Research on the optimization path of university education management under the background of big data era

Renzhi Luo

Chuxiong Normal University, Chuxiong 675000,China

Abstract: With the deepening of education reform, college education management should be further optimized. Teachers should actively introduce new education concepts and teaching methods, so as to better arouse students' interest, strengthen their understanding and application of the knowledge, and improve the education effect. As a popular educational auxiliary means, big data can greatly enrich the content of college education management, broaden the path of education, and greatly promote the level of education management. In view of this, this paper will analyze the optimization of college education management under the background of big data era, and put forward some strategies for your colleagues' reference.

Key words: Big data; Universities and colleges; Educational administration; optimization

In the current context, big data has gradually become a key means to improve the quality of education. Therefore, in the process of college education management reform, we should pay full attention to the application of big data technology. The introduction of big data technology can not only help teachers to further optimize the path of education management, but also provide a better learning environment for college students, so as to comprehensively improve the overall level of education management. Therefore, teachers should keep up with the pace of the development of The Times and constantly improve their comprehensive quality, so as to give full play to the role of big data technology in education management and improve the actual effect of college education management.

I. Analysis of college students' characteristics

1. Lack of interest in learning

Compared with junior high school and senior high school, college students' learning time is more free, and teachers have less control over them, which leads to many college students often spend their energy and time on playing games, shopping and other entertainment, which gradually leads to their loss of interest in learning, which is extremely unfavorable to the development of education management. In the long run, college students may be distracted in class, skip class, homework perfunctory situation, thus gradually forming a vicious circle, hinder the formation and development of college students good learning habits, is not conducive to the improvement of the comprehensive level of college students.

2. Lack of good habits

At present, many college students have not formed a high-quality learning habit, and they are often affected by external factors, which makes it difficult for them to actively participate in the study and exploration of corresponding knowledge, which will hinder the development of subsequent education management work and is not conducive to improving the education effect. In addition, some college students lack lofty ideals, learning goals are not clear enough, there is a muddling mentality in learning, in the face of some problems, difficulties, some college students will appear fear psychology, lack of learning initiative and toughness. Due to the lack of support of good habits, college students will gradually lose their learning initiative, which is extremely unfavorable to the development of education management.

3. Lack of self-control ability

For college students, good self-control ability is the basis for them to carry out high-level learning activities, which is also the key to carry out education management. However, at present, many college students lack self-control ability, which makes them easy to be affected by external factors. Especially in the era of big data, some college students are glued to their mobile phones all day long, and even play mobile phones and watch videos in class, which will greatly hinder their later study and work.

II. Analysis of the status quo of college education management

First of all, the work of educational administration has high complexity. Due to the difference of college students' cultural level and living habits, it undoubtedly increases the difficulty of education management, which affects the further improvement of education effect.

Secondly, communication is too one-way. The quality of education management is not only affected by teachers, but also by students' feedback. However, the current mode of education management often overemphasizes the one-way teaching of teachers and lacks in-depth communication with students, which undoubtedly hinders the improvement of the level of education management.

Moreover, the comprehensiveness of educational management needs to be strengthened. Effective educational management should be carried out at multiple levels and targeted to students at different stages and majors. However, the reality is that many teachers do not know enough about the specific situation of students, which undoubtedly affects the quality improvement of educational management work.

Finally, there is a lack of timeliness in dealing with problems. In the process of education management, teachers fail to summarize and solve the problems of students in time, which leads to the recurrence of these problems, which undoubtedly hinders the improvement of the level of education management. In addition, the application concept of big data introduced in the current education management work is

mainly based on existing literature and opinions. Future research directions should introduce questionnaires, interviews and other methods to collect first-hand data from different groups such as students, teachers and administrators to increase the depth and breadth of research.

III. The value of university education management optimization in the era of big data

In the era of big data, the data scale of many industry application systems continues to expand, resulting in the traditional data storage management methods and systems can not effectively cope with the growing demand for big data storage management. At the same time, tablet, computer and other intelligent devices have been popular in the work of colleges and universities, their small size, easy to carry, if it can be reasonably applied in education management activities, will greatly improve the effect of education management work. In addition, when we carry out the college education management work in the era of big data, we can try to change our thinking, further optimize the existing management mode, and carry out information education management for them, which is of great significance to improve the quality of college education management.

In the era of big data, through the reform of college education management, the quality of education can be greatly improved, the distance between college students and teachers can be effectively narrowed, and a solid foundation can be laid for them to carry out higher level education management work in the future. In addition, we can use computer technology and Internet technology to create an education management platform, and then share some documents and management goals with college students, so that they can gradually form good learning habits, promote them to form a correct, positive and upward learning goal, and improve the quality of college education management.

