He also supports the "big data era" opened up by the Internet to bring new vitality to our traditional education [17]. Therefore, digital education gradually changes traditional education. At the same time, Sun Quan also analyzed the various shortcomings of traditional secondary vocational schools in his works and Zhu [18]. Their "experimental" teaching methods can also improve classroom efficiency and cultivate students' individuality and self-learning ability. The study found that the traditional methods of education and teaching have limited students' ability to learn independently. The overall teaching quality of traditional teaching methods has retreated or stopped, students' ability to innovate has been limited, and students' personality development has been restricted [19]. Li Yanqin, Wang Yingna, Shen Chenglin, and other scholars in response to these existing problems [20, 21], according to the development and reform of traditional secondary vocational schools in the context of "Internet +", also proposed "creation teaching method," "reverse thinking teaching method," "situation Set teaching methods," "inspired teaching methods," and other reform methods for traditional secondary vocational schools [22–27]. The emergence of the "Internet +" era has completely changed the traditional sports health education teaching model, making up for the technical defects and deficiencies of the traditional sports health education teaching, bringing more free sports health education teaching space and more convenient sports health learning methods. Make a technical change in the original boring sports health education teaching. As an important Internet and carrier for optimizing the teaching of traditional sports health education [28–31], Internet technology not only improves the effectiveness of teachers' sports health education but also improves the efficiency of students' sports health learning. More importantly, digital sports health education breaks the shackles of traditional teaching [32, 33], gets rid of time and space restrictions and regional imprisonment, truly pays attention to students' individualized differences, cultivates students' awareness of lifelong sports health training, and stimulates students' inner existence. The interests and appeals of sports health care meet the diverse needs of students in sports health education and improve the quality of sports health education. At the same time, it also provides technical support for the reform and innovation of sports health education in China and better promotes the development of school education. With the advancement of science and technology and the increasing level of living standards, the per capita life expectancy has become increasingly extended. Information and medical technology are supported by computer technology, and the family can enjoy the professional-level monitoring of the hospital at home with the family as the core.

The lifestyle of students in the Internet age is itself a special group lifestyle, which is different from the lifestyles of other social groups in contemporary society and the lifestyles of students in history. The widespread use of the Internet has made the digital network culture a new cultural trait in the Internet age. The Internet environment in the Internet era has attracted students with diversity, complexity, entertainment, interaction, and virtuality; quickly became their main channel for understanding the outside world; and profoundly affected their behavioral habits [34, 35]. While the Internet brings convenience to students' life and communication and the improvement of their understanding, their negative influence cannot be ignored. For example, the reality and virtual coexistence of the Internet can easily lead to the imbalance of interpersonal relationships and the alienation of network personality; indulging in the network has a negative impact on the physical and mental health of students; some violent, pornographic, and superstitious information in the Internet causes information pollution to the campus environment [36–38]. These problems affect the normal socialization process of students and need to be highly valued by us. The general microprocessor contains three main registers, one test control register (TCR) is used to provide microprocessor instruction operating code when test mode, a linear feedback shift register (LF-SR) and a multilosing feedback feedback the displacement registers
(MISR) are used to generate random data and compressed test responses, respectively.

Enhance the storage protection ability of the embedded microprocessor for important data through the expansion design, and at the same time have the acceleration engine function of the specific algorithm. Due to the influence of everyone’s understanding and experience, the different perspectives lead to the existing teaching principles of sports health education. However, there are fewer studies on the teaching principles of sports health under the new curriculum standards, and fewer papers. Individuals have personal opinions, but they all have limitations. Which one we use when choosing is more appropriate, which requires us to explore, so it is very important to seek better teaching principles of physical education to guide teaching practice. This paper mainly integrates all the teaching principles of sports health education from the reform and opening up to the present through the literature and data method and then produces a questionnaire. Through the expert survey method, the professors in the field of sports health education are studied in the university, and the integration of 51 teaching principles of sports health education was conducted in 3 rounds of questionnaires, and the data obtained from each round were analyzed and counted by mathematical statistics and logic analysis, and expert opinions were collected. Finally, 8 sports health education with the highest concentration of expert opinions were obtained. The main research content of the paper includes the following: the hardware composition of the hardware constitutes the connection method of the hardware of the development board to introduce the connection methods of each functional module and the microprocessor. The system software focuses on analyzing the embedded system guidance program and was finally tested on the hardware platform. Application software is based on designing embedded medical care terminal application software.

