Research on the deep integration of education informatization and English teaching under the background of "Internet +"

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Abstract. With the rapid development of information technology, people pay more and more attention to the education mode dominated by flipped classroom, micro class, MOOC and other new technologies. China's education work gradually enters the era of "Internet + education", which not only changes the traditional education concept, but also presents the classroom atmosphere of teacher-student interaction. According to the analysis of China's long-term education reform and development program, education informatization has been promoted to the height of the country's overall development strategy. In this context, English teachers should not only grasp the development opportunities of the new era, actively respond to the challenges of The Times, but also establish a sense of independent learning and anxiety, and integrate information technology and English teaching. Therefore, after understanding the basic characteristics and development status of education informatization under the background of "Internet +", this paper explores how to build an information education service system in depth according to the construction principles of English information teaching system, and clarifies the precautions and teaching strategies for the deep integration of education informatization and English teaching.

Key words: "Internet +"; Educational informatization; English teaching; Information education service system

1. Introduction

With the steady development of social economy and information technology, the innovation of "Internet + education" in China is getting faster and faster. The informatization development of practical education presents the following characteristics: First, educational resources are optimized. At present, the distribution of educational resources in China is not balanced, among which the educational resources in developed areas such as eastern and coastal areas are relatively surplus, while the educational resources in the middle and western regions with a large number of poor households are relatively scarce. Although China's macro policy has always attached great importance to resource allocation, the results are not ideal. After entering the information age, some high-quality educational resources have been widely disseminated and their application value has been maximized. Meanwhile, the educational field has begun to use Internet technology to break through the time and space restrictions, comprehensively improve the application efficiency of educational resources, and continuously expand the dissemination scope of information data. Second, it is more convenient for students to obtain knowledge. Traditional Chinese education is mainly limited in the classroom environment, and students have limited access to knowledge and a narrow range of knowledge. However, under the background of information technology, students can collect and download learning knowledge from various channels, interact with teachers more frequently, acquire more practical knowledge, and improve students' enthusiasm and initiative in learning. Thirdly, teachers' teaching methods are diversified. Fourth, redefine the role of education and teaching. In traditional classroom teaching, students can only passively accept the knowledge of books and teachers' representative power, while teachers control the dominant power and control of classroom teaching. However, in the context of education informatization, students can choose to learn knowledge according to their own interests, and teachers can also collect more teaching resources on the network platform for optimization and innovation. It can be seen that the deep integration of educational information method and English teaching is the main issue explored in

the field of education[1.2].

From the current situation of English teaching, as early as the 1980s, modern educational technology was applied to English teaching. Scholars and experts also put forward a variety of software equipment to assist English teaching and carried out a variety of teaching practice research. Began in the 1990 s, with the comprehensive promotion of Internet technology, Internet technology as the core of the information obtained the full implementation of English teaching, more and more English learning website, into people's visual field, which not only can help teachers to collect more teaching resources, can also develop students' way and the way of learning English. Therefore, in the 21st century, information technology as the core of English teaching, not only can build English teaching website, to provide intelligent online learning platform between teachers and students, this model not only can provide students with feedback information, the intelligent interaction with them, can for the teachers and management personnel to provide an effective communication space. Therefore, this paper mainly analyzes the deep integration of educational informatization and English teaching under the background of "Internet +"[3.4].

2. Method

2.1 Design Principles

In the era of "Internet +", in order to deeply integrate education informatization and English teaching, it is necessary to build an English informatization teaching service system and follow the following design principles: First, take students as the center. As the main body of classroom teaching, students' English ability and accomplishment should be regarded as the basic goal when constructing the information teaching service system. Therefore, we should not only pay attention to students' learning interests and learning needs, but also put forward differentiated teaching strategies according to different basic levels. Only in this way can the application value of educational informatization be fully demonstrated in practical teaching. Secondly, high efficiency. Compared with the traditional teaching system, the technical advantage of the information teaching system lies in its high efficiency. In the information education service system, English teachers can use pictures, videos, text and other ways to guide teaching, continue to optimize students' English listening and learning level, optimize classroom teaching efficiency as far as possible; And finally, dynamic. This principle means that teachers will not only establish the basic concept of development and change in the process of teaching guidance, but also make continuous adjustments according to the learning needs of students.[5.6.7]

