

Application Analysis of Intelligent Information Technology in Transaction Management System

Shihan Hou^{a,*}, Yizhi Cao^b

Haojing College of Shaanxi University of Science and Technology, Xi'an, China

^a357746581@qq.com, ^b838275428@qq.com

*Corresponding author

Abstract: With the development of educational informatization and the continuous construction of educational informatization infrastructure, cloud technology is gradually applied to subject teaching, and the background of "cloud education" is spreading. At the same time, it also puts forward higher requirements for the curriculum teaching of various subjects. This paper studies the students at different levels through the teaching research method. The experimental results show that the biggest gain in the cloud classroom is that learning becomes easier and the knowledge learned is more solid. At the same time, it is also full of expectations for the cloud classroom in the new semester. English theory teaching under the cloud education platform model can not only effectively stimulate students' learning enthusiasm and interest, but also effectively integrate the learning resources of traditional education. Most importantly, it can optimize the learning process and change the teaching methods of traditional education.

Keywords: Cloud Education; Education Model; English Teaching; Model Research

1. Introduction

Because of its strong information reserves and the advantages of intuitively, clearly and vividly displaying information and knowledge, cloud education platform makes classroom teaching full of vitality, makes students have strong interest and improves classroom quality. It is an educational service platform, which can also be regarded as the extension of network education. It is a virtual, unified and diversified platform that allows all teachers and students to play different roles in the learning, communication and communication of different teaching management, realize the sharing of educational resources and promote educational equity. Cloud education technology has been paid more and more attention. As an innovative modern teaching method, it has far-reaching significance in the field of education and teaching.

Many scholars at home and abroad have studied the research on English theory teaching based on cloud education model. For example, ran analyzed the construction and optimization of multi English teaching model based on computer cloud technology. After logging into the interactive English teaching platform, students can browse the course content, watch videos and complete interactive exercises. With the help of modern information equipment, students can complete their learning tasks independently. English theory teaching gets rid of the traditional classroom teaching [1]. Cui analyzed the advantages of cloud platform in College English teaching, further constructed a college online English teaching system based on cloud computing, and discussed the construction of autonomous learning mode according to the problems existing in cross-cultural teaching [2].

This paper aims to study the junior middle school English theory teaching mode under the background of "cloud education". Through literature induction, it is found that the existing English theory teaching research under the background of "cloud education" does not fully discuss the teaching mode, lacks the integration and systematicness of teaching and learning, and has some problems, such as the lack of pertinence of composition teaching methods and the lack of abundant composition material resources, Therefore, starting from the three elements of composition teaching, the author puts forward the teaching method of junior middle school English theory teaching based on "cloud education".

2. Application Analysis of Intelligent Information Technology in Transaction Management System

2.1. Basic Understanding of "Cloud Education"

The emergence of cloud technology and its application in the field of education and training is referred to as "cloud education". Cloud education breaks the traditional educational informatization boundary and introduces a new concept of educational informatization, integrating teaching, management, learning, entertainment, sharing and interactive communication [3,4]. It belongs to a large education platform and relates to the technical field. The application projects in "cloud education" include huge digital library, virtual cloud environment for subject teaching and scientific research, various cloud learning platforms supporting cloud environment teaching and convenient office systems. It can be seen that its application projects constitute a complete education system. The application of mobile learning and cloud education has covered all levels of education abroad. At the level of basic education, it mainly focuses on enhancing extracurricular communication and interaction and providing extracurricular learning resources, which can flexibly obtain students' computer information and provide students with services for communication and completing teaching tasks [5, 6].

