

## Research on Construction of College English Test Item Bank Based on the Intelligent Test Cloud Platform

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**Keywords:** Intelligent Test Cloud Platform, College English, Test Evaluation

**Abstract:** Formative assessment is undoubtedly the guiding principle and implementation direction of university teaching reform. Combined with the practice of oral English test in higher vocational colleges, this paper explores a new type of oral English test mode created by the cloud platform of the World University City, and demonstrates its practicability with the theory of communicative language test. This paper will briefly analyze the main characteristics of College English testing and evaluation based on the intelligent testing cloud platform, including three aspects: full interaction of the evaluation process, intelligent tracking of the evaluation content and the leading evaluation of the evaluation process. The necessity and implementation path of college English test and evaluation based on intelligent test cloud platform are discussed. The students' follow-up is carried out in fuzzy reasoning in terms of content integrity, phonetic standardization and speech rate fluency, and corresponding evaluations are given. Students adjust and improve their pronunciation according to the feedback information provided by the system, so as to achieve the purpose of training, testing and improving students' spoken English. After some school-related teaching experiments, the construction of the mobile intelligent teaching cloud platform helps to promote the modernization reform of English testing methods in the context of college English teaching reform.

### 1. Introduction

The rapid development of cloud technology and modern wireless communication technology has spawned a huge potential cloud industry and APP application market. However, in the face of a huge education market, the perfect combination of cloud technology and APP technology of mobile intelligent terminals is rare [1]. In the past ten years, the oral test research has been carried out from the perspectives of oral test theory, test implementation, test evaluation, test reliability and validity, oral test on the backwash of teaching, and computer-assisted oral test [2]. However, due to the differences in educational conditions between regions and the limitations of understanding, the research on the use of the Internet and computer to implement the oral test model is not deep enough [3]. With the help of the intelligent test cloud platform, College English testing and evaluation can realize the development of network technology from the auxiliary position of English teaching to the main position, making computer teaching activities become an important part of English teaching, which is the main demand of students' English learning. In the traditional classroom teaching, teachers are an effective feedback source, which can quickly and accurately evaluate the level of students' pronunciation, and point out the existing problems of their pronunciation [4]. But teachers as feedback also have shortcomings: limited classroom teaching time, a large number of students, can not ensure that every student's pronunciation is effectively feedback.

In English teaching and testing, oral English has been paid more and more attention because of its practicability. In the context of quality-oriented education, the modernization of education puts forward new requirements for the reform of English education. Teaching activities and evaluation activities complement each other in English education. Therefore, in the reform of modernization of English education, innovation should be made in testing and evaluation [5]. Due to the rapid development of network media technology, the level of oral test in China needs to be improved. It is of great significance to study the oral test in the network environment. In particular, the implementation of computer tests such as TOFEL, GRE and IELTS has further promoted the

research process [6]. Especially the cloud platform construction that realizes informationization, paperless and intelligent teaching and testing on mobile phones is still a blank market. The status quo of college English test-oriented teaching in China urgently needs reform. The new curriculum reform puts forward the viewpoint of cultivating the ability of listening and speaking and the application of computer technology in university teaching. Its effective implementation has promoted the significant improvement of students' English application ability. As an important means of evaluation, English test is a reflection of the results of curriculum reform. Therefore, under the background of the continuous deepening of college English teaching reform, the continuous reform and innovation of English test plays an important role. In addition to classroom teaching, students can only rely on their own perceptions to judge the difference between their own pronunciation and standard pronunciation. In addition, pronunciation learning of language requires repeated training, which is not provided by traditional classroom teaching methods.