2. Proposed Method

2.1. “Internet Plus.” “Internet Plus” is a new form under the development of the Internet driven by Innovation 2.0. It combines the Internet with traditional economic industries, makes full use of modern information technology and Internet information platform, promotes a new model of traditional industry economic development, and realizes the tradition. Due to the special technical characteristics of the Internet and the special business management mode of Internet companies, Internet sports health learning has some differences from traditional sports. The new wave of sports led by the Internet New Wave has its new features [2]. “Internet +” is mainly user-oriented, combined with the latest technology, not only forms an “iron triangle” with sports, innovation, venture capital but also provides technical support and thinking innovation for traditional industry updates. Sports has the characteristics of strong derivative and has more extensive cooperation space with traditional industries. For example, Vipshop, Taobao, Dangdang, Alipay, and Applepay are traditional department store purchases, traditional bank counters, traditional cash payment methods, etc. Effective combination of the Internet “big data platform” is a new model of sports innovation. This multi-component combination of Internet sports and traditional business not only shortens the distance between enterprises and users but also accelerates the pace of innovation of enterprises and makes sports people directly contact with users to meet The various needs of users, the “extra function” brought about by the “Internet” has greatly promoted the cultivation of the innovative spirit of sportsmen and promoted the development of China’s market economy. Thus, simply speaking, “Internet +” refers to relying on Internet information technology to promote the deep integration of the Internet and traditional industries, give full play to the advantages of Internet big data, achieve industrial product structure upgrades, improve economic productivity, and ultimately achieve an increase in social wealth.

2.2. “Four-Segment” Sports Health Education Teaching. The traditional “four-stage” sports health education emphasizes the key points of teaching in every aspect of the actual teaching operation, including the work focus of the sports health education teachers and the learning priorities that students need to understand. At the beginning of the “four-segment,” more emphasis is placed on the declaration of this course, teaching the content and work of this sports health course. Sports health teachers are often elaborated based on the teaching content of the original prepared teaching plan. At this stage, students have almost no interest in learning, and they have not yet entered the state of learning because they are already familiar with what their teachers will emphasize in this class. In the actual motor skills transfer course, this “beginning part” is more “notification content,” that is, “reading” and “sending” the main possible content in this sports health course, it has no real meaning. Guide students and attract students to participate actively in the classroom. Generally speaking, this part is very important, paying attention to the guidance of the course, and the correct way of guiding, will definitely make the teaching work of sports health-care workers very easy and achieve twice the result with half the effort. In the “four-stage” preparation section, more emphasis is placed on the preparations required for this course in this sports health project. The PE teacher will divide the lecture content of this sports health education project into different class hours, and each class will be taught step by step according to the teaching tasks planned in the teaching plan. The narrow understanding is that in the actual “preparation part,” the sports health education teachers need to prepare the course for this sports health education course at the beginning of each course: for example, through language, or the introduction of the general action, to introduce this course, let the students have a basic understanding of the content of the course, and can intuitively understand the difficulty of the course. This part can have two levels of meaning, on the one hand, the end of the summary of the sports health project, and on the other hand, the final exam and assessment of this sports health project. The narrow sense is that in the actual traditional sports health education teaching, the end of the course is the end of this course. The sports health teachers make a
brief summary of this course and point out the difficulty of this sports health course. In order to test the student’s grasp of the situation, the final test is conducted by arranging the test. This traditional “four-stage” sports health teaching method can also pass the teaching content to students. However, this “pre-emptive” and “passive cramming” learning approach not only brings heavy and repetitive tasks to the sports health teachers themselves but also hinders the individualized and active thinking development of the students. It has slowed down the reform of sports health education.

