Research on home-school linkage mechanism in Chinese universities based on cloud service platform design

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Abstract: In the development of modern university education reform, the design of cloud service platform is proposed in the field of education, promoting the brand new management environment, so that teachers and students can enjoy the diversified services through the network platform, change the traditional campus life mode, and truly realize the win-win situation between platform merchants and ordinary users. According to the cumulative experience of Chinese college education reform in recent years, the linkage mechanism of colleges and universities is the main issue of practical inquiry, and plays an important role in the overall implementation of modern education work. Therefore, on the basis of understanding the research status of home-school linkage mechanism construction in Chinese colleges and universities, this paper defines the integrated development strategy of home-school linkage mechanism in colleges and universities in the future according to the design architecture and basic functions of cloud service platform, so as to build a better college education management system.

Keywords: Cloud service platform; Higher education; Linkage mechanism; informatization

1. Introduction

With the steady development of social economy, college education has been popularized in an all-round way, and more and more problems related to education management have been raised. In order to further enhance the comprehensive level of education in colleges and universities and build a harmonious home-school environment, the education field should accurately grasp the relationship between colleges and universities and parents in student management, pay attention to put forward the home-school linkage development mechanism in colleges and universities, and comprehensively improve the existing educational management environment in colleges and universities. Since the expansion of college enrollment in the late 1990s, the popularization of higher education has been increasing and the scope of college education management has been widening. With the gradual improvement of the national level of education, the problems of university education management become more and more obvious.[1.2.3] When students' parents and professional teachers pay attention to various conflicts, they begin to discuss how to build an effective home-school linkage mechanism, so as to lay the foundation and guarantee for comprehensively promoting the pace of university education innovation. According to the relationship between the family school of colleges and universities in recent years the analysis found that most of the students parents believe that after the students enter colleges and universities, as they have adult or going into adult group, has a certain self-awareness and the ability to innovate, thus gradually reduced attention to education in the university, the school teachers and students themselves as the main responsibility of education management body, It is easy to make one-sided attribution when students have problems, which directly aggravates the contradiction between students, parents and schools. Due to the unclear position of legal responsibility in the education management of colleges and universities, colleges and parents can not play a role in the practice work together, so the problems related to students are not scientific and perfect. It is also easy to turn the home-school relationship into an antithesis if the practical work mechanism is not standardized. Nowadays, the communication mechanism of education management in colleges and universities is one-way, mainly from teachers to parents, but parents have limited feedback information and low participation in solving problems and education management, so they can only fall into a passive situation.
"National education career" much starker choices-and graver consequences-in planning "clearly pointed out that to improve the social education environment, the first to build the government, school, society and family full participation in collaborative education working mechanism, clear responsibility of family education, strengthen the parents education, popularize family education knowledge, guide the parents to do the first teachers of the students, To promote the development of young people's personality and psychological health ". Therefore, school and family are both indispensable components of higher education management and important support for students' all-round development. The core of college education management is to cultivate high-quality and high-level outstanding talents. Although the current educational activities are characterized by diversification and multi-dimension, college education personnel are still the main body of teaching management and play an important role in the learning and growth of students. And family education as the primary part of education guidance, the parent is to support the body of the education management of colleges and universities, the students' personality cultivation and value conception has a deep effect, although not as good as most college students have adult, but their life values is not mature, unstable state of mind and psychological characteristics, still needs the attention of parents and guide.

Based on the analysis of the cloud service platform structure shown in Figure 1 below, it can be seen that in the development of social economy, science and technology innovation, the following work should be done to explore and build a digital cloud service platform for university education innovation:[4.5.6]

Figure 1 Structure diagram of cloud service platform

Firstly, the application value of cloud service is comprehensively analyzed, effective resources are timely presented to demanders, and the resource sharing characteristics of cloud service platform are fully reflected, so as to promote communication between teachers and students and fully mobilize students' enthusiasm for learning and exploration. It should be noted that although the cloud space is very similar to the browser, the cloud space can provide service functions for multiple traditional servers, and the relevant technical theories have strong advantages, which can ensure the normal operation of the system.[7.8.9]

Secondly, the specific application of user management procedures. The application platform, platform service and other basic module communications are connected together, and the local call interface is used to truly achieve the expected set of functions. In order to ensure that the data of cloud service platform can meet the resource sharing requirements of teachers and students, administrators should use intelligent electronic technology to carry out portal management and control. On the basis of summarizing and analyzing the design theory of cloud platform, they should establish the portal management program of order and standard.

Finally, pay attention to continuously strengthen the application technology. In the application and promotion of cloud service platform technology in colleges and universities, it is necessary to integrate the underlying physical equipment and the upper operating system with the virtual technology developed by network engineering information, so as to constitute the virtual working
mode of resource sharing, which can be provided to application users according to the needs of various departments.

Based on the understanding of the current situation of the development of educational reform in Chinese colleges and universities, this research probes into how to build cloud service platform and the development measures of home-school linkage mechanism in Chinese colleges and universities in the future according to the design and application of the mechanism.