## **2. Characteristics of College English Test and Evaluation Based on Intelligent Test Cloud Platform**

### **2.1 The Evaluation Process is Fully Interactive**

College English test and evaluation based on intelligent test cloud platform has the characteristics of teaching test process. With the help of university test and evaluation based on intelligent test cloud platform, it can effectively break the traditional teaching evaluation mode of "one test and one lesson". In the intelligent test cloud platform, the process evaluation plays a major role in the process of testing and evaluation, and realizes the transformation of traditional English teaching test to network informationization [7]. From the perspective of testing, follow-up is a relatively simplified spoken language output. It is easy to measure and distinguish language level and language ability in the case of reducing the interference of variables such as pragmatic factors, so it has been widely used in language testing. Follow reading can test students' pronunciation and intonation, mastery of English pronunciation rules, fluency and grammar ability [8]. Because language learning is a step-by-step process, in the past, the final examination with the nature of "one stroke" should be gradually divided into classroom tests, which is more conducive to the teaching staff to master the learners' learning progress and weak links, so as to strengthen and improve the focus. As a national educational information pilot unit, the platform integrates multimedia, artificial intelligence, network technology, simulation training and other technical means [9]. It has the powerful functions of publishing materials, teaching application, spatial learning, instant messaging, video interaction, classroom work, online examination, digital library, community making friends, group, micro blog and so on, which provides technical support for this study.

### **2.2 Intelligent Tracking of Evaluation Content**

College English test and evaluation based on Intelligent Test cloud platform, intelligent tracking of teaching content is the main feature. Based on the analysis from the perspective of students, the intelligent test cloud platform can provide students with rich teaching content and convenient teaching platform, effectively breaking the restrictions of time and space on students' learning activities [10]. With the help of online communication and exchange platform, students can have real-time communication and interaction with teachers when they encounter problems in learning, and can view teachers' evaluation and guidance on their own learning in the intelligent test cloud platform, and adjust their own learning programs and learning plans in time. It is pointed out that the following reading is a process of language control with complex psychological and physiological changes, involving all levels of language ability, such as voice tone, vocabulary, syntax processing ability, sentence and text understanding ability. Formative assessment is an assessment of the activities of the curriculum to improve the curriculum, and its focus is on the learning process. From the perspective of implementation methods, the means of summative assessment is mainly the examination, and the formative assessment is classroom test, homework,

and usual observation. From the content of the test, the summative assessment is a general examination of the learning outcomes, and the formative assessment is a phased examination based on the phased objectives. The intelligent tracking of teaching content in the intelligent test cloud platform is characterized by continuity, dynamics and diversity. Using the intelligent test cloud platform to test and evaluate students' English learning can improve students' enthusiasm and initiative.

### **3. Implementation Path of College English Test and Evaluation Based on Intelligent Test Cloud Platform**

#### **3.1 English Reading Test and Evaluation**

The test and evaluation of college English reading ability based on intelligent test cloud platform mainly includes four aspects, namely, graded test, share test, direct test and indirect test. The extension test refers to classifying the students' college entrance examination scores in the intelligent test cloud platform, designing the test content according to the level of the scores, and formulating corresponding teaching plans for the students' test situations. Traditional oral tests are subjective tests, and scoring is susceptible to subjective factors such as the examiner's language level, mood at the time, and understanding of the scoring criteria. At the same time, the English speaking test scores are subjective and difficult to grasp, and the scores have certain ambiguity. For the same student, different scorers may make different scores. The work after the English test is often limited to the teacher's revision of the answer, but seldom to the difficulty and differentiation of the test itself and the situation reflected by the test scores. This kind of behavior, which only pays attention to the test but not to the summary, is not conducive to teachers' real understanding of students' English learning state and learning weaknesses, and is not conducive to timely adjustment of English teaching strategies. The daily teaching is all around this teaching thought and goal. The test points of the test bank in this test mode are strictly corresponding to the daily teaching topics and objectives. Therefore, this test mode can undoubtedly test the simple oral communication ability of the subjects, and the test results can reflect the simple oral communication ability of the subjects.

