

Research Article

Improvement of English Classroom Teaching Effect Based on Real-Time Supervision of Student Status

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For English courses, the interaction between teachers and students in the classroom teaching process has a crucial impact on the improvement of classroom teaching effects, and through real-time supervision of students' classroom learning status, students' learning dynamics and learning effects can be grasped in time. For this reason, this paper proposes a learning state semisupervised learning method and real-time state monitoring system based on a clustering algorithm and a self-training SVM classification algorithm. At the same time, combined with the reform of English classroom teaching, the teaching effect can be improved to the greatest extent through the supervision of students' learning state. The experimental results show that monitoring the primary school English classroom teaching quality subject and providing skill training can help the primary school English classroom teaching quality subject predict the possible situation in the monitoring and prepare in advance in terms of thinking and skill teaching. Schools can urge primary school English classroom teaching quality monitoring subjects to have basic monitoring knowledge literacy, monitoring ability literacy, and monitoring moral literacy through primary school English classroom teaching quality monitoring knowledge training, skill training, and moral training. On the basis, the main body of primary school English classroom teaching quality monitoring can give full play to the role of the main body of monitoring when it organizes and implements monitoring. It is proved that real-time supervision of students' status can effectively improve the effect of English classroom teaching.

1. Introduction

As China's education continues to deepen, the new curriculum adapts to the new needs of the traditional curriculum and curriculum. As part of the revision of the new curriculum, it is possible to gradually establish the important role of students in the curriculum by gradually changing the presentation standards of the curriculum. Education is thus motivating and encouraging students to learn [1]. Let the students' learning process in class and after class change into a knowledge exploration process in which students constantly ask questions and teachers help students solve problems. At the same time, select appropriate teaching methods for different course learning contents, so as to make students' learning activities richer and personalized. In this process, the real-time supervision of students' learning state is directly related to the improvement of classroom teaching effect, and

it is also an important content of classroom management [2]. The classroom management under the new curriculum reform is to let teachers use modern educational ideas to continuously optimize the content and result system of classroom teaching, maximize the enthusiasm and initiative of students in classroom learning, give full play to the role of classroom teaching time, and complete the objectives and tasks of classroom teaching more efficiently and with higher quality [3]. Therefore, the key and main purpose of classroom management is to gradually improve the quality, effect, and efficiency of teachers' classroom teaching. Classroom teaching without classroom management is impossible. Classroom management must supervise students' learning state in real time and master students' learning state in time. Therefore, this paper focuses on how to better improve the effect of English classroom teaching by combining semisupervised learning method and real-time state detection system [4].

2. Literature Review

Dharmawati believes that the definition of “teaching quality” is influenced by the concept of education and can be divided into static concept and dynamic concept. Some scholars define this concept as static and define teaching quality as the sum of all characteristics that can be used to distinguish whether it meets the specified “target.” It is owned by both the teaching process and the teaching effect [5]. Phoeun and Sengri believe that the definition of this concept reflects its dynamics and that teaching quality is the overall structure of talent training specifications, an inexhaustible development system, a general effect of school education and teaching management, and a dynamic generation process of continuous development [6]. Kurdi and Archambault believe that since this study will expand to “primary school English classroom teaching quality” on the basis of “teaching quality,” the definition of this concept by previous scholars is conducive to increasing the reliability of the concept of primary school English classroom teaching quality monitoring sorted out by the author [7].

Alsahli believes that, due to the lack of research on English teaching quality monitoring in primary school, no completely relevant research results have been found. However, the author believes that English teaching quality monitoring in college and English classroom teaching quality monitoring in primary school have disciplinary commonality, so he tries to seek reference from the research results of English teaching quality monitoring in colleges and universities [8]. Ekstedt et al. believe that English, as an important part of college education, has received great attention in recent years. Some scholars have proposed to build a people-oriented teaching process quality monitoring system by establishing a college English teaching resource monitoring system and a teaching process monitoring system. It is proposed that the establishment of a scientific student quality evaluation system and the realization of teaching evaluation activities must be multiangle, the teachers’ teaching evaluation consciousness and theoretical level must be improved, and the members of the evaluation team should carefully design the form of praise teaching activities [9]. Saienko and Chugai call for the establishment of a good English language college management system by establishing a quality English language program based on good English, good English teaching, and teaching English, that is, quality assurance, good English language inspections record work performance, rewards, and penalties. These strategies and procedures for improving English language proficiency management in colleges are important in this study for developing strategies to improve English language arts management to be good in elementary schools [10].

Jitjumnong and Suksakulchai believe that total quality management is an important theoretical basis for teaching quality monitoring. It is a way to manage long-term success based on performance, total participation, customer satisfaction, and benefits for all members of the organization and people. It was started by General Electric of the United

States, and other industrialized nations have entered a new phase in the development of efficient management systems, including the implementation of sound management systems and improvements of their own qualities and characteristics [11]. Payant and Bell believe that total quality management refers to a quality management method for an organization to continuously improve product quality, mobilize all personnel to comprehensively use modern scientific management technology to conduct the whole process and comprehensive and systematic management of various factors affecting quality, and finally ensure that the products provided satisfy consumers [12]. Pan believes that emphasizing the overall situation and systematic viewpoint is a prominent feature of the total quality management system, which requires that the product quality should not only satisfy users, but also be conducive to the overall development of society [13].

