

Retraction

Retracted: Construction of University English Informatization Learning Environment Based on ESP Teaching Mode

Security and Communication Networks

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

- [1] L. Feng, "Construction of University English Informatization Learning Environment Based on ESP Teaching Mode," *Security and Communication Networks*, vol. 2022, Article ID 5462618, 12 pages, 2022.

Research Article

Construction of University English Informatization Learning Environment Based on ESP Teaching Mode

Ling Feng 

Department of Public Foreign Language Teaching, Henan Finance University, Zhengzhou 450046, Henan, China

Correspondence should be addressed to Ling Feng; fengling@hafu.edu.cn

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To further improve university students' English comprehensive quality and knowledge level, a kind of information analysis and evaluation system based on the English course was put forward and designed. The construction of the informatization learning environment was explored from the perspective of ESP theory, combining with the existing problems of English informatization teaching in universities. It aimed at promoting the transformation and development of the targeting of English teaching, the application of the curriculum system, the specialization of the teaching content, and the multidimensional evaluation mechanism. The results showed that the application of ESP teaching theory in the construction of an informatization learning environment could provide the system and resource guarantee for the innovative development of the English teaching model and further optimize the English teaching method. Through a semester of The Foundation of University Information Technology MOOC study and practice in the practical operation of the evaluation system, the pass rate of each college was over 80%. And 91% of the students scored more than 60 in the final exam and 35% of the students scored more than 90.

1. Introduction

With the deepening of national education system reform, an adjustment must be made timely and innovation is required for the modernization of teaching in colleges and universities. And with the continuous development of network technology and mobile communication technology, the new technology based on modern information technology begins to gradually fuse into the field of university English teaching and learning environment [1]. Both the network teaching mode based on multimedia and the independent learning platform have been widely used in university English teaching and other related information technologies have gradually been integrated into university English teaching. It can be said that the informatization development of modern education has become the inevitable choice of educational innovation and development in the new era. Under the informatization environment, the construction of university English teaching mode and informatization learning environment is also the inevitable trend of English teaching reform and innovation in the future. Therefore, how to apply

information technology to university English teaching and innovate the existing English teaching environment is the current focus of university English research [2].

2. Literature Review

Shamsudin and Majid believed that social environment, predictive factors, process factors, and learning effects jointly affected English teaching in the process model of English teaching. Some scholars believed that the course goal was to meet the actual job demand for employment and the core of the course content was to develop vocational skills in this teaching model, with teachers and students playing the most important roles [3]. According to the language requirements, cultural background, English proficiency, and career goals of vocational students, it was divided into several different models by Lee. The second language mode was the language training for employment and job environment. Vocation mode referred to the training of language skills related to a specific occupation or the occupation through the simulation of occupational scenarios. Work experience

mode combined experience of workplace and VESL classroom teaching so as to train. The field mode was the training of language skills related to specific work areas, which were carried out in the context of a specific workplace [4].

Foreign scholars created a system to help people learn foreign languages for free. It was found by Veselov et al. that when Spanish native speakers just started to learn English pronouns such as “he,” “she” and “it,” the word “it” tended to cause confusion and anxiety in learners. Because it was difficult to translate into corresponding Spanish. Therefore, he tried many times to get the best way for Spanish people to learn English, which was that “he” and “she” were only taught at first and then “it” was taught a few weeks later when the number of people who insisted on learning increased significantly, thus improving the number of people who insisted on learning significantly [5]. Baram et al. believed that the teaching method presented us with a way of big data reshaping education, which reflected that big data technology could effectively analyze and intervene in learning. The mechanism of how to collect behavioral data of learners and obtain information from it was designed [6]. Ruge and Mackintosh believed that with these learning behavior data, big data analysis could solve those problems that were difficult to solve in the past. For example, which questions did learners spend more time answering, right questions or wrong questions? The reason for learners’ wrong answers is their insufficient understanding of the content or physical and mental exhaustion [7]. Gan et al. believed that the most suitable learning path for learners could be planned through data analysis. Teachers and parents could also obtain learners’ learning progress reports through the digital panel, so that learners could play an active role in learning. This teaching method highlighted the changes in teaching and learning in the era of big data and the analysis results of learners’ learning behaviors could be used for teaching improvement [8]. The structured system proposed and constructed by Han and Chen provided learners with the freedom to choose the content they were interested in as much as possible. And he studied the data that learners searched and learned on the Internet and the data that learners communicated and exchanged with each other, so that teachers could master learners’ learning behaviors [9]. According to the actual learning behavior based on the situation, Huang provided advice and counseling to students and the proposed and designed system had functional modules related to the study of learners’ behavior and evaluation, mainly studying learners’ learning behavior data and learners’ feedback to the learning system so as to evaluate learners’ learning behavior [10].

Based on the present research, a kind of information analysis and evaluation system based on the English course was put forward and designed. The construction of the informatization learning environment was explored from the perspective of ESP theory, combining with the existing problems of English informatization teaching in universities. It aimed at promoting the transformation and development of the targeting of English teaching, the application of the curriculum system, the specialization of the teaching content, and the multidimensional evaluation mechanism.

3. English Course Information Analysis and Evaluation System

3.1. Course Learning Platform

3.1.1. Learning Platform. The rapid rise of Massive Open Online Courses (MOOC) and other large-scale open online courses has prompted the reform of traditional teaching mode and management system, which bring new opportunities and challenges to the teaching reform of colleges and universities. Facing the “digital tsunami” in the history of education, in order to participate in, explore and innovate college computer basic education suitable for the Internet era actively, several colleges and universities in Fujian province jointly produce the MOOC quality teaching video of The Foundation of University Information Technology, which has been released on the MOOC cloud platform [11]. The MOOC resource is fully open and accessible to learners at any time. Supported by The Foundation of University Information Technology, various universities can carry out mixed a teaching mode including classroom teaching, online learning, SPOC, and Flipped Classroom (Learners complete knowledge learning after class, and classroom becomes a place for the interaction between teachers and students and between students). There are 39 videos and 8 chapter tests. So the points of the video task account for $39/(39+8)=82.98\%$ and the points of the chapter test task account for $8/(39+8)=17.02\%$. As shown in Figure 1.

3.1.2. Comprehensive Evaluation Method of Theoretical Courses. The comprehensive means of a process evaluation method and a summative evaluation method were adopted in the MOOC of The Foundation of University Information Technology. The purpose of the comprehensive evaluation was to encourage learners to pay more attention to the learning process [12].

