# **Applications Research of Cloud Computing Technology in College English Teaching**

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**Abstract:** The emergence of cloud computing technology has brought new opportunities to college English teaching. College English teaching based on cloud computing technology has the advantages of convenient teaching, diverse patterns, high participation and low cost. The development and utilization of English teaching platform based on cloud computing will be the trend of college English teaching in the future. This paper analyses the key points of the application of cloud computing technology in college English teaching and provides some references for relevant researchers.

#### 1. Introduction

With the continuous development of network technology, cloud computing has become a research hotspot in the field of computer [1]. Cloud computing is a network of hundreds of thousands or even millions of inexpensive servers that provide users with the required computer services in remote locations. It is a kind of computer capability provided to users in a service way, which allows users to obtain the required services through the Internet without knowing the technology, knowledge and equipment management capabilities. As a new business computing mode, cloud computing has the advantages of lower cost, higher performance, lower infrastructure cost, less maintenance problems, lower software cost, more immediate software updates, stronger computing power, unlimited storage capacity, stronger data security, easier group collaboration, etc. It improves the compatibility between operating systems and improves the performance of cloud computing. The compatibility of file format is eliminated, and the dependence on specific devices is eliminated. The appearance of file format changes the user's usage habits. Cloud computing platform conforms to the characteristics of constructivism and collaborative learning theory. It can create a collaborative environment with strong learning atmosphere and provide an interactive collaborative environment for collaborative learning. Cloud computing is a new knowledge sharing structure based on network computing and virtual storage. It realizes the integration and sharing of resources through the unified management of storage resources. The application of cloud computing in College English education provides a new platform for college English education. It allows teachers to design different teaching content and teaching methods according to the characteristics of subjects and students, make use of all available teaching resources, centralize them, and then put them on this advanced platform. Cloud computing technology forms a set of appropriate curriculum structure, which can improve student's performance and meet the teaching requirements of curriculum reform standards [2].

# 2. Advantages of Cloud Computing Technology Applications in College English Teaching 2.1 Convenient Teaching.

The greatest charm of the internet is its inexhaustible resources. Cloud computing assisted instruction can effectively integrate, store and share massive educational resources through network services, which enables educators to maximize the integration of educational resources. Traditional teaching plan has long been unsuitable for modern education, and is bound to be replaced by new ideas and teaching methods. The emergence of cloud computing system will provide teachers with a wider space, more flexible way of preparing lessons. In the teaching mode of cloud computing, teachers can easily find the teaching resources used in teaching by browser, which provides great

convenience for teachers to find teaching content. Teachers do not need to master the more complex software. They can build their own teaching platform on the network platform. According to the requirements of teaching content and the abilities of the teaching objects, different teaching contents, teaching objectives and tasks are formulated. It can save time and energy while ensuring the quality of teaching. On the other hand, it changes the traditional form of preparing lessons for teachers. Teachers do not have to confine themselves to notebooks for preparing lessons. They can deal with the work they are going to do anytime and anywhere through the network, which greatly saves the time of preparing lessons for teachers. The Teaching frame of college English based on cloud computing is shown in Figure 1.

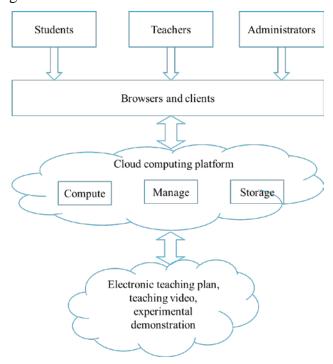


Figure 1. Teaching frame of college English based on cloud computing

## 2.2 Various Patterns.

One of the obvious changes in cloud computing-based teaching methods is that the teaching methods and methods in the classroom are different from those in the past. Multimedia assistant teaching tool is an indispensable tool in modern teaching. Compared with traditional teaching methods, the addition of modern teaching tools, on the one hand, can reduce the time teachers write on the blackboard and erase the blackboard, teaching rhythm will accelerate, the same classroom teaching time, teachers can impart more knowledge to students, teaching efficiency is therefore accelerated. On the other hand, in the teaching mode based on cloud computing, we can make more use of modern teaching tools, which can also increase the interest of the classroom. For such a boring language course as English, teachers can use projectors in the classroom to enable students to understand the teacher's lecture more intuitively and clearly. At the same time, college students themselves are more interested in these fresh scientific and technological products [3].