2. Method

2.1 Platform Functions

After clarifying the basic content of the efficient home-school linkage mechanism, the cloud service platform as shown in Figure 2 below should be built:

![FIG. 2 Structure diagram of university cloud service platform](image)

The overall service platform should be oriented to teachers, students and parents of colleges and universities, pay attention to providing basic services for system users, avoid repeated construction between systems, facilitate the access of the original application system and support the development of new systems. From the perspective of practical application, the overall system platform design should comply with the following principles: first, practicality. According to the fundamental requirements of the home-school linkage mechanism in colleges and universities, after clarifying the fundamental needs of education management, we should consider low cost and maximize the application of existing equipment resources, and facilitate the subsequent maintenance and application. Second, stability. The cloud service platform should operate stably in practice, and can correctly respond to the needs of daily teaching, student life, scientific research and discussion; Finally, ease of extension. In the construction and application process of university cloud service platform, with the continuous expansion of business scale and core application, higher requirements will be put forward for the whole service platform, among which the most critical is data storage and computing pressure. When the computing and storage capabilities do not meet the requirements, the entire service platform should be extended and analyzed, and the technical functions compatible with the old and new heterogeneous resources and systems should be provided. Only in this way can the orderly operation of the overall service platform be guaranteed.[9.10.11]
The overall service platform should be developed and realized in the form of App. Eclipse + Android SDK is selected as the development environment, and MySQL is used as the background database, which contains a number of data tables. For example, the data form of student users mainly records the basic information of registered student users, such as name, phone number, class, dormitory, mobile phone and so on. The structure of the database is shown in Figure 3 below:

![Figure 3 Structure diagram of MySQL database](image)

3. **Result analysis**

3.1 Practical Significance

First of all, the application of home-school linkage mechanism construction meets the needs of parents. According to a survey conducted by the National Institute of Educational Sciences, most parents regard learning as the main content of parent-child communication. At the same time, according to the research and analysis of specific problems, most students think that parents do not listen to their own speech carefully, and parents think that they are unable to find effective ways of communication. In this context, the communication between students and parents is becoming less and less, and it is difficult for parents to go deep into students' psychology to find ways to solve problems. In the long run, it will inevitably form an insurmountable gap. After students enter the stage of university study, they have less and less time to get along with their parents and don't have much feedback from each other, which will inevitably cause more communication difficulties in the long run. The home-school linkage mechanism can build a good communication platform for colleges and universities and students' parents. Teachers can timely provide parents with various information about students at school, which can help parents understand the growth and changes of students faster, gradually narrow the distance between parents and students, and let parents gain more sense of accomplishment and joy.[11.12.13]

Secondly, the application of home-school linkage mechanism is consistent with the ideological and political education platform. If college education is regarded as the critical point of a student's timeline, then the original learning experience is the past, the education management during college is the present, and the future is after college graduation. College teachers can analyze students' original learning status through information such as students' self, parents and teaching files, but the
information is fragmented, so it cannot play a full role. It is necessary for teachers to communicate with students face to face, pay attention to the working mechanism of combining home-school linkage, and work with students' parents to guide and help students make current learning plans and future development plans, so as to promote the integrated development of family education and college education, so as to guide students to build a correct outlook on life and values.

Finally, the construction and application of home-school linkage mechanism can improve the quality of personnel training in colleges and universities. In the linkage mechanism, students' parents can have a comprehensive understanding of the specific process of training talents in colleges and universities, put forward substantive suggestions for practical education management, and help colleges and universities to master more valuable information in the optimization and innovation of talent training mode, so as to optimize the training level of college talents. The structure of the home-school linkage mechanism is shown in Figure 4 below:

![Diagram of the linkage mechanism between schools and colleges](image)

FIG. 4 Structure diagram of the linkage mechanism between schools and colleges

3.2 Development Suggestions

On the one hand, it is necessary to propose the common development of school moral education and family cultivation, regard family education as the basic condition of school education implementation, integrate innovation, family cultivation education and efficient moral education, so as to build a three-dimensional moral education management mode. As an important period of life growth and development, college education should not only transfer basic theoretical knowledge and practical experience, but also take moral education management as the fundamental content and
focus on cultivating high-quality talents with good moral quality. Therefore, home-school linkage mechanism should also play an important role from this aspect. On the other hand, combined with the cloud computing service technology as shown in Figure 5 below, the working objectives of the home-school linkage mechanism should be clarified, and the multi-layer structure and application functions should be designed according to the practical business requirements. In the interaction and participation of colleges and families, in order to closely link the two together, it is necessary to formulate activity targets according to different needs, so as to contribute to the construction and development of the socialist road with Chinese characteristics.[14.15]

![Figure 5 Technical structure of cloud computing services](image)

4. Conclusion

To sum up, in the understanding of education reform in colleges and universities in recent years, the development direction, on the basis of depending on parent-school linkage mechanism for the construction of the specific application, deeply discusses how to utilize the cloud service technology theory to build a new management platform, give full play to the family education and the positive role of education in colleges and universities in personnel training, only in this way can provide high quality resources for social development. At THE SAME TIME, WE SHOULD actively learn to introduce advanced technology theory and research results from foreign countries, improve our educational management mode in colleges and universities, give full play to the positive effect of home-school linkage mechanism, and improve the traditional monOTone educational management ideas.

Reference


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