

Research on English Pronunciation Teaching Strategy in Intelligent Learning Environment of Higher Vocational

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Abstract: According to higher vocational English teaching environment is not true, auxiliary teaching effect is not good, don't have standard pronunciation, teaching boring, students are easy to produce the problem such as resistance, according to the constructivism theory, learning theory and the theory of learning motivation, the wisdom of the APP using artificial intelligence to construct the learning environment, combined with the characteristics of higher vocational college English phonetics course and the characteristics of higher vocational students, This paper designs a three-stage and nine-step English pronunciation teaching method in vocational college. Through the implementation, it is concluded that the teaching strategy can fully improve students' English pronunciation scores and comprehensive ability, stimulate students' interest in learning, improve students' self-evaluation awareness and independent learning ability, which has certain reference value for the reform of English pronunciation teaching in vocational colleges.

1. Introduction

There are some problems in English teaching in higher vocational colleges, such as "pen can speak not", poor teaching environment, poor teaching assistance effect and students' resistance, which hinder the improvement of English pronunciation scores and comprehensive ability of higher vocational students. Artificial intelligence to solve English teaching problems brings new opportunities, and it is necessary to study intelligent classroom teaching.

Foreign research on teaching under intelligent learning environment started earlier. Palmisano, president of IBM in the United States, put forward the new concept of "smart Earth" in 2008, and the concept of intelligent learning also originated from this. The connections between people will also be closer. Foreign research on teaching strategies in smart learning environment: First, research on the promoting effect of technology and equipment on teaching strategies^[1]. The second is to study the design of intelligent classroom teaching strategies^[2].

In China, the research on teaching in smart learning environment focuses on basic education and secondary vocational education, while the theoretical and practical contents of English phonetics teaching in higher vocational colleges are relatively few^[3-5]. In this paper, the organic combination of higher vocational English pronunciation teaching and intelligent environment, promote teaching, guide students in the active construction of knowledge, self-understanding and penetration, improve students' enthusiasm, encourage them to actively learn English pronunciation, improve students' pronunciation ability; To improve the efficiency of English pronunciation teaching for higher vocational students..

2. Theoretical Basis and Related Concepts

2.1. Master Learning Theory

The United States adopted the model of comIn the 1960s, "Mastering learning theory" was put forward by Bloom, an American psychologist and educator. "Teach to master" is the essence of this

theory. According to this theory, the majority of students will always be able to master the knowledge we teach, and the teacher's main task is to find ways for students to master the subject.

"All learners to learn" is the guiding ideology of the mastery learning theory, on the basis of collective teaching, through the reasonable placement system, combined with timely and frequent feedback as auxiliary means, personalized coaching and it is also necessary to help students, so as to make the most of the students achieve the master standard stipulated in the curriculum goal.

2.2. Constructivism Theory

The founder of constructivism is Swiss scholar Piaget. Piaget believed that we should study the objective law of people's cognition of things from the Angle of interaction between internal and external causes. He believes that people are always in the interaction of environment, and in this process, people gradually establish cognitive concepts and promote the development of cognitive level . Constructivism holds that teaching should not only be transmitted to students by teachers in the way of explanation from top to bottom, from the past to the present, the subject knowledge system constructed by professional scholars in advance. Instead, students should be guided to gradually build their rational understanding of things from their own perceptual understanding and build their own knowledge system through practice, projects and experience.

2.3. The Role of Learning Environment

Constructivism emphasizes the feeling and experience of students, and the learning situation should be real and diversified. It is difficult for students to immerse themselves in the real context, which is one of the unfavorable factors affecting English learning. The traditional teaching method is dominated by classroom teaching, and almost all students' learning situations take place in the classroom, without paying attention to the language training of students in real situations.

Constructivism believes that cooperation can help individuals achieve a flowing learning process, and only through cooperation can the gap of information inequality be narrowed. The survey found that although 97 percent of students use AI apps every day, they do so at different times. By using APP to build a smart learning environment in class, students can double their learning effect by cooperating and communicating with team members in forms of punching in, group cooperation and competition.

