Audio-Assisted Correction Algorithm for Business English Spoken in Intelligent Education Environment

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Abstract:This paper proposes a dominant color clustering algorithm fused with audio features. The experimental results show that the algorithm does not need manual preprocessing and has good robustness for different competition venues. Through the auxiliary analysis of audio features, this paper uses the theory of multiple intelligences in the teaching of business English to try to construct multiple intelligences according to the current situation. The teaching mode of business English major under the guidance of this theory enables students to develop more comprehensively, improves the efficiency of learners' language input, activates their language output, respects the individual differences of learners such as cognitive and emotional factors, and contributes to the promotion of learning. It provides the theoretical and practical basis for the teaching of business English in our country .

Keywords: Audio-Assisted Correction, Business English Spoken, Intelligent Education Environment

1. INTRODUCTION

In recent years, the popularization of Internet technology has driven the rapid development of multimedia information industry and related application fields [1]. Among many video media, sports video has a stable viewing group and broad application prospects, and has gradually become a hot research topic. It provides an important data basis for the detection and identification of the next target [2].

The positioning and tracking of indoor targets requires the system performance to have the following characteristics: accuracy, which can give accurate information of the tracked target; real-time [3], that is, the high efficiency of the algorithm; with the development and needs of the times, the focus of college development has changed from How to carry out teaching reform so as to continuously improve the quality of personnel training is a prominent problem in front of us [4].

The development trend of business English teaching is very good in college and university teaching, especially for the teaching of business English oral language.How to improve the business English communication skills of college English majors has become a hot topic in domestic English research. [5] Most of the higher vocational business English teaching materials do not meet the requirements of higher vocational education and lack the characteristics of higher vocational education [6].

There is a serious lack of supporting business English oral training materials in higher vocational colleges. For this reason, this paper extends the form of learning in view of the problems existing in the construction of higher vocational business English teaching materials [7], which affects the relationship between educators and educated people, and no one can stay out of it. Among them, "flipped classroom", as a representative of subverting the traditional teaching form, is like a whirlwind, which has quickly become popular at home and abroad. The concept of multiple intelligences theory [8]. The so-called theory of multiple intelligences refers to the educational viewpoint of American scholar Gardner [9].

He believes that human beings have eight types of intelligence, namely language and literature intelligence, logic and mathematics intelligence [10]. Domestic multimedia-assisted foreign language teaching research mainly focuses on the following aspects: the production and utilization of courseware (Song Xiaoying, 2009; Wu Xiaozhen, 2000; Molly, 2003); the advantages of multimedia teaching (Zhang Hongling, 2000; Yang Chunhui, 2000) In recent years [11], with the development of information technology, China is gradually entering the era of "intelligent education", "AI+ education", "online teaching", "smart classroom" and other terms Gradually appearing in the public eye, the traditional single classroom teaching method has been difficult to meet the requirements of the new era and the needs of teaching reform in vocational colleges [12].

Aiming at the above problems, this paper proposes a main color clustering algorithm for audio fusion. The basic idea is to first use the SVM algorithm to construct an audio classifier to classify the video segment to be tested [13]. In indoor positioning and tracking scenarios, the effect of positioning and tracking using multiple modal information is better than using single-modal information for positioning and tracking. Data from different sources are combined by means of multi-source information fusion [14].

The same target is confirmed by different types of sensors, and compared with single-modal data. Therefore, through the theory of multiple intelligences to study the teaching mode of business English majors and put them into practice, the ability of each individual student can be comprehensively cultivated and developed [15], so that the individuality of each student has been brought into full play, so that the English teachers in colleges and universities adopt "cramming" teaching in disguise in order to complete the task of the class. As a result, most English major students are familiar with grammar, vocabulary and English language materials, etc., but it is difficult to communicate through business oral English. Many vocational business English oral textbooks are titled "high vocational", but they are far from the real requirements of vocational education [16].

Many higher vocational business English oral textbooks are just cut from the original general higher education textbooks to form the world's largest number of Chinese English learners [17]. Among the 54 non-native English-speaking countries and regions in the world, mainland China ranks 36th

in spoken English. Among the 12 countries and regions in Asia, mainland China ranks second from the bottom [18].

2. THE PROPOSED METHODOLOGY

2.1 The Intelligent Educational Environment

At present, the teaching of business English majors basically stays at the level of "emphasizing knowledge and ignoring ability" [1], unilaterally focusing on the cultivation of students' language intelligence and logical reasoning intelligence, and ignoring the development and improvement of students' other intelligences through practical teaching. In the teaching, the practice teaching is weakened. In the process of learning, different students have different personal learning styles.

From a sensory perspective, learning styles can be divided into visual learning, auditory learning, kinesthetic learning and tactile learning. Spoken Business English in higher vocational colleges uses English as the medium, emphasizing the application of business knowledge in the English environment. Therefore, its training goal should be "to have solid English knowledge and skills, to use the basic theory of international business as a loser in the high school entrance examination, a layman in exam-oriented education and passive learning, with a weak English foundation and a lack of study habits, including business English majors. Students, with the mentality of starting from scratch and starting from scratch.

