Online Educational Video Scoring System for Physical Education

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Abstract. In order to meet the needs of online education score calculation for sports subjects, an online education video scoring system for sports subjects has been designed and developed. The system uses an 80C51 microprocessor as the core device, which uses not many data units and the system program occupies not much space, which can save system space. Developing database programming with Visual Basic 6.0 eliminates the need for users to master tedious operating skills, which is beneficial for improving the simplicity of system operation. On the basis of hardware design, optimize the software functional structure and complete the design of online education video scoring system. The experimental results confirm that the online educational video scoring system for sports disciplines can better quickly and accurately score sports videos, and has certain reference value.

Keywords: Sports Discipline · Online Education · Educational Video · Scoring System

1 Introduction

In the process of sports practice at this stage, the timely, accurate and effective conversion of sports scores measured in the process of sports testing into percent has certain guiding significance for students' performance evaluation, teaching and training. At this stage, in the process of physical education teaching, manual scoring is basically adopted, and a scoring table is used to find the original score of each item of physical education. There is a certain deviation in this statistical process, which takes a long time and has a large workload. Therefore, it is particularly important to study the application and implementation of effective sports score video scoring system [1]. In the calculation process of sports scores, teachers should change the manual calculation method in the traditional calculation process, fully recognize the efficiency, accuracy and timeliness characteristics of the sports education video scoring system, give a positive attitude to try and accept the application of the sports education video scoring system in sports score statistics. In addition, physical education teachers should also constantly improve their ability to use computer related knowledge and skills while accepting the sports education

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video scoring system, overcome computer related knowledge and training difficulties, and constantly learn the relevant knowledge and skills of the corresponding scoring system, so as to improve the effectiveness of using the sports education video scoring system to achieve high efficiency accurate and timely scoring. With the development of times and technology, computers have gradually penetrated into the teaching process of various disciplines at this stage. To some extent, online sports education video scoring guides students to learn independently, helps students build an overall knowledge system, changes the traditional teaching mode, integrates new teaching methods, and makes teaching more mature and efficient. Physical education achievement is mainly an important indicator to evaluate students' physical education learning level. It is necessary to publish the examination results timely, effectively and accurately after the examination. The traditional manual calculation method takes a long time, lacks timeliness, and errors often occur in the calculation process [2]. In the process of building the sports education video scoring system, it can improve the timeliness, effectiveness and scientificity of sports performance evaluation to a certain extent. It will carry out statistical analysis on the needs of theory and skills, directly export the corresponding analysis table, so that viewers can see clearly.

2 Optimization of System Hardware Configuration

The system uses 80C51 microprocessor as the core device.80C51 on-chip data memory (RAM) space is 256B, address O0H-0FFH: on-chip program memory (ROM) space is 4KB, address 000H0FFH.The microcomputer score input system uses only a few data units, and the space occupied by the system program is not large, so the RAM and ROM in 80C51 chip are enough, and external data memory and program memory are not needed. The hardware composition of the microcomputer fraction input device is as follows: chip address latch 74LS373 pieces of digital tube segment display driver chip ULN2003AN, six Darlington tubes drive digital tube 6-bit display. 3-bit 3-inch high brightness nixie tube and a small nixie tube display. Chip 825 programmable parallel I/0 expansion interface [3]. (The microcomputer scoring input device has the functions of input and display, and 8255 is used as the interface between keyboard and display). The MAX232 chip can realize level conversion and drive. In order to make the system reliable and prevent power interference and crash, a power filter watchdog reset circuit is added in the hardware design. The camera equipment selected in the camera module includes the sports teaching video decoding security PTZ. The decoding of sports teaching video is shown in Table 1.

YA9045 PTZ is a built-in, all-weather environment PTZ, which can be hoisted or wall mounted, with a double-layer cover design, prefabrication function and built-in digital decoder. The video capture module mainly collects multi-channel video signals in real time through the video capture card. The selected video capture card is AVZE1000X, which can output, store, digitize and perform other operations including zooming, editing, etc. on the captured and captured pictures. The module diagram of the video capture card is shown in Fig. 1.