3. Semisupervised Learning Algorithm

3.1. Semisupervised Learning and Clustering Algorithm. Semisupervised learning algorithm combines the learning concepts of supervised algorithm and unsupervised algorithm, as shown in Figure 1. Generally processed data sets are as follows:

$$X = \{(x_1, y_1), (x_2, y_2), \dots, (x_l, y_l), x_{l+1}, \dots, x_n\}, \quad (1)$$

$$x_i \in R^D, y_i \in \{1, 2, \dots, c\}.$$

It includes the first l labeled samples and the last $n-l$ unlabeled samples. Its purpose is to label unlabeled samples by finding reliable internal structure information in labeled samples and then train a better classifier or regression system through the expanded labeled sample training set. The learning process is shown in Figure 2.

In the traditional classification algorithm, the classification process mainly follows the labeled information of training samples to establish the classification model, while the semisupervised classification algorithm pays more attention to the global structure implied in a large number of unlabeled samples to optimize the classifier. Previously, unlabeled samples were difficult to introduce into learning algorithms (such as feedforward neural network) until someone explained the value of unlabeled samples and integrated semisupervised algorithm into classification algorithm to mine the structure information of the whole sample from unlabeled samples and avoid the classification model falling into local minimum. Then it is proved that unlabeled samples can affect the performance of the classifier in the classification process [14], as shown in Figure 3.

Self-training: as a semisupervised learning algorithm with more research, this algorithm first uses a small number of labeled samples to train the classifier, then uses the classifier to predict the unlabeled samples, adds the high confidence results to the training samples, and then repeatedly trains the classifier. In fact, the classifier uses its own prediction results to improve itself. At present, it has been

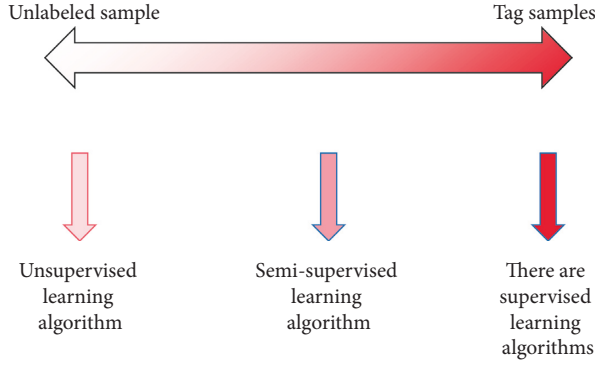


FIGURE 1: Schematic diagram of semisupervised learning algorithm.

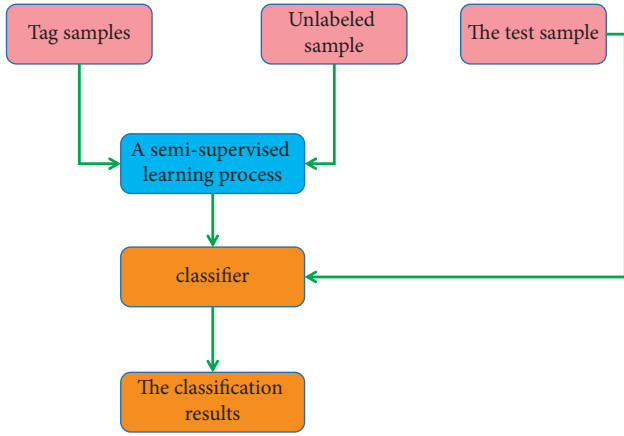


FIGURE 2: Process of semisupervised learning algorithm.

applied in natural language processing, word sense disambiguation, image recognition, and other fields.

3.2. Semisupervised Learning Algorithm Based on SVM.

Advantages of SVM algorithm are as follows:

- (1) It can solve the classification and regression problems of high-dimensional features.
- (2) The final result of the model does not need to depend on the entire sample, but only on the support vector.
- (3) There are well-researched kernel techniques that can be used to deal with linearly inseparable problems.
- (4) The sample size is moderately small and has a good effect, with a little generalization ability and robustness.

For the traditional SVM optimization problem, the training set contains i samples:

$$(x_i, y_i), i = 1, \dots, l, \quad (2)$$

where $x_i \in R^n$ and the classification hyperplane constructed by SVM is $wx + b = 0$. Through transformation, the problem can be transformed into an original optimization problem:

$$\min_{w,b,\eta} C \sum_{i=1}^l \eta_i + \frac{1}{2} \|w\|^2, \quad (3)$$

$$s.t. y_i (w \cdot x_i - b) + \eta_i \geq 1,$$

$$\eta_i \geq 0, i = 1, \dots, l.$$

Add unmarked data at this time:

$$x_j, j = l + 1, \dots, l + k. \quad (4)$$

The semisupervised SVM optimization problem can be described as follows:

$$\min_{w,b,\eta,\xi,z} C \left[\sum_{i=1}^l \eta_i + \sum_{j=l+1}^{l+k} \min(\xi_j, z_j) \right] + \|w\|,$$

$$s.t. y_i (w \cdot x_i - b) + \eta_i \geq 1, \eta_i \geq 0, i = 1, \dots, l; \quad (5)$$

$$w \cdot x_i - b + \xi_j \geq 1, \xi_j \geq 0, j = l + 1, \dots, l + k;$$

$$-(w \cdot x_i - b) + z_j \geq 1, z_j \geq 0.$$

The second and third inequalities constrain the class of 1 and -1 , respectively. The objective function represents the minimum value of computational error classification, and the programming problem can be solved by integer programming.

