Optimization of education management system for English teaching based on web

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Abstract. With the integration of world economy, social reform and the development of English education. The English test has become a significant part of education. Due to the status of English courses and the scale of examinations, computer examination is undoubtedly a convenient and fast way of examination. At the same time, for higher vocational college teaching, some English examination systems based on WCB are not targeted. Therefore, the development of higher vocational English Web examination system. It is an exploration of English teaching reform and English language learning test in higher vocational colleges under the new situation. It has the characteristics of pertinence, science, economy, practicability and operability. It is believed to be of great promotion and application value to higher vocational English teaching, curriculum construction and reform as well as teachers' own development.

1. Introduction
There are many students in higher vocational colleges, but there is a shortage of English teachers [1]. It has become a necessary and trend for the development of English teaching in higher vocational colleges. Therefore, the development of higher vocational English Web examination system is an exploration of English teaching reform and English language learning test in the new situation. It has the characteristics of pertinence, science, economy, practicability and operability. It is believed to be of great promotion and application value to higher vocational English teaching, curriculum construction and reform as well as teachers' own development.

2. Development background and preliminary investigation of web-based English examination system
With the development of higher education, the rapid development of higher vocational colleges in China, no matter from the total number of schools or the total number of students, has occupied half of China's higher education education [2]. However. The popularization and popularization of higher education. It also brings great pressure and challenge to English teachers, teaching and testing. So. In view of the actual situation of English teaching in higher vocational colleges (there are many students taking courses, heavy workload of teachers teaching and testing examination and reading, material consumption and labor cost of paper testing). In order to seek high vocational English test fairness and justice and scientific. To meet the increasing demand of students and society for English, and to meet the development trend of large-scale English tests at home and abroad. The research of "the construction of higher vocational English test database and the development of Web examination system" came into being. At the beginning of project approval and development [3]. The research group conducted a lot of research and came to the following preliminary conclusions:
(1) At present, there are some college English examinations and automatic marking systems in the domestic market. But they are mostly test systems based on C, S (that is, client/server) mode. Students need to install additional software when using it, and use is usually limited by time and place. At the same time, such systems are outdated and obsolete.

(2) Some college English examination systems in the domestic market are basically designed for college English undergraduate teaching (CET-4 and CET-6). As most of the people involved in the system development are computer professionals, and limited by their own English level, the system is not practical. And the English learning of vocational college students is even less targeted.

(3) Some existing college English test and evaluation systems in China are mostly special products developed by enterprises and institutions or management departments. No flow to the market (in case of disclosure), high development costs. Maintenance is difficult. In addition, users cannot add new questions according to the test requirements. So, not keeping up with the needs of The Times, curriculum, student learning, and sustainable development.

3. Main features of web-based examination system

As the "higher vocational English Web examination system" is one of the achievements of higher vocational English curriculum construction. Project was as a result, its purpose is to solve the problem of practical teaching, improve the English test of fairness, impartiality and science: maximum norm, perfect the higher vocational college English teaching and evaluation system. Save time and human resources for English test every semester: to promote and improve students' comprehensive ability to use English and their adaptability to English computer test. It is from teaching, based on teaching, serving teaching, to meet the actual needs of teaching. Therefore, it has the characteristics of pertinence, science, economy, practicability and operability.

3.1. With the progress of The Times and computer technology

As well as the further development of Internet and campus network, college English learning in various vocational colleges and universities will gradually achieve autonomy, online practice and examination [5]. The society's requirements for English proficiency of graduates from higher vocational colleges are increasing day by day. However, there are many students in higher vocational colleges and there is a severe shortage of English teachers. Take my college as an example. Early under construction in hospital, the higher vocational English teachers are very limited to thousands of shot-cycle courses of non-English major students in our hospital, amateur radio and television university English teaching and English teaching of adult English teaching the enormous task. At the end of the term. Questions, exams, and exams are all very difficult tasks. Although all high vocational English teachers and part-time teachers are very dedicated and united. With dedication, but each semester big proposition, exams, change book tasks are cost a great deal of their energy and time, at the same time, a lot in a limited time and large areas of evaluation tasks. The efficiency and quality of the examination papers are affected to varying degrees. Therefore, the research on the development of "higher vocational English Web examination system" comes from the actual problems and demands in teaching. Item bank is on the basis of the basic requirements of higher vocational college English teaching, at the same time for teaching, teaching material and students level, topic is by those who have certain knowledge of language testing, and the first line of higher vocational English teaching experience of teachers carefully edited, so has strong pertinence.