Constructivism believes that teachers and students should strengthen interaction and communication, and provide help and guidance for students to construct knowledge system in the form of equal dialogue. Through the communication and discussion between teachers and students, the meaning construction of students' knowledge is constantly improved and deepened. At the same time, students' cognitive level has also been improved. In the digital and quality-oriented education environment, teachers should guide students to enhance their learning exploration and innovation, which is in urgent need of equal dialogue and communication between teachers and students.

2.4. Intelligent Learning Environment

Intelligent learning environment is learner-centered, easy, engaged and effective learning at any time, any place, in any way and at any pace. The intelligent learning environment is mainly to build an artificial intelligence APP. With the help of speech recognition technology, the user's pronunciation is segmented and evaluated at the phoneme level, so as to improve the intelligent service for students and improve the traditional English pronunciation teaching environment. Based on the artificial intelligence APP "Microsoft Xiaoying", this paper studies the new English pronunciation teaching strategy in the intelligent learning environment, and carries out relevant research by applying it in the English pronunciation classroom of higher vocational colleges and analyzing the experimental effect. Microsoft Xiaoying is an oral English learning software released by Microsoft Research Asia in April 2016, which is rooted in the official account platform of mobile phone wechat. Functions based on wechat chat window: three functions: situational dialogue, following and training, and Chinese-English translation. Based on the function of web application, scene simulation, pronunciation challenge, easy mixing exercise, word training four functions..

Mobile learning is a new hot spot in the field of educational technology. It is a new learning

mode after digital learning. Mobile learning can fully and effectively use wireless mobile communication technology and mobile computing equipment to promote education and teaching. Intelligent learning is the extension of mobile learning and the deep development stage of mobile learning.

3. Design of Phonetic Teaching Strategy in Intelligent Learning Environment

3.1. Basic Principles of Instructional Strategy Design

To improve the evaluation consciousness and ability as the core. Will be comprehensive, dynamic assessment in artificial intelligence APP in English phonetics learning wisdom, to students to develop self consciousness and improve the ability of self management, in this study, to build the integrity of the formative and summative evaluation system, so as to promote the teachers, students and wisdom interaction between these three learning environment, so as to motivate the students' independent consciousness, Improve students' self-management ability, in the study of self-supervision, self-control, self-regulation, so as to achieve the ultimate goal of improving academic performance.

The key is to increase interest in learning. Intelligent learning environment makes up for the lack of traditional classroom. It gets out of the shackles of the traditional classroom and is the improvement of the traditional classroom form by the emerging information technology. After Microsoft Xiaoying releases learning tasks, teachers can use apps and wechat groups as communication carriers, understand students' learning content and performance, and directly communicate with students in an all-round way. Through interesting APP learning resources, help students' personalized development and improve their interest in learning.

Improve the ability of self-directed learning. The key task of teachers is to assist and guide students to build their own knowledge system. Learning to learn is the embodiment of students' autonomous learning ability, is also our important task. The significance of intelligent learning lies in accelerating the acquisition of knowledge and promoting the formation of self-study habits. Through the new media of intelligent learning environment, students' autonomous learning behavior is catalyzed and standardized.

3.2. The Flow Design of Teaching Strategy

In essence, teaching strategy belongs to the operation mode, which is the specific operation scheme of teaching concept and the specification and control of the implementation of "[50]" series of teaching activities. The "teaching strategy" designed and studied in this paper highly integrates "teacher's teaching method" and "student's learning method" to form an organic and unified teaching system, which takes learners as the center and achieves the established English pronunciation teaching goals in an intelligent learning environment. With the help of artificial intelligence APP and other intelligent technology means, teachers monitor students' dynamic learning behaviors, provide students with adaptive and personalized learning technology support and resources, as well as intelligent teaching programs.

Constructivism puts "teaching" and "learning" on the same level. The teacher's guiding function is equivalent to the catalyst, is indispensable. Learners as subjects are the core existence, all teaching activities should be carried out around them, teaching and learning complement each other. Traditional cramming education mistakenly turns teaching activities into knowledge indoctrination instead of learners' active knowledge seeking, and ignores learners' ability to process information independently, which should rely on active construction rather than passive construction..

As shown in Figure 1, when designing English pronunciation teaching strategies in higher vocational colleges under the intelligent learning environment, the teaching process is divided into three stages: preparation, rehearsal and reflection. These three stages are corresponding to the pre-class, class and after-class teaching links, one is indispensable. When designing the strategy of English pronunciation teaching in higher vocational colleges under the intelligent learning environment, the teaching process is divided into three stages: preparation, rehearsal and reflection.