IV. The optimization strategy of college education management under the background of big data era

1. Optimize the teaching management system and create management characteristics

In fact, "big data" in higher education can affect processes at different levels. Under the background of big data era, when carrying out the optimization of college education management work, we should not only pay attention to the learning situation of college students, but also pay attention to daily affairs to avoid excessive pressure and fatigue, which will have adverse effects on the optimization of education management work in the future. To this end, we can try to introduce big data technology and computer technology into education management work, create a more reasonable and scientific education management system, create a more effective and distinctive management mode, and lay a solid foundation for the development of college education management work. In the practice of education management, we can combine the actual situation of the class, further optimize the existing education management work mode and system, integrate into the psychological quality monitoring, class resource sharing and other content, in order to improve the characteristics of education management work. In addition, when applying big data technology, we should take into account the potential risks of introducing big data technology, such as data security, privacy protection issues, as well as the possible negative impact on students' learning habits, and put forward management and mitigation measures for these risks.

2. Create an online communication platform to keep close contact with families and schools

In the era of big data, in order to further improve the effect of college education management, we should actively contact with college students' parents, which will greatly promote the effect of education management. In the past education management work, few teachers can carry out in-depth contact with college students' parents, so it is difficult to let family education resources into the classroom, which is not conducive to improving the effect of education management work. In the era of "Internet +", it is necessary to keep the technological lead while applying new technologies, and provide intellectual support for technological development. To this end, we can try to use big data technology and computer technology to create an online communication platform, which can not only provide convenience for college students and teachers, but also allow parents to participate in education management. Combined with the exchange platform, parents can not only inquire college students' exam results, daily performance, homework, but also understand teachers' evaluation of college students. In this way, parents can have a deeper understanding of the production of colleges and universities, which will greatly promote the development of education management.

3. Improve the professional quality of teachers and improve the management level

For teachers, it is challenging to let students participate in online teaching mode. Therefore, if teachers want to further improve the effect of education management, they should pay attention to the optimization and innovation of their own quality, so as to better adapt to the development trend of the era of big data. To this end, we can try to learn some new knowledge with the help of Internet technology, actively innovate our own educational management thoughts and concepts, and explore a set of their own more reasonable management path, and then highlight the application value of Internet technology in education management in the era of big data. In order to improve the quality and efficiency of education management, we need to analyze and improve it from multiple perspectives. First of all, we should actively participate in the information education management activities and carry out in-depth exchanges with the information education management experts in order to better optimize our own education management mode. Secondly, with the help of Internet technology, we will collect information related to education management and big data, and explore the characteristic management path suitable for the university. In addition, we can also use the Internet platform to communicate with teachers from other schools to discuss the problems existing in education management and brainstorm ideas to find more effective solutions. Through these measures, the professional quality and informatization level of teachers will be effectively improved, thus promoting the further development of the quality of education management reform.

4. Improve the quality of management with the help of instant communication tools

In the era of big data, with the continuous enrichment of the functions of smart phones, the frequency of college students' communication through various communication software is increasing. Through these software, college students can not only communicate with each other about the problems encountered in study, but also share some movies, music, games and pictures seen in daily life, which can effectively narrow the distance between college students. As an important tool and means for college students to obtain external information, mobile phones have been frequently used for their interactive functions and information exchange functions, among which instant messaging is the most prominent.

When carrying out the education management of college students, we can use instant communication tools to communicate with them more timely and efficiently. This will help us to have a deeper understanding of the ideological dynamics of college students, and provide strong support for the optimization of subsequent education management work. Therefore, we need to deeply master the expression and characteristics of communication software such as text and voice, in order to achieve more effective communication with college students. In this way, we can stimulate the learning enthusiasm of college students, cultivate good learning habits, and promote their physical and mental healthy development.

V. Smart device technology into the practice of university management

In college education management, the application of intelligent equipment and technology is mainly reflected in the following aspects: intelligent security system, data management system, interactive teaching tools, online learning platform, automated office tools, campus navigation and information services, energy management system, etc. In the application of intelligent equipment technology to college management, we should follow the following steps:

1. Demand analysis: First of all, the challenges and demands of higher education management are established, such as optimizing teaching quality, strengthening campus safety, and improving administrative efficiency.

2. Technical research: According to the needs, research the corresponding intelligent equipment and technical solutions, weighing the cost, benefit, operability and other factors.

3. Program planning: design the overall solution, covering equipment selection, system architecture, implementation plan and other links.

4. System integration and testing: Integrate intelligent devices with existing IT systems, and conduct comprehensive tests to ensure system stability and reliability.

5. Training and deployment: Conduct operation instruction for managers and users, and then formally deploy the system.

6. Continuous operation and optimization: carry out continuous maintenance and necessary optimization according to feedback and system operation status.

In the implementation process, focus on user experience, data security and privacy protection and other issues to ensure that the application of smart devices and technologies can truly improve the efficiency and quality of education management.

By following these optimization steps, universities can ensure that the introduction and application of smart devices meet educational objectives, effectively solve practical problems, and ensure maximum return on investment.

Summary

To sum up, if we want to improve the level of university education management in the era of big data, we can build an education management system and create management characteristics; Create an online communication platform to keep close contact with the family and school; Improve teachers' professional quality and management level; With the help of instant communication tools, improve management quality and other levels of analysis, so as to virtually promote the quality of college students' education management to a new height in the era of big data.

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