

The Realistic Dilemma and Breakthrough Path of the Digital Transformation of Education Management under the Background of Informatization

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Abstract: In the process of talent training and selection in China, the key role of colleges and universities as a base is highlighted. In order to help colleges and universities to achieve the goal of sustainable development, the importance of education management should be highlighted. In order to construct a healthy development trend and based on the influence of information background, it provides a certain convenience for the development of university education management. To make up the defects and deficiencies of traditional management mode, need to further to the current management form optimization and upgrade, in the process of the implementation of college education management, need effective fusion with information age background, speed up the process of digital construction, help break through the reality, and then find out more effective education management path, in order to improve the current education management situation, highlight the practical utility of university education management digital innovation.

1. Introduction

In the process of the reform and development of colleges and universities, with the continuous improvement of the education system construction and the innovation trend of the background of the information age, the current educational management concepts and methods are integrated to make them innovative, feasible and practical. Under the influence of the information age, it is necessary to highlight the necessity of reforming the education management mode in colleges and universities, based on the current situation of the management system construction, summarize the practical difficulties in the digital construction, and find a more effective breakthrough path, so as to promote the comprehensive innovation and reform of the traditional education management concept in colleges and universities. By optimizing the leadership mode of university education management, when accelerating the integration of educational resources, providing support for the development of digital education management, and laying a foundation for the reform and innovation of college education management system.

2. The influence of digital development on university education management

2.1 Challenge to the original curriculum setting and content

With the rapid development of digital lifestyle, combined with the courses set up by colleges and universities, the above contents need to go through a long time of demonstration and research, so there is a certain lag in the update of teaching content, and there is a certain gap between the development trend of digital network. Applied professional courses related to network development are susceptible to digital lifestyle influence. For example, in the logistics professional, the teaching content involved, if not closely related with the Internet of things, students after graduation, if work related to the Internet of things industry, often need to use a long time of exercise and learning, to strengthen personal self adaptive ability, so the students' employment competitive advantage is not strong^[1].

2.2 Requirements for resource allocation and sharing and digitalization of logistics construction

For the resources in colleges and universities, there are still unreasonable and unbalanced situations in the process of allocation. For example, when setting up self-study vacancies, laboratory resources and collected books, the digital method can provide convenience for the resource allocation link, so as to ensure the transparency and controllability of the allocation link, and eliminate the problems in unbalanced resource allocation in time. For example, in university libraries, when the collection of books is insufficient, the school electronic books can be added to improve the utilization rate of resources. At the same time, when the use of electronic reading, retrieval, search and other additional functions, it can help students to improve the efficiency of information query and learning.

In school life, it is necessary to establish a close connection with the real social life. When entering the digital era, the logistics construction of colleges and universities should actively conform to the trend of innovation in the new era, and use new technologies and new ideas to further enrich the content of logistics construction, so as to promote the level of logistics construction. For example, when setting up the campus payment system, it can be integrated with Alipay, or compatible with the online payment platforms such as WeChat, which can facilitate the campus life of teachers and students. For online payment, due to its strong traceability, the payment security factor is generally high, which can help students to improve their current consumption plan, so as to consume reasonably.

2.3 Requirements for the reform and innovation of traditional teaching forms

For the traditional classroom teaching mode, it is the main form for colleges and universities to implement education and teaching work, but with the survival and development of digitalization, in real life, network life has become an important part of it. The network has the characteristics of convenience and speed, and can give play to multiple advantages such as innovation. When when it is applied to the classroom teaching stage of colleges and universities, it can play multiple roles such as supplement and assistance. In the process of teaching reform practice, preliminary results have been made in the attempts and experiments of mobile Internet. In universities, for example, set up different types of elective courses, if part of the course belongs to the popular type, due to the capacity of the classroom has limited, cannot fully open to students, live video can use the mobile form, further expand the scope of students to participate in elective courses, promote the education utilization of resources.

3. The practical dilemma in the digital transformation of university education management mode

3.1 The digital construction of education management is backward

For the traditional education management mode, in the process of exploration in colleges and universities, with the formation of the management mode, the development of network technology has not been fully developed. Therefore, it is still difficult between the education management mode created by colleges and universities and the current situation of educational development. If the education management personnel lack good comprehensive quality, in the traditional management mode for a long time, the formed working mode is fixed.