$$\min_{w,b,\eta,\xi,z} C \left[\sum_{i=1}^l \eta_i + \sum_{j=l+1}^{l+k} \min(\xi_j, z_j) \right] + \|w\|,$$

$$s.t. y_i (w \cdot x_i - b) + \eta_i \geq 1, \eta_i \geq 0, i = 1, \dots, l;$$

$$w \cdot x_i - b + \xi_j + M(1 - d_j) \geq 1, \xi_j \geq 0, j = l + 1, \dots, l + k;$$

$$-(w \cdot x_i - b) + z_j + Md_j \geq 1, z_j \geq 0; d_j = \{0, 1\}.$$

(6)

The problem with this method is that the amount of calculation will increase rapidly with the increase of unlabeled samples. Therefore, some researchers have transformed the original nonlinear programming optimization problem into iterative optimization problem through each iteration of linear programming, but the effect is limited.

3.3. Semisupervised SVM Classification Algorithm Based on Collaborative Training

3.3.1. Standard Cooperative Training Algorithm.

Specifically, the training set meets the following two conditions: (1) Each attribute set contains enough information to establish the structural model of the system; that is, each attribute set can train a strong learner independently, and the learner itself has high generalization ability; (2) when a tag is given, each attribute set condition is independent of another attribute set, which is often difficult to achieve in the actual process [15]. Then, in the process of collaborative training, each classifier screens several unlabeled samples with high prediction confidence and adds them to another tag set to provide update conditions for each other. The specific steps of the algorithm are shown in Figure 4.

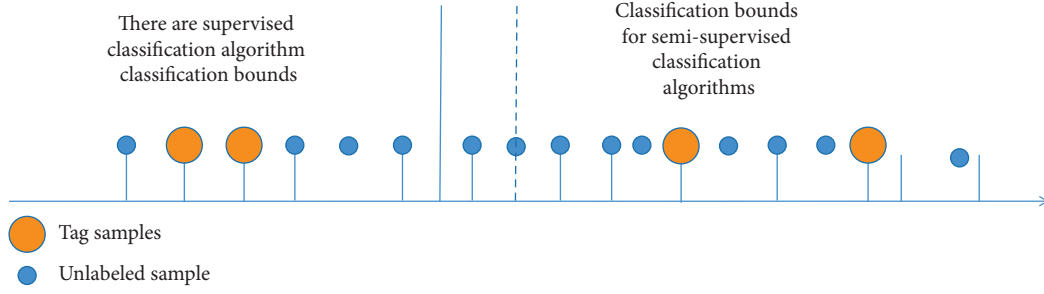


FIGURE 3: Effect of unlabeled samples.

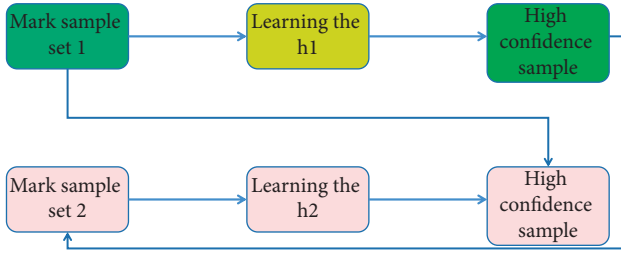


FIGURE 4: Standard cooperative training algorithm.

This algorithm has attracted the attention of many researchers since it was proposed. However, in practical problems, it is often difficult to directly obtain two fully redundant views from the original data. In this algorithm, unlabeled samples are classified by two different SVM classifiers, and the samples with high classification reliability are added to the labeled samples, so as to expand the labeled sample size.

3.3.2. Semisupervised Support Vector Machine Classification Algorithm. The main purpose of the SVM classifier is to prepare the low-dimensional data model to enter the high-dimensional feature model according to some nonlinear relationship and assume that it still can be divided into separate models in the high-section space. The distribution problem is solved by the distribution of the small area and then the high area [16]. The topology of SVM is shown in Figure 5. n is the input data dimension, K is the kernel function, and n is the number of support vectors.

Given a dataset:

$$\{x_i, y_i | i = 1, 2, \dots, N\}. \quad (7)$$

$x_i \in R^d$ is the difference of the individual, $y_i \in \{+1, -1\}$ is the difference of the individual (data set), and N is the magnitude of the training pattern. When dividing binary classification problems linearly, the following model can be used to define hyperplane $f(x) = 0$ to divide data:

$$f(x) = \sum_{i=1}^N w \cdot x_i + b = 0, \quad (8)$$

where w is the weight matrix and b is the bias factor, N is the training sample size. The following constraints are then used to determine the location of the classification hyperplane:

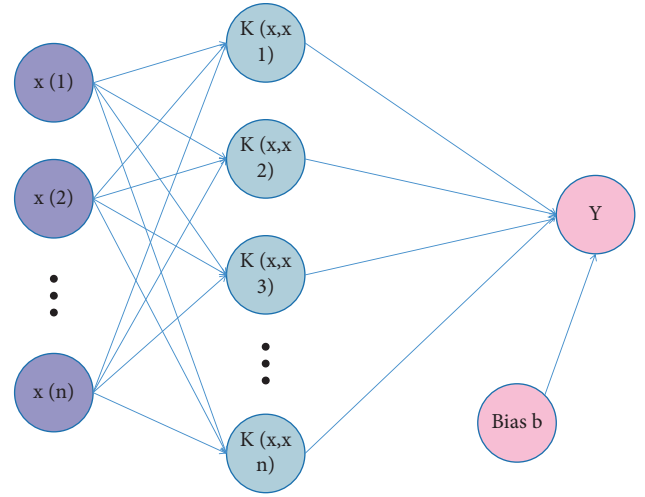


FIGURE 5: Topology of SVM.