3.1.3. Analysis of Overall Learning Behavior

(1) Statistics of Access Times in Each Period. From November 1, 2019 to January 6, 2020, a day not on school holidays from Monday to Friday was randomly selected and a total of 20 days were randomly selected for the statistics of learners’ active time period within 24 hours of a day. As shown in Figure 2.

It can be seen that learners’ access to the platform improves significantly from 20 o’clock and the number of clicks drops sharply after 21 o’clock. The active trend of learners on the platform is also consistent with their learning rules in school life.

(2) Statistics of Learners’ Accessing Learning Way. According to the statistics of learners’ access to MOOC on the platform, it is found that most learners use mobile clients to access courses. As shown in Figure 3.

It can be seen that most learners use mobile clients to access the MOOC of The Foundation of University Information Technology. When teachers assign teaching tasks or

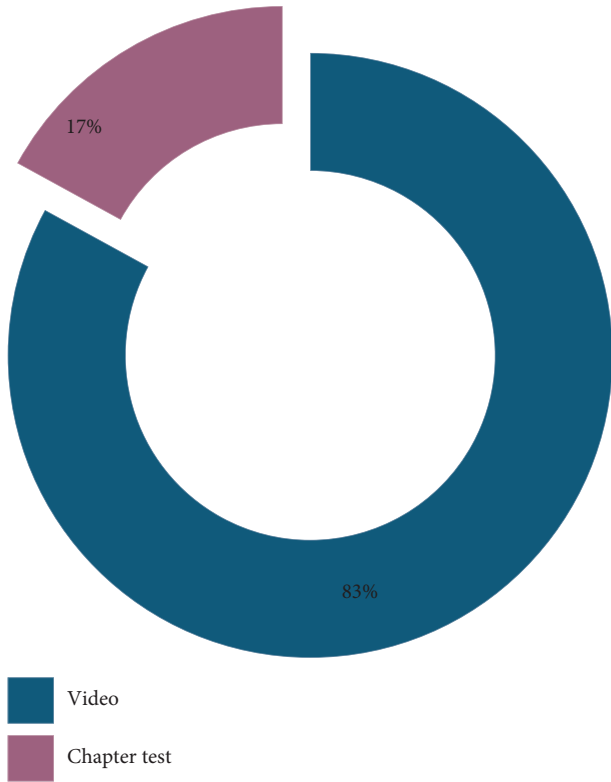


FIGURE 1: Distribution of the course task points.

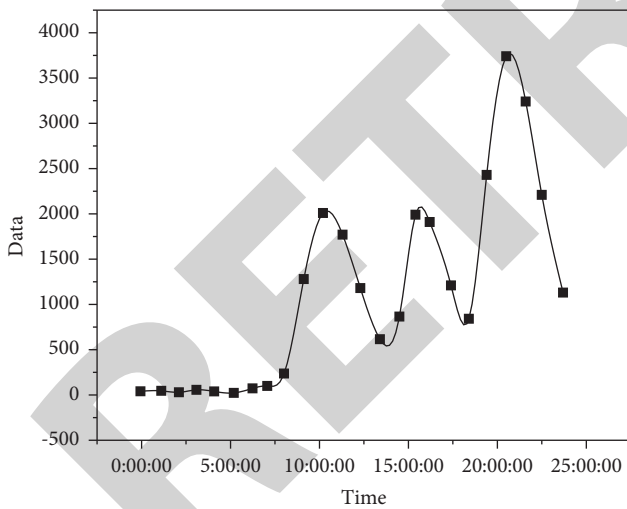


FIGURE 2: Statistics of access times in each time period.

ask questions online, they should give full consideration to the operations that can be completed on mobile terminals [13].

3.2. Cluster Analysis of Learning Behavior. In order to understand the relationship between the behavior of each type of learners watching videos in the chapter and the learning effect (chapter test), the learning behavior of each video in MOOC of The Foundation of University Information

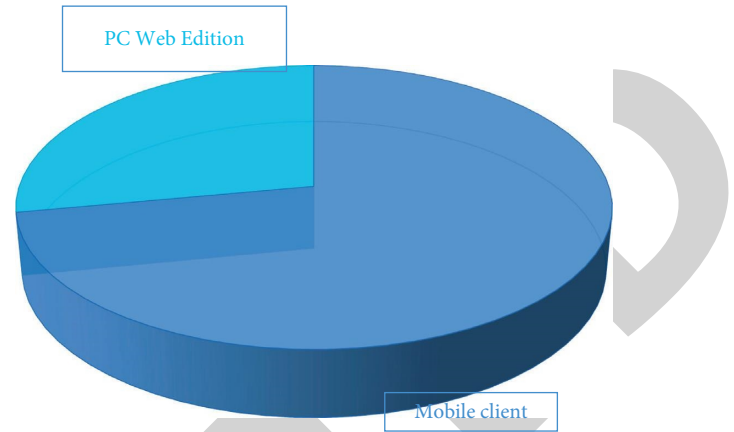


FIGURE 3: Statistics of learners' accessing learning way.

Technology was combined respectively according to eight chapters and the percentage of learners watching videos in each chapter was counted, as shown in formula.

$$N = \frac{\sum_{p=1}^k (m_p * L_p)}{\sum_{p=1}^k L_p} \tag{1}$$

In formula (1), N is the viewing rate of a video in a chapter. k is the number of videos in the chapter. m_p is the viewing rate of the p th video in the chapter and L_p is the length of the p th video in the chapter. Therefore, the correlation analysis between “learning behaviors of watching chapter videos” and “learning effects of chapter tests” can be carried out.

After the mean clustering of learning behaviors was carried out, learners were divided into 4 cluster members. And the average score of theoretical scores of these 4 cluster members was counted. It was found that cluster member 1 had the highest score and cluster member 3 had the lowest score.

3.2.1. Comparative Analysis of Watching Videos. The behavior data log of watching videos in learners' learning behaviors was extracted and analyzed. To compare the differences of learning behaviors of watching course videos in four clusters, the average value of watching duration ratio from video 1 to video 8 of four clusters was drawn here, as shown in Figure 4.

As shown in Figure 4, the frequency of watching videos of learners of different groups varied greatly. The progress of watching videos of samples in different clusters varied widely, indicating that the overall situation of learners in different clusters was not stable. Because the frequency of watching videos of some learners differed greatly from that of other learners [14].

