

# Exploring the Development Path of Informatization Innovation of University Education Management

**Jiangge Liang**

*Nanjing Normal University, Nanjing 210046, China*

*\*Corresponding Author*

**ABSTRACT.** *Under the background of the continuous innovation and research and development of various emerging technologies, many universities have gradually strengthened the construction of information management systems for education management. This paper will briefly describe the informationization of college education management, and put forward the current informationization of education management in colleges and universities, and propose a new path for the development of education management information innovation in colleges and universities.*

**Keywords:** *college education management