3.2. The scientific nature

"In higher vocational English Web test system" is "the construction of higher vocational college English test database and Web examination system development" is an important part of the project research, is by the higher vocational English teachers and computer optional project, joint interdisciplinary cooperation projects [6]. It is also one of the construction achievements of "vocational English", a national quality course. The project group is composed of professors (ph. d.), program developers and associate professors (master's degree) of foreign language major in the first line of English teaching in
higher vocational colleges. At the beginning of system development, the members of the research group conducted a lot of theoretical research and practical research on the related fields such as "English test base construction" and "English test system". Through research and investigation, it is found that some large international examinations (such as toefl, ielts, etc.) have been carried out globally and online examinations have been carried out. At home. The national college application ability examination (ncee) has carried out the Web online examination in some provinces (such as guangdong province), and the national college English test (cet-4 and cet-6) has developed towards the computer examination. However, there is no precedent in the English teaching test of higher vocational colleges in China. Therefore, higher vocational English question bank construction and Web test system development project done "demand and the research, the higher vocational English and computer technology, interdisciplinary research team" I aspects such as the organic combination. Not only ensure the design aspects of computer technology, scientific, feasibility and operability of modernity, and guarantee the practicability, pertinence of higher vocational English examination system and the special features of higher vocational English test and quality. So. The project has a high degree of science in terms of development team, technical level and r&d results. It is embodied in the following aspects, such as practicability and operability.

3.3. Practicability and operability
Because this system can enable students to pass the local Internet for higher vocational college English computer examination. In line with the rapid development of The Times and the current national college English proficiency test. At the same time. It can improve the ability of students to learn English and use computers independently as well as the adaptability of the national unified examination, so it has strong practicability and operability.

Do not need to install the system: the system based on Web, so students do not need to install other software in the exam, can be in the home, dormitory, school anywhere can be connected to the Internet local area of the Internet, such as the exam.

The examination system test question bank is rich in types of questions and has divided different difficulty levels. The problem plough supported by the test bank basically includes the types of questions needed in the practical teaching and application of the national college and university application ability examination. For example, select and fill in the blanks. Selective and fill-in-the-blank vocabulary and grammar questions; Select, fill in the blanks, match, and answer questions; Choice, essay translation and essay questions. Test item design is divided into: preparation, class I, II, III, IV five difficulty level. According to the differences of English proficiency of students in higher vocational colleges, different levels of English tests can be carried out.

Flexible way to select questions in groups: in groups and select questions to generate test papers. You can customize the type of questions, difficulty level, number of questions, and exam time. It also supports multiple groups of tests and supports multiple levels of tests. At the same time, you can use automatic random selection or manual selection. So. It can meet the different requirements of the test and the teacher according to different teaching objects, progress and test emphasis in the actual teaching. This is what the test software on the market cannot achieve. Test software sold on the market is generally packaged for sale, closed design. ~ to the consumer side. No one can add different types of test questions, and the difficulty level, number of questions, and time of test cannot be changed.

The examination organization manages the examination paper to read conveniently
When organizing the examination, students do not need to enter their student number in advance. Students can be divided into different classes only by entering the test class.

Automatic grading of objective questions. Subjective questions are graded by teachers on a web-based basis. Marking is convenient and quick.

A few minutes after the end of the examination evaluation. Candidates' scores can be quickly translated into Excel documents. Export printing is convenient.

Convenient operation, system running concurrently good effect. The number of students that the server can support the exam at the same time depends on the server configuration.
Convenient training and maintenance. The exam system is designed to be human, so. No matter for the system management personnel or invigilators, examination, marking personnel, some simple training. You can master the relevant skills. Convenient for follow-up maintenance and update. In addition. Development of "English Web examination system in higher vocational colleges". It also promotes the reform and development of English curriculum construction in higher vocational colleges. At the same time. In the course of project operation, the team of English teachers in higher vocational colleges has also been trained, and an interdisciplinary teaching and research team has been formed for the construction of English courses in higher vocational colleges.