2.2. Specific Connotation of English Theory Teaching under the Background of "Cloud Education"

The research on English theory teaching mode under the background of "cloud education" is put forward under the current environment of educational informatization reform. If you want to clarify the specific connotation of English theory teaching under the background of "cloud education", you must first understand the curriculum teaching under the background of "cloud education". At present, there are many researches on the integration of cloud technology and curriculum in the curriculum teaching under the background of "cloud education". It is roughly divided into two categories, one of which is to clarify the great changes made by cloud technology to adjust the teaching structure and content from the perspective of curriculum system [7,8]. Some scholars have proposed that the integration of information technology and curriculum is to create an information-based curriculum culture and to use cloud technology for relevant curriculum development. This is a general view. The other is to equate curriculum with teaching, that is, the application of cloud technology in teaching process, teaching evaluation and other teaching at all levels, which is mainly integrated as a tool and method. In the relevant connotation of the development of cloud education in China at the present stage, as well as most grass-roots teachers tend to the latter view, believing that this kind of view plays an important leading role [9,10]. Considering the long-term goal of educational informatization reform, integrating cloud technology into teaching as a tool and method will achieve good results, but at the same time, we should also take into account the adjustment of cloud technology to teaching structure and teaching content, and explore an effective teaching model for the integration of cloud technology and English Teaching under the background of cloud education. If you want to study the English theoretical teaching mode under the background of "cloud education", the application of cloud technology in specific practical teaching is the focus of attention. Some experts believe that in addition to complementing and closely connecting with the previous curriculum teaching, it also has the characteristics of independent teaching mode. From the perspective of discipline teaching practice, a scholar also proposed that the integration of information (cloud) technology and curriculum is to organically combine technology and teaching, fundamentally change the traditional concept of teaching and learning, and adopt a variety of methods and evaluation means [11].

To sum up, the research on English theory teaching mode under the background of "cloud education" does not simply take cloud technology as a demonstration tool for auxiliary teaching, but organically combines cloud technology with English theory teaching, highlights people's dominant position in the integration and promotes the integration between people and information. Let cloud technology organically integrate with teaching content, teaching resources, teaching structure, teaching environment and teaching means. In an ideal classroom teaching environment, let students complete the reconstruction of knowledge and promote students to actively participate in processing and learning [12].

3. Experiments

English for students, the most important thing is the language environment, which lies in interaction and oral expression. It is necessary to carry out effective layered practice and personalized guidance for

students in English class. They can practice with different difficulties for different students. However, in the previous "star class", the efficiency of hierarchical practice and personalized guidance was not high, and a large number of recitations were a heavy burden on students. Once the recitation content exceeded the students' short-term memory, it would not improve students' interest in learning, but would make students disgusted with the recitation content, and the classroom effect was not ideal. Therefore, it can not effectively achieve the teaching objectives. In the cloud classroom, through the combined use of tablet computers, teachers can achieve the effect that can not be achieved in the traditional English classroom, and can properly solve these problems.

3.1. Classroom Design

3.1.1. Creating Situations

Release preview content before class to let students have a preliminary understanding of the content to be learned and collect certain materials. Teachers introduce teaching content through pictures, audio and video to make students immersive and have a sense of situation. Introducing knowledge in the form of multimedia materials can stimulate students' interest in learning.

3.1.2. Assign Tasks

Task type (1): students are required to use software for listening practice. Students use the software alone to practice the assigned listening materials, and the results are summarized to the teacher after practice.

Task type (2): students are required to record during oral training. During oral dialogue training, group role play and record the dialogue content through recording software. When completing the oral training of text type independently, students recite the text and record it. After the recording process is completed, group scoring or mutual evaluation and correction among students shall be carried out. The recording files shall be submitted to the teacher in groups after the dialogue practice.

Task type (3): students are required to use software for animation creation and dubbing. Independently complete the type oral training: the teacher specifies the content range, and the students use the collected materials to make animation, and dub the animated characters in the independently designed animation. Cooperate to complete type oral training; In the form of grouping, the teacher gives the animation content and requires the students in the group to play the form of animation dubbing. After dubbing, the students in the group will evaluate each other in groups.

Task type (4); Students are required to complete the reading task independently. The teacher assigned the reading content and asked the students to answer the reading content in the platform test module, and sort out the new word book through the memo during the reading process.

Task type (5): students are required to show their learning achievements. Each group will send representatives to report and show the completion of the group's tasks. After the group report, the teacher will publish the top way of excellent works to the platform Forum module for display, and sort out the knowledge points of the report contents into documents or courseware to help students consolidate the review stage.

3.1.3. Learning Effect Evaluation

Students conduct mutual evaluation or self-evaluation according to the teaching content. Teachers comment on students and help students summarize. It mainly evaluates students' learning effect by means of students' self-evaluation, group mutual evaluation, teachers' direct evaluation and test. The self-evaluation, group mutual evaluation and teacher direct evaluation use the platform Forum module, and the test uses the platform test module.

