

Research on the Construction Path of University Education Management Informationization under the Background of New Era Big Data

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Abstract: with the Advent of the New Era, the Traditional Education and Teaching Management System of Colleges and Universities Can No Longer Meet the Development of Today's Society, and Colleges and Universities Urgently Need to Change This Situation. Colleges and Universities Should Also Conform to the Development of the Times. in the Education and Teaching Management Work, the Introduction of Big Data Technology Can More Effectively and Reasonably Manage the Daily Teaching Work of the Campus, Which is Conducive to the Development of College Teaching. This Paper Presents the Meaning and Characteristics of Big Data Technology, Analyzes the Problems Existing in the Daily Teaching Management Process of Colleges and Universities, and Proposes Solutions According to These Problems, in Order to Provide Reference for Relevant Scholars.

1. Introduction

1.1 Literature Review

Ten years of trees, a hundred years of tree people, education is a hundred years of great history, has been a very important thing since ancient times (Liu, 2017). The current society is already an information-based era of rapid development, and the field of application of information technology will gradually increase (Zhou and Jia, 2018). Culture and education are the spiritual forces necessary for the development of the country, and the application of informatization to the field of education and teaching management in colleges and universities has significantly improved the level of teaching management in universities (Wu, 2016). In the information age, colleges and universities must keep up with the development of the times, abandon the traditional teaching management methods and methods, adopt advanced information management methods, integrate all available resources, explore the greatest value of existence, and improve the teaching management level of colleges and universities. To a new height (Wang, 2018). Informatization technology has penetrated into various fields of life, and the impact on the field of education has entered a deep level. The development trend of teaching management in colleges and universities has entered a new direction. The continuous breakthrough of big data technology has also changed the way universities apply big data informatization teaching management (Zou, 2017). The teaching management methods and modes currently adopted by universities are still biased towards the traditional ones. When recording important information, most of them use paper for recording. However, after long-term preservation, paper materials will be lost and damaged. Development and management are disadvantageous. Due to the reproducibility of information technology, when storing data, backup work is done at the same time, so that the data will not be easily lost and damaged. Even in case of unexpected situations, the backup data can be used without affecting the data. Going to the normal development of the schedule teaching management work in colleges and universities. The application of information technology has increased the efficiency of daily teaching management in colleges and universities, reduced the workload of daily teaching and management personnel in colleges and universities, and played a role in boosting the daily teaching management mode of college reform.

1.2 Purpose of Research

The rapid development of information technology, as a powerful boosting force, quickly promotes the process of modern teaching management in Chinese universities (Li, 2016). Based on powerful data processing and data analysis capabilities, big data technology transforms the daily teaching management of colleges and universities from relying on experience to data, rationally deploying existing resources of the school and intelligently managing them. Analyze past data, prevent things from happening in advance, and gradually improve the management of campus management. However, there are still many problems in the process of the change of schedule management mode in colleges and universities. The professional quality of campus schedule managers is not high, the basic data is not perfect, and the data guarantee mechanism is imperfect. These problems hinder the development of educational information management in colleges and universities. At present, the daily teaching management system of colleges and universities urgently needs modern management, which has greatly improved the daily management and teaching of colleges and universities. Big data is a new type of science and technology, an indispensable advanced technology in all walks of life, and a large number of applications in the field of education. The daily education management of colleges and universities has a very important relationship. The application of advanced big data technology can make the daily teaching of campus more scientific, reasonable and efficient. This paper presents the connotation and characteristics of big data technology, analyzes the problems existing in the current efficient application of big data technology, and proposes countermeasures accordingly, in order to provide a reference for relevant scholars.

2. Big Data Connotation Analysis

2.1 The Connotation of Big Data

Big data refers to a large amount of data that cannot be processed by conventional tools in a short period of time. These huge amounts of data require new processing techniques and tools to process them. New processing technologies must include more powerful decision making, clearer insights, and efficient process analysis capabilities. In the book “The Big Data Era” written by American scientist Victor Meyer Schonberg and Kenneth Cooke, the big data is that all data is selected, and some data is not selected. Conduct a sample survey. The 5V feature of big data was proposed by IBM and includes Volume, Variety, Veracity, Velocity, and Low-Value Density. Big data technology is a scientific information processing technology derived from the Internet + computer, and it is also the science and technology produced in the process of sustainable social development (Zheng, 2019). Through the processing, storage, and analysis of massive data, and processing and utilization of valuable information.

2.2 Big Data Characteristics

Big data technology has the following four characteristics. The first massive amount of data. With the rapid development of computer technology, we can collect a large amount of data, form an Internet-based information model, and collect and organize data in large quantities, and make this concept a reality. The second diversified data. In people's daily work and life, smart devices have become an indispensable living device, and the types of data are constantly increasing and increasing over time. The application of big data is more scientific and reasonable for the use of traditional data. The third can achieve the fast processing of data. Optimize the big data processing system systematically, scientifically and quickly process the collected data. The fourth is true and accurate. Under the background of big data, based on real data, scientifically, reasonably and efficiently process the collected data to optimize the workflow and indicators of the data system.