Before extracting the feature parameters, the speech signal must be preprocessed, including the sampling of speech signal, anti aliasing band-pass filtering to remove the individual pronunciation difference and noise impact caused by equipment and environment. Because the speech signal is a non-stationary random process, it needs to be processed in a short time, and involves the selection of primitives and endpoint detection of speech recognition. The College English follow-up test system designed in this paper uses the scale reference test. When scoring the test results, it uses the pre-defined standard pronunciation as the reference to test whether the students meet the standard. Because oral test is an individual subjective test, the scale reference test is more objective and consistent than the norm reference test. The system includes two main functions: demonstration and evaluation feedback: (1) Play the demonstration voice. The system plays an English short sentence with about 12 words, and the student can repeatedly listen to the standard pronunciation of the English short sentence stored in the system. (2) Evaluation feedback. After the students hear the sentences played by the system, they can follow the sentences. The system gives grade evaluations for the students' pronunciations in terms of content integrity, phonetic standardization and speech rate fluency, and gives a reference score. According to the basic functions of the system, the processing flow of the system is shown in Figure 1.

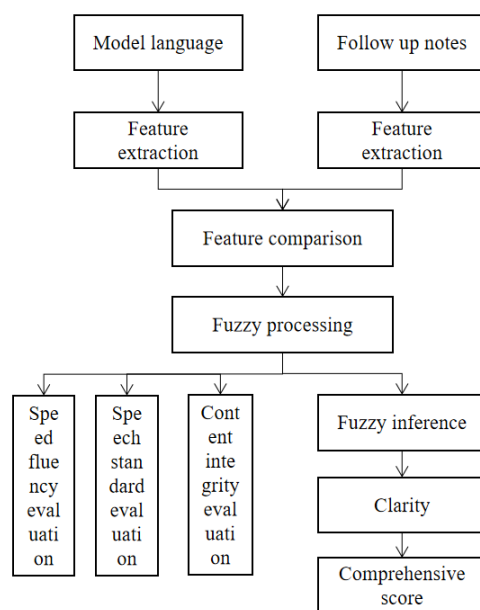


Fig. 1 Processing Flow Chart of the System

### 3.2 English Vocabulary Test and Evaluation

At present, the design and research of English vocabulary assessment work and assessment tools for students in the field of foreign education has entered a more modern and in-depth development stage, and has achieved remarkable research results. College English testing and evaluation based on the intelligent testing cloud platform is the only way for the modernization of College English teaching evaluation in China. Teachers use the teaching platform to explore a new way of teaching reform and achieve good results. Two classes in which the same teacher teaches English are divided into two groups. The students in these two classes have the same score in the entrance English Grading Test. One group uses the mobile intelligent teaching cloud platform to track and monitor the teaching effect, the other group only uses the final evaluation method, i.e. the final exam to assess the students. Due to the powerful multimedia functions of the World University City platform, this test mode has added more audio and video materials related to the test tasks, mainly from TV, movie clips and well-known English teaching audio and video materials at home and abroad. Such as the Longman interactive English website, EF English teaching resources. Based on the college English test and evaluation of intelligent test cloud platform, colleges can build a vocabulary learning and testing platform. Through the detection of students' English vocabulary acceptance and output ability, the effectiveness of English teaching can be clarified, and a more targeted teaching plan can be formulated.

### 4. Conclusion

With the continuous advancement of social economy and information technology, China's status and influence in the international environment have gradually increased. Therefore, economic cooperation and cultural communication with countries around the world are closer, and there is a higher demand for talents. . With the support of multimedia and information technology, modern university English testing is developing in the direction of individualization, efficiency, interaction and objectification. This study demonstrates through practice and theoretical analysis as a form of oral test built on a networked human-machine dialogue platform. This test model is consistent with the characteristics of communicative language testing theory, and its applicability can be proved from six aspects: reliability, construct validity, authenticity, interaction, aftereffect and applicability. Through the technical and scientific means, we can make full use of the smart phone in our daily life as a test tool, which can provide a broader development prospect for the modern education means. There are some problems in the traditional college English testing methods, such as

singleness and lag. Therefore, under the background of educational modernization reform, the innovation of College English testing and evaluation based on Intelligent Testing cloud platform has important research value and significance.

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