3.2. Data Processing and Analysis

In this paper, SPSS 22.0 software is used to count and analyze the questionnaire results for L test. The l-test formula used in this paper is as follows:

$$l = \frac{\bar{x} - \gamma}{\frac{\partial x}{\sqrt{e}}} \quad (1)$$

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(e_1 - 1)S_1^2 + (e_2 - 1)S_2^2}{e_1 + e_2 - 2} \left(\frac{1}{e_1} + \frac{1}{e_2}\right)}} \quad (2)$$

Where, formula (1) is a single population test, which is the average number of samples, s is the standard deviation of samples, and E is the number of samples. Formula (2) is a two population test, and are two sample variances, and E1 and E2 are sample sizes.

4. Discussion

Firstly, the English scores of the respondents are analyzed: in the collected effective questionnaire, the average score of English composition is 67, the average score of oral expression is 70 and the average score of listening ability is 68 in the traditional classroom; In cloud class, the average score of English composition is 78, the average score of oral expression is 81 and the average score of listening ability is 85. See Table 1 and figure 1

Table 1: Grades in different classroom methods

	English composition	Oral expression	Listening ability
Traditional teaching classroom	67	70	68
Cloud classroom	78	81	85

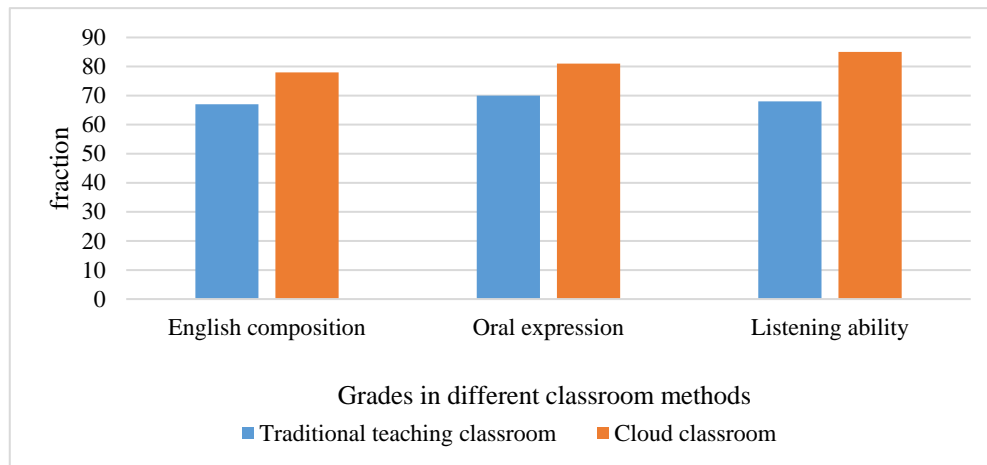


Figure 1: Grades in different classroom methods

Table 2: Students' interest in cloud classroom

Changes in interest in learning	Increase	No change	Reduce
Number of people	52	11	0
Proportion	83.2%	16.8%	0.0%

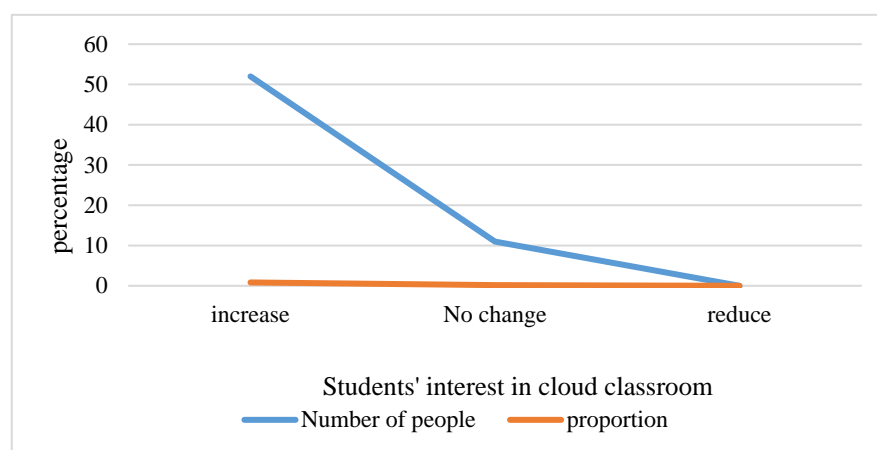


Figure 2: Students' interest in cloud classroom

In addition, the change of cloud classroom to students' learning interest. The survey shows that cloud classroom is conducive to improving students' learning interest. The survey results are shown in Table 2 and Figure 2

To sum up, it can be seen that the full mining and utilization of cloud platform is conducive to English learning, make teaching more targeted, give better play to the effect of classroom teaching, and achieve the predetermined goal of English theory teaching in junior middle school. The above outstanding advantages have a positive impact on the research of junior middle school English teaching model under the background of "cloud education".