3.2.2. Comparative Analysis of Chapter Test. The submitting time of eight tests for the learners in cluster 0 is shown in Figure 5. It could be found that there were almost no existed learners not submitting test in the cluster 0. By and large, the completeness degree was higher for cluster 0 learners in

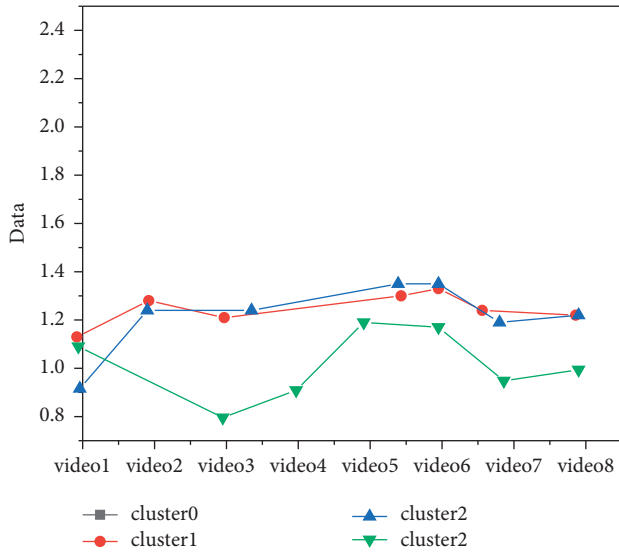


FIGURE 4: Video duration of watching 8 chapters by four clusters.

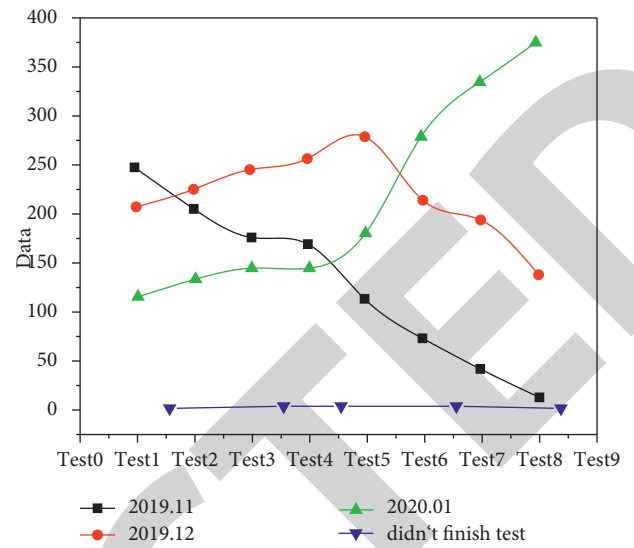


FIGURE 6: Learners' eight tests submission time in cluster 1.

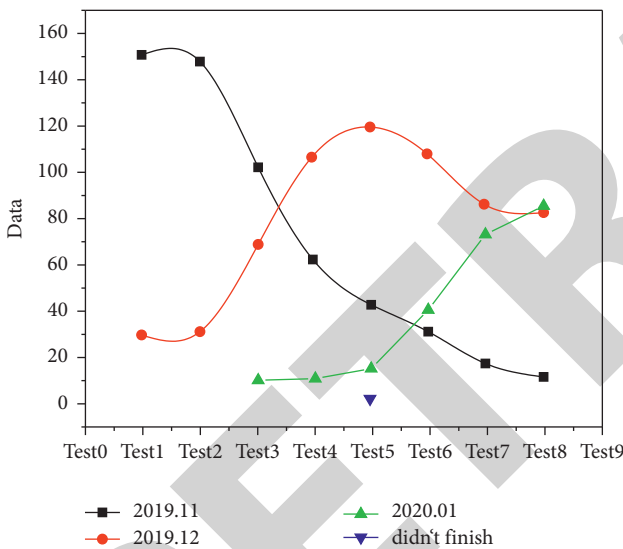


FIGURE 5: Learners' eight tests submission time in cluster 0.

online test, indicating that they had a more serious learning attitude. A part of learners in cluster 0 submitted the homework before January. The cluster 1 learners' learning habit was worse than the cluster 0 learners' learning habit. It could be seen from Figure 6 that some cluster 1 learners finished the test of each chapter in January 2019. A small number of learners could review and test what they learned through the chapter test timely to ensure the learning time. All the learners in cluster 1 almost submitted all tests. And most of these learners were science and engineering majors and had a certain theoretical basis.

3.2.3. Learning Model Summary and Suggestions. As can be seen from Figure 7, the roughly completing learners accounted for a majority in the four types of learners. They

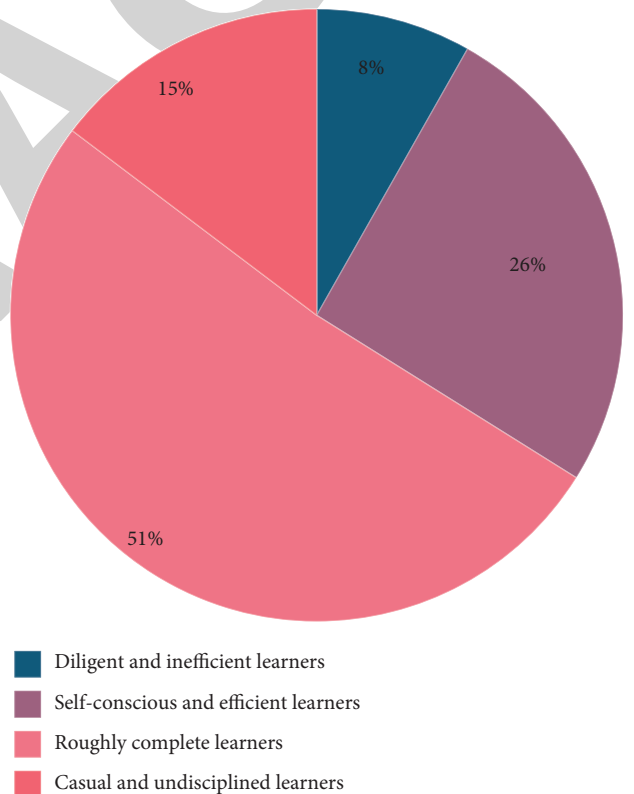


FIGURE 7: Proportion of the four types of learners.

had good study habits and finished the chapter test immediately after learning the teaching video at the beginning, but the learners' enthusiasm on completing the test declined over time. And the value of chapter test were not valued. They just took the test as a mandatory task, so their final score was not the highest. These learners mainly learned knowledge through the course videos and could pass the course.