## 2.3 High Participation.

With the development and popularization of Internet technology, ubiquitous learning is no longer a theoretical learning model. With the emergence, development and rapid popularization of cloud computing, the requirement of hardware for network applications is getting lower and lower, and more and more learning media are available. With the maturity of smart mobile products such as smart phones, the development space of mobile learning mode based on ubiquitous learning theory is becoming wider and wider. The application of teaching mode based on cloud computing can effectively combine the two aspects of teaching and learning. In the past, students simply used e-mail and other technical platforms to learn knowledge. These learning platforms often fail to maintain the

durability of learning, and cannot meet the students' requirements of real-time sharing and integration of resources, knowledge exchange and reflection. The teaching mode based on cloud computing may well meet the needs for these learning methods, to a large extent, ensure the students' persistence in learning, greatly increase student's interest and initiative in learning, and promote the improvement of college students' English teaching quality. In the cloud technology model, teachers and students do not have to face to face, but can achieve online communication and communication. The teaching jigsaw based on the basic design of cloud computing system is the product of the combination of contemporary social needs, science and technology and teaching theory, which helps learners to use cloud computing for lasting learning. With the help of cloud database, each client can quickly find its own entry point, so as to obtain the English materials or English test questions that they want to learn. This greatly simplifies the cumbersome traditional procedures and optimizes the modern English education mechanism and ideas [4].

## 2.4 Low Cost.

In the acquisition of teaching equipment in the computer room, the equipment investment of the traditional computer room is twice as much as that of the computer room dominated by desktop virtualization terminal equipment. With the development of cloud computing technology, there is more room for unit cost reduction, while the cost of upgrading, updating and maintenance is lower. Cloud computing model is on-demand service, timely, convenient and low cost. Cloud is a huge resource pool, which has the lowest requirement for user devices. Cloud can be purchased and charged on demand like tap water, electricity and gas, which is very convenient to use. Video and audio streams that are independent of file size can be played without downloading them all to the client. The delay time is very short and has nothing to do with the size of streaming media files. They are only related to the performance of streaming media servers, clients and networks. Students can easily and intuitively learn high-quality teaching resources. Teaching managers can easily and quickly generate courseware, so that teaching and learning can communicate in time, greatly improving the effect of distance teaching. The data center of traditional university has the shortcomings of low utilization rate of equipment, inability to share resources and heavy maintenance workload. Cloud computing technology enables university data centers to achieve effective management and flexible allocation.

# 3. Key Points of Cloud Computing Technology Applications in College English Teaching

# 3.1 Pay Attention to Curriculum Design.

Curriculum design is the core of teaching. College English teaching based on cloud computing should also undergo strict curriculum design. The teaching goal of college English course is to cultivate student's comprehensive English application ability, so that they can effectively communicate oral and written information in English in their future work and social interaction. In addition, it should be emphasized that when designing college English teaching courses, besides considering the requirements of general courses, we should also fully consider whether the curriculum design is based on the normative operation of understanding and understanding of College English teaching objectives and textbook contents, as well as the realistic possibility of current technical means. The content of courseware is textbook, which is the common embodiment of teaching objectives and tasks. It explores and constructs the background knowledge, text structure and language points related to the subject of the course. At the same time, it provides students with relevant books, newspapers, websites, audio-visual materials and other learning resources. The existing college English textbooks are all written for face-to-face teaching, which are far from the actual needs of students and cloud computing-based courses in both content and form. Therefore, it must be improved to make it suitable for practical teaching. For the design of courseware content, on the one hand, it is to select language norms and materials suitable for textbooks as the blueprint for basic language skills training. On the other hand, the use of online resources to increase lively extensive reading materials, expand the scope of perception of language materials. Formally,

multimedia technology can be used to assist teaching, and hyperlink text, sound, image, animation, video and other forms can be organically combined to enhance student's interest in learning.