These three stages are corresponding to the pre-class, class and after-class teaching links, one is indispensable. The three stages are complementary to each other, and the fundamental purpose is to improve students' pronunciation scores, improve their pronunciation learning effect and comprehensive ability.

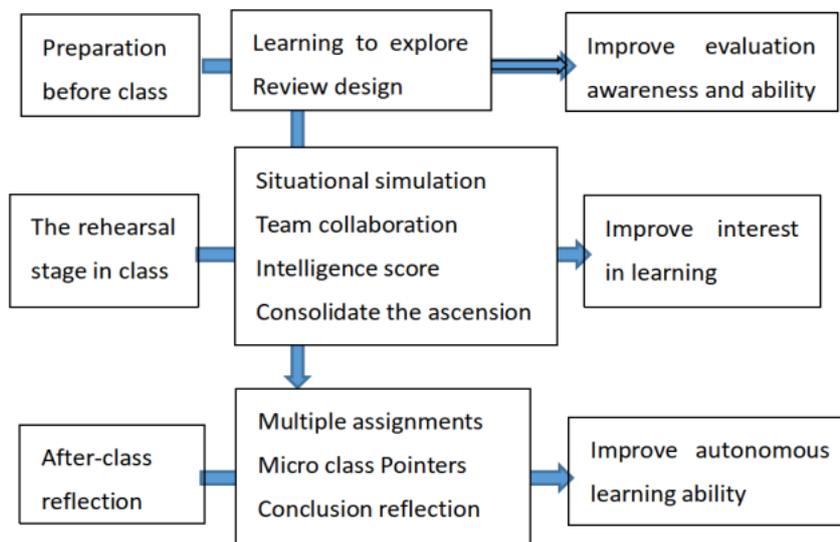


Figure 1 English pronunciation teaching strategies in higher vocational Colleges under intelligent learning environment.

3.3. Evaluation of the Design

According to Bloom's mastery learning theory, the ultimate goal of summative evaluation is to comprehensively evaluate students' course learning outcomes. Quantitative evaluation and qualitative evaluation. Quantitative evaluation comes from the "English Pronunciation Level Test" of Microsoft Xiaoying, an artificial intelligence APP, which can obtain the pre-and post-test scores of students in the experimental group and the control group, and accurately and intuitively understand and analyze the effects of students' intelligent learning of English pronunciation by using the artificial intelligence APP. Qualitative evaluation is obtained through the distribution of questionnaires to obtain data. Student self-evaluation, student mutual evaluation and teacher evaluation. English phonetics grading standard reference of Chen xm and YueFeng quantitative theory in improving spoken English test score feedback validity research, students evaluation questionnaire scores for themselves and their team members, grading standard to the practical ability of students as a starting point, through students share in WeChat group of learning content according to the criteria rating and evaluation guidance for students.

4. Experimental Research on Teaching Strategies in Intelligent Learning Environment

4.1. Objective and Subjects of the Experiment

Experiment purpose, this research in artificial intelligence APP "Microsoft small English" as a way to build intelligent learning environment, use effect the policy of higher vocational English phonetic teaching experiment, through the evaluation of higher vocational students' consciousness and ability, interest in learning, discusses the experimental results, for the higher vocational English phonetic teaching reform and practice to provide effective reference.

In this study, 50 students from grade 18 preschool education major of Normal University were selected as the experimental group, and 50 students from another class of grade 18 preschool education major were selected as the control group. There was no difference between the experimental group and the control group in the sex ratio of students, teachers, teaching places, students' learning level and course content and progress.

4.2. Experimental Process and Experimental Variables

Experimental process and experimental variables. The experiment lasted for one semester. Preparation stage: Early September 2019 is the preparation stage before the experiment begins. It mainly includes relevant guidance for students to use "Microsoft Xiaoying", the establishment of "Microsoft Xiaoying" wechat group to facilitate communication and interaction in the process of phonetic learning, and the design of relevant teaching activities. Experimental pre-test: In mid-September 2019, relevant pre-test questionnaires were distributed to the students of the experimental class and control class of grade 18 preschool education major, and their English pronunciation pre-test scores were collected to collect relevant pre-test data. Post-test: In late December 2019, relevant post-test questionnaires were distributed, and students' English pronunciation post-test scores were counted at the end of December 2019, and relevant data were collected and analyzed.