For different types of learners, teachers can adopt different personalized methods to assist learners to improve their scores. The roughly completing learners account for a majority in the four types of learners. For such learners, teachers should encourage them to keep their good learning habits at the beginning and remind them to pay attention to the teaching video knowledge and chapter tests in daily life, using chapter tests to consolidate what they have learned instead of cramming before exams [15].

3.3. Analysis of Learning Behavior Characteristics Effectiveness

3.3.1. The Engineering of Learning Behavior Characteristics. The unit tests in the MOOC of The Foundation of University Information Technology were graded. Those whose scores were greater than or equal to 0 and less than 10 were divided into level 1. Those whose scores were greater than or equal to 10 and less than 20 were divided into level 2. As shown in formula (2), where K is grade and G is score. Set a failing grade below level 6. The calculation formula is as follows.

$$K = \text{int}\left(\frac{G}{10}\right). \quad (2)$$

3.3.2. Gini Index Analysis. Gini index can be used as a measure of feature weight and is widely used in feature selection of decision trees. The Gini index is also used to measure the “impure degree” of data. When the data comes from the same category, the Gini index is 0. When the data comes from two categories with half of each, the Gini index reaches the maximum value of 0.5 [16]. The smaller the Gini index is, the lower the probability that the selected samples in the set are misclassified. That is to say, the higher the purity of the set is, the less pure the set is. Gini index is defined as formula.

$$Gini(P) = \sum_{c=1}^N P_c(1 - P_c) = 1 - \sum_{c=1}^N P_c^2. \quad (3)$$

Description of Gini index analysis algorithm:

- (1) For sample D in set D , P_c represents the probability that sample D belongs to category C , so the probability of wrong selection is $(1 - P_c)$.
- (2) There are C categories in the sample set and a sample randomly selected can be assigned to any of these C categories.
- (3) When it is dichotomous

$$Gini(D) = 2P_c(1 - P_c). \quad (4)$$

- (4) When it is C category

$$Gini(D) = 1 - \sum_{c=1}^C P_c^2. \quad (5)$$

Suppose that there are 15 samples in the current training set S , among which 5 are positive classes and the other 10 are negative classes. The Gini index

corresponding to the training set can be calculated as follows:

$$P_+ = \frac{5}{15} = \frac{1}{3},$$

$$P_- = \frac{10}{15} = \frac{2}{3}, \quad (6)$$

$$Gini(S) = 1 - \left(\frac{1}{3}\right)^2 - \left(\frac{2}{3}\right)^2 = 0.44.$$

- (5) The Gini index can be used to select the optimal feature in the classification tree. If sample set D is divided into D_1 and D_2 according to the value a of feature A , then under the condition of feature A , the Gini index of set D is as follows:

$$Gini(D, A) = \frac{|D_1|}{|D|} Gini(D_1) + \frac{|D_2|}{|D|} Gini(D_2). \quad (7)$$

Suppose there is such a set of performance dataset. The sample set has nine samples and each sample has three characteristics (Test1, Test2, Test3). One sample has the result of a pass or a fail.

In this sample, the set of values of Test 1 = {6, 7, 8};

In this sample, the set of values of Test 2 = {5, 6, 7};

In this sample, the set of values of Test 3 = {5, 7, 8};

In this sample, the set of the final grade values = {pass, fail};

Test1:

D_1 (Test1 = 6), D_2 (Test1 = 7), D_3 (Test1 = 8),

$|D| = 9, |D_1| = 4, |D_2| = 3, |D_3| = 2,$

$$Gini(D, \text{Test}) = \frac{|D^1|}{|D|} Gini(D^1) \quad (8)$$

$$+ \frac{|D^2|}{|D|} Gini(D^2) + \frac{|D^3|}{|D|} Gini(D^3).$$

$|D^1| = 4$. The pass number is 1 and the number of fail is 3.

$$Gini(D^1) = 1 - \left(\frac{1}{4}\right)^2 - \left(\frac{3}{4}\right)^2 = 0.375. \quad (9)$$

$|D^2| = 3$. The pass number is 2 and the number of fail is 1.

$$Gini(D^2) = 1 - \left(\frac{1}{3}\right)^2 - \left(\frac{2}{3}\right)^2 = 0.444. \quad (10)$$

$|D^3| = 2$. The pass number is 1 and the number of fail is 1.

$$Gini(D^3) = 1 - \left(\frac{1}{2}\right)^2 - \left(\frac{1}{2}\right)^2 = 0.5,$$

$$Gini(D, \text{Test}) = \frac{4}{9} * 0.375 + \frac{3}{9} * 0.444 + \frac{2}{9} * 0.5 = 0.425. \quad (11)$$

By using this method, the values of Gini (D , Test2) and Gini (D , Test3) can be calculated. It can be seen that which feature has the greatest impact on the final grade. By using Gini coefficient method to analyze learning behavior feature weights, it is found that timely submission of chapter tests has the greatest impact on grades. Teachers should set the chapter test submission time in the Mooc platform chapters and monitor learners to complete the test timely after class to consolidate their knowledge of learning. Learners are urged to watch videos carefully.

3.4. System Function Requirements. System design is C/S architecture. To reduce the size of the installation package, the installation program is divided into server installation package, client installation package, and teacher installation package. Different users log in on different software interfaces. After successful login of legitimate users, they can enter corresponding modules and perform related operations.

3.4.1. System Function Requirements. The system users are divided into three kinds of users including administrators, teachers and students. The three kinds of users must be authorized by the system to use the related system resources. The system resources used by authorized users are determined by user identities. Administrators are mainly responsible for subject management, program management, question bank management, student management, task management, parameter management, monitoring management, connection management, statistics management, software update, authority management, log management, etc. See Figure 8. Teachers mainly have the authority of invigilation management and other permissions are determined by the administrator [17].

Through the system, students can change the password, conduct online practice, view the results, view risk evaluation, online test, and so on. See Figure 9.

3.4.2. System Function Analysis. Based on the needs of various users of the system, the system should have basic functions closely related to the evaluation system, including the following routine function operations, as shown in Figure 10:

The main purpose of this system is to improve the work efficiency of teachers in our school and to facilitate teachers to supervise the learning state of learners. In this learning process, learners can also be encouraged to learn regularly so that learners can have the most fundamental learning pressure at any time, preventing the interruption of learning due to the loss of learning interest. At the same time, in the learning process of learners, teachers can correct learners' learning style timely, promote learners to study according to their learning objectives, and strive to achieve learning tasks [18].