In the interim, the embedded processor is selected as the processor module of the system, and the selected model is Samsung SC23440A. The embedded processor has

Table 1. Technical Parameters of Sports Teaching Video Decoding

number	project	date
1	model	VC-7XXS
2	image sensor	HAD Super 1/3 CCD
3	Photosensitive area (mm)	6.3 × 3.7
4	Effective pixels	PAL: Horizontal * Vertical: 562 * 542 NTSC: Horizontal * Vertical: 678 * 498
5	Installation method of lens	CS /A format
6	signal system	NTSC/PAL
7	Auto iris lens	DC/ VIDEO Servo type
8	White balance method	White balance automatic tracking
9	minimum illumination	1.5 lx
10	Signal-to-voice ratio	> 10db
11	power supply	AC 22V
12	Power consumption	< 4.8W
13	Size (mm)	58*50*115

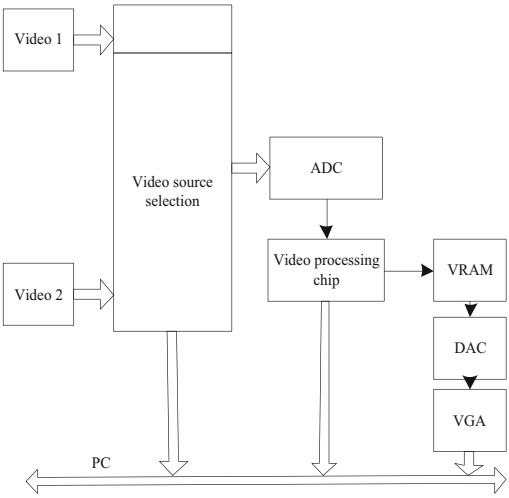

Fig. 1. Structure of Motion Video Capture Device

the characteristics of full static design, low power consumption, low cost, etc., which is very suitable for application in the system. The specific technical data of the embedded processor is shown in Table 2.

The design method of the average score display is basically the same as that of the score input device. The system displays data sent from PC through communication with

Table 2. Specific Technical Data of the Embedded Processor

Number	project	date
1	model	SC33665A
2	structure	CACHE
3	Peripheral Addressing Space Bytes	1.2 G
4	Data and instruction capacity (KB)	32
5	dominant frequency (MHZ)	200
6	AMBABus interface bits	64
7	ARMInstruction Set Bits	46
8	equipped	Universal I/O interface (140)
		clock generator (PLL)
		External interrupt (24 channels)
		Camera Interface

MCU. In this system, the display data is the data of one, ten, hundred and decimal places. However, during system communication, the data of one and ten places are combined into one byte data, and the data of one hundred places and decimal places are combined into one byte unit data. To display specifically, BCD code is required to be separated, and the actual display is rearranged according to the decimal place data. Therefore, the average score display program includes display subprogram, data communication subprogram, and display data processing subprogram. The average score display is used to display the average score transmitted from the PC without keyboard or operator control. Therefore, the design structure of the system software can choose the job sequence scheduling type. There are not many data buffers required in the average score display system, but three display buffers and two data receiving buffers are defined at the high end of the RAM address. The stack is still set at the 60H unit [4].

3 Database Design of Online Education Video Scoring System

The design of database in the system is a very important part of the application system, and the establishment of a suitable database is critical to the maintenance and use of the system. The scoring record statistics system only uses one table, so it adopts the form of free table, which is conducive to the synthesis and statistics of scores. The data table is named pingdata. The database structure is shown in Table 3:

It can be seen from the table structure of the database that most fields are of character type. The reason for this definition is that it is convenient to query and operate the database using SQL statements [5]. The serial port of the computer is used for communication between the decoder and the application program to realize the control of the lens and the PTZ. The communication protocol of the video scoring monitoring control module is as follows:

Table 3. Database Result Table

Field Number	Field Name	Field type	weight	illustrate
1	Csh	character	8	Number
2	Xm	character	10	Name
3	Fz	character	6	Sports Zub
4	Cj2	character	6	Teacher grading
5	Sex	character	8	Action rating
6	Address	character	12	average
7	school	character	12	Comprehensive score

(1) The baud rate is 9.7BPS/22.085 crystal oscillator.
(2) A frame uses 10 bits together, and the number of start bits is 1; The number of data bits is 8;The number of stop bits is 1, and there is no check bit.
(3) The interface standard is RS845.
(4) The format that the computer sends the serial port instruction is control code+address code, in which the control code has a total of 16 bits and 2 bytes, which are represented by hexadecimal binary data; The address code has a total of 32 bits and 4 bytes, which are also represented by hexadecimal binary data. The instructions sent by the computer to the serial port instructions are shown in Table 4, and the returned information is represented by the status code+address code.