2.3. Digital Sports Health Education. The concept of digitization is applied to the classroom of sports health care, mainly through the teaching of sports health knowledge through various information resources, which makes the whole sports health education teaching process more intelligent and standardized. Informatization resources include not only various hardware information resources provided by computers, mobile phones, projections, etc. but also various software management resources such as various teaching management software, course monitoring app, and multimedia network materials. In the process of modern digital sports health education, using the convenience of various information resources, the boring, cumbersome, single, and one-sided written physical education teaching content will be displayed through animation, video, audio, and other methods. It is the most popular and most effective teaching method available today. In the process of digital sports health education, we can make use of the convenience of network resources to build a network digital management platform, so that the sports health teachers can supervise and manage the teaching courses and manage the students’ learning effects, so that students can independently carry out sports health courses. Difficult learning allows sports health teachers to improve management efficiency and teaching efficiency. It also enables students to master the key and difficult points in the sports health curriculum more vividly and improve the learning efficiency.

The teaching of digital sports health education has gradually surpassed the traditional sports health education teaching mode in the era of “Internet +”. More and more colleges, especially those with more time-honored secondary vocational education, have begun to use the digital education methods of the information age to conduct course teaching, especially the sports health courses that focus on student experience, interaction, and participation. Students not only need to learn the basic knowledge of the course in the sports health course but also many different courses in sports health courses, such as the “three-step hurdles” of basketball training courses and the “soccer positioning” of football training courses. The training content requires a certain amount of accumulated practice. Due to various factors such as the time of the course, the course venue, and the weather of the class, it is difficult for students to grasp the essentials of the “three-step hurdle” in the true sense. It is difficult for students to grasp whether their actions are standardized or not. Therefore, through digital teaching methods, sports health teachers can provide students with various related videos, animations, etc. for multimedia indoor teaching.

They can also communicate online with students through online management platforms to timely master students’ courses on sports health. The degree of mastery allows students to study sports health courses in a variety of different ways and in different ways participate in the study of sports health courses. Users can send appointment requests to the center website at any time to return the appointment for consultation time according to the doctor’s time arrangement. Of course, the user also has the permission to cancel the appointment. If the appointment is successful, the appointment time, users and the attending doctors can conduct remote video consultation.

2.4. Internet Sports Health Information. A considerable part of the Internet information bears the role of the government. Generally speaking, in the process of students’ socialization, the role and value of guidance is unquestionable. Due to the rich and varied social life, the personality differences of the student groups are becoming more and more obvious, and the effectiveness of Internet information in guiding students is facing enormous challenges. Because of the economic interests and the diversification of economic composition, social organization, and lifestyle, students’ differences in material life, spiritual life, working environment, and ideological realm are more and more obvious, and the influence of one-way thinking guidance can be covered. Faces will gradually shrink as the individual differences become more apparent, and the effect will continue to decline. In this context, the guiding function of Internet information can only effectively play its role by continuously deepening the theme and innovative forms. At the same time, communication is the primary task of Internet information. Because students are the key period for the formation of world outlook, outlook on life and values, Internet information needs to disseminate correct and comprehensive information to students. In particular, it is necessary to deal with several relationships, that is, the media also needs to carry forward the excellent traditional sports health culture when spreading the modern sports health culture to students. In the content of Internet information reporting, sports health education is an important source of news and content of Internet information.
information. Because it will have a huge impact on people’s sports health lifestyle and the development of sports health science, Internet information is especially comprehensive. Influential Internet information must be reported in the field of sports health. However, the main role of determining the specific mode of communication and reporting content is the law of the operation of the news media itself. Indeed, the lives of modern people are closely linked to Internet information. In modern society, especially the popularity of electronic Internet, it has brought a new cultural environment and a broader vision of the observing society. The Internet gives people a world that cannot be described and experienced by language alone, so that they can acquire education, edification, cultural knowledge, morality, aesthetics, behavioral norms, interpersonal relationships, etc., and understand the society they are going to enter. Overview: the Internet has become a teacher to guide students in social learning. Students observe and imitate social behavior through the Internet, which is a study that relies on indirect experience. Many athletes on the Internet are heroes of student worship, and it is easy to stimulate their imitation behavior. In general, students first observe the behavior and consequences of Internet characters, then imitate, and observe the consequences of their imitating behavior. If it can be accepted by society, this temporary imitation may develop into its fixed behavior pattern. The influence of Internet information on students’ interest in sports health care and idol worship is far more than the interpersonal influence of teachers, classmates, and parents. The introduction of various sports health education events and related knowledge in the society reflected by the Internet has inspired their new curiosity and is the basis for their own hobbies.