$$y_i (w \cdot x_i + b) \geq 1, i = 1, 2, \dots, N. \quad (9)$$

The positive relaxation variable ξ_i is defined to calculate the distance between the boundary and the misclassification vector x_i , w is the weight matrix, and the b is the bias factor. Then the optimal classification hyperplane can be obtained through the following optimization problems:

$$\begin{aligned} \min & \frac{1}{2} \|w\|^2 + C \sum_{i=1}^l \xi_i, i = 1, 2, \dots, N, \\ \text{s.t.} & \begin{cases} (w \cdot x_i - b) \geq 1 - \xi_i, \\ \xi_i \geq 0. \end{cases} \end{aligned} \quad (10)$$

Here, C is the offense. By including the negative Lagrange multiplier α_i , the above model can be converted to a quadratic optimization rule, which can be defined as follows:

$$\max L(\alpha) = \sum_{i=1}^N \alpha_i - \frac{1}{2} \sum_{i,j=1}^N \alpha_i \alpha_j y_i y_j K(x_i, x_j), \quad (11)$$

$$\text{s.t.} \sum_{i,j=1}^N \alpha_i y_j = 0, 0 \leq \alpha_i \leq C, i = 1, 2, \dots, N.$$

For linear classification problems,

$$K(x \cdot x_i) = x \cdot x_i. \quad (12)$$

The training sample with nonzero weight α_i is called support vector, so the decision function of SVM is defined as follows:

$$f(x) = \text{sign} \left(\sum_{i=1}^N \alpha_i y_i K(x \cdot x_i) + b \right). \quad (13)$$

The advantage of using kernel function is that the kernel function replaces the spatial internal multiplication of a high-dimensional function, which drastically reduces the number and complexity of calculations. Classical kernel functions include linear kernel functions, polynomial kernel functions, Gaussian radial basic kernel functions, and S-shaped kernel functions. Each kernel function has its own unique characteristics [17]. The Gaussian radial root function (RBF) used in this form is widely used in parametric computing due to its excellent effect and strength. RBF format is as follows:

$$K(x \cdot x_i) = \exp \left(-\gamma \|x - x_i\|^2 \right), \quad (14)$$

where

$$\gamma = \frac{1}{2\sigma^2}. \quad (15)$$

σ is the width parameter in RBF. According to the experience of previous researchers, the main content of SVM design is to select the appropriate kernel function and kernel parameters. However, some researchers believe that the key factors affecting the performance of SVM compared to the mode of action of the tablets are the nontablets and the penalties C . Thus then, it is necessary to select the model that fits the specific model of SVM. Take advantage of SVM. In this chapter, two different SVM classifiers are defined using different values. It is able to calculate the constraints of an SVM classifier by the genetic algorithm and determine the value of the measure according to the specified parameters.

In the implementation of the algorithm, we must ensure that h_1 and h_2 are two different classifiers; otherwise the collaborative algorithm will be transformed into a self-training algorithm, which will lead to the two classifiers having the same misclassification result for the same sample, and this result will deteriorate with the iteration, and the subsequent classifier will be updated. Therefore, in this paper, according to the characteristics of SVM, we adjust the parameters of two SVM classifiers to obtain the difference between classifiers. In h_1 , we use the default parameter value, and in h_2 , we use genetic algorithm to optimize the parameter value. As mentioned above, the parameters in SVM have a very important impact on the performance of the learner, so we can think that we have selected two different learners by selecting two different parameters.

For the classification reliability problem, it is intuitively believed that if the two classifiers trained by L have the same prediction results for the same unlabeled sample, the result will have higher classification reliability. Therefore, this labeled result can be added to L to expand the training labeled sample set [15].

4. Design of Real-Time Condition Monitoring System

4.1. Platform Software. The system developed is a real-time condition monitoring system for track circuit. It is an application based on C/S architecture. An important feature of the application is that it can provide users with an easy-to-use user environment. In addition, it requires developers to write programs in a development environment with friendly interface, easy operation, and easy understanding. Based on the above considerations, C++ Builder 5.0 is selected. C++ Builder provides powerful database application development functions and database auxiliary tools. Through these components, you can access large databases such as Oracle and SQL server. Using these component tools, developers can quickly and with high quality develop applications based on C/S architecture. And there are more than twenty kinds of components on the Internet component board of C++ Builder. Users can use them to create almost all common Internet applications.

4.2. Overall System Architecture

4.2.1. Software Structure. The overall software structure of the system is shown in Figure 6.

As can be seen from Figure 6, the monitoring system carries out real-time data communication with each board of the lower computer through the serial bus. On the one hand, it receives the real-time data transmitted by the lower computer; on the other hand, the upper computer application program can send instructions to the lower computer to change the working state and mode of the lower computer. At the same time, the real-time data information collected by the upper computer application and the relevant information of the application itself are stored in the database server, and users can query, update, and delete this information.

