

# **Innovative Thoughts on College Students' Educational Management in the Era of Big Data**

**Zhu Xia**

Shanghai Jianqiao University, Shanghai, China

**Keywords:** Big Data, Colleges and Universities, Student Education Management, Innovation.

**Abstract:** In the context of the big data era, it has played a greater role in promoting the development of College Students' education management. However, in the era of big data, the current management of College Students' education is still facing many challenges, which need the attention of relevant departments. Under the background of the new era, university administrators should combine the characteristics of the big data era, constantly bring into play the application advantages of big data technology in the management of college students' education, and ensure the management of College Students' education by establishing and perfecting relevant systems, enriching the contents of student education management and establishing professional management teams.

## **1. Research Background**

### **1.1 Literature review**

Du Jun and Li Hong combined the impact characteristics of big data technology on all walks of life, analyzed the basis and challenges faced by ideological and political education in Colleges and Universities under the background of big data era, and innovated ideological and political education from the aspects of thinking mode, operation process, education mode and supervision mode, which is conducive to improving managers. Personnel's way of thinking, enhance relevant departments' awareness of the application of big data, and then enhance management leve (Du and Li,2017). With the rapid development of Internet and computer, the era of big data has come quietly. Huang Qian and Wang Dongdong combine the basic characteristics and types of big household data, analyze the combination of big data technology and college students' work, and put forward the development path of combining college students' work with big data technology, which can effectively guide students' work (Huang and Wang,2016). Under the background of the continuous development of China's education, Li Ziyi, with the help of big data technology, has brought a new perspective for the development of University Students' education management by analyzing the current activity data of teachers and students (Li,2017). With the continuous application and development of network technology, Chinese residents have gradually widely used Internet technology, and the characteristics of information data are becoming more and more obvious. Wu Xiaoxi and Liu Xiaowen analyzed the changes brought about by the big data era, interpreted the possible challenges faced by the management of College students, and put forward corresponding countermeasures, which could provide theoretical reference for the management of College students (Wu and Liu,2018).

### **1.2 Purpose of research**

The wide application of new media technology and the popularization of information technology not only promote the rapid development of the industry, but also promote the effective development of student management in Colleges and universities (Wang,2017). At the same time, it also brings the management of College Students'education into the era of big data, which is conducive to improving managers' cognitive ability to society, and puts forward a new technical system for students to understand and change the world. In the process of Traditional University Students'education management, there are some problems, such as the difficulty of carrying out work, the low degree of students' participation and the imperfect mechanism, which are not

conducive to the landing of relevant educational methods in universities and seriously restrict the further development of higher education. Under the background of big data era, by analyzing the role of big household data in promoting the management of college students'education, and taking this opportunity, this paper puts forward innovative ways of College Students' education management in the era of big data, which will help to change the service concept of colleges and universities, improve the management and service mode of relevant institutions, and promote students'teaching. Educational management is gradually developing towards refinement and improving the educational level of colleges and universities.

## **2. Overview of related theories**

Up to now, there is no accurate definition of big data in relevant academic circles. As early as 2001, relevant research institutions pointed out that under the background of modern information society, the increasing amount of information and the explosion of massive data seriously affected the efficient application of relevant data in different fields. In this context, the relevant organizations need to process the massive data, constantly show the data processing mode, and improve the utilization rate of the massive data, so as to better enhance the decision-making power and insight of the department, and help the long-term development of enterprises (Xiao,2016). In McKinsey's research report, it is pointed out that big data cannot be collected, stored and processed, integrated and utilized in a specific time with the help of new database and software tools. Victor Schoenberg believes that big data is the main source for people to acquire new knowledge and use it to create new value. In the practical application process, big data technology is the main method to change the organization of enterprises and the relationship between market operation and citizens. It is difficult for some traditional tools to capture and manage large-capacity data.

