



Informatization of Educational Management in Colleges and Universities

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Abstract

With the rapid development of today's social science and technology, network information technology has been widely used in all walks of life, and education, as an important pillar of the national economy, must also be reformed and developed. In this context, schools must carry out informatization construction and use modern scientific and technological means to improve the level of teaching management. At the same time, it can also effectively improve the level of school-running management, thereby promoting the improvement of the market position of colleges and universities. The purpose is to let students establish a correct learning concept, clear learning direction, strong learning motivation, and have a love for learning and a willingness to learn. Interests and hobbies to study scientific and cultural knowledge, and have the will to not be afraid of hardships, setbacks, and perseverance. Learning strategy education, including how to make a study plan, how to preview before class, how to take each class well, how to review and summarize knowledge. The purpose is to let students understand the general process of learning and characteristics, grasp the general mode and principle of learning.

Keywords

Universities, Education Management, Informatization

1. Introduction

The development of today's society has gradually expanded the scale of schools, especially higher requirements for domestic quality education, and the development of today's education has made schools take on more responsibilities. Especially in recent years, with the continuous strengthening of school recruitment, the scale of college admissions has continued to expand, and the college admissions work has become more complicated. To further promote the informatization process of higher education management in our country, we must have a comprehensive understanding of it. Education management refers to the use of a certain amount of resources by management staff to implement centralized management of school students in order to achieve the previously planned teaching Purpose.

The implementation of educational management in colleges and universities is to continuously promote the level of educational management in colleges and universities. Under the environment of "double first-class", all colleges and universities should give priority to improving the level of education, and how to implement educational management. On this basis, it has become a very important subject to make the school develop comprehensively and systematically. Under the background of today's big data, the organization of education management information system is an unchangeable trend, so how to use information technology to present a higher-level educational organization model should be the common expectation of every university. University information management refers to the use of modern technology, based on computers, to achieve fixed organization and management of students, reduce human resources, and improve teaching quality. In addition, the use of big data technology to organize the content of teaching management can ensure that teaching work can be carried out efficiently.

2. Current Situation of Informatization of Educational Management in Colleges and Universities

2.1 Overview of educational management concepts

The quality of education is the central task of education management, and many colleges and universities only take employment as a key indicator to measure the quality of teaching. With the continuous deepening of the reform of higher education in China, the reform of higher education and the development of connotation have also promoted the pursuit of educational quality in some universities. At present, there are two types. One is internal adaptive quality, that is, whether students have sufficient knowledge reserves and whether they can make necessary preparations for new discoveries in the future. This is a kind of internal cognition based on the school. The result sought is essentially a professional or academic norm. The second category is externalities, usually referring to whether graduates meet the standards required by the state and employers.

That is to say, the quality of a university should be measured by external needs and satisfaction. The employment rate is "externally suitable", which can reflect the level of running a university to some extent. However, there is a general phenomenon in the current employment situation. Therefore, the current university education organization and management should advocate systematic quality management, which combines the advantages of internal quality and external quality, emphasizes student-centered, and continuously improves quality standards. Therefore, the school's direction of running a school has shifted from direct management of students and teaching activities to indirect management of students and teaching activities. Truly serve students and serve educational. Changes in the quality of education in colleges and universities require colleges and activities universities to establish a more effective and reasonable education quality monitoring and guarantee mechanism. The staff of higher education organizations should make it clear that the primary value of education managers is the beginning of the project rather than the end of the project, and its management should aim at the formation process of educational quality, rather than meeting institutional needs or the success of the educational system.

2.2 Changes in education management informatization

Imprint of education is in the blood of the Chinese people. With the continuous reform of education, some problems in education have gradually emerged. Today, with the increasing popularity and development of information technology, the Party Central Committee and the State Council have put forward the requirement of promoting the modernization of education with information technology. Educational administration informatization is an important part of educational organization and management construction. In 2013, the Ministry of Education released the national educational administration informatization construction plan, which clarified the content and promotion steps of education management information construction in colleges and universities (Dong Murphy, 2016), and made the information management of colleges and universities in China more and more perfect .