2.5. Embedded Microprocessor. Since the beginning of the century, the upgrading of digital integrated circuit products has accelerated, especially in the field of consumer electronics. China’s research on embedded microprocessors is relatively backward, and there is still a big gap between related third-party compilation and development tools, manufacturing processes, and software support compared with foreign countries. Embedded systems are widely used in various fields today in the pursuit of portability, low power consumption, and highly integrated digital circuits. As the core of embedded systems, embedded processors have also gained rapid development in both design methods and manufacturing processes. Embedded microprocessors have limited hardware resources, so a branch prediction that not only has low hardware overhead but also has high
execution efficiency is needed to achieve a higher cost performance. Combined with the current reality, the embedded operating system is a multiuser, friendly interface; can perform multiple tasks at the same time; is a widely used, low-cost system, especially with high reliability and development efficiency; and can shorten the development cycle. Embedded real-time operating system. As integrated circuits enter the stage of deep submicron and nanoscale processes, the power consumption of embedded microprocessors is becoming more and more serious, and power consumption has become one of the most important factors restricting the development of a new generation of microprocessors. Since the data transmission rate of the external bus is much lower than the internal bus of the processor, the communication cost of data transmission will greatly reduce the efficiency of cryptographic services. The bypass unit of the processor is an important unit responsible for the correct computation cost of data transmission will greatly reduce the efficiency; and can shorten the development cycle. Embedding real-time operating system, especially with high reliability and development efficiency is needed to achieve a higher cost per-

efficiency, and speed, structural optimization is required. Let the index of the hardware structure of the designed multicycle multiplier, considering the requirements of layout and speed, structural optimization is required.

$$\alpha(i_1, \cdots, i_m) = \frac{1}{\omega} \prod_{n=1}^{i-1} S_i(r_i - 1), \quad (7)$$

$$s_i(i_{n+1}) = v_i^f / \prod_{a=1}^{r_i} X_i(a - 1), \quad (8)$$

$$H = \sum_{u \in R} \prod_{i=0}^{n} S_i(r_i + (r \cdot (i - 1))). \quad (9)$$

There are many kinds of embedded applications, ranging from audio \( \omega \), video codec \( \nu \), image recognition to scientific computing. Store multiple arrays without data relevance into different subarrays, add auxiliary instructions, and use the formula to express

$$v : 1 \leftrightarrow i+, \nu : 0 \leftrightarrow i-. \quad (4)$$

Due to the direct mapping method, the memory dedicated to storing page address information and related control bits is tag memory \( U_{i+} \). Page address information is reflected in some high bits of the address bus for calculation, there are

$$C = \left[ (i_1, \cdots, i_n) \right], i_i \geq 1, \sum_{j=0}^{n} r_j = h, \quad (5)$$

$$\|C\| = [R + N]^2 + 1/(n - 1). \quad (6)$$
\[ f(i) = -\sum_{s \in S} h(S_i) \ln f(S_{i-1}). \]  

(12)

Since the data set size \( f_{ab} \), code length, and time and space locality of data and program \( f(i) \) of various applications are very different, information entropy can be used to describe the uncertainty of the system state.

\[ \prod_{S_i} f(S_{i-1}) f(S_i) = \{f_i\}, \]  