4.2.2. System Software Function Module Diagram. The division of functional modules is an important part of system design. Its key task is to divide a system into several subsystems according to the objective requirements of function or logic. After the division, each subsystem can be independent as far as possible and has universality in some aspects, in order to expand and modify the system in the future. Its functional modules are shown in Figure 7.

4.3. Design and Key Technology of Each Functional Module of the System

4.3.1. Communication Module. The communication mode between the system and the lower computer acquisition device is serial communication. Serial communication is that data is transmitted bit by bit through a transmission line. The advantages of serial communication are long transmission distance and strong anti-interference ability. Serial communication can be divided into three transmission modes according to the direction of data flow: simplex, half-duplex,

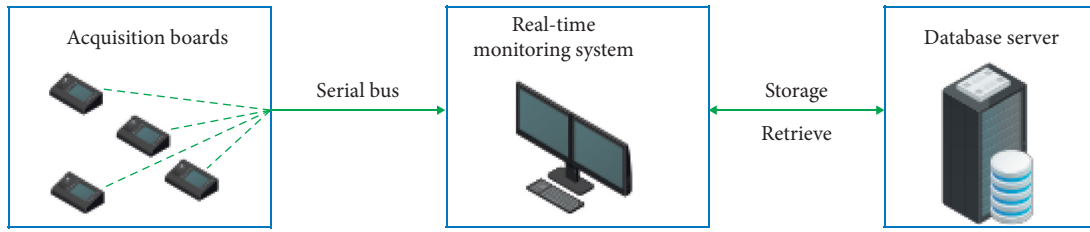


FIGURE 6: Overall software structure of the system.

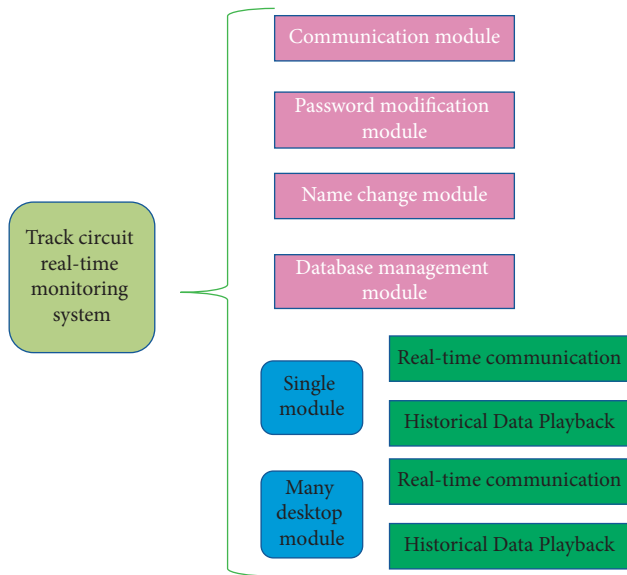


FIGURE 7: System software function module diagram.

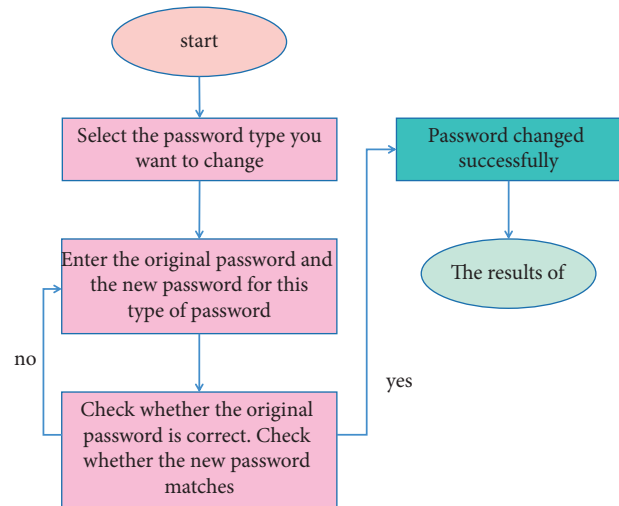


FIGURE 8: Password management flowchart.

and full duplex. Simplex data transmission is one-way. One party is fixed as the sending end and the other is fixed as the receiving end. Half-duplex communication uses a transmission line, which can send and receive data but can not send and receive data at the same time. At any time, only one party can send data and the other party can receive data. The main function of the communication module is to set various communication parameters of the serial port to adjust the communication state. These parameters include port number, baud rate, data bit, and checksum stop bit [18].

4.3.2. Password Management Module. Because the system has strict requirements for operation, in order to prevent improper operation caused by users who are not authorized or have low access to some functions of the system, when users use some functions of the system, they need to enter a password, and the system will verify whether the user’s permission is legal. The system divides user passwords into three levels. They are debugging password, maintenance engineer password, and exit password. The debug password level is the highest and the exit password level is the lowest. For example, threshold setting requires the highest level of permission, while the lowest level of permission can be used when exiting the system. The password management flowchart is shown in Figure 8.

4.3.3. Name Management Module. In order to enable users to modify the display mode of the lower computer name in the system according to different usage habits and in different environments, it is necessary to modify and manage the lower computer name. The flowchart of this module is shown in Figure 9.

4.3.4. Database Management Module. Database management module is a platform to realize these functions. Its function is mainly divided into two parts: first, delete and update the expired and worthless single machine/multi-machine historical data information saved in the database; second, when single machine/multimachine historical data is played back, the required historical data information is retrieved through the platform. The flowchart of this module is shown in Figure 10.