2.2 Information education service system framework

First, infrastructure. Campus network, as the basic condition for the implementation of educational informatization, involves five parts: data center, administrative office subnet, teaching and scientific research subnet, student dormitory subnet, and subnet of public activity area. The specific structure is shown in Figure 1 below:
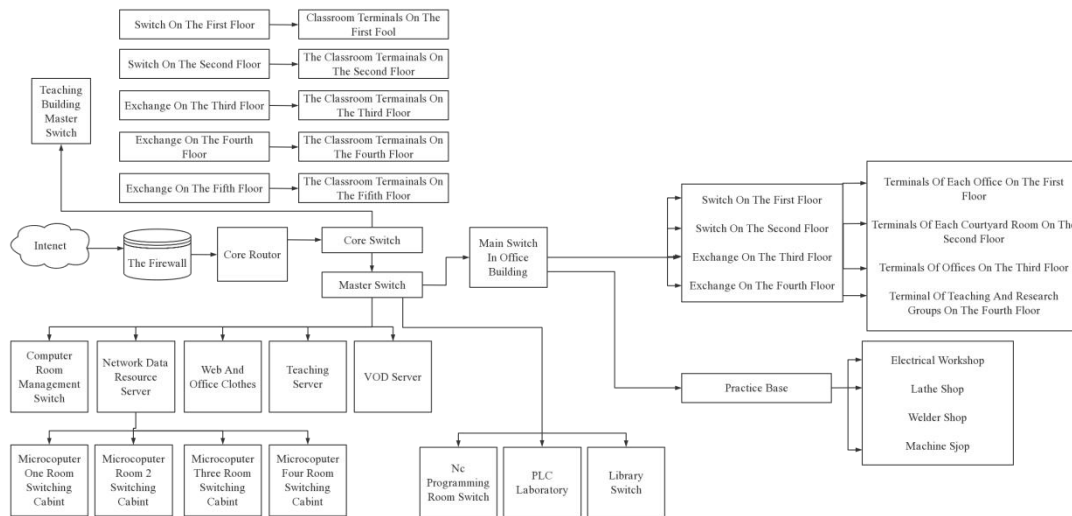
Figure 1 Topological structure of campus network

From the perspective of practical application, the data center should have servers and storage devices to meet the operating requirements of resource system, teaching assistant system and management system. Other subnets should meet the requirements of smooth security, access, convenience and high coverage as far as possible.

Second, user management and teaching assistant management system. This part of the unified planning is critical. Among them, advanced user management involves portal system, broadband service management, user management center, central authentication system and so on. Its purpose is to make the information data of all application systems shared and unified, convenient for campus network users to use single sign-on, personalized definition in a digital, campus portal, and use all business application systems. The teaching assistant management system is a key link, and the specific content involves teaching administration management, student course selection, score query, student management, scientific research management and other content, will follow the teaching management business gradually built. The specific structure is shown in Figure 2 below:
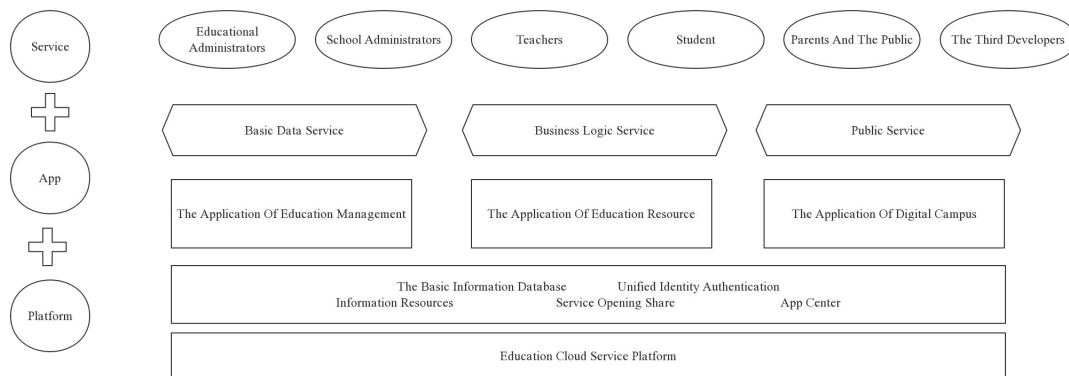