As the personal work ability has not been continuously improved, and there is a disconnection with the current development background, the education management of colleges and universities lacks a high degree of intelligent development, cannot guarantee the accuracy of the management effect, and cannot better adapt to the needs of digital reform. In the lack of sufficient financial support, it is difficult to promote the transformation of the traditional education management mode as soon as possible, so the application of the digital education management mode is limited, and it is difficult to effectively support the digital reform, so the data processing in the university education management is relatively difficult.

3.2 The mode of education management is simple

Combined with the traditional education management methods in colleges and universities, it is difficult to meet the needs of effective management of students due to the lack of richness. In colleges and universities, the communication between teachers and students is relatively frequent, and the number of students managed by each teacher is generally large, so the amount of information faced and processed is huge, so it is difficult to provide personalized and targeted guidance for individual students^[2].

Under the background of the current educational environment, students' knowledge needs are transforming towards the diversified development direction. In the process of teachers' teaching evaluation, various needs are gradually extended, and it is necessary to promote the transformation of teaching incentive mode towards the diversified development direction, which brings more challenges to the development of education management.

For college counselors, the number of students responsible for their management is large, so it is necessary to start with students' daily life and study to provide targeted guidance and help for them. If not comprehensive and effective education management, difficult for effective methods for in-depth research and thinking, need based on the information age background development perspective, the implementation of relevant education policy and the management system of colleges and universities, based on the basic principles of rigor and rigor, in the process of actual education management, play the actual utility of digital management, so as to break the limitations of the single education management mode.

4. Under the background of informatization, the relevant path breaks through the realistic dilemma of the digital transformation of education management

4.1 Update traditional concepts and strengthen top-level design

With the development of university education management, the important role of improving the top-level design should be highlighted in the implementation of the digital construction work. In the

stage of digital reform and innovation, through attracting the attention of universities, highlighting the important value of the application of education management information in universities, the information layout design in a top-down form. Under the influence of the information age, in the process of college education, it is transforming towards the development direction of sharing and cloud. In such trends, the great value of data and data technology should be exerted.

After clear related big data application in theory, to actively play the value of the technology, should ensure that the relevant management personnel can master big data knowledge, in the process of construction and development of university recognition data practical value, and applied to the higher education modernization stage of development, promote the data management level. By improving the construction of the traditional governance mechanism, this kind of work is classified into the medium-term and long-term development plans of colleges and universities. With the construction of digital education management in colleges and universities, the ideological contradictions are effectively solved, and the digital idea of education management formed in colleges and universities can be widely recognized and accepted^[3].

4.2 Clarifying the basic principles in the digital reform of university education management

4.2.1 Openness

In the development process of the information age, with the construction of the digital platform of university education management, it should be timely innovated. When setting the functional modules, it is necessary to promote the continuous development and utilization of the management platform to ensure the utilization of the system. In the establishment of the platform of university education management data, the added new functional modules should be closely related to the education management work, so as to enhance the adaptability and advanced nature of the platform.

Information module setting, for example, need to fully facing the school teachers and students, openness, diversity and practical, in the management information module, for the students' information query, test scores query, transaction, teachers, curriculum arrangement, and other links to provide open function advantage, ensure the timeliness of information in transmission. Through timely access to effective information, college teachers and students can understand the school education management at any time, and achieve the goal of education in the form of all staff, the whole process and all-round form.

4.2.2 Sharing

Under the background of digital age, in order to promote the gradual innovation of education management mode in colleges and universities, it is necessary to pay attention to the implementation of reform work. In the introduction of computer, Internet and big data and other technologies, flexible application should be used to promote the digital transformation of education management mode in colleges and universities, and can further accelerate the overall process of education management information construction.

In the process of education management information construction, data sharing is one of the basic principles. When establishing the education management system in colleges and universities, it is necessary to take the education management of the whole school as an important goal, so as to implement unified management and supervision and further improve the top-level design. In the education management system, it covers relatively many functional modules, so it should ensure the interoperability between the modules, and connect and switch at any time to ensure the effectiveness of this operation. Among various functional modules, promote the real-time transmission of information, in order to achieve the purpose of sharing, provide scientific guidance

for the development of university education management, and give full play to the timeliness of this work.

In the process of data sharing, colleges and universities should also pay attention to the control of security and confidentiality. In the establishment of security, they can adopt the form of database encryption or identity authentication, so as to maintain the security of data information and avoid loss, damage and other problems. In the implementation of education management, the main position of students should be highlighted, through building a perfect data sharing platform, using the important support of big data, using the multiple characteristics such as classification and integration, and ensuring the feasibility and scientificity of the plan when making education management decisions^[4].