Table 4. Commands sent by the system to serial port commands

Code	describe	Code	describe
0149	Control the magnification of the camera lens	0140	Stop pan tilt scanning
014A	Control the reduction of camera lens magnification	0141	Upward pan tilt action
014B	Patrol through PTZ	0142	Downward pan tilt action
013A	Control query does not exist	0143	Increasing focal length
013B	Stop camera action and pan tilt action	0144	Defocus

The score uses character data for data security. If the score is defined as numerical type, the initial value of the score is 0.00. In order to ensure the security of the data, the system stipulates that if there is already data in the position to be modified in the database, the original data must be deleted by authorization before it can be re entered by the single-chip score input device. The standard for deleting data is that the original data is empty characters. Therefore, the types of these score data are also set to character type. When performing arithmetic operations on the score data, the conversion functions

Strtofloat() and FloatTostr() in Delphi can be used. The scoring system defines sub elements and scoring criteria for each element. It is divided into two sub elements: one is the proportion of 13.333% of the score in the level of action technology, and the other is the proportion of 13.333% of the score in the level of diversity of action elements. Make progress in interpreting its various elements, so as to calculate the single factor variance value. Assume that the characteristic index of the original data is α, the commonness of information is β, and the difference of information is χ. Combine the weighted TOPSIS method to calculate the single factor variance of teaching information. The specific algorithm is as follows:

$$\Delta F = \frac{\alpha}{\chi - \sqrt{\beta}} - 1 \tag{1}$$

Combining the above algorithm, further analyze the characteristics of the original information category, and statistically calculate the difference value d in the quality indicators of different categories of teaching information. Furthermore, use factor analysis and cluster analysis principles to iteratively process the average R of information management evaluation indicators, and record the teaching management indicators as A, B, C, D, E five levels. Based on this, Standardize the evaluation parameters of teaching management at different levels, with specific algorithms as follows:

$$level(A \to E) = d \times \frac{(A \to B \to C \to D \to E)}{\Delta F + R} \tag{2}$$

Based on the above algorithm, the weights of evaluation indicators for online sports education videos in China are set uniformly, and different registered indicators are standardized, so that the quality of online sports education videos can be accurately evaluated later. From the scoring elements of physical fitness, it can be seen that the competition has very high requirements for the physical fitness of participants: strength, speed, endurance, coordination, flexibility Sensitivity and other qualities are very important. It is particularly critical for competitors to effectively use their physiological advantages, upgrade their physiological advantages to a higher level of ability, and turn their disadvantages into advantages [6]. The scoring system makes the evaluation results of sports events a relatively objective evaluation. It is a scoring system that allows the referee to judge the contestants with a more rational attitude. Although there are many indicators in the scoring system, it is not a one size fits all evaluation, but a more comprehensive and objective evaluation of the contestants, providing new ideas for sports teaching and promoting the development of sports teaching [7].

4 Software Function Design of Online Education Video Scoring System

The system runs under the Windows operating system. With VVisBasic6.0 as the programming tool, it is an information analysis and processing tool that integrates multiple functions such as data tables and databases. The sports education video scoring system includes student data entry, information entry and competition performance management. The system can not only query and print the results through the computer, but also timely release the results of the game through automatic voice play, LED large screen display, Web publishing and other forms. See Fig. 2 for system function module.