The practical operation evaluation system platform has complex functions. Due to the limited space of the article, only part of the function structure is shown in Figure 11.

(1) Program Management Function. The program management provides all the functions related to the practice operation and examination, including creating, editing, browsing and deleting examination paper program, generating, editing, deleting, and printing examination paper, etc. For learners to practice and take tests on the client, administrators or authorized teachers need to set up a plan first.

(2) Learning Behavior Risk Evaluation. First of all, the score of each learner who takes this course is counted and the average score of each learner is obtained. The ranking is calculated according to the evaluation score of each learner and the percentage of ranking is obtained. Then it is compared with the percentages of excellent, good, medium, pass, and fail in the final exam of the learners in the last semester to get the corresponding risk level. The system will present the corresponding risk evaluation to learners according to the corresponding risk level [19].

The system compares the ranking percentage of the average score of learners in all tasks with the percentages of excellent, good, medium, pass, and fail in the practical operation final exam of learners in the last semester to get the corresponding risk level.

4. Construction of English Informatization Learning Environment Based on ESP Theory

4.1. Teaching Characteristics and Feasibility Analysis

4.1.1. Characteristics of ESP Theory Teaching. For ESP teaching, different teaching situations are set up for students and communicative tasks are simulated in specific situations. All communicative tasks are carried out around the application of relevant professional knowledge. For example, in the English course teaching of architecture major, students can simulate the communication of work site projects, describe the specific accident site, explain the use of equipment and prepare for work meetings, etc. After class, students can contact front-line construction workers and understand the details of the process or work link at the work site. Teachers' teaching also focuses on how students use English in relevant working environments [20].

In addition, ESP theory has the following characteristics. As shown in Table 1.

4.1.2. The Feasibility of ESP Theory in Higher Vocational English Teaching. Closely integrated with majors, ESP teaching is practicability-oriented, which focuses on the combination of English teaching and majors to cultivate students' pragmatic competence. A high level of professional English skills should be mastered. The idea that the ability to use English and professional skills are the same is emphasized. The starting point and central point of setting ESP teaching objectives is the demand analysis, extracting English applications that are suitable for the profession or academic field and then integrating words, syntax, and other factors in teaching to make the teaching path more relevant and practical. The goal of English teaching in higher

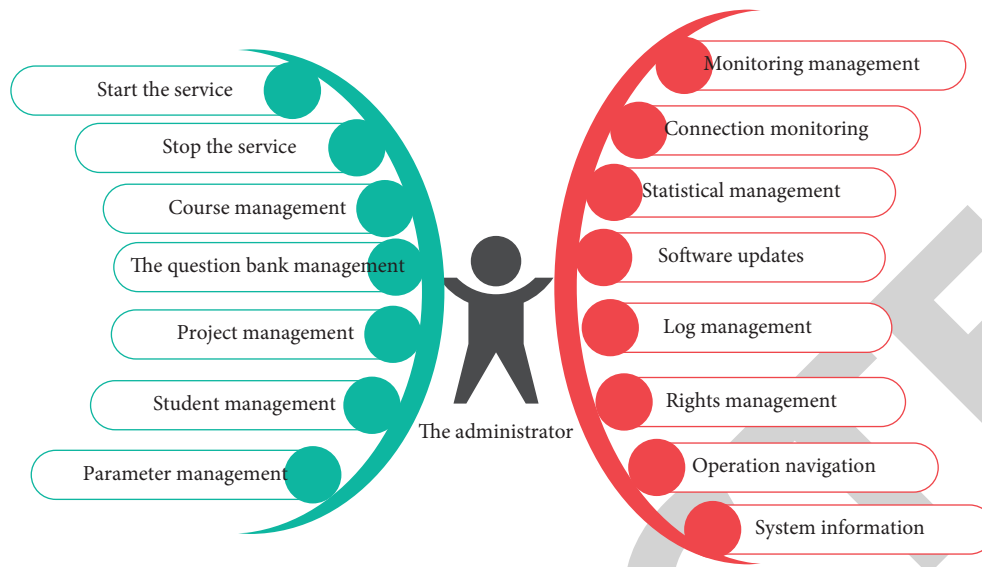


FIGURE 8: Administrator use case diagram.

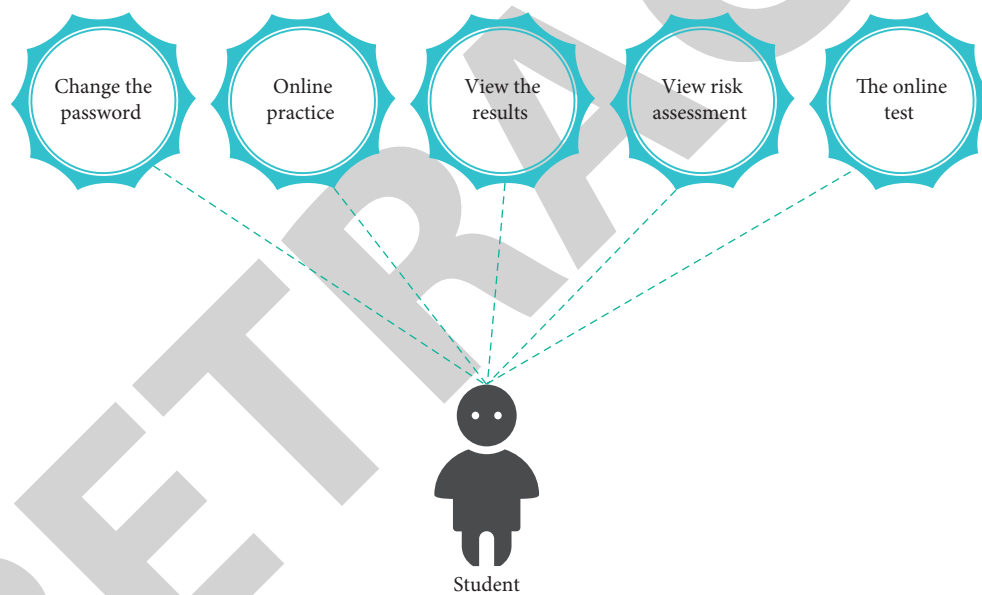


FIGURE 9: Student user use case diagram.

vocational colleges is to train students to complete their future job tasks with the help of English. It can be seen that ESP teaching objectives are consistent with higher vocational English.