4. System operation
"Higher vocational English Web examination system" has been developed, designed and operated for two years. It has been used many times in the mid-term exam, the final exam, the retake exam and other teaching tests of our school. Compared with the previous English paper-based examination (non-computer-based) process, it has improved the fairness, justice and scientific nature of the examination and has been widely welcomed by teachers and students. At the same time, in the whole process of "proposition a group of books a grading". It avoids the possibility of disclosure, error and error in the process of printing and distributing English propositions and examination papers. In addition. It saves a lot of time and manpower and material resources. The results show that if you take the same English test, the same number of students in the same class. Machine test, compared with previous teacher manual marking takes all the time at least can save more than 3, 5 (for listening, reading, vocabulary can be a part of computer automatic grading, and wide choices and translation for thesis topic is to click on the component to points). From an economic point of view, according to a rough estimate, if full course "English" (two) a "test", each time the final exam in 3000 students every year, each exam paper costs be $1, then. Exams are administered in two grades. Each time will save more than 6000 yuan (paper cost), two final exams can be saved

About ten thousand yuan or more. The economic and environmental benefits are obvious.

5. Application and consideration of web-based English examination system
Through the "higher vocational English test database construction and Web examination system development" project research. The higher vocational college English curriculum construction and evaluation has entered a new stage. An interdisciplinary/interdepartmental research, teaching and research team has been formed. It has improved the teaching evaluation concept, examination paper design quality and level of higher vocational English teachers. At the same time. It also solves the practical problems encountered in the development of higher vocational English Web examination system and the construction of question bank. And has triggered the higher vocational English curriculum and learning test standards and so on further thinking.

5.1. Technical application and countermeasures in higher vocational English Web examination system
(1) Target and solve the phenomenon of technical "traffic jam"

In the initial operation stage of "Web exam system development in higher vocational college", there were some problems that were not anticipated at the beginning of design and development in the process of examination. For example. At present, the national college English proficiency test in guangdong province is a "computer test". Each of the 30 computers in the test room is equipped with a server, which ensures the smooth running of the test. For the sake of economic utility, the project is in its early stage. The higher vocational English Web exam system is a server that drives several exam halls. When students log in to take an exam, especially when they enter the English listening test stage or when they hand in their papers, there are too many candidates driven by a server. And frequently switch pages at the same time. It can cause things like accidental death (just as buying Olympic tickets at the same time across the country can result in a traffic jam in the ticketing system that can't be accessed). To solve this
problem, Web system designers envision and try to get students from different exam halls to log in at random. Time and playback time. This avoids the problem. However, this method is relatively unwieldy in reality tests. So, Designers build on that. Improve the original procedure. Were held in the design of the original "normal students randomly generated test after unified stored in server" migrated to each examinee's computer terminals, thus avoiding the "student frequent access server" congestion caused by the phenomenon, finally solved the problem such as "traffic jam" hearing or crash.

(2) Serve teaching and design different ways of grouping papers

Early design of English Web examination system. Mainly for j kind of reasons: to improve and enhance English exam marking fair justice: reduce the massive English reading manpower and time cost, enhance students for computer-assisted language test (machine) to test the adaptability. At the same time, In order to ensure that "computer test" can comprehensively test students' English application ability and various micro skills. The software design of Web exam system takes into full account the different types of questions in English test. In addition. In order to make the English test can be consistent with the teaching content and the level of different examinees. The Web exam system has designed two forms of "manual" and "automatic" tests. So, before each exam. The propositional person can record the question or the "artificial group" manually according to the need. You can also make your computer "auto-group" according to your own needs. Therefore, some examination papers in the market and questions teachers can not control. Examinations are divorced from the phenomenon of teaching and teachers.

(3) User-friendly design and easy operation

As the "higher vocational English Web examination system" is established from teaching, service in teaching. Therefore, it fully considers the needs of students, teachers, teaching content, evaluation methods and so on, and the design is humanized. For example. When the examination is finished, the score of objective questions can be automatically graded, while "subjective questions (such as translation and writing)" can be scored by teachers by clicking on the options. At the end of the exam, students' test scores can be quickly converted into Excel sheets in a few minutes, saving an average of 3 to 5 minutes of reading time. After nearly two years of teaching examination, the Web system has been running, which is very popular among English teachers in higher vocational colleges.