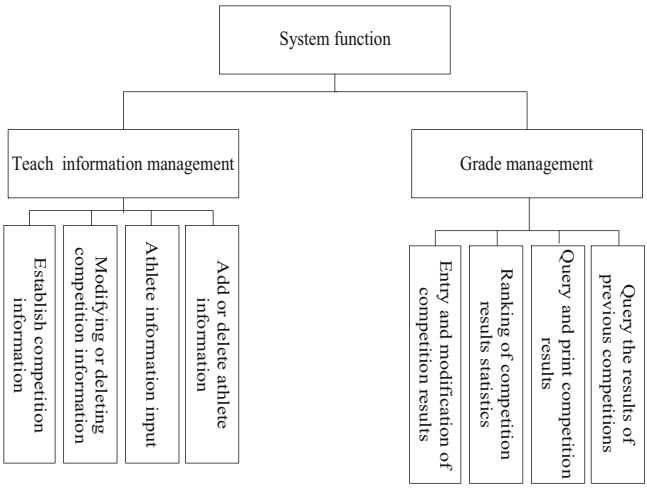

Fig. 2. Structure optimization of system function module

The system is programmed with Visual basic 6.0 and runs on the Windows operating system. It is a graphical user interface application software supported by the fully object-oriented programming concept. It is also the first set of application software used to calculate the results of figure skating competitions in China. To some extent, it reflects the level of competition performance statistics. The system adopts the object-oriented programming method and has the typical style of Windows application program [8]. Users do not need to memorize any code and master tedious operation skills. As long as they are familiar with Windows, they can carry out actual operation after a few minutes. The system can closely monitor the operation and operation. According to the operation status and the competition process, error proofing programs are set in good time. Once the operation is wrong, the system will immediately "sound" and display error prompt information. The system can also automatically save the data in the current operating environment, and even in the event of power failure and other unexpected circumstances, it can recover to the state before the accident after restarting. Based on the above collection mode, the collected common characteristic data and difference characteristic data are described and explained, and the original data is compared and tested. To ensure the accuracy of the evaluation results, the information management characteristic parameters are collected, and the specific collection steps are as follows (Fig. 3):

The scoring results will be further recorded and analyzed. In order to ensure the accuracy of the analysis, different feature categories will be recorded as $f(i), f(j), f(x), f(y), f(n), f(z)$ and $f(m)$ for subsequent calculation and analysis. Based on the above content, further optimize the evaluation method of educational informatization management quality. In order to ensure the effectiveness and reliability of the evaluation of higher education informatization management quality, it is necessary to further define teaching information, student information, campus information, etc. in order to evaluate information accurately. Due to the huge amount of information, online sports education

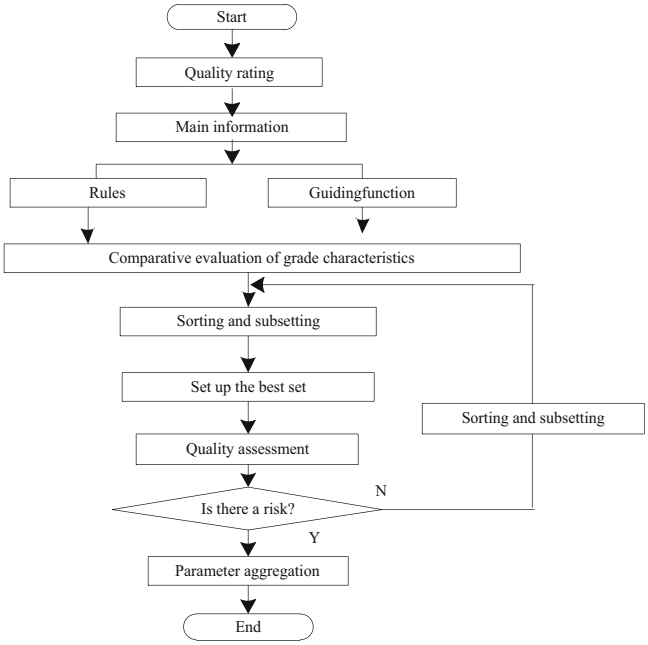

Fig. 3. Video scoring feature information acquisition steps

evaluation is relatively complex, which needs to be defined from different perspectives. Based on this, it is necessary to further improve and adhere to the principles of sports education video evaluation: complex, connotative, personalized, academic, democratic and innovative. This further carries out a comprehensive analysis on the standard indicators of teaching informatization management quality judgment, and carries out a consistency test on the structural and independent characteristics of physical education video scoring indicators [9]. Combined with the analytic hierarchy process, professional, objective and overall calculation and evaluation are carried out, and the relative importance values of teaching evaluation indicators are given, and the characteristic values are analyzed consistently. The numerical matrix of the relative importance of students' evaluation indicators is:

$$R_1 = \begin{Bmatrix} level(A), \frac{1}{2}, \frac{1}{3}, 1, 2, 0, 0, 1 \\ level(B), 2, \frac{1}{2}, 1, 0, 1, 9, \frac{1}{3} \\ level(C), 1, 3, \frac{1}{2}, \frac{1}{3}, 2, 1, 1 \\ level(D), 0, 3, \frac{1}{2}, 0, \frac{1}{3}, 0, 1 \\ level(E), 1, 2, \frac{1}{3}, 2, \frac{1}{2}, 2, 1 \end{Bmatrix} \tag{3}$$