Fig. 2 Structure diagram of user management and teaching assistance management system

Third, teaching information system. This part is the core content of the information-based teaching service system, and the specific structure is shown in Figure 3 below:
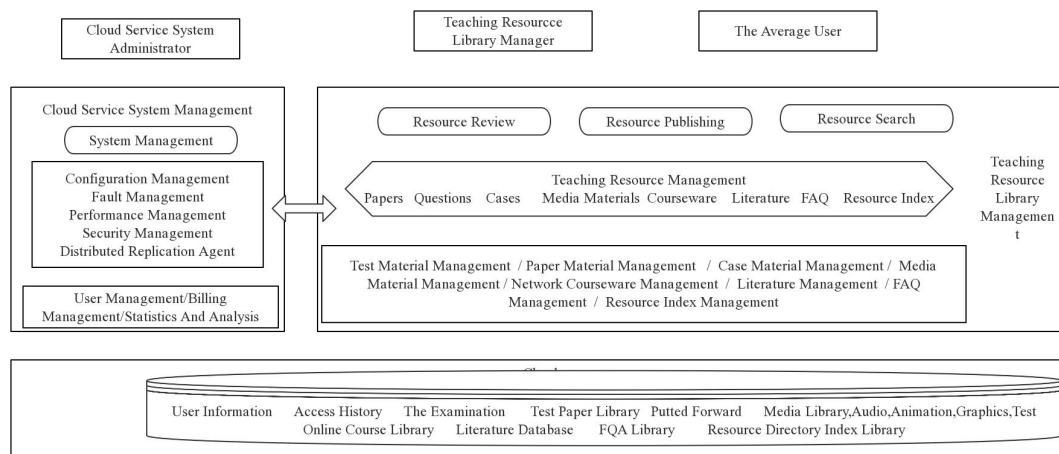
Fig. 3 Structure diagram of teaching information system

Based on the above analysis, it can be seen that the teaching information system contains the following contents: First, a comprehensive teaching information resource library. In the development of education informationization, the education department of our country puts forward that resource is the key element of informationization teaching and the core content of education informationization construction. In the modern development of education, the teaching resources should conform to the thinking, cognition and usage habits of teachers and students. The comprehensive teaching information covering the whole school, the resource library usually arranges the library to purchase various types of book information, although these contents only play an auxiliary role in the teaching period, but can continue to develop the potential ability of students, constantly expand their thinking consciousness; Secondly, network teaching platform. In the network teaching platform, teachers can directly upload teaching resources to the network space, design courseware and communicate with teachers and students while designing and promoting network courses, and students can preview review and evaluate and analyze according to their own learning status. This platform can make the teaching between teachers and students not restricted, help teachers to change from knowledge imparting to teaching guidance, and students can optimize their learning ability and innovation consciousness; Thirdly, network teaching system. Nowadays, there are many network teaching systems developed and designed for specialized courses, such as learning management system, grading testing system, multimedia network courses, etc., which can not only provide personalized learning platform for students, but also provide real-time query and statistical functions for educational administrators and professional teachers. Finally, the teaching resource generation system. The classroom recording system can automatically complete the recording and broadcasting of the teaching process, generate the teaching courseware in real time, and store it in the system equipment according to the international standard video file format. This system can directly broadcast lectures on the network, and any computer can watch them through the network platform, which has a positive impact on the innovation of modern education technology[8.9].

3. Result analysis

3.1 Precautions

Based on the analysis of the information education service system shown in Figure 4 below, the following problems should be paid attention to in the deep integration of English teaching and educational information technology: First, the key and difficult points of English teaching should be demonstrated. In the information education service system, English teachers are prone to pay too much attention to the information technology of teaching awareness, but ignore the real teaching difficulties. Therefore, teachers should pay attention to the combination of practical teaching status