4.3.5. Single Machine, Multimachine Mode, Real-Time Communication. When storing data files, in order to reduce the capacity size of data files, the system uses data file compression to save. In this way, the capacity of data files saved in the local hard disk is very small and will not occupy too much local hard disk space [19]. The real-time communication flowchart of single machine/multimachine mode is shown in Figure 11.

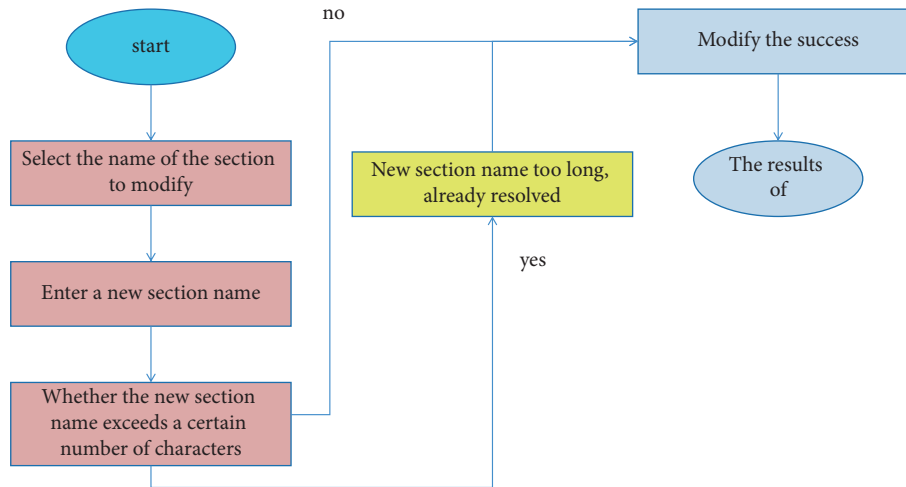


FIGURE 9: Name management flowchart.

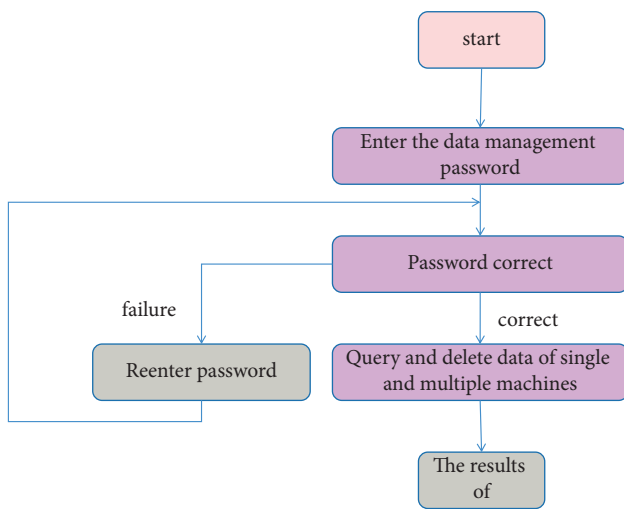


FIGURE 10: Flowchart of database management.

4.3.6. *Single Machine, Multimachine Mode, and Historical Data Playback.* Since the single machine/multimachine mode uses compression to save the historical data file when saving real-time data, the contents of the file cannot be read directly. Therefore, when selecting the historical data file for playback, the system decompresses the selected data file to generate a temporary file and restore it to the original readable state, so that the system can read the contents of the file for data playback. When the user selects the next history file to open, or when the user exits the module, the temporary file will be deleted [20]. The flowchart of single machine/multimachine mode historical data playback is shown in Figure 12.

The user selects the historical data to be played back in two ways. In the standalone mode, the data content will be displayed in the oscilloscope after successful selection. The historical data playback of multimachine mode is divided into two parts. One is the historical data playback of the overall status of multiple machines; the other is to select a specific section to view the data of the section.

Through the construction of quality culture, every employee of the school can understand the connotation of quality and form a certain quality responsibility and quality ethics, so that every person participating in quality monitoring can restrict their own quality behavior. Through the construction of quality culture, the quality foundation of quality monitoring participants can be improved. Therefore, first of all, the school should strengthen the construction of “quality culture,” so as to make the school environment form an atmosphere of paying attention to quality and better understand quality monitoring in the edification of this atmosphere. On this basis, the school organizes and implements the quality monitoring of primary school English classroom teaching, which can be carried out in such an atmosphere with better background support. The next step is to promote good governance in English elementary schools. The banner not only allows the display of banners and posters, but also supports the administration of English language education in elementary schools. All participants in the effective management of English language instruction will have a better understanding of this, reducing the negative understanding of the topics and objects of management. English schools are good and develop a good understanding of the environment [21]. The word “control” often makes people feel bad, so the objects of control are not understood and felt high and lead to good management. In order to avoid such a decision and make a better impact, which is the real goal of “performance management.” Within the framework of the mission of “Quality Assurance in Primary English,” the curriculum and materials of management formed a “United Front” to ensure the quality of the original English.