The maximum characteristic value can be calculated through the above algorithm, which is recorded as: $\lambda_{\min}$=3.154, the average value is:

$$CI = \Delta F \prod (\lambda_{\min} - R_1)/K - 1 \tag{4}$$

Among them, K is a consistency index, its randomness ratio algorithm is:

$$CR = CI_1 - \lambda_{\min} /RI \tag{5}$$

If in the calculation process, the weight value of students' teaching evaluation is: $s = (0.1219,\ 0.183\,5,\ 0.4862,\ 0.2084)$

Then further standardize the student evaluation matrix, as follows:

$$r = \begin{Bmatrix} A: 1, 0, 1, 0, 0, 0, 1, 0, 1 \\ B: 0, 1, 2, 1, 2, 0, 1, 2, 1 \\ C: 1, 2, 0, 1, 2, 1, 0, 2, 1 \\ D: 0, 2, 1, 2, 0, 2, 0, 1, 1 \\ E: 1, 2, 0, 0, 1, 2, 1, 0, 2 \end{Bmatrix} \tag{6}$$

If the teacher's teaching attitude can be recorded as U_n, with a consistency ratio of 1:0.328, then the weight of the teaching attitude can be recorded as $m = (0.124, 0.232, 0.187)$. Further select the average weighted value M and combine it with fuzzy algorithm to calculate the first level evaluation model. The specific algorithm is:

$$\begin{cases} W = U_n \sum CI - R_1 * s \\ N = 0.328 \sum CR - rm \end{cases} \tag{7}$$

Further standardize the secondary evaluation model, as follows:

$$C = \sum \lambda_{\min}(W - N)/2 \tag{8}$$

Assuming that during the teaching process, the difference in teaching effectiveness before and after is 0; But in reality, there are certain cross differences before and after the teaching ends. On the basis of this hypothesis, hypothesis testing is conducted on the teaching difference parameters, and a calculation method is set based on data mining and Analytic Hierarchy Process principles. p is set as the influence parameter of sports education video scoring. If $|p|>\varphi$ is set, it indicates that the teaching effectiveness evaluation is poor; On the contrary, if $|p|<\varphi$, it indicates that the teaching evaluation effect is good. Then, starting from the zero hypothesis, we use the Proof by contradiction method for reasoning. If the difference before and after teaching is $\varphi \geq 1$, it will be recorded as x, indicating that it is a factor with high influence value. If $\varphi < 1$, it will be recorded as $1 - x$, indicating that it is a factor with low influence value. On this basis, we conduct a unified evaluation and analysis of the learning effect of the training objects, and we can get the following algorithm for the influence parameter of physical education video scoring:

$$V = \frac{\lambda_{\min}}{m\sqrt{\frac{(p-\varphi)s_1^2+(p_1+\varphi)s_1^2}{1-x}}\sqrt{\frac{1}{W}+\frac{1}{N}}} - \frac{\overline{z}}{s_z/\sqrt{Cn}} \tag{9}$$

where, z represents the average difference of teaching effect test samples before and after evaluation, s_z is the standard parameter value of the teaching scoring effect of physical education, m is the maximum influence degree, n is the minimum influence degree. Through the above algorithm, we can calculate the influencing parameters of different influencing factors on the teaching scoring effect of physical education, and evaluate the influencing factors of teaching effect according to the influencing parameters. In order to better evaluate the influencing factors of the effect, the scoring effect statistics is carried out in combination with the network platform. Mining and integrating the marketing value and influence degree of teaching content under the condition of big data, and conducting online evaluation on sports education video scores according to the integration results, so as to timely and effectively collect the characteristics of students' learning behavior, and retain the collected data: learning duration, online number of people, learning progress, examination results, etc. And input the obtained data into the knowledge inventory storage system, and set set evaluation rules to evaluate the influencing factors of teaching effect [10]. Set up $L = (Q, R, T)$ is the evaluation value of an information, $\xi = \{a_1, a_2, \cdots, a_m\}$ is the reference coefficient in the evaluation rules, then:

$$Ea \leq \widehat{V} \frac{C, \{level(A \rightarrow E)\}}{H(E) - H_a(E)} - L\xi \tag{10}$$