and curriculum knowledge, gradually adjust the information teaching function, must not appear the teaching problem of putting the cart before the horse; Secondly, students' interest in learning should be regarded as a basic condition. In daily life, the relationship between ability and interest is a virtuous circle. If students' interest in Learning English can be cultivated, time teaching will get twice the result with half the effort. Therefore, teachers should use information technology to present interesting and diverse classroom activities, give priority to the topics that students are interested in, and deeply tap the learning potential of students. Finally, the comprehensive quality of English teachers should be improved. In building the information service system is a teaching, a teacher as the knowledge and the organizers of the classroom activity, must optimize its own application level and information technology, and actively learn the advanced technology theory, how to participate in school or society provides education and training activities, in order to introduce more interesting teaching activities, change the traditional teaching management mode[10].
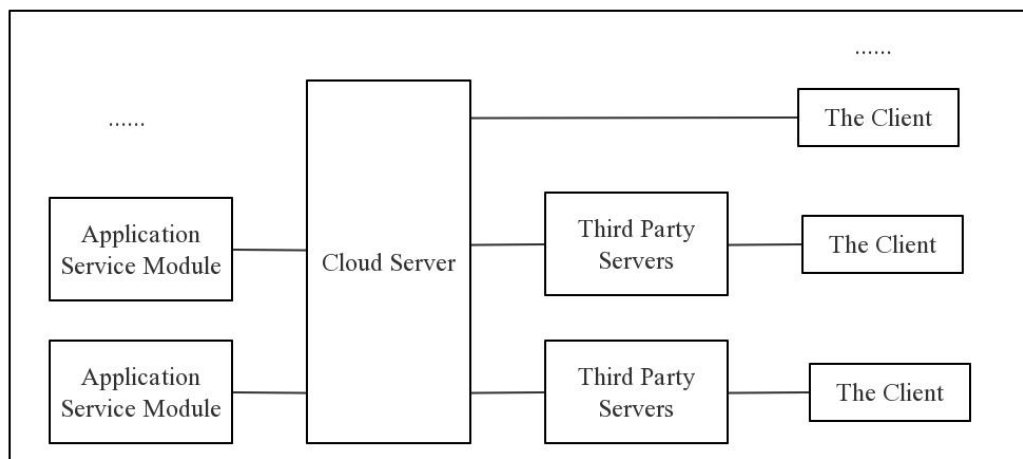
Figure 4 Frame diagram of information service system

3.2 Fusion Strategy

On the one hand, information technology should be used to enrich students' learning content. Under the background of Internet + education, the construction of information education service system should not only expand students' learning resources, but also change the practical teaching content, so that students can continue to expand their learning thinking in deep research and skilled application. For example, the learning platform as shown in Figure 5 below can be used for effective preview before formal classes and interest, cultivation and skill training after the completion of basic teaching tasks, because they provide channels for learning to expand knowledge and make them truly realize the fun of learning English.