4.2. *Mode Construction.* Through the combination of quantitative analysis and qualitative analysis, a higher vocational college in Qinhuangdao is taken as an example and its English teaching mode is analyzed. And the problems existing in the current teaching mode are pointed out. To solve these problems fundamentally, we must reform the teaching mode. In the author’s opinion, only under the guidance of ESP theory can the current situation of “learning English cannot be applied” in higher vocational colleges be solved and basic English can be combined with professional

English, so that students can consolidate their English foundation, enlarge their vocabulary and reading ability of professional English and meet the needs of future work [21]. Under the guidance of ESP theory, feasible solutions are put forward.

As shown in Figure 12, ESP courses should be based on demand analysis. Skills training in listening, speaking, reading, writing, and translation are implemented, covering all aspects of skills and knowledge in students’ professional fields to meet their professional needs.

4.2.1. *Contextualization of English Teaching Materials.* When compiling ESP textbooks, teachers should spend more time on the training of students’ language output skills. Centering on teaching objectives, combining students’

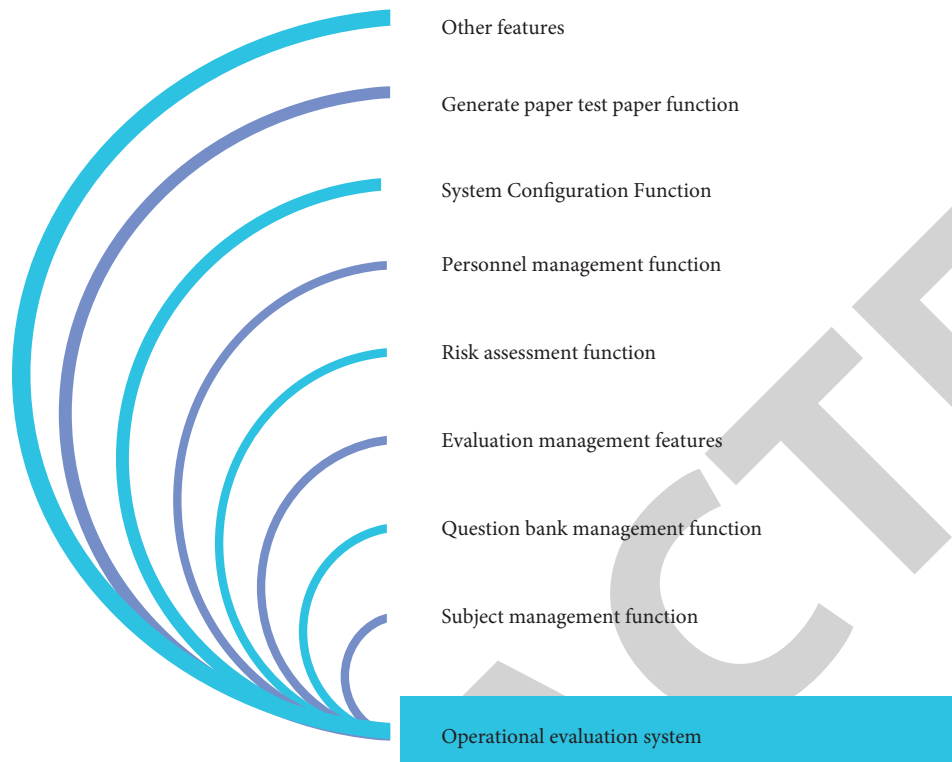


FIGURE 10: System function module diagram.

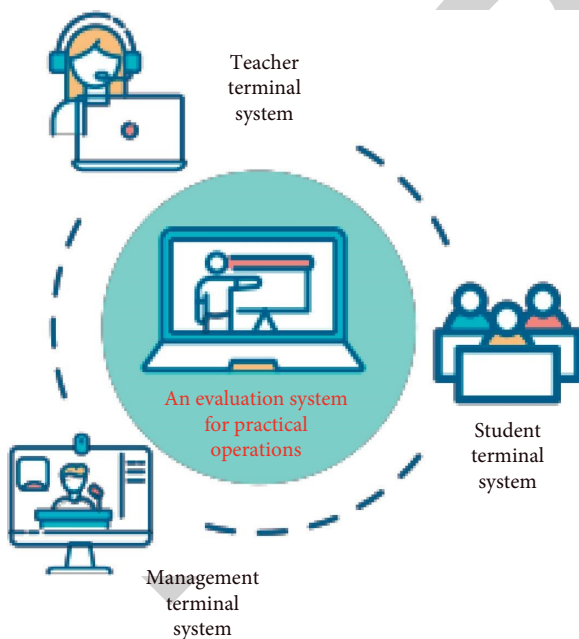


FIGURE 11: Partial function structure of the practical operation evaluation system.

majors and students' different learning demands and knowledge levels, teachers should design simulated situational tasks imitating real professional situations to cultivate students' English application ability. Teachers should ensure that students are fully and truly taught English for specific purposes. At the same time, combined with the real context

and case analysis, the after-class exercises are designed so that students really can apply what they have learned.

4.2.2. Practicability of Teaching Methods. Teaching methods can also use heuristic method, case analysis method, situational performance method, role simulation method, communicative contrast method to encourage students to participate in interaction and mobilize their enthusiasm of students. At the same time, with the help of multimedia network resources, teachers can create a real language environment for teaching and practice. The competition method can be adopted after class to encourage students to participate in various English competitions and improve their English level. Teachers can also strengthen school-enterprise cooperation, bringing students to the enterprise to observe and learn or even combining some practical operation links of the enterprise to let students use English to realize the use of the ESP teaching method. For English major teaching in automobile parts, teachers can guide students into the university training building and the form of interactive question and answer in English can be adopted. ESP teaching methods are diversified, which are easy to arouse students' interest. There is a large independent learning space for students to choose. Students can learn English and use English in a relaxed and efficient learning atmosphere so as to achieve a good learning effect.

4.2.3. The Multidimensional Evaluation Mechanism. Scientific and reasonable evaluation is a strong guarantee of teaching reform. Teachers should change the traditional

TABLE 1: Absolute and variable characteristics of ESP.