Among them, $H(E)$ is the associated influence value, $H_a(E)$ it is a reference parameter for data evaluation.Then the impact assessment parameters between a and E are:

$$RH_E(a) = Ea - \sum \widehat{V} \frac{H_a(E)}{H(E)} - C \tag{11}$$

If $RH_E(a)$ is less than or equal to zero, the hypothesis is not tenable, which indicates that the evaluation results of the factors affecting teaching effectiveness are effective, otherwise, it indicates that the evaluation results are uncertain and need further optimization. In the sports education video scoring system, the operation page is simple, highly operable and intuitive. The page mainly includes the corresponding list import link, score input link, score query link and score statistics link. In the list import link, students' names, learning, classes, teachers, sports class hours and other information are counted in the form of EXCEI. Have certain comprehensiveness and accuracy; In the score input link, statistics are mainly made for each sports item in the process of physical education teaching, such as standing long jump, special event, theory, process score and usual score. Among them, standing long jump accounts for 10%, theoretical knowledge mastery accounts for 20%, special event accounts for 40%, and process score accounts for 10%. The peacetime percentage is 10%, and each item shall be statistically calculated based on 100 points. The score inquiry link is mainly based on the input of student number and name to accurately obtain students' individual exam scores, which is fast and accurate. The last part is the link of score statistics, which is mainly aimed at the statistics of students' peacetime scores, final scores, overall evaluation scores, technical achievement statistics, theoretical scores, etc., and the number of test scores, the lowest score, the highest score, the number of people, the average score and other ratios

in the process of students' examination, so as to facilitate teachers to better statistics of sports and physical education video scores and teaching levels. The application of video scoring system of physical education can reduce the workload of physical education teachers to a certain extent, improve the accuracy of statistical scores of physical education teachers, and has a certain advantage of timeliness.

On the basis of the above software and hardware design, the overall design of an online education video scoring system for sports subjects has been completed. The following is a schematic diagram of the login interface of the system.

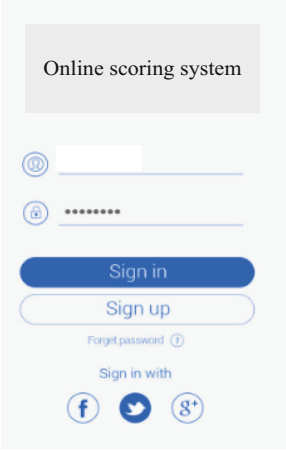

Fig. 4. System Login Interface

As shown in Fig. 4, users only need to have an account and password to log in, and the system has good privacy.

5 System Test

Build an experimental environment to test the online education video scoring system for sports disciplines. The simulation tool used in the experiment is matlab 7.0. Use the moving target detection digital video capture equipment to conduct a digital video scoring experiment on a place with moving targets, and compare the traditional scoring system based on remote control technology and the scoring system based on image coding processing technology in the same experimental environment. The specific experimental environment is shown in Table 5.

Based on the above environment, the digital video sampling frame rate data and signal fluctuation data of moving objects are obtained as experimental data. In order to enhance the contrast of the experimental results, the traditional scoring system based on remote control technology and the scoring system based on image coding processing technology are used as the comparison system in the experiment. The two digital video dynamic scoring systems are also used to conduct digital video scoring in the experimental place,

Table 5. Built Experimental Environment

Number	Experimental environment configuration	project	date
1	hardware configuration	CPU	intel core i8 9800
		Memory	32GB
		Hard disk	wdf-069T
		Graphics card	GV-N0903GAMING
		Number of hosts	6
2	software configuration	operating system	Win7
		Embedded system	LINUX

and the sampled frame rate data and signal fluctuation data of the two systems are obtained as the comparison experimental data,The experimental data were recorded and compared.

In the case of different moving time of moving objects, the sampling frame rate comparison experimental data of the online education video scoring system for sports disciplines, the scoring system based on remote control technology and the scoring system based on image coding processing technology proposed in this paper are shown in Table 6.

According to the comparative experimental data of the sampling frame rate in Table 6, the sampling frame rate of the online education video scoring system for sports disciplines proposed in this paper is higher than the sampling frame rate of the system based on remote control technology scoring and the scoring system based on image coding processing technology, when the moving time of the moving target is different. The great improvement in the video sampling frame rate helps to make more clear and accurate scoring decisions. The higher the sampling frame rate, the closer the scoring will be to the standard.

The experimental data of signal fluctuation comparison between the online education video scoring system oriented to physical education, the scoring system based on remote control technology and the scoring system based on image coding processing technology is shown in Fig. 5.