(13)

\[ f(a_{i-1}) = \frac{1 - a}{\delta} \exp \left\{ -\sum_{\sigma=1}^{n} \delta_i f(S_{i-1}) \right\}, \]  

(14)

\[ \delta = \exp \left( \chi_0 \right) = \left\{ -\sum_{i=1}^{n} \delta_{i-1} f(S_{i-1}) \right\}. \]  

(15)

It is very difficult to measure the arrival interval \( f_l \) and service time \( \chi_o \) of the actual system. Only parameters such as the average value and variance can be accurately measured. Use the multiplier parameters to calculate the data.

\[ \varphi(v_{i+1}) = \min_{\sigma \in \theta} \varphi v_{i+1} + f(l + 1), \]  

(16)

\[ \delta(a, b, i) = \lim_{i \to \infty} \frac{1}{\sigma - 1} \sum_{i=0}^{n-1} \varphi(s_{i-1}) \varphi v_{i+1} (a, b, i). \]  

(17)

The implementation of changes will lead to changes in the distribution of marker \( \varphi v \) in the network. Simplify the system into a simpler system, while keeping the properties of the system to be analyzed \( \delta(a, b, i) \) unchanged; then,

\[ m^{-\infty} (i - 1) / f(l), \]  

(18)

\[ r \geq b^{m-1} (S^{-1})^{i-1} f(l)/(a^{n-1} n_{i-1}), \]  

(19)

\[ r_{\max} \geq \left\{ b^{m-1} (S^{-1})^{i-1} f(l)/(a^{n-1} n_{i-1}) \right\}/\min. \]  

(20)

The dynamic behavior of the model will be affected by the time parameter, and the behavior of the concurrent uncertain order \( m^{-\infty} \) in the original system will have a sequence due to the influence of the time parameter. The experimental parameters and calculated results are shown in Table 1 and Table 2.

### 3. Experiments

This paper selects 15 professors who study the teaching theory of sports health in colleges and universities as the survey object. Through the search engines such as databases, China Knowledge Network, and libraries, we can research the
research results of domestic and foreign students’ sports health lifestyles, study excellent master’s and doctoral thesis on sports health care lifestyles, and study on students’ sports health lifestyles. The paper reviewed the related books on sports health sociology, sports health psychology, sports health lifestyle, and sports health education. In addition, I borrowed books, statistical software books, and analytical technical materials related to the sports health lifestyle from the Library of the School of Sports and Health Sciences. The collected data were statistically analyzed, organized, and tabulated using Excel and statistical software and multivariate analysis of variance.

4. Discussion

4.1. Embedded Microprocessor-Related Data. Embedded application development debugging environment is a kind of remote cross-debugging software based on the debugging support of embedded microprocessor. It is necessary for embedded application development. Embedded microprocessors are designed for the embedded application environment, and the specific hardware platforms of the applications can be described as vastly different. During the development of specific applications of the chip, the debugging and running of the application program has therefore become very complicated. The embedded microprocessor’s support for software debugging will directly affect the application and promotion of the processor. The performance improvement of general-purpose processors greatly enhances the functions of the software, providing strong support for ultralarge-scale chip testing. The structure of the microprocessor constructed in this experiment is shown in Figure 1.

Functional testing is measured by running results. The design is generally performed during functional testing at level or gate-level simulation. The access strategy testing parameters of this experiment are shown in Table 3.

When developing such complex applications, debugging methods are directly related to the efficiency and progress of the development and determine the quality of the application. Testing its performance, the data is shown in Table 4.

A highly optimized, compact-embedded type is formed after miniaturization. Although its size is small, most of the advantages that are still retained are stable, excellent transplantation, complete network functions, and rich support and standards for various file systems. The simulator developed for the target computer can guarantee the basic correctness of the software, that is to say, the software that cannot run correctly on the simulator will definitely not run correctly on the target computer. Through simulation experiments, we recorded the data before and after the critical path delay optimization, as shown in Figure 2.