However, the informatization of colleges and universities is a systematic project that needs to be carried out continuously, which cannot reflect the degree of informatization of education management in a short period of time. In terms of technology, mechanism and system, there are still some engineering problems that cannot be ignored in the construction of educational management informatization in China's higher education institutions. As an important part of the national education administration work, this can easily lead to the generation of the digital divide. Schools in some regions already have the conditions for smart classrooms, while in some regions there is no significant progress in multimedia teaching. Continued investment, blind construction, unsound norms, uncertain standards, and unstable teaching management information systems have all resulted in the ineffective exchange and sharing of information resources in colleges and universities. The education management of colleges and universities is constantly updated with the development of the times, and there is no end. With the continuous development of scientific and technological information technology in today's society, the informatization of education management in colleges and universities is bound to improve with the development of the times. However, the application of technology is becoming more and more mature, and the awareness and system of education management in colleges and universities are increasingly backward. In the aspect of college education informatization, the regular management and maintenance of college informatization APP is emphasized, but the teaching management concept is not matched.

3. Problems existing in the informatization of education management in colleges and universities

3.1 Weak ideological awareness

Due to the lack of understanding of school informatization in the traditional offline teaching management mode, and the lack of guidance for schools in various places, the informatization level of education management has not been sig-

nificantly improved. With the rapid development of economy and technology, many universities do not realize the important role of informatization in university teaching, and still stay on traditional concepts and innovative thinking. In today's society's increasingly high requirements for information technology, universities must realize the urgency of teaching reform in order to promote the improvement of the level of informatization.

3.2 Lack of standards for information management

Due to the lag in the construction of educational informatization in our country, the lack of social norms for informatization teaching makes it difficult for universities to grasp the level of informatization education management. In addition, domestic colleges and universities have not yet established a complete set of information-based teaching systems, nor can they strictly manage the quality of university education. In order to improve the information management of enterprises, strict management standards must be formulated.

3.3 The management system is not perfect

At present, the educational management work of Chinese universities still lacks an information-based management system. If there is no effective system to regulate the behavior of the university, it will not be able to effectively improve the school's information management and will not be able to achieve the long-term development of the school. In China's education system reform, the government should take responsibility and establish relevant system norms, which should not only provide norms for the development of schools, but also strengthen the management of schools. In addition, the rewards of welfare policies can also have a certain incentive effect on students, which is also beneficial to the long-term development of the school.

4. The basic idea of developing scientific research management informatization

4.1 Fully understand the importance of scientific research management informatization

Only by fully understanding the importance of scientific research management informatization, and innovating management processes and management models that can reflect the characteristics of systematization, relevance, immediacy, and pertinence to replace the original management model, can the staff be free from complicated affairs. Processing liberates meters. The leadership should optimize the scientific research management process from the perspective of informatization, investigate and analyze the informatization needs of various departments, make macro plans, formulate overall goals and plans for informatization, and guide the steady development of informatization work.

4.2 Innovative scientific research management informatization model

An innovative scientific research management model should be able to standardize, simplify and systematize business procedures, and improve the efficiency and effectiveness of scientific research and management. If only the traditional management model is used and incorporated into the information process, it will not only solidify the unreasonable factors in the original management process, but also lead to the phenomenon of multiple management, which makes managers and researchers have to carry out electronic documents at the same time. And the repetitive labor of traditional paper document production.

4.3 Integrate and optimize the scientific research management informatization process

If the information management of scientific research does not establish a set of standardized management foundation, the information system does not cover the entire process of scientific research management, the information flow is cut off, the transmission of information is slow, and it is difficult to share information and optimize business processes. A clear workflow and work order is a necessary condition for data collection, processing, transmission, and feedback. The informatization of scientific research management requires a higher spirit of cooperation and a clearer division of labor among scientific research managers and researchers (Yang Kai, 2017), so as to minimize duplication of work and ensure reliable quality of data from shared resources.

4.4 Cultivating professional talents in scientific research management

Information technology is an emerging science. There is a lack of professional talents in information technology in colleges and universities. However, the application of information technology is more and more closely integrated with daily scientific research and management. Therefore, it is necessary to strengthen the information awareness of scientific research managers and researchers, carry out knowledge training in computer application foundation, network application technology, etc.; strengthen the information processing ability of the above-mentioned personnel, so that they

can master basic information technology such as scientific research data integration and application, and improve the level of information processing and application. In addition, as the application of information technology becomes more and more extensive, the demand for scientific research informatization is getting higher and higher, and the demand for information technology talents is increasing. The introduction of professional information technology talents has become a feasible way to improve the current situation of talent shortage.

4.5 Ensure the accuracy and timeliness of grassroots data collection

Another key problem to be solved in the construction of scientific research management informatization is the grasp of data quality. The information system has the functions of reflecting the dynamic information of scientific research activities and scientific research management at any time. To reflect the real situation, it is necessary to carefully check the data to ensure its accuracy and timely input into the system. Data collection at the grassroots level is very important for information management. Only with accurate basic data can we have correct data analysis and serve for decision-making.