In the figure, A is the online education video scoring system for sports discipline proposed in this paper, B is the scoring system based on remote control technology, and C is the scoring system based on image coding processing technology. The lighter the color in the figure, the smaller the impact of interference on the system score. According to the signal fluctuation comparison experimental data, as shown in Fig. 6, under the interference environment, the online education video scoring system for sports discipline proposed in this paper, B is a system based on remote control technology scoring. The digital video dynamic monitoring system based on motion target detection has a lower signal fluctuation frequency and is more stable. Finally, the accuracy of the system scoring is compared. The scoring accuracy of the three systems is compared based on the on-site scoring of 10 expert teachers. The specific results are shown in the following table (Table 7):

Table 6. Experimental data of sampling frame rate comparison

Target Movement Time (s)	Sampling frame rate (frames/s)		
	This article system	A Scoring System Based on Image Coding Processing Technology	A scoring system based on remote control technology
0	86	42	38
5	88	43	38
10	89	44	37
15	91	48	36
20	89	41	36
25	97	40	36
30	92	39	35
35	91	42	38
40	91	40	32
45	93	38	37
50	88	37	30
55	88	40	29
60	87	40	35

Table 7. Comparison and Analysis of Video Scoring Results of Three Systems

Video frequency (min)	Expert scoring (average score)	This article system	A Scoring System Based on Image Coding Processing Technology	A scoring system based on remote control technology
15	88.45	88.33	85.46	82.46
30	91.26	91.45	89.33	86.39
45	73.58	73.89	80.12	70.56
60	90.44	90.89	86.44	87.23
75	96.34	96.34	88.12	86.43
90	87.23	87.65	80.56	82.12

Based on the above comparison results, it can be seen that the highest scoring value of the designed system in this article reaches 96.34, which is significantly higher than the scoring system based on remote control technology and image encoding processing technology. The online education video scoring system proposed in this article for the

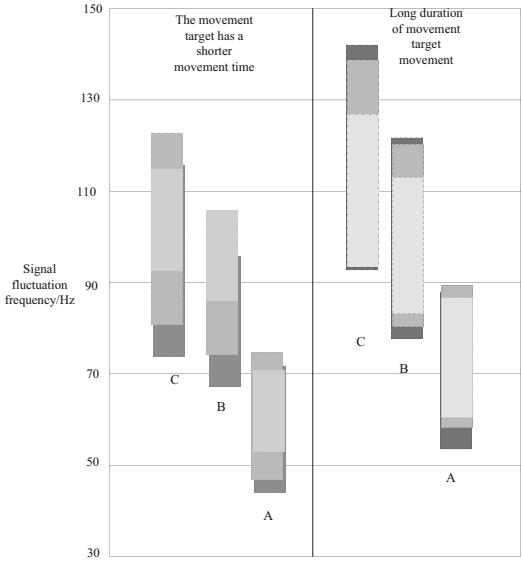

Fig. 5. Signal fluctuation comparison experimental data

discipline of physical education has high stability and accuracy in practical application, and repeatedly meets the design requirements.

In order to further verify the performance of the system designed in this article, the system response time was used as a testing indicator to compare the application effects of the three systems mentioned above. The results are shown in Table 8.

Table 8. System Response Time Test Results/s

Number of experiments/time	This article system	A Scoring System Based on Image Coding Processing Technology	A scoring system based on remote control technology
10	1.23	2.30	1.97
20	2.05	2.97	2.48
30	2.41	3.56	3.07
40	2.59	4.02	3.99
50	2.87	4.28	4.52

From the data in Table 8, it can be seen that the minimum response time of the designed system in this article is 1.23 s, while the response time of the other two systems is higher than that of the designed system, indicating that the application effect of the system in this article is better.

6 Conclusion

This article has optimized the design of an online education video scoring system for the physical education discipline. According to the experimental results, the lowest response time of the system designed in this article is only 1.23s, and the highest scoring value reaches 96.34. This indicates that the application effect of the system is good and good results have been achieved. This is because the system uses an 80C51 microprocessor as the core device and uses Visual Basic 6.0 to develop database programming. This not only saves system space, but also helps to improve the simplicity of system operation. However, in the application of sports score statistics for physical education video scoring system, teachers should also enhance the security, reliability and stability of data by setting worksheet protection password and cell protection password. In the process of statistics of online education video scoring system for physical education disciplines, teachers should also realize the statistics of list import link, score input link, score query link and score statistics link by implementing the transformation of traditional calculation methods and calculation concepts of physical education scores and the application process of physical education scores in the sports education video scoring system, improve the effectiveness, timeliness and accuracy of sports score statistics.

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