# 3.2 Strengthen Communication after Class.

In order to encourage students to learn language based on cloud computing, we should adopt various ways of communication to enhance student's initiative and creativity. If students are divided into several discussion groups, they can exchange their learning experience with teachers and other groups of students as well as within the discussion group. This requires teachers to prepare some discussion topics related to this course and publish them regularly on the bulletin board. Students can freely express their views or ask questions. Other students can offer suggestions and suggestions. Finally, teachers can guide and summarize them properly. At the same time, student's participation and the quality of speech can be regarded as an important factor in evaluating students' learning level. Factor. Some students are limited to the ability of language expression, and the discussion is not easy to carry out. Then we can design some interesting and simple forms of communication to enhance interest, such as pictures with simple sentences or even words. In order to better realize autonomous and cooperative learning, cloud computing platform is used to exchange opinions and discuss problems. In this learning process, teachers not only assign specific learning tasks, but also provide students with necessary learning resources, learning monitoring and learning strategy guidance. Teachers can check student's understanding of the text through both objective and subjective exercises. For objective exercises, the system is easy to identify right and wrong automatically, and students can get feedback immediately after completing the exercises. For subjective exercises, it includes induction of the main idea, translation of sentences and post-reading feeling. Students can send homework to teachers in the form of e-mail, and then send it to students after teachers have corrected it. If possible, students with different English foundations can choose their own exercises independently, which will help to enhance their confidence in English learning. When students have any questions about the exercises or need help, they can communicate with teachers through e-mail.

## 3.3 Develop Cloud Platform Cooperatively.

There is a close relationship between colleges and cloud computing enterprises. Teachers and students use the teaching resources on cloud computing platform directly through the client, and they do not have direct contact with cloud computing enterprises. That is to say, there is a disconnect between teaching subject and teaching object. As the teaching resources on cloud computing platform are manufactured products that have been developed and designed, it is not clear whether they meet the actual needs of teachers and students. Teachers and students in the school belong to passive acceptance of teaching content, which goes against the original intention of individualized teaching to some extent. The main purpose of using cloud computing technology to promote English teaching is to improve English learning enthusiasm and autonomous learning ability by enriching the teaching content and promoting the diversification of teaching methods, and at the same time to realize the individualized teaching of English. The cloud computing teaching platform developed by enterprises can ensure the accuracy and stability of cloud education resources, and its expansion content is relatively rich. However, due to the lack of specific research on specific colleges and students of specific majors, its resources are lack of pertinence, and it is difficult to tailor English teaching courses suitable for English learning and development. In the process of teaching informationization, colleges often face the test of many restrictive factors, such as hardware equipment, network conditions, teacher's weak information technology ability, etc. Cloud computing enterprises provide the best solution to these problems. Colleges are responsible for the development of digital teaching resources, while enterprises are responsible for the design and maintenance of cloud computing platform, which combines advantages and disadvantages to make the best use of cloud computing teaching resources. Because colleges are both cloud computing developers and users, on the one hand, student's needs and teachers' requirements are accurately grasped, and the demands are reflected in cloud computing development and design; on the other hand, through the use of cloud computing teaching resources, the feedback is timely applied to the debugging of cloud computing platform to achieve the best teaching effect.

## 4. Conclusion

Cloud computing technology can make virtual classroom of online teaching activities authenticity and make teaching more vivid and effective. Cloud computing technology can transmit streaming media data to students in a high-speed, convenient, accurate and clear form without increasing the burden of network and server. It provides a good technical support for streaming media transmission in English network teaching. College English teaching based on cloud computing technology is of great practical significance to break through the development of time and space in teaching.

## References

- [1] Wang Xingyuan. The Research on Construction and Practice of New College English Ecological Teaching Mode Integrated with Cloud Resources in Internet Plus Period [J]. Journal of Zhejiang Industry & Trade Vocational College, 2018, 18(3): 21-25.
- [2] Wang Hongyan. An Empi rical Study on the Vocational College English Flipped Classroom Instructional Mode Based on Cloud-Based Teaching Class [J]. The Modern Education Journal, 2016(1): 43-51.
- [3] Dong Yingying. A Study on New Interaction Model in College English Flipped Classroom Based on Cloud-Based Teaching Class [J]. Education Modernization, 2018(9): 210-213+219.
- [4] Jin Shanguo, Chen Xiaoyu, Chen Weifeng. The Research of College English Self-regulated Learning Mode Based on Interactive English Cloud-Based Teaching Platform [J]. Theory and Practice of Education, 2015, 35(36): 58-59.
- [5] Zu Chun Dun.Cloud Service Model Based on University English Reading Database[J].Advanced Materials Research, 2015, 2534 (756): 889-891.
- [6] Ting Ting Wang. The Research on the Cloud Computing Assisted Instruction under the Low Carbon Circumstance [J]. Advanced Materials Research, 2015, 3181 (926):441-442.
- [7] Su Han,Xin Dai Zhang.Research of the Multimodal English Teaching in the Cloud Computing Environment[J].Advanced Materials Research,2017,3326(989):566-567.
- [8] Wei Zhang.On College Oral English Teaching in the Base of Virtual Reality Technology[J].Applied Mechanics and Materials,2017,3634(687):720.