Absolute characteristics	Variable characteristics
(1) The curriculum of ESP is learners' specific requirement	(1) ESP teaching is not limited to language learning
(2) The teaching content of ESP is related to the specific subject, occupation, and activity	(2) ESP teaching methods are flexible and varied
(3) ESP teaching should be carried out with the help of teaching activities of relevant majors	(3) ESP teaching objects are not limited to learners with no foundation, but apply to elementary, middle, and advanced learners

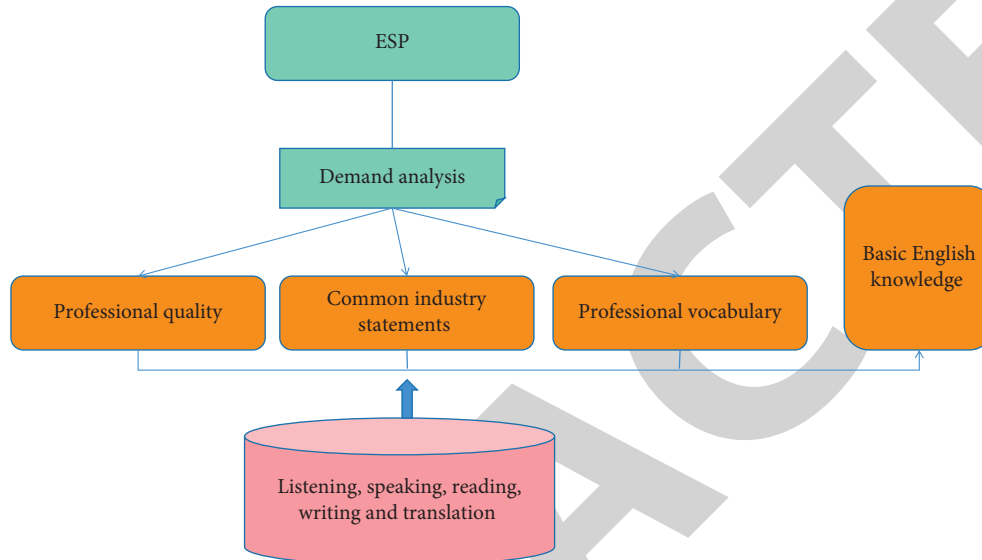


FIGURE 12: Demand analysis.

single evaluation method, pay more attention to the application and context of English language skills and value the ability to use English to solve problems related to the major. A multi-level evaluation system is established from pure language knowledge evaluation to professional English ability evaluation. At the same time, teachers should pay attention to the evaluation of practical ability and the evaluation of students' learning ability in the learning process, constructing the combination of the evaluation mechanism of "knowledge and ability, school and enterprise, curriculum and certificate." In addition, the evaluation has also formed a variety of forms, such as the students' mutual evaluation panel reports and the learning process programs evaluation certificate, so that students have the practical application ability required by the target position.

4.3. Comparison of Final Score between the Theoretical Learning Behavior Clustering and the Practical Operation

4.3.1. Comparison of Teaching Effects before and after Using the Evaluation System. Before the use of the evaluation system, the usual exercises are manually changed by the teacher and the final exam will be taken as the result of the practice final exam. The learning effect of learners before using the system with that after using the system is compared. It is found that the teaching effect improved significantly after using this system. The statistical distribution of each score segment is shown in Figure 13.

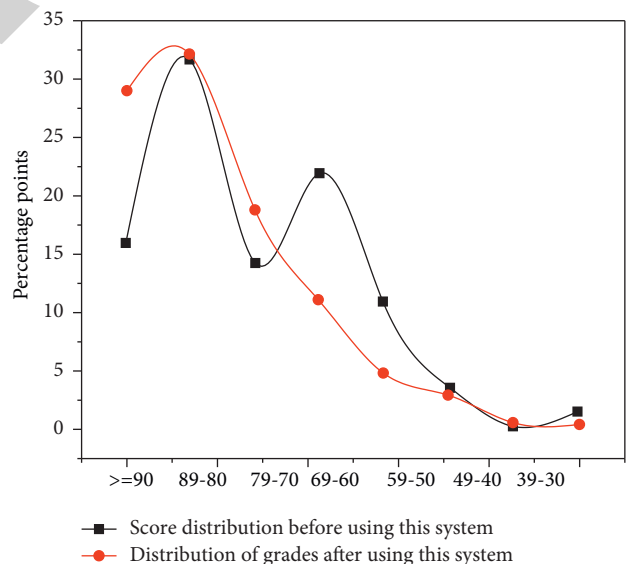


FIGURE 13: Semester score distribution before and after using the system.

In Figure 13, the pass rate increased by nearly 7 percentage points and those with scores above 90 increased by 13 percentage points.

4.3.2. Analysis of the Entrance Test and the Final Examination Results. To know how well students have mastered

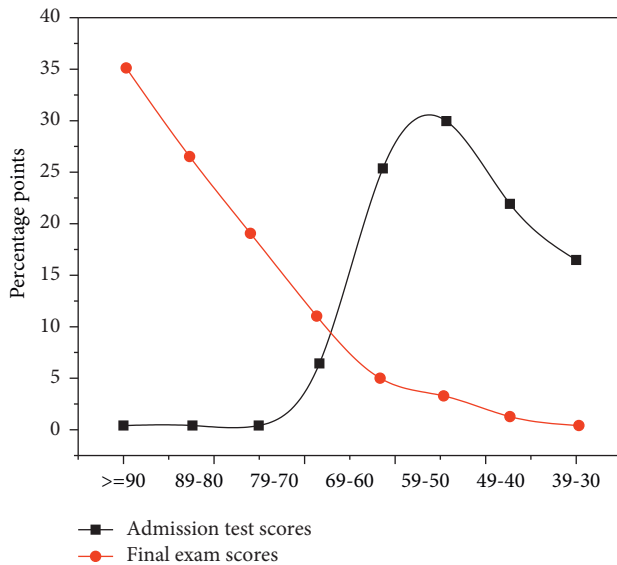


FIGURE 14: Statistics of scores in the entrance examination and the final examination.

the course The Foundation of University Information Technology before entering the university, an entrance examination was organized for freshmen at the beginning of the first semester in 2018-2019, the results of which was compared with in the results of the final examination.

(1) *Statistical Analysis of Each Score Segment.* As shown in Figure 14, the proportion of students who scored more than 60 points in the entrance examination was 7.4%. Most of them were in the 60–70 area, accounting for 6.7%. It could be seen that more than 90% of the students did not meet the requirements of The Foundation of University Information Technology. The proportion of students with more than 80 points was 0.1%, indicating a very low excellent rate. The total score of the students was mainly concentrated in the range of 50–60 and 40–50. The sum of the two segments accounted for 55% of the total number of students, indicating that more than half of the students had the basic ability of computer application, but their grasp was not solid enough and their level needed to be improved.