The data in the above figure shows that the maximum value of critical path delay performance optimization has increased from 4.69 to 8.24. Analyze the data before and after the logic unit consumption optimization, as shown in Figure 3.

The data in the figure shows that after the logic unit consumption is optimized, the performance of the
microprocessor has been greatly improved. The debugging protocol is based on the characteristics of the on-chip hardware debugging support logic and the characteristics of the debugging interface, while the communication protocol can be very flexible, and various communication interfaces can be designed according to the needs to improve the speed and efficiency of debugging.

4.2. Internet Application and Sports Health Attitude. With the reform of the college enrollment system and the advancement of quality education, a large number of disadvantaged students in sports have appeared in colleges and universities across the country.

The teaching content and organization form adopt a “one size fits all” method, which lacks pertinence and practicability and fails to reflect the teaching principle of “differentiated treatment and individual teaching.” The student performance evaluation process is mostly result evaluation, ignoring process evaluation. This has greatly affected the enthusiasm of sports-disadvantaged students to participate in sports. The embedded microprocessor is applied to the health-care class system, the structure diagram is shown in Figure 4. The real-time operating system module can ensure the real-time and reliability of the program’s execution, thereby reducing development time and ensuring software quality. The embedded system is combined with the specific application, and its upgrade and replacement are also synchronized with specific applications. Therefore, embedded system products have a long-life cycle. Software of the embedded system is solidified in the storage chip or single-chip microcomputer, not stored in the disk and other

<table>
<thead>
<tr>
<th>Questionnaire type</th>
<th>Leadership questionnaire</th>
<th>Teacher questionnaire</th>
<th>Teacher questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of issues</td>
<td>30</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Number of collections</td>
<td>28</td>
<td>28</td>
<td>59</td>
</tr>
<tr>
<td>Effective number</td>
<td>28</td>
<td>28</td>
<td>59</td>
</tr>
<tr>
<td>Efficient</td>
<td>94%</td>
<td>94%</td>
<td>98%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching content</th>
<th>Quantity</th>
<th>The proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>National traditional sports</td>
<td>17</td>
<td>99%</td>
</tr>
<tr>
<td>Sport dancing</td>
<td>5</td>
<td>22.3%</td>
</tr>
<tr>
<td>Ball games</td>
<td>7</td>
<td>31.2%</td>
</tr>
<tr>
<td>Sports fun games</td>
<td>3</td>
<td>17.4%</td>
</tr>
<tr>
<td>Theory lectures</td>
<td>3</td>
<td>17.4%</td>
</tr>
</tbody>
</table>

Figure 6: Students’ cognition.
carriers, so it can improve the execution speed and reliability of the program.

At present, the physical health education of disadvantaged students in China lacks a universal teaching guideline, and there is no clear guidance to the curriculum goals, curriculum content, etc., which makes the curriculum design of various colleges and universities more random. The theoretical teaching content lacks pertinence and practicability and cannot effectively teach the related theoretical knowledge of sports health care, rehabilitation exercise prescription, and rehabilitation evaluation. The questionnaire scoring data of this experiment is shown in Figure 5. Disclaimer: the data has no other interest relationship, which is obtained based on the actual situation.

From the data in the above figure, we can see that the reliability of the questionnaire in this experiment is very good. The distribution of the questionnaire is shown in Table 5.

The content of the questionnaire is mainly to investigate students’ perceptions of their own physical health. The results of the survey are shown in Figure 6.

Obviously, sports-disadvantaged students believe that a good lifestyle is closely related to their own health and is the most fundamental condition to ensure their health. So we have carried out relevant data statistics for its teaching content, as shown in Table 6.

Generally speaking, the school does not pay much attention to the teaching of physical education and health care. Colleges and universities should expand the scope of practical teaching content, expand with the popular fitness content in the society, and make an effective transition to social sports. The students summarized the overall evaluation of participating in the health-care class, as shown in Figure 7.

For the time being, most students are not very satisfied with the health class. In order to improve the teaching satisfaction of students, we design the tutorial goal of embedded microprocessor application and teaching process and normalize the health data related to the health-care class. As far as the data is concerned, the comparison results of the data integrity before and after are as follows, as shown in Figure 8.