Objectives: Progress in English pronunciation learning based on teaching strategies in intelligent learning environment; Content: The traditional Learning mode of English pronunciation of vocational college students English pronunciation level; Vocational college students' English pronunciation communication ability; The independent learning ability of higher vocational students; Higher vocational students' interest in learning;

The subjects in the experimental group and the control group had the same content and progress. In the sex ratio and number, the experimental group and the control group kept the same. The experimental group and the control group were taught by the same teacher. The experimental group and the control group kept the same test time. The experimental group and the control group adopted a unified scoring standard. The experimental group and control group used unified scale questionnaire and unified test questions.

4.3. The Experimental Results

The implementation of English pronunciation teaching strategies in higher vocational colleges under the environment of intelligent learning. From the analysis of the pre-and post-test data of the questionnaire of students' evaluation consciousness and ability, it is concluded that the application of English pronunciation teaching strategies in the classroom of English pronunciation wisdom in higher vocational colleges can effectively improve students' evaluation consciousness and ability.

After comparing and analyzing the data from the questionnaire of English learning interest of higher vocational college students, it is concluded that the application of English pronunciation teaching strategies in English pronunciation wisdom classroom can effectively improve students' interest in English pronunciation learning.

The artificial intelligence mobile APP is used for speech intelligence learning. Although the teacher is also in the whole process of supervision and guidance, the students are required to have certain self-reliance and autonomous learning ability. "Microsoft Xiaoying", an artificial intelligence APP, helps improve students' awareness of evaluation, interest in learning and autonomous learning ability. English pronunciation teaching strategies can effectively improve students' autonomous learning ability.

Through the measured before and after the contrast analysis of the achievements of the English phonetics, the wisdom of teaching strategies applied to English phonetics learning environment after learning, students English phonetics of experimental group was obviously higher than that of control group, and also significantly higher than that of the experimental group before the test data, and it shows the wisdom of teaching strategies in higher vocational English phonetic learning environment "teaching" and "learning" play a positive role in ascension, It can effectively improve students' English pronunciation scores and comprehensive ability.

5. Conclusion

The effectiveness of English pronunciation teaching strategies has been fully verified, which has certain reference value for the current English teaching reform in vocational colleges. The

application of English pronunciation teaching strategies in higher vocational colleges can stimulate learning interest, enhance self-evaluation awareness, enhance self-learning ability, and improve the pronunciation scores and comprehensive ability of higher vocational students. .

It is innovative to choose vocational students as research objects. Based on the demand of vocational English pronunciation and teaching status quo and the background of intelligent learning environment, this paper tries to improve the English pronunciation learning of vocational students by using intelligent learning environment constructed by ARTIFICIAL intelligence APP, designs teaching strategies and obtains certain practical teaching results.

The proposed strategies of English pronunciation teaching in higher vocational colleges are not only innovative, but also have certain reference significance for English teaching reform in higher vocational colleges. Different from most of the higher vocational English teaching research involved only slightly to the reading, words, spoken language level, this study of higher vocational English phonetic teaching learning environment with wisdom as the research Angle, analyzed the higher vocational teachers and students in English "teaching" and "learning" problems and trouble, in combination with intelligent learning environment, higher vocational English phonetic teaching strategy is designed. After a semester of teaching practice, it is proved that the teaching strategies of English pronunciation in higher vocational colleges have improved students' evaluation consciousness, learning interest, autonomous learning ability and pronunciation performance.

The enlightenment to teaching is as follows: the design of teaching strategy is guided by setting up students' principal status; The teaching strategy design focuses on cultivating evaluation consciousness and self-study ability. During the implementation of teaching strategies, students' wisdom should be cultivated.

More long-term teaching practice is needed to achieve better and more perfect teaching effects. Vocational English pronunciation teaching strategy in intelligent learning environment is a new teaching strategy based on the development of information technology. Through vivid simulation of various real scenes, students' experience is enhanced, and artificial intelligence technology is used to help students enhance their interest and motivation in pronunciation learning. It improves the teaching quality of pronunciation class and optimizes the English pronunciation level of vocational college students.

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