After a semester of The Foundation of University Information Technology MOOC study and practice in the practical operation of the evaluation system, 91% of the students scored more than 60 in the final exam and 35% of the students scored more than 90. It could be seen that 91% of the students met the requirements of the course and a considerable proportion of students had a very solid grasp of knowledge.

(2) *Pass Statistics of Each College.* As could be seen from Figure 15, College A had the highest pass rate of 21.7%, while College J had the lowest pass rate of 3.3%. With the exception of College A, College B and College C, the remaining seven colleges had a pass rate of less than 10%.

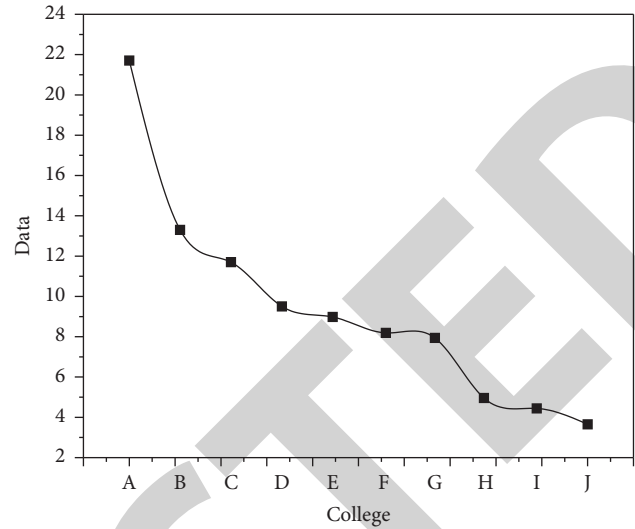


FIGURE 15: Entrance test of each college.

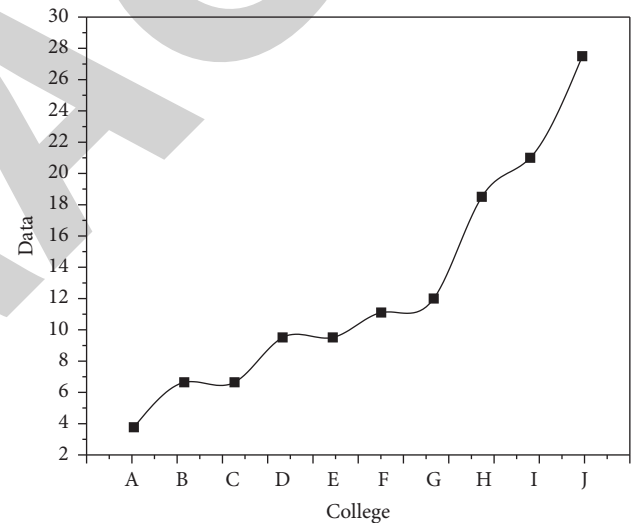


FIGURE 16: Pass improvement rate of each school in the final examination and the entrance test.

From the statistical results of the entrance examination, we could find several interesting phenomena. The level of computer basic application ability of students in College A was higher than that of students in other colleges. The new media major of College A and digital media major of College B ranked first and second in pass rate respectively, indicating that the students of these two majors had received solid training of basic computer application ability in high school. The basic computer application ability of engineering majors was lower than that of other majors. The students in College J, College I, and Materials Science and Engineering all had a pass rate of less than 5%. This result was beyond the judgment of many teachers and the specific reasons remained to be further explored. However, according to past experience, the computer application ability of engineering students was generally lower than that of students majoring

in economics, management and language. After a semester of MOOC and practice on the evaluation system of practical operation, the pass rate of all colleges was above 80%, but the highest improvement was no longer in liberal arts majors and the computer application ability of engineering students had been rapidly improved [22].

As could be seen from Figure 16, the higher improvement rates for the final examination and the entrance test were College G, College I, and College H. The reason for the high rate of improvement was that the basic computer application ability of engineering students was relatively weak at the time of admission, but the basic computer application ability of engineering students had rapidly improved after learning. It could be seen that engineering majors had certain disciplinary advantages.

5. Conclusion

Students' learning motivation and confidence are affected by the teaching evaluation greatly. It has been accepted by English teachers to change the mode of final evaluation based on single test scores and attach importance to process evaluation in the whole learning process of students. But in teaching practice, teachers often rely too much on personal formative evaluation and students are short of self-evaluation and mutual evaluation. Information in the context of the learning process is more diversified, so the teaching evaluation should pay attention to students' learning link performance. The cooperative learning group is advocated. Based on teachers' personal evaluation, students' self-evaluation, group evaluation, and peer mutual evaluation should be developed. Students' emotional factors should be given full consideration. Through diversified evaluation mechanism, affirmation and encouragement are given to the students, which helps them to recognize their shortcomings, so as to mobilize their enthusiasm of students. After a semester of The Foundation of University Information Technology MOOC study and practice in the practical operation of the evaluation system, the pass rate of each college was over 80%. And 91% of the students scored more than 60 in the final exam and 35% of the students scored more than 90. It could be seen that 91% of the students met the requirements of the course and a considerable proportion of students had a very solid grasp of knowledge.

ESP English teaching mode has made a detailed discussion on English teaching content, textbook selection, teaching methods, teaching staff, and evaluation methods and feasible countermeasures are put forward. The teaching content reflects the principles of practicality, proficiency, professionalism, and comprehensiveness. Practical courses should be increased and practical teaching links should be strengthened. According to the content of practice, practice should be connected with related teaching courses and teaching content as far as possible. The selection of teaching materials caters to the characteristics of higher vocational colleges and adheres to the principle of "giving priority to practical use and giving priority to sufficient use" based on students' language. For teaching methods, oral English, reading and translation should be attached great importance

to, especially to skills which are closely related to students' ability to use English in their future jobs. The teaching and training of English language skills should be focused on. It should be emphasized that English language skills must be combined with professional knowledge. English teachers should not only know and understand professional knowledge, but also have the comprehensive teaching ability of "profession + English." English teachers should must have some business experience. For the universities, relevant training system and incentive mechanism should be established to encourage teachers to conduct further research. The teachers should be organized to practice in the school-enterprise cooperation department. Case teaching should be introduced into the classroom. And a strong and "double-qualified" teacher team forms gradually. In a word, ESP theory requires that the English teaching model should pay attention to the combination and penetration of professional English and basic English, which is employment-oriented. It emphasizes students' application ability of professional English so as to achieve the effect of applying what they have learned to practice.

Data Availability

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

Conflicts of Interest

The author declares that there are no conflicts of interest.

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