In the physical education work of sports-disadvantaged students, more efforts should be made in the guidance of mental health, and the physical and mental education of health should be carried out. The attention of university leaders is the basic prerequisite for the development of school sports education for disadvantaged students in sports, and it is also an important guarantee for accelerating the construction of sports health-care courses. Emotion regulation physical education teaching model has important practical significance to promote the overall development of students’ quality. Inferiority complex, anxiety, fear, weariness, and other negative emotions in health class students affect their learning enthusiasm and then affect the formation and development of students’ healthy personality. The data source of this phenomenon is shown in Figure 9.

Physical exercise not only improves people’s physical health but also promotes mental health. The emotional regulation of physical exercise is a constructive behavior, which is very popular among students of special groups. The relationship between emotion regulation mode and teaching procedures and teaching strategies is shown in Figure 10.

The use of the Internet requires hardware and software, hardware is the terminal, that is, student handheld devices, such as mobile phones and computers. Data surveys can reflect that 94% of students use smartphones, and 86%
of students have computers, as shown in Figure 11. The data shows that Internet terminals such as mobile phones and computers are already very popular among student groups.

Students’ attitudes towards sports health activities are related to their enthusiasm for participating in sports health activities. Attitude can show people’s evaluation and behavioral tendencies toward something. Attitude does not have genetic characteristics but an inherent psychological tendency formed under the influence of social environment. The attitude of sports health care is to make a psychological tendency to participate in sports health activities.
through the value judgment of individuals under the influence of external conditions. The students’ participation in the sports health education movement has great directionality and motivation for their participation in the sports health education movement. Students’ attitudes towards the participation of sports health education can influence their enthusiasm for sports health training. Figure 12 shows the attitude of students towards the participation of sports health education.

Among them, 46.5% of the students have a favorite attitude towards participating in sports health training; 19.6% of students hold a preferred attitude; the average attitude is 16.3%; the less like and dislike, respectively, account for 12.5% and 5.1%. Overall, the ratio of likes and preferences is 66.1%. It shows that most students’ attitude towards the participation of sports health education is preferred.

B3 carries out the principles of collective education in collective activities, B4 raises the principles of sports cognition and inheritance sports culture, and B7 lays down the basic principles of lifelong sports. The concentration of opinions is lower than 7.0, and the degree of coordination of expert opinions is high, so it is directly deleted.
It can be seen from Table 7 and Table 8 that in this round of questionnaires, the objective principle of C2 education, the principle of reasonable physical activity of C4, and the basic principle of C7 lifelong sports are less than 7.0, and the degree of coordination of experts is relatively high. The remaining four decibels are the following: C1. the overall principle of teaching; C3. the principle of humanistic aesthetics; C5. the principle of promoting the continuous improvement of motor skills; and C7. the principle of lifelong health. The purpose principle of C2 education is too general and the scope is too large. It does not highlight the key requirements of sports health education under the new curriculum standard, so it is deleted.

The subjective interest principle refers to the fact that students are the main body of physical education in the process of physical education. Interest is an important driving force of physical education. All activities of teachers should be arranged around the students’ interests, needs, and physical and mental characteristics. The main interest of students should be under the leadership of teachers, they actively participate in the learning activities and then cultivate students’ fun and interest in sports to show students’ autonomy, initiative, and creativity.