The flipped classroom embodies student-centered, personalized learning. The theory of multiple intelligences is conducive to improving the teaching environment of business English in higher vocational colleges. The theory of multiple intelligences believes that the development of intelligence is greatly affected by the surrounding environment and education, so to improve the quality of education, we must first improve the quality of the classroom environment. In most schools, the business English conversation course has always taken the traditional teacher-centered teaching mode. Although there is teacher-student interaction in teaching. However, the language and form of input in the classroom are too monotonous, and there is a lack of personalization and teacher-student interaction. (1)Master the conversation flow and business reception etiquette for potential customers at trade fairs; (2) be familiar with the main content of product introduction; (3) be proficient in the main content of inquiries and offers. Machine learning theory for small sample training developed on the basis of statistical learning theory. The specific implementation adopts the LmSVM open source software package developed by Dr. Lin Zhiren of National Taiwan University. The experimental data are taken from basketball.

2.2 The Audio Assistance for Business English Spoken

The mean shift method can help us find the maximum position of similar probability density distributions, and in the continuous iterative process, the search window is continuously moved in the direction of the largest gradient change, until the distance of the vector movement is less than the specified threshold. The target position of the current frame of the video is found.

The Multiple Intelligences Theory (MI Theory for short) was proposed by Harvard University psychology professor Howard Gardler and his assistants in the book "Intelligence Structure". The theory believes that people have at least 8 kinds of intelligence, namely linguistic intelligence, mathematical logic intelligence and visual space intelligence. The compilation of higher vocational business English teaching materials should focus on the goal of cultivating applied talents in higher vocational education and the talent training goal of business English speaking, reflecting the training goals of higher vocational education and the training goal of business English. Speaking fluently in English is the "2013 Featured APP" in Apple's official AppStore (the only language category selected), and it has been ranked second in the overall AppStore list and first in educational apps. In practice, the following means are used to improve the teaching effect of business English speaking.

A way to integrate multiple intelligences theory and oral English teaching. There are many ways to introduce the theory of multiple intelligences into oral English teaching. The first is the arrangement of classrooms. Whether it is the placement of tables and chairs in the classroom, the humanistic teaching concept reflects the concept of "learner-centered". It believes that learners can educate themselves. Develop their own potential, while learners receive help from those around them and improve themselves. According to the teaching objectives, job requirements and students' characteristics, "receive foreign customers properly", "adjust the content of product introduction according to the needs of different customers" and "use English to make oral inquiries and offers" as the focus of the teaching content of this project.

2.3 The Audio-Assisted Correction Algorithm for Spoken English

An estimate of the required density function can be obtained from the sampled data samples, which can be used to estimate the density of any distribution. Therefore, in the case of unknown probability density, the probability function value of a point can be estimated by processing the data around the neighborhood of a continuous point.

Under the guidance of the theory of multiple intelligences, the teaching content should be more targeted and the teaching methods should be more diverse. Teachers should be good at considering the teaching activities of visual, listening and speaking from multiple perspectives, so that students can receive stimulation through visual and auditory senses at the same time, and see, listen and perceive at the same time, and then digest the perceived information content in an all-round way to improve listening and speaking ability, and finally achieve the purpose of training. The training goal of higher vocational education is to cultivate skilled application-oriented talents. Therefore, the compilation of business English textbooks in higher vocational education must be combined with the target needs and learning needs of students in this major, focusing on cultivating students' practical ability, teaching evaluation, and focusing on results. Business English teaching should change from focusing on only the scores to process, from commonality to individuality, from focusing on selection to the development and improvement, trying to make evaluation conducive to the development of students.

In practical operation, students at all levels should be taken care of, top students be cultivated, underachievers be stimulated, average students be driven. Procedural evaluation should be focused on. Students with different foundations should be dealt with separately, and students with different goals will be guided separately. A student's expressive and emotional tendencies should be encouraged . As the main

body of information technology use, teachers need to have scientific and modern educational ideas and educational concepts based on information technology. We can infiltrate new teaching concepts and change teachers' concepts through theoretical learning, and we can also observe some demonstration courses with advanced teaching concepts and good information-based teaching effects.

3. CONCLUSIONS

This paper discusses the audio tracking technology, video tracking technology, and audio-video fusion tracking technology for auditory- and visual-related target localization and tracking methods. In terms of audio target tracking technology, a localization method based on Time Difference of Arrival (TDOA) with better real-time performance is introduced. The theory of multiple intelligences brings vigor and vitality to the teaching of business English, and it also puts forward higher standards and requirements for business English teachers, and teachers can improve their teaching behavior in time. Audio-visual-oral Comparing is a comprehensive oral English teaching mode in oral English teaching. Audio-visual class can be combined with modern teaching media to improve students' spoken ability in business English efficiently.

4. REFERENCES

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