The content of overseeing English language proficiency in elementary school should remain in the general curriculum of elementary school English language teacher classes, and key words that affect English proficiency in elementary school should be gradually subdivided into elementary school concepts. Good English language management: The concept of “whole process” of all formal management is combined with the standards or stages of the process of

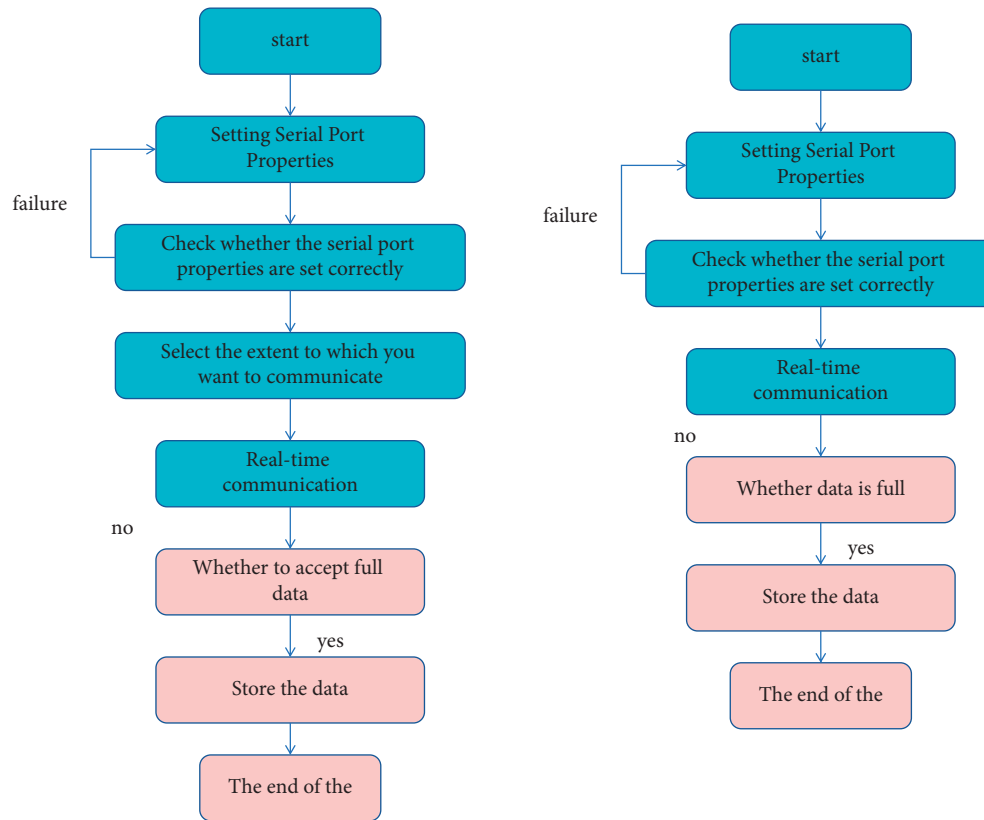


FIGURE 11: Single machine/multimachine mode real-time communication flowchart.

teaching English in elementary school, as shown in Tables 1 and 2.

The purpose of dismantling the monitoring content in stages is to make the monitoring subject no longer feel the classroom as a whole by feeling aimlessly in the information collection link, and the elements settled in each stage are more targeted. In addition, it should be explained that the knowledge literacy, ability literacy, and moral literacy of primary school English teachers can be subdivided. Here is only a reference monitoring content framework. Formulating the monitoring content throughout the “whole process” of primary school English classroom can well improve the monitoring content of primary school English classroom and reduce the problems caused by incomplete monitoring content [22].

By implementing a number of specialized trainings on key concepts of performance management in English language elementary schools, we will be able to eliminate the risk of recognizing the importance of maintaining college English proficiency and gain a full understanding of the concept of care in our hearts. In addition, training skills to monitor the good governance of the elementary school English will help to predict the situation that will occur in the management of good governance at elementary school English and prepare their thoughts and skills in advance. From the first English language school to a comprehensive English language center for intellectual property, vocational training, and ethics training, the school provides a comprehensive English language arts supervision program, to

excel in elementary school, promoting academic achievement and ethical supervision. By ensuring that the supervisors have achieved these positive characteristics, a good performance management class for the English primary school can play a full role in management and administration [23].

A single monitoring means will lead to the problems found in the monitoring process which is not comprehensive enough, so we need to choose the primary school English classroom teaching quality monitoring means from multiple perspectives to find problems from multiple perspectives to make up for the shortcomings of each monitoring means. The convenience and efficiency of the “Internet +” model are increasingly recognized by the society, so the “Internet + primary school English classroom quality monitoring” will produce “online” monitoring means, and the application of this means can improve the efficiency of primary school English classroom teaching quality monitoring and will greatly improve the level of modern education and teaching in schools. Therefore, schools need to look at the cost of investment in “online” monitoring technology from a long-term perspective and consider the development of education in the future. In addition, the application of self-evaluation monitoring means is relatively weak compared with evaluation monitoring and mutual evaluation monitoring, and self-evaluation monitoring means can help primary school English teachers form self-monitoring and improve their awareness of ensuring quality. Therefore, it is necessary to strengthen the use of self-evaluation monitoring