5.2. Enlightenment and consideration on the development of the W music examination system in higher vocational college English

In today's world of education. Education evaluation, basic theory of education and development of education have been regarded as the major research topics. Education evaluates the development and reform of education. Management and decision making for education. They all play a vital role. (1) computer software design of English examination system; (2) construction of English test question bank. If there is no software design, the English test system will be difficult to complete: if there is no proper and targeted English test database, the English test system will lose its service object and practical value.

For every English teacher. Neither "English test" nor "exam" are new words. However, according to modern linguistic theory, the difference between the two is not known to every teacher. English testing is a branch of applied linguistics. Its research involves psycholinguistics, cognitive science, language acquisition theory, linguistics, pragmatics and education measurement. Examinations, on the other hand, refer to a single activity carried out at a specific time, for a particular examinee, according to a specific procedure. Exam questions are not just a patchwork or a combination of random questions. But should pass the propositional design and the examination implementation, the appraisal paper, the result analysis and so on a series of related activities. To test teaching, guide teaching and promote the improvement of teaching quality.

For different purposes. English test can be divided into: proficiency test, performance test, potential (or quality) test or diagnostic test; According to the learning stage. English test can be divided into: class test, in-class test, mid-term test or final test. According to the predicted language items. English test can
be divided into: vertical test, comprehensive test or communicative test. According to the different grading methods, English test can be divided into subjective test and objective test, etc.

6. Matters needing attention in the implementation of knowledge base system platform

In the first place. Pay attention to cultivating the cultural atmosphere of "knowledge sharing" in the school. Culture atmosphere of "sharing knowledge" can people from the following several aspects: first, from the perspective of the teaching management personnel and professional teachers to set up correct concept, on the one hand, the knowledge sharing can be realized to win more, on the other hand, not only is the provider of knowledge teaching units. Knowledge from social institutions, fraternal colleges and students is also a very important resource. Secondly, from the perspective of system development design, on the one hand. To improve the usability of software, the easier it is to be used by users. The more can improve the speed of knowledge exchange between users, and the easier it is to realize the user asked the knowledge sharing, on the other hand, in does not affect the site safety conditions, decrease as far as possible for users to upload, download, and transfer files. Next, from the student's perspective, encourage students to give feedback and share knowledge, for example, membership levels can be determined based on knowledge sharing. Attract senior students to serve as moderators to mobilize their enthusiasm and enhance their sense of achievement. Finally, appropriate material and spiritual incentives can be used to encourage all kinds of users to participate in sharing knowledge.

Secondly, ensure the professionalism and authority of knowledge. Repository administrators from foreign language college senior experts, the administrator shall submit to the system carefully examine and verify the user's knowledge, or by other sources of knowledge, and use the knowledge base maintenance tool to update of knowledge, to ensure the authority of knowledge in the knowledge base. In addition, the English teaching practice in the community of the expressing ideas webmaster by foreign language professional teachers (including teachers), international students, the moderator should not only responsible for their speech, and to the students to verify the article and ensure the accuracy, authenticity and reliability of the information in BBS. Third, strengthen the security management of the platform. The knowledge base system platform is based on interconnection

Network, easy to be affected by computer viruses, hacker attacks, malicious code, and so on, the security management of the website should also be given full attention. User organizations should improve the security management system

The system administrator shall strictly control the permissions of all kinds of users, improve anti-virus software and firewall software, and make regular data backup.

7. Conclusion

This paper presents a model of college English teaching knowledge base system based on web platform, based on the characteristics of English teaching activities, include teachers' individual knowledge, organization knowledge base is constructed, organize the external knowledge base, knowledge base, knowledge environment. Teachers and students can acquire and use knowledge through knowledge retrieval tools and knowledge delivery tools: knowledge base managers manage knowledge base through knowledge maintenance tools. English teaching practice community and personal teaching website of teachers are not only important sources of knowledge acquisition in knowledge base, but also places for knowledge sharing, application and innovation. The system platform can well support the demand of knowledge management and improve the quality of English teaching. It is of great practical significance to enhance teaching effect and guide and support students' personalized learning. The model of web-based English teaching knowledge base system proposed in this paper has strong feasibility and important application value. We will do further research on this.

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