### 5. Conclusions

People’s pursuit of improving the computing performance of microprocessors is endless, especially with the further development of multimedia, database, scientific computing, and artificial intelligence applications, the requirements for the computing performance of microprocessors are bound to become higher and higher. In view of the current practice of sports health education curriculum and teaching reform in China, through the screening and analysis of the principles of physical education teaching principles, the current Chinese sports health teaching principles system should cover the following eight teaching principles, namely, the principle of subjective interest, the principle of safety and hygiene, the principles of humanistic aesthetics, the principle of promoting the improvement of motor skills, the principle of health and lifelongness, the principle of gradual and orderly progress, the principle of teaching students in accordance with their aptitude, and the principle of holistic teaching. The overall view of the sports health teaching process: the vertical view of the sports health teaching process is based on the semester plan, and the horizontal view of the sports health teaching principle is composed of the teaching process. Therefore, we should take a holistic view of sports health education, starting from the overall situation, focusing on the big aspect, to understand sports. Formulate effective and practical teaching objectives, promote students’ all-round development, optimize teaching content, adapt to student development, comply with the requirements of the new curriculum standards, and choose effective teaching methods to enable students to accept teaching knowledge and skills. From the overall perspective, it is necessary to look at sports health education in order to maximize the benefits of teaching. Conduct physical education classes with holistic thinking. Pay attention to the integrity of the teaching materials, the development of sports health education should focus on the teaching objectives and the difficulty of teaching; pay attention to the integrity of the physical education curriculum, design the overall teaching situation, run through the physical education class, each part of the

### Table 7: The first round of the optimization of sports health teaching principles.

<table>
<thead>
<tr>
<th>Principles of physical education</th>
<th>Opinion concentration $M_j$</th>
<th>Standard deviation $S_j$</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1: the holistic principle of teaching</td>
<td>8.00</td>
<td>1.0445</td>
</tr>
<tr>
<td>B2: the principles of education, development and purpose of education in teaching</td>
<td>7.17</td>
<td>1.3371</td>
</tr>
<tr>
<td>B3: principles of collective education in collective activities</td>
<td>6.50</td>
<td>0.9045</td>
</tr>
<tr>
<td>B4: improve sports cognition and inherit the principles of sports culture</td>
<td>5.67</td>
<td>1.9695</td>
</tr>
<tr>
<td>B5: principles of reasonable arrangement of physical activity</td>
<td>8.00</td>
<td>1.5954</td>
</tr>
<tr>
<td>B6: the principle of promoting continuous improvement of sports skills</td>
<td>8.17</td>
<td>1.0299</td>
</tr>
<tr>
<td>B7: lays the foundation principles for lifelong sports</td>
<td>6.67</td>
<td>2.0597</td>
</tr>
<tr>
<td>B8: humanistic aesthetic principle</td>
<td>7.50</td>
<td>1.2432</td>
</tr>
</tbody>
</table>

### Table 8: The second round of the optimization of sports health teaching principles.

<table>
<thead>
<tr>
<th>Principles of physical education</th>
<th>Opinion concentration $M_j$</th>
<th>Standard deviation $S_j$</th>
</tr>
</thead>
<tbody>
<tr>
<td>The holistic principle of C1 teaching</td>
<td>7.83</td>
<td>1.3371</td>
</tr>
<tr>
<td>C2: the purpose principle of physical education</td>
<td>3.00</td>
<td>0.0000</td>
</tr>
<tr>
<td>C3: humanistic aesthetic principle</td>
<td>8.00</td>
<td>1.3484</td>
</tr>
<tr>
<td>C4: principles of reasonable arrangement of physical activity</td>
<td>5.67</td>
<td>0.9847</td>
</tr>
<tr>
<td>C5: principles of promoting continuous improvement of motor skills</td>
<td>8.33</td>
<td>0.9847</td>
</tr>
<tr>
<td>C6: lays the foundation principles for lifelong sports</td>
<td>4.67</td>
<td>0.7785</td>
</tr>
<tr>
<td>C7: healthy lifelong principle</td>
<td>8.67</td>
<td>1.1547</td>
</tr>
</tbody>
</table>
activities must be interlocked. The value of the equipment is fully utilized. With the rapid development of science and technology, the embedded microprocessor has become increasingly becoming the focus topic of continuous attention in the field of computer application research, focusing on the issue of inquiry. Based on this, this article focuses on the teaching resources and design of embedded microprocessor application technology project courses. I hope that the analysis of this article can provide some reference for practitioners.

Data Availability
The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflicts of Interest
The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

References