5. Fourth, the methods and measures of college education management informatization

5.1 Improve the understanding of information management

Domestic colleges and universities should strengthen the understanding of information education management, take the government as the leading role, promote the concept innovation of colleges and universities, and recognize its advantages. In addition, through the establishment of an information management team, vocational skills training, and regular publicity and education, the awareness of college information work has been improved. In addition, it is also necessary to disseminate the latest ideas to school students and parents, and use multimedia technology to publicize, so that they can recognize the specific teaching content of informatization, so as to promote students' learning, and then achieve the purpose of promoting informatization of school education management.

5.2 Establish the concept of information management

In today's society, many domestic colleges and universities are still stuck in the traditional teaching management concept, lack of innovation consciousness, and in the university, the management idea of the information system has not been established, resulting in the lag of the university's informatization construction. Information management can free university administrators from heavy work and make them more meaningful and has become an important feature of university modernization. Promoting the modernization of universities is a reform that is in line with the current national conditions and deserves the attention of universities and colleges. The use of high-tech can realize the information management of schools, improve the effectiveness of management, and at the same time can effectively monitor the operation of colleges and universities, thereby promoting the long-term development of colleges and universities in China.

5.3 The method of constructing information management

College education management is a comprehensive work involving all aspects. To make it play a greater role in management, it must be analyzed and generalized concretely, and reforms should be carried out on this basis. At first, students should be taken as the main teaching objects, the basic needs of students should be grasped, and an information management system in colleges and universities should be established, teaching management should be divided into specific links, and targeted for organization and planning. From the part to the whole, forming a hierarchical structure of the system can not only meet the needs of all students, but also realize the comprehensive management of all students, which is helpful to realize the scale of education management.

5.4 The government provides policy support

In terms of education management in colleges and universities, the government should take corresponding responsibilities and adopt policy support or financial assistance to promote the informatization construction of schools, thereby improving the management level of schools. The information management of colleges and universities can provide convenient opportunities for many complicated tasks of colleges and universities, and make the management work more simplified and concrete. At present, the degree of informatization in domestic universities is relatively low, mainly because the informatization equipment of universities is not perfect, thus restricting the development of educational informatization work. The government can provide equipment for enterprises by means of investment, and can also cooperate with enterprises to improve the level of school informatization management.

5.5 Issue relevant systems and strictly supervise

Colleges and universities can effectively restrict the behavior of schools and promote the development of school informatization. For a long time, due to the lack of a corresponding management system, there is a big gap in the degree of informatization of our universities, which reduces the level of informatization in China. By establishing a corresponding system, universities can pay more attention to information management, so that universities can better carry out information construction. By setting up a supervisory agency and regularly checking the degree of informatization in colleges and universities, it will help to comprehensively improve the level of informatization in colleges and universities. The establishment of this system is equivalent to setting a fixed standard for the university, so that the university has a clear teaching goal in order to better achieve the expected purpose. Moreover, with the constraints of these systems, the effect of educational informatization can be more effectively improved, so that the management of educational informatization in colleges and universities can truly take root, rather than simply perfunctory.

6. Exploration of the innovation path of college education management informatization in the big data environment

6.1 Accelerate the construction of campus education management information platform

Nowadays, driven by the rapid development of the Internet information age, great changes have taken place in the educational management mode of colleges and universities. Model reform and innovation are the inevitable trend of the development of college education, and have also become the primary task of the development of colleges and universities. Received extensive attention and attention. Therefore, in order to actively respond to the development requirements of the Internet era, all colleges and universities have begun to integrate school education management resources, accelerate the construction of campus education management information platforms, and build a safe, reliable, efficient and stable management system that meets the development of their own education management work. At the same time, it combines a variety of advanced computer and Internet technologies and plays a very important role in the education management of colleges and universities. The campus education management information platform can effectively connect teachers, students, and administrators, and form a comprehensive local area network through the campus internal network. Students and teachers can log in to the education management department information platform to access, so as to obtain real-time information. Provide complete information query and management services for teachers and students to meet their learning needs and teaching needs.