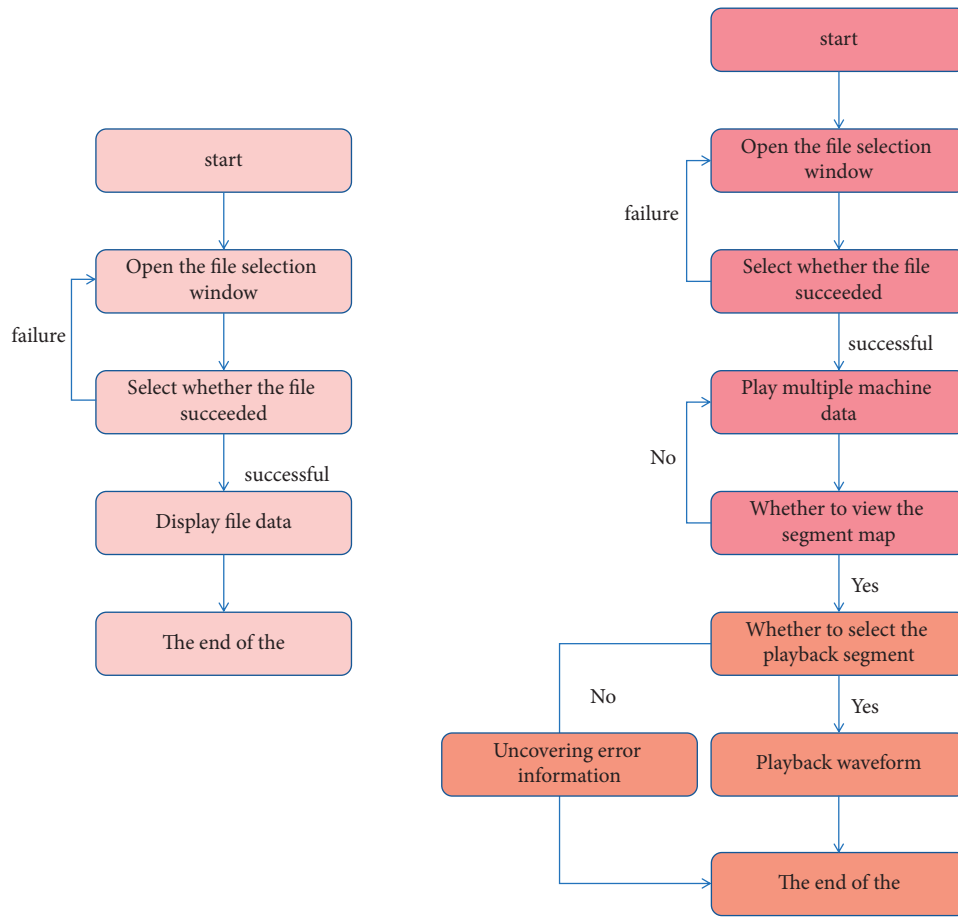


FIGURE 12: Single machine/multimachine historical data playback flowchart.

TABLE 1: Reference frame A of “whole process” monitoring content of English classroom teaching quality in primary school.

	Warm up and lead in	Presentation	Practice and consolidation	Production and homework
Primary school English teachers	Knowledge literacy Ability literacy Truth literacy			
Student	Degree of participation Degree of concentration			

TABLE 2: Reference frame B for “whole process” monitoring content of English classroom teaching quality in primary school.

	Before reading/before listening	While reading/while listening	After reading/after listening
Primary school English teachers	Knowledge literacy Ability literacy Truth literacy		
Student	Degree of participation Degree of concentration		

means in primary school English classroom monitoring quality monitoring.

5. Conclusion

“Quality Assurance of English Language Teaching” should be changed to “Quality Assurance in English Language Teaching and Strengthening the Effectiveness of English Language Teaching.” Second, engage English elementary school teachers in the development of assessment standards, including the specific concept of teaching English in elementary school. It will improve the management content of the first English language education, which reaches all levels of the “whole process” of basic English. Specialized training will be provided to elementary English classes to teach classroom management skills to gain knowledge of classroom management. An organization will be set up to oversee English language classes in elementary schools in order to work with “responsible leaders.” Sixth, provide tools to monitor the quality of English language instruction and strengthen the use of “online” monitoring and self-assessment. Specify the operational time of the link to monitor the quality of basic English instruction and to conduct a strict writing process for the link to be tested.

The primary school English classroom teaching quality monitoring link is mainly composed of classroom information collection link, evaluation link, feedback link, and regulation link. In order to ensure the quality of each monitoring link and avoid the neglect of the monitoring link, it is necessary to divide the labor of each link, and at least two people participate in one link. In the information collection link, because the monitoring content involves the “whole process,” the number of monitoring subjects can be appropriately increased as needed. Every subject participating in the information collection link should participate in the evaluation link. Both written feedback and face-to-face communication feedback in the feedback link should be fed back to the teaching teacher. The regulation link is essentially the beginning of a new round of monitoring, which requires the personnel who participated in the information collection link and those who did not participate in the previous round of monitoring to be responsible together, so as to ensure that the teaching teachers implement the feedback and consciously improve the teaching. In addition, the monitoring link needs to make a strict and mature written regulation on the specific requirements and taboos of each link, so as to take this as the minimum behavior standard for the monitoring subject to implement the monitoring in each monitoring link and standardize the monitoring behavior.

Schools can, through the primary school English classroom teaching quality control knowledge training, skills training, and moral training, promote primary school English classroom teaching quality monitoring where subject has basic monitoring knowledge literacy, monitoring ability literacy, monitoring moral quality, on the basis of the basic quality of primary school English classroom teaching quality monitoring subject in the organization and implementation of monitoring to give full play to the role of the monitoring

main body. It proves that the real-time supervision of students’ status can effectively improve the effect of English classroom teaching.

Data Availability

The labeled datasets used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The author declares that there are no conflicts of interest.

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