

INFORMATION PLATFORMS FOR HIGHER EDUCATION MANAGEMENT IN CHINA

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Currently, the reform of higher education in the People's Republic of China provides for the expansion of the functions of information platforms for education management in colleges and universities and the improvement of relevant software systems. At the same time, there are a number of reasons hindering this process: a low degree of application of Big Data technology, limited functions of the education management information platform and insufficient software. Therefore, in order to further develop informatization in the management of higher education in China, the goals and directions of designing the platform for informatization of education management in colleges and universities are being clarified.

In this regard, the purpose of our work is to identify innovative ways of development in the field of informatization of higher education management in China using Big Data technology.

Material and methods. Based on the application of Big Data technology, our research rethinks the directions of informatization of higher education management, offers some innovative methods of work, provides a methodological approach, improves the quality of management informatization and contributes to its development.

Results and their discussion. On March 15, 2021, the decree “Notification on strengthening the informatization of education management in a new Era” issued by the Ministry of Education of China noted the need to comply with the trend of modern informatization of education, the effective use of Big Data technology, and the implementation of an education management model. It is necessary to adapt the information platform of education management to each specific educational institution to provide technical support for academic management and implementation of teaching. After the release of the relevant policy documents, colleges and universities across the country have been intensively implementing the informatization of education management over the past two years. Through system integration, application of Big Data technology, creation and improvement of software, they offer innovative approaches for informatization of higher education management.

Although individual universities have made progress in this direction, in real conditions there are still problems such as insufficient system integration, insufficient data exchange, poor software. In addition, many universities use the traditional concept of education management, which is an “emphasis on teaching and neglect of management”, which is why colleges and universities have faced many problems in implementing educational management information systems.

1. Requirements for informatization of higher education management.

The essence of informatization of higher education management is the effective use of Internet technologies, Big Data technology and network platforms to create an integrated management platform necessary for academic management, teaching implementation, management of teachers and students. According to the “Notification on the strengthening of informatization of education management in a new era” of the Ministry of Education, the main requirements for colleges and universities to conduct informatization of education management are as follows: 1) integration of management systems, namely: teaching, academic administration, teachers and students. The integration of information unites disparate educational resources, provides integrated management, reduces the loss of labor, material resources, funds and time in the management of education, as well as increases its overall efficiency; 2) intellectualization of the work of the teacher and the student. To implement this, it requires the use of Big Data + “Intellectual Push” technologies, which increases the intellectual level of administration and teaching staff; 3) implementation of the principle of exchange of educational information between faculties within a college or university and between educational institutions; 4) software improvement, a combination of three technologies “cloud, network and terminal” to create a complete information base for education management [1].

2. Innovative goals of informatization of higher school management.

2.1. Focus on managing teachers and students and providing them with educational services.

In accordance with the information requirements for the management of higher education, it is necessary to follow the principle of “people orientation”, focus the goals of work at the level of teachers and students, as well as provide high-quality educational services through the creation of information platforms. With the help of “big data + intellectual push” technology, teachers' pedagogical data is collected and processed, as well as their comprehensive analysis is carried out to provide teachers with methodological recommendations and students with information on personalized learning services [2].

2.2. Pay attention to the efficiency of data use.

Data efficiency requires “comprehensive data collection”, “data mining” and “accurate data exchange”, improving the data management system, creating a system of data standards, implementing the principle of “one number, one source” and “one educational institution, one standard”. This is accompanied by data exchange and their practical application [3].

2.3. Pay attention to logistics support and strengthen the control function

It is necessary to ensure the improvement of the software. The main goal of optimization is to provide logistical support and safety of teaching in higher education. To achieve this goal, it is necessary to focus on the control of information platforms of education management. To do this, it is necessary to use firewall technology, which will improve the quality of service of information platforms and eliminate the leakage of academic information and information about teachers and students [4].

3. Innovative ways of informatization of higher education management.

3.1. Create a service segment “Big Data + Smart Push” based on the convergence of three technologies “Cloud, Net and End”.

If the university has sufficient funds and technical capabilities, professional and technical personnel can create an integrated information management platform based on the actual situation in the educational institution, develop functional sections, create a common basic functional architecture and achieve comprehensive openness of the Application programming interface (API). Then it is necessary to optimize the campus network. The campus network is used to connect the service ports of each faculty to create a hierarchical structure.

In practice, teachers can use the built-in cloud platform to host training programs, educational resources, research results and textbooks. Teachers on the platform share these resources and strengthen cooperation with other professionals, which increases the effectiveness of teaching. They also use the cloud classroom platform to deliver personalized online learning, blended learning, and flipped learning. In addition, the educational resources of the whole country are integrated into the system platform and a student subsystem has been developed. With the help of a student ID and password, students can log in to it. The platform of the system allows you to study independently and use various educational resources provided to students by faculties [5].

3.2. Adhere to the principles of “one number, one source” and “data exchange” and create a standard system for collecting and applying campus data.

The collection, exchange and application of data are key tasks in the construction of informatization of education management. In our study, educational institutions are recommended to create a system of data standards, apply the principles of “one digit, one source” and “one educational institution, one standard”. This ensures the use and processing of data, the exchange of them throughout the academic year. At the same time, the data sharing function is added, which helps educational institutions to create an audit system, standardize the workflow of data exchange, increase the efficiency of application use, and jointly support decision-making in the field of education and management. On this basis, an educational institution can connect the campus network with the network outside it to create a comprehensive platform for sharing network resources, which facilitates communication between teachers, provides exchange of educational resources between regional colleges and universities [6].

3.3 Create an intelligent multi-level education security and management system.

To ensure security, universities can create a group for the supervision and maintenance of the platform and its software. It is necessary to upload the firewall function to the network platform and develop password protection, as well as the function of identifying information and verifying the logged-in person, thereby increasing the security of the platform [7].

The aspect of intelligent education management services is aimed at expanding the coverage of information platform applications, which allows it to connect to the system networks of enterprises, other colleges and universities, education

departments and government departments. A special subsystem for managing cooperation between an educational institution and an enterprise has been designed on the information platform. Through the system platform, teachers can upload the results of completed training tasks to the online learning platform. Teachers and representatives of the company jointly evaluate the results of students' homework assignments. This contributes to the development of practical skills of students. At the same time, using a mobile Internet terminal, it is possible to implement a link between practice and offline positions of enterprises, as well as organize "online research", "resource exchange", "term papers", "skills training" [8].

Conclusion. Thus, the informatization of education management in colleges and universities and the search for new ways to build education management systems are not only fundamental requirements for reforming the model of education management in China, but also ensure self-improvement and self-development of colleges and universities. Informatization of higher education management requires clear work goals, meeting the requirements for informatization, focusing on the management of teachers and students, academic management, data collection and exchange. All this contributes to the implementation of the construction of informatization of education management in higher education.

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