3. Problems in the Construction of Educational Management Information in Colleges and Universities

3.1 Uneven Resource Allocation

The level of teaching information management in colleges and universities has gradually improved, and the funds invested in information-based teaching management have also increased year by year. The information management teaching equipment of colleges and universities has also become more perfect. However, due to the differences in regional and economic and cultural levels, there is still a large gap in the level of informatization teaching management between different regions. In the economically developed eastern regions and coastal regions, the popularity of modern science and technology equipment is also generally high, with a wealth of information resources. More skilled in the use of informational teaching management equipment. However, in the underdeveloped central and western regions, the modern information equipment itself is relatively scarce, the popularity of the Internet network is low, the degree of use of modern information equipment by colleges and universities is generally low, and the excellent resources for informationization talents are seriously insufficient. In addition, the capital investment for modernized teaching management in different universities is also different. The funding for undergraduate colleges is far higher than that of colleges and universities.

3.2 Insufficient Information Reserve Talent Capacity

Informatization talents are one of the important factors in the development of modern information teaching management in colleges and universities. High-quality informationized talents are an important guarantee for the rapid advancement of educational information management in colleges and universities. In the construction of information-based teaching management, high-quality informationized talents are the foundation of all. Therefore, the speed of promoting the construction of information-based teaching management in colleges and universities has a direct relationship with the cultivation of information-based construction talents. In recent years, colleges and universities have also made a lot of practical work and training in the training of informational talents. Introduce experts and scholars from high-level universities to give lectures, actively organize campus information technology competitions, and assign excellent teachers to study and study. Colleges and universities are also adding information technology teaching courses to the teaching curriculum, aiming to help students quickly master the information science knowledge, and also play a role in repeating exercises for teachers. Although colleges and universities have carried out many training methods and measures that are conducive to the cultivation of information-based talents, the lack of high-quality information-based talents in colleges and universities has not yet been resolved, and it is still a major obstacle to the promotion of information-based teaching management.

3.3 Insufficient Application Capacity of Information Resources

The purpose of the farewell of the traditional teaching management method to the modern information management mode is to better serve the teachers and students of colleges and universities. The use of information technology in the infrastructure, information management systems and the overall teaching environment of universities can maximize the effectiveness of these jobs and facilities, and be more scientific and reasonable. Regardless of the change and upgrade of the informationized campus management system, the ultimate aim is to serve teachers and students and build a more harmonious campus environment. However, when colleges and universities use information management systems, there are still problems that cannot be applied. When constructing an information-based teaching management system, some colleges and universities still attach importance to the construction of infrastructure equipment and neglect the cultivation of information-based talents.

4. The Path of College Education Management Information Construction under the Background of New Era Big Data

4.1 Establish Correct Concepts and Correctly Understand Big Data Technology

With the rapid development of science and technology, the technology of big data has also been born, which has also greatly promoted the education industry and optimized the teaching management system of colleges and universities. Colleges and universities should clarify the role of big data technology in daily teaching management, rationally distribute the content of big data technology in daily teaching management of colleges and universities, grasp the advantages of big data technology, and use big data technology to collect daily teaching management in colleges and universities. Various data. The big data technology will form an atmosphere, innovative reform, guarantee optimization, scientific distribution, data integration, and realize the scientific, intelligent, rational and refined daily management of the campus. In the collection and processing of the data involved in the daily teaching management of the campus, the use of advanced big data technology, scientific and reasonable analysis and processing of data, to avoid errors and omissions, to promote the steady operation of the university information management platform.

4.2 Develop Professional Big Data Talents

Colleges and universities should keep up with the trend of the times, combine big data technology and establish a modern teaching management system in the daily management of the campus. In the subject teaching, scientific research and daily teaching management, the application of big data technology is fully applied to achieve the purpose of improving the daily management level of colleges and universities and improving the teaching effect of colleges and universities. In the context of such current big data, professional teachers and big data professional teachers in colleges and universities should cooperate in teaching. Big data teachers participate in the teaching process of colleges and universities, and through the collection of data in the teaching process, and analyze and feedback, to achieve support for the daily teaching work of colleges and universities. In a fixed period of time, colleges and universities can also organize teaching management personnel to observe and learn from each other, and use the big data technology to build an internal communication platform to communicate with each other. Colleges and universities should also raise the salary of big data professionals, recruit high-quality big data professionals, and help the university's modernized information campus management system run steadily.

References

- [1] Liu X. (2017). Exploration and reflection on the construction of education management information in colleges and universities under the background of big data. *Jiangsu Science and Technology Information*, 34(33): 43-44+61.
- [2] Zhou N.P., Jia J. (2018). Research on the Path of University Informatization Construction under the Background of Big Data. *China Electrification Education*, 380(09):81-86.
- [3] Wu Z.G. (2016). Research on the Path of Information Construction of University Archives Management under the Background of New Era. *Office Business*, No.238(05):46.
- [4] Wang S.Y. (2018). Analysis and suggestions on the status quo of informationization construction in colleges and universities in the era of big data. *SME Management and Technology* (late issue), No. 549(08): 88-89.
- [5] Zou T.L. (2017). Possible Trends and Realization Paths of College Education Management in the Age of Big Data. *Higher Education Exploration*, 33(11): 12-18.
- [6] Li Y.P. (2016). Reflections on the construction of information technology in colleges and universities under the background of big data. *Journal of Chuzhou Vocational and Technical College*, 18(2): 85-88.

[7] Zheng T.Y. (2019). Exploration and Practice of Teaching Management Informationization under the Background of Big Data. Journal of Chifeng University (Chinese Philosophy and Social Sciences Edition), 40(04): 146-148.