By consulting a large number of data and related literature, and analyzing the application of large data in different industries. In this paper, we redefine the big data and think that the big data has evolved from pure data to data analysis and processing. In the application of large data in related industries, it is found that large data mainly emphasizes the whole sample. Data analysis using large data does not necessarily have accuracy, but requires simple logic. Among the massive data relations, the big data think that the correlation between the data is more important. In a sense, the application of big data in different industries has not only changed the understanding of data in traditional industries, but also has become a method of information application for the public in essence.

## **3. The Promoting Role of Big Data in College Students'Educational Management**

The management of College Students'education is the main content of school education and plays an important role in the teaching activities of relevant institutions. In the era of big data, colleges and universities actively use big data technology to apply big data analysis to the management of college students'education, which is conducive to giving full play to the functions of relevant functional departments and improving management efficiency. In the era of big data, the role of big data related technology in promoting the management of College Students'education mainly includes the following points.

First, it is helpful to grasp the students'ideological situation. Mastering students'ideological status is the premise of developing students' education and management in Colleges and universities. Big data was first used to describe network indexing, and later covered data processing speed. The significance of using big data technology lies in having a relatively sound data system, which contains a large amount of data information, including students'daily behavior. For example, as long as students are in the monitoring area or engaged in related online activities, shopping, consumption and information query can be captured by relevant institutions and uploaded to the system to provide relevant data information for relevant educational institutions. In the process of developing student education management in Colleges and universities, educational institutions pay attention to students'daily behavior by combining different kinds of network data platforms with different

students' browsing information, which is conducive to obtaining students' ideological information and grasping students' ideological status in time. Of course, this is the premise for the development of student education management, and also the necessary way for students to obtain information, which is conducive to speeding up the development of student education management.

Secondly, it is helpful to predict the changing trend of students' thoughts. In-depth analysis of the trend of students' ideological change by management organizations is conducive to promoting the efficiency of students' educational management. In the context of the big data era, through in-depth analysis of students' ideological trends from different fields and dimensions, as well as the main concerns of students, institutions are conducive to the mastery of students' ideological and behavioral. At the same time, in the era of big data, students' opinions on management can also be commented and feedback through relevant channels to provide basic feedback information for relevant departments. By integrating students' feedback information and summarizing students' suggestions on management, the organization is conducive to innovation and reform of student management in Colleges and universities.

Thirdly, due to the establishment and improvement of student management mechanism. The establishment of student management mechanism is the basic guarantee for the smooth development of student management in Colleges and universities. With the help of big data analysis technology, we can deeply analyze the behavioral characteristics of college students in the current era, and through the analysis of students' understanding of relevant practices, we can grasp students' thoughts and behaviors. At the same time, with the help of big data technology, we can understand the basic state of students in real time, the scope of activities in peacetime, and reflect the achievements of students' education management. This has played a good reference role in the establishment of University Students' education management organizations, and is conducive to promoting the smooth development of University Students' Education management. Exhibition.

#### **4. Innovative Path of College Students' Educational Management in the Era of Big Data**

Under the background of big data era, colleges and universities have played a good role in promoting the rent of students' education through the scientific application of large-scale data technology. But at the same time, in the context of the big data era, the management of College Students' education is also facing many challenges. In order to improve the application of big data in the management of college students' education, relevant departments should combine the new characteristics of the era of big data, through different aspects, effectively explore the path of applying big data in relevant institutions, which is conducive to improving the effectiveness of the implementation of College Students' education management. Under the background of big data era, this paper further analyses the path of College Students' education management under the background of big data era.