5. Conclusion

With the continuous advancement of the reform of educational informatization, "cloud education" is gradually popularized and spread, and the concept and mode of education are constantly changing. The application of cloud technology in the field of teaching is also showing an increasing appearance. At the same time, it can more effectively improve the teaching effect and cultivate talents with information literacy that meet the needs of the society. This study mainly draws the following basic conclusions: firstly, the teaching concept contained in cloud education is two-way, which is an advanced teaching concept of "student-oriented" and "double subject" construction, which returns to the essence of education and aims to develop towards students; Secondly, relying on various platforms built by cloud technology to realize resource sharing and openness, promote educational equity and enrich the source and quality of composition materials; The interaction between teaching and learning in the classroom can be broken through the limitation of time and space, and the effect of multi-directional education can be improved. Cloud education is a new thing in the development of the times. The research on English theory teaching under its background has strong vitality and is a subject worthy of in-depth research and discussion by the majority of relevant educators, so as to give full play to its value.

References

- [1] Ran M. *Research on the construction and optimization of multi english teaching model based on computer cloud technology [J]. International Journal for Engineering Modelling*, 2018, 31(1):228-235.
- [2] Cui S. *Research on Across-Cultural Communication in College English Teaching Based on Cloud Platform [J]. Revista de la Facultad de Ingenieria*, 2017, 14(1):89-93.
- [3] Huang Y., Fu H. *Research on Public English Teaching Reform in Applied-Type Undergraduate University Based on Professional Ability Training [J]. Creative Education*, 2020, 11(11):2233-2239.
- [4] Karim F., Rampersad G. *Cloud Computing in Education in Developing Countries [J]. Computer & Information Science*, 2017, 10(2):87-96.
- [5] Odeh M., Garcia-Perez A., Warwick K. *Cloud Computing Adoption at Higher Education Institutions in Developing Countries: A Qualitative Investigation of Main Enablers and Barriers [J]. International Journal of Information and Education Technology*, 2017, 7(12):921-927.
- [6] Wu T T., Gennari R., Huang Y M., et al. [Lecture Notes in Computer Science] *Emerging Technologies for Education Volume 10108 || Construction of Efficient Cloud-Based Digital Course Learning Platform for Agricultural Worker [J]. 2017, 10.1007/978-3-319-52836-6 (Chapter 12):97-106.*
- [7] Golovkova E., V Kulygin, Pozdeev E. *Opportunities for Using Cloud Servers in Education [J]. Modern Technologies and Scientific and Technological Progress*, 2021, 1(1):117-118.
- [8] Kati S A., Khan M A. *Challenges and Issues of E-Learning Using Education Cloud – A Review in Context of Covid-19 Pandemic [J]. International Journal of Computer Applications Technology and Research*, 2021, 10(5):106-110.
- [9] Hiran K K. *Investigating Factors Influencing the Adoption of IT Cloud Computing Platforms in Higher Education: Case of Sub-Saharan Africa with IT Professionals [J]. International Journal of Human Capital and Information Technology Professionals*, 2021, 12(3):21-36.
- [10] Al-A Mm Ary J., Saleh Z. *Assessing the Readiness for Cloud Computing in Higher Education Institutions in the Kingdom of Bahrain: Towards an Education Cloud Computing Strategy[J]. International Journal of Managing Information Technology*, 2021, 13(1):33-54.
- [11] Paun B., Langovi Z. *Cloud computing concept in education systems [J]. Serbian Journal of Engineering Management*, 2020, 5(2):25-32.
- [12] Kiporenko S. *Features of Using Cloud Technologies in Education [J]. Economy Finances Management Topical issues of science and practical activity*, 2019(4 (44)):181-189.