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                                              ┌─────────────────┐
                                         ──→  │    Sign Up      │
                                              └─────────────────┘
                                              ┌─────────────────┐
                                         ──→  │   News Center   │
                                              └─────────────────┘
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                                         ──→  │ Learning Tasks  │
                                              └─────────────────┘
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                    ──→  │ The Front    │ ──→ │ Learning Qualifications│
                         │    Desk      │     └──────────────────────┘
                         └──────────────┘     ┌──────────────────────────────┐
                                         ──→  │ Personal Information Management│
                                              └──────────────────────────────┘
  ┌─────────────────┐                         ┌─────────────────┐
  │ Campus English  │                    ──→  │  Online Videos  │
  │Learning Platform│ ───                      └─────────────────┘
  │Based On ASP ,NET│                         ┌─────────────────┐
  └─────────────────┘                    ──→  │  Online Tests   │
                                              └─────────────────┘
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                                         ──→  │ Online Customer Service│
                                              └──────────────────────┘
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                                         ──→  │ Message Boards  │
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                                              ┌──────────────────────┐
                                         ──→  │ Membership Management │
                                              └──────────────────────┘
                                              ┌──────────────────┐
                                         ──→  │ News Management  │
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                    ──→  │The Background│ ──→ │Teacher Management│
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                                         ──→  │ Learning Materials│
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                                         ──→  │ Message Boards  │
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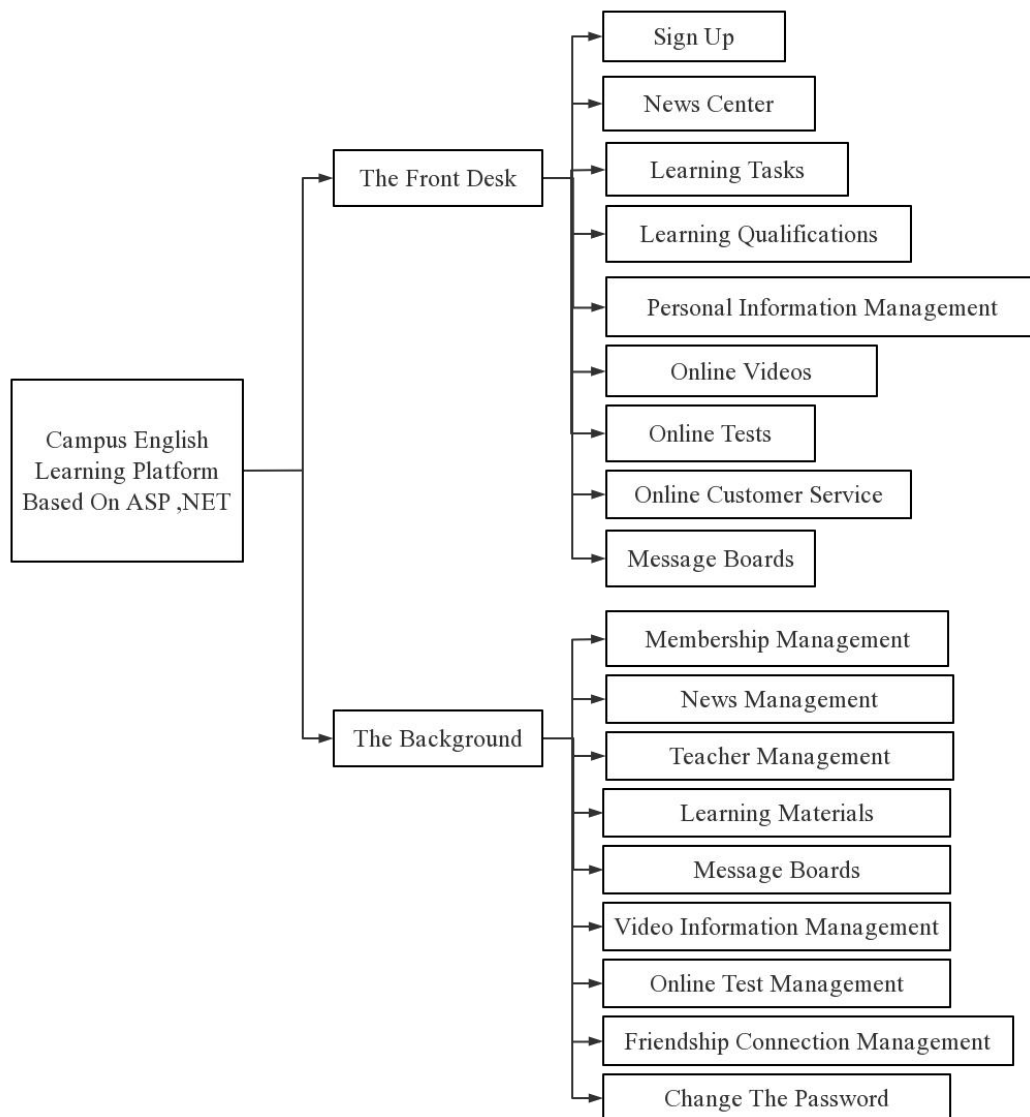
FIG. 5 Structure diagram of learning platform

On the other hand, we should build a diversified teaching system. The biggest problem with the traditional teaching system is that it only focuses on cultivating students' English test ability and neglects students. In learning English knowledge, listening, speaking, reading and writing ability, so it is difficult to meet the needs of modern talent training. In the construction of information teaching service system, the use of diversified teaching system can develop students' English ability in an all-round way.

4. Conclusion

To sum up, under the background of "Internet + education", the deep integration of education informatization and English teaching and the construction and promotion of information education service system will have a positive impact on the innovation and development of modern education. In this process, teachers should not only abide by the basic principle of being people-oriented, but also use information technology to show the key and difficult points of teaching. Only in this way can we construct a rich and interesting English teaching class for students.

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