4.3 Formulate reasonable norms and solve the integration problems

In setting up a big data application working group, it should be based on the basic requirements of specialization. In the process of big data standardization construction, to promote the effective implementation of various affairs. It should be noted that in the process of university education management, with the development of information collection work, because the standards and norms have not been implemented, so the use of relevant data and information cannot be supported. In order to effectively solve the above problems, colleges and universities can set up standard data collection standards, and solve various problems in data processing one by one in the construction and improvement of the system system.

On the one hand, in the process of setting up the data collection standards, colleges and universities need to make contact with the joint education management institutions in time. For the established data collection standards, it is necessary to be based on the field or the internal universities to ensure that the data collection link has the characteristics of standardization. After obtaining the compliant data, it can provide convenience for the subsequent data disposal link, and promote the efficient use of data and information.

On the other hand, set up institutional standards. With the development of data collection, it is necessary to clarify such requirements. When setting the system standards, the education management data of colleges and universities is the main body, and the education management information standard should be constructed from the collection, disposal, research and use of the whole process, so as to achieve the purpose of one-stop operation. In the establishment of data requirements and system standards, its main purpose is to ensure that all kinds of information can be interconnected, promote the real-time sharing of data and information, and ensure that various businesses can be carried out together.

4.4 Strengthen talent cultivation and build a higher vocational education team

In the reform and innovation of the education management mode in colleges and universities, because the final management effect and the talent ability and level are directly related, so it is necessary to carry out regular training work, and strive to improve the comprehensive quality level of the education management personnel. Through the establishment of a professional teacher team, to provide talent support for the development of university education management work.

With the continuous acceleration of the modernization process of higher education, digital support is needed in order to implement the education management work in order to achieve good results. At the same time, build a digital team with strong comprehensive ability to support the digital development of education management. Combined with the focus of the digital development of university education management, it usually focuses on personnel, covering two types of personnel: education and management. Professional participation is required in data collection,

disposal, research, presentation and use.

In the digital construction of university education management, the introduced skilled talents not only need to have a deep understanding of the data, but also should form unique insights combined with the development mode of higher education, so as to ensure the flexibility of data application. In the establishment of digital team of education management, it is necessary to appropriately raise the threshold of talent recruitment, and regularly carry out training and education work, so that the ability and level of talents meet the requirements of digital development of education management.

For the training content of big data and data application, it is necessary to be appropriately enriched and increased to assist the construction of education management team, so that the education management personnel can form the idea of data application, fully grasp the technology related to data collection, research and processing, so that the construction of training technology is more perfect^[5].

4.5 Establish and improve the platform to break the "data island"

In the digital construction stage of education management in universities, in order to effectively solve the problems of "data island", two platforms can usually be set up, focusing on education and management, actively assisting the development of schools, and avoiding data restrictions among education, scientific research, management and other departments.

First, by optimizing the application system. For the data framework in universities, it needs to be centrally planned and processed. In the form of cross-department, cross-university and cross-industry, the data fusion and application system is optimized and improved, so that the information within universities can be circulated and unimpeded in the stage of sharing and integration. Based on the efficient traffic mode, to solve the problem of "data island", to avoid the limitation of information.

Secondly, in the implementation of hierarchical management work. It is necessary to summarize the above key elements in combination with the needs of the education management of relevant departments and secondary colleges by the university, strengthen the maintenance of privacy, and promote the effective implementation of hierarchical processing data when the minimum load requirements are formed. According to the above basic demand elements to be used to ensure the rationality of information use, timely avoid information leakage and other bad problems.

Finally, colleges and universities need to fully do a good job of security protection to ensure the security of information in the circulation stage. For part of the education management information content in colleges and universities, because it has a high sensitivity. Under the current premise of information sharing and integration, it is necessary to fully implement the protection work in the whole process, increase the avoidance of data leakage and other problems, and adopt reasonable protection methods to ensure that the information can be used scientifically.

5. Conclusion

Under the influence of information reform, it is an important product that conforms to the rapid development of today's social economy. It can drive the continuous reform of the work mode of education management in colleges and universities, follow the trend of digital reform, and promote the improvement of data utilization rate. In college education management stage, should clearly grasp the current management status, analyze the development trend of digital change, and analyze the key value of the construction of digital, follow the basic principles of the construction of digital education management, promote the current management mode innovation and upgrade, to promote college education management level.

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