6.2 Optimizing measures to integrate information inside and outside the school

In view of the current difficulties in collecting social data in colleges and universities, government departments should organically combine social data information with college information according to the actual situation. First, in the process of data collection, the education department should cooperate with the relevant market departments to collect enterprise data and grasp the relevant situation of different enterprises in the process of economic growth through the analysis of the line chart. Second, relevant departments can unite relevant enterprises in the market according to the development needs of different industries to strengthen cooperation, sort out the data generated in the process of cooperation, and then conduct corresponding data analysis, and use hierarchical theory to construct industries Development Information Base. Third, relevant departments should effectively integrate college education data with enterprise data to build a platform with shared value. Universities can keep abreast of the development of relevant majors through the sharing platform, and enterprises can obtain the latest developments of universities through the sharing platform in time, thus promoting closer cooperation between universities and enterprises. Through cooperation and exchanges, colleges and universities can reform teaching content and teaching methods according to the specific needs of enterprises, and enterprises can hand over some topics and problems in their own development to colleges and universities, so that college teachers and students can carry out scientific research. Fourth, enterprises and universities should conduct in-depth research on the difficulties encountered in the process of industrial development. Under the new economic situation, enterprises must carry out industrial transformation if they want to develop better. To this end, colleges and universities can establish a basic data management platform based on the corresponding data in the development of social industries, form a scientific research team according to the difficulties faced by enterprises, carry out scientific research exploration, and build a complete set of talent training programs. In addition, colleges and universities can also build an external data collection and analysis mechanism according to the problems existing in the process of education and teaching management, form a data information system that is more in line with their own management characteristics, and lay the foundation for a better construction of a data-based information platform.

6.3 Forming a high information literacy education management team

The reform and innovation of the educational management model in colleges and universities, in addition to having a good hardware environment as the basis for management innovation, must also be equipped with a good soft environment for necessary support, so as to ensure the effective reform and innovation of the educational management model in colleges and universities, improve overall management efficiency and quality. Based on this, in the process of innovation and reform of the educational management model in colleges and universities, it is necessary to concentrate efforts, integrate existing teacher resources, and form an educational management team with high information literacy, which is responsible for the daily disposal of large amounts of information and ensures the management of college education. successfully launch. First of all, colleges and universities need to introduce technical talents with good information literacy in talent recruitment, enrich the existing education management team, and improve the information level of education management. Secondly, colleges and universities need to provide information literacy and information technology training for existing managers, and effectively improve the information technology level and processing ability of incumbents through specialized special training, so as to better cooperate with each other and promote education management, continuous development and progress.

6.4 Innovate information management ideas and promote the construction of education management informatization

Managers should attach great importance to the education and teaching data resources of colleges and universities. Each college has its own history. It collects, organizes and stores the original data in history, analyzes and stores new data generated in real time, and the integration of new and old data must be applied to large-scale universities. Data technology requires managers to establish the concept and thinking of big data, and managers must have the awareness of analysis, relevance and thinking of new data. Many colleges and universities combine administrative management with informatization construction, but have not noticed that administrative management is not suitable for informatization management. Only by changing the thinking, changing the management method, and forming a management concept with service as the main and management as the auxiliary, can the informatization construction of colleges and universities be facilitated through modern management methods.

6.5 Improve the education management system and strengthen the management

The traditional education management model has been unable to meet the development needs of the Internet information age, and has also caused certain obstacles to the development of college education. Therefore, in order to ensure the sustainable development of college education, we must effectively reform and innovate the existing educational management model, in line with the development trend of the times, to meet the needs of college education management. Universities need to develop a comprehensive education management system that meets their own management requirements from the reality of their own education management, improve the work efficiency of education management departments, constrain the work behavior of managers, provide convenience for student management and school affairs management, and at the same time strengthen Effective communication and communication between students and administrators. In addition, the improvement of the education management system can standardize the implementation of every reform and innovation in education management, and promote the realization of education management goals.

6.6 Adopt standardized data management to promote the construction of education management informatization

Colleges and universities should abide by the relevant norms of national education management informatization, and conduct educational informatization management according to the system structure of college management information and the standard of student management data subsets under the data set. The standardization of normative information data should not only ensure its authority, compatibility and extensibility, but also ensure its normativeness, security and stability. For example, colleges and universities can learn from each other to develop and improve the system, and at the same time, they can also use the data collected by the information management personnel as a reference to build and improve the information management system. Unified standard data, covering enrollment, student status, education, training, examinations, degrees and other aspects. Of course, each university can also make its own regulations according to the situation of its own school. Strengthen data integration with external universities, use effective data analysis, and mine data information. It can play a role in indicating the development direction of the school's future development, and choose a path suitable for the school's own development.

6.7 Effective use of limited funds and resources to integrate social resources

At present, the informatization of colleges and universities has entered a critical period. Cloud storage technology, cloud computing technology, big data technology and Internet of Things technology are advancing by leaps and bounds, changing the development direction and development form of informatization all the time. It is necessary for colleges and universities to pay attention to the development trend of these technologies. First, establish and improve the information technology funding mechanism to ensure the continuity of the information technology work; secondly, change the construction ideas of the information technology, pay attention to the full use of the integration of information technology and social resources, and pay attention to the new technology belt of information technology. It focuses on measuring the resource allocation benefits of informatization from an input-output perspective.

7. Prospects for the construction of education management informatization

7.1 Strengthen top-level design, standardize teaching management, and improve education quality

The essence of college education determines the educational mission of colleges and universities, and it should be to cultivate comprehensive talents with all-round development of quality. Regardless of whether it is informatized or not, the concept of college education must be changed, and the level and height of college education must be improved. This is not only related to the academic performance of students themselves is also related to their all-round development in school. They must have basic qualities. The quality of education in colleges and universities is not simply to instill basic knowledge in them, but to let them learn. Self-quality has been comprehensively improved and enhanced. However, the idea of changing the quality of education is very difficult. The early adoption of the framework of excellence, the management of the process of teaching activities, and the process of planning, action, evaluation and improvement, try to make the quality of education continue to improve, but in order to bring this idea It is very difficult to promote it among the faculty and staff. It needs to be prepared for industrialized language, systems, concepts, etc., and it must be understood by the majority of faculty and staff. The reform of higher education in colleges and universities has made a comprehensive change in the concept of education management, but at the beginning of education management, many teachers did not understand the connotation of education management, which is a ideological error . In fact, it is precisely because of this. First of all, we must do a good job in the design of top-level concepts, and systematically correct the deviation from the education policy of the party and the state. It is required to establish an information system and system for college education management, and to strengthen the standardization through the system. A modern university is a university without walls. Individuals cannot represent everyone in the collective. The rights and interests of schools and students are inconsistent with traditional concepts. This requires the formulation of corresponding laws and regulations to adjust and regulate the relationship and responsibilities of various subjects. This is the educational management of colleges and universities. key to development.

Therefore, it is necessary to realize the education of the rule of law, relying on the legal provisions, and formulate a reasonable and effective system according to the actual situation. At the same time, it is necessary to organize teachers and leading cadres to study new concepts, change the traditional teaching management concepts and teaching quality concepts, and adapt to the new teaching management informatization. It is necessary to improve the management system of graded assessment, fully mobilize the enthusiasm and creativity of each teacher, promote the optimal development of human resources, do a good job in the supervision mechanism, do a good job in teaching quality analysis, and evaluate the teaching quality through a reasonable teaching quality evaluation system. To build an education supervision mechanism to serve education and teaching, we must consider what supervision the school should carry out in the entire training process, and at the same time, we must continuously improve the level of education and teaching, and use various monitoring methods to understand and master teachers' teaching behavior and teaching. Students' learning status, analyze the problems faced in management, so as to continuously improve the quality of education and teaching.

7.2 Thoughts on the construction of education management informatization based on technology

At present, domestic education management should focus on the construction of education management system in colleges and universities, and formulate corresponding solutions according to the needs and feedback of various departments and institutions to fully mobilize the enthusiasm of school departments and relevant institutions. At the same time, according to the needs of the university's own infrastructure, many factors should be considered. To formulate corresponding policies and guidelines to promote the construction of college education management informatization. Therefore, the domestic education management system takes the education management system as the main body, and the colleges and universities should take the education management system as the basic framework. According to their own needs, combined with the national educational goals, establish an information system suitable for schools, and then

conduct comprehensive management of the key content of college education management. Therefore, it is necessary to realize data integration and sharing, implement all-round information intelligent collection of education information management, and regard college education management as an important platform for domestic education management information construction. The data collected by the education management subsystem of each school is centrally uploaded to the local education management department system through the network according to a unified format, and stored in the relevant database (Chen Weiqiang, 2017), using big data and other technologies to realize the construction of college wisdom and provide local college education management decision-making. The local education administrative information system is a distributed education network service node (Wang Lijing, ZouYuhang, & Yang Hongjia, 2020), and all data will be aggregated to the national education management system to provide data support for education management decision-making at the national level.

8. Summary

In a word, in today's society, China's education management informatization has entered an important development link. With the development of modern society, education reform is imperative, all colleges and universities must strengthen the comprehensive management of information-based teaching, and on this basis, conduct information-based management of schools. Improving the teaching management process and improving the teaching quality standards is an important measure for the development of colleges and universities in the future. Strengthen the understanding of colleges and universities, re-establish the awareness of informatization management, set up comprehensive means of informatization management, promote the process of informatization construction in colleges and universities in China, and then provide a more complete reference and development direction for the informatization teaching in colleges and universities.

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