##### **4.1 Enriching the Contents of Student Education Management**

Under the background of big data era, the effective development of student education management needs abundant content as support. Therefore, the content of student education management is the basis of developing student education management in Colleges and universities. Under the background of informationization, in the process of carrying out student education management, colleges and universities need to enrich the existing work content on the basis of the original content and improve the effectiveness of student education management. On the one hand, with the help of large data technology, relevant institutions should strengthen the guidance and correct selection of some educational information to improve students' ability to distinguish information. With the massive increase of information, the network has brought many impacts on the school-related education system. While enriching the content of education, relevant institutions also need to pay attention to the scientific selection of relevant content, and try to use some positive energy information to bring correct guidance to students, which is conducive to improving the utilization rate of new information in the new era. On the other hand, institutions should pay attention to the combination of educational management concepts and work. In the process of

developing students'educational management, they should constantly improve students' practical application ability through correct ideological guidance and skills upgrading. Moreover, in the ideological education of Canadian University Students'education management, relevant institutions should play a leading role in promoting more students to participate in relevant work and improving the utilization rate of mass education information by carrying out corresponding practical activities.

#### **4.2 Establishment of Student Education Management Team**

Under the background of big data era, in the process of smooth development of College Students'education management, a sound working team is indispensable. In order to do a good job in student education management, colleges and universities need to give full play to the role of student education management team and improve the management efficiency of relevant personnel. On the one hand, relevant educational institutions should pay attention to improving the theoretical foundation level of managers, ensure that relevant personnel have strong theoretical knowledge before carrying out their work, and master the relevant knowledge of student education management, and be familiar with the relevant theoretical knowledge of pedagogy and psychology. On the other hand, colleges and universities should pay attention to improving the personal abilities of the personnel concerned in the management of students'education. They should know how to train the relevant personnel in network information technology with the help of large-scale data technology, so as to ensure that the managers can effectively use the network carrier and give full play to the role of big data technology in the management of students' education. At the same time, on the basis of improving their own application to the network platform, managers pay attention to improving their ability to grasp dynamic information, and constantly apply relevant information to work in order to improve work efficiency.

#### **4.3 Establishing and Perfecting Relevant Systems**

A sound working system is the basis for the development of students'education and management in Colleges and universities. Therefore, on the basis of the original system, the relevant institutions in Colleges and universities should constantly establish and improve the relevant system to ensure the smooth development of student education management in Colleges and universities. Under the background of the big data era, colleges and universities should play a leading role in student management, and constantly improve the content of style of study, combining with the relevant characteristics of big data technology. At the same time, on the basis of mastering the characteristics of the era of big data, relevant departments continue to establish and improve relevant policies and systems. Combining with the practical application of big data analysis technology, this paper draws the conclusion that there may be some problems in the process of College Students'education management. Then, we should adopt scientific analysis methods, establish and improve relevant systems, increase the attention of relevant institutions to the management of students'education, and then improve the management efficiency. In addition, colleges and universities should strengthen the establishment of relevant mechanisms in terms of work flow, work method, work mode and team building, constantly standardize the work flow and content of College Students'education management, so as to promote the development of relevant work towards institutionalization, process and standardization, and improve the level of work. The level of school students'education and management has been related to the quality of personnel.

#### **Acknowledgements**

This paper is the research result of the project of Shanghai Moral Education Department in 2019, "Pilot Project of Ideological and Political Education Teaching Reform in Shanghai Colleges and Universities - Key Cultivating Schools (No. 219001-17-12)"

#### **References**

[1] Du J., Li H.(2017). Thoughts on the Innovation of Ideological and Political Work in Colleges and

Universities under the Background of Big Data Era, Journal of Liaoning University of Technology: Social Science Editio,19(19):86.

[2] Huang Q., Wang D.D(2016). Research on the Innovation of College Students' Work in the Big Data Era, Inner Mongolia Education (Vocational Education Edition),6(8):19-19.

[3] Li Z.Y.(2017). Research on University Management Innovation in the Big Data Era, Information Technology,15(15):221.

[4] Wu X.X., Liu X.W.(2018). Challenges and Countermeasures of university student management in the era of big data, A Comparative Study of Cultural Innovation,2(29):142-143.

[5] Wang Y.M.(2017). Management Innovation of College Students under the Background of Big Data, Good Parents,17(58):198-198.

[6] Xiao H.(2016). Innovative Ideas of College Student Management in the Big Data Era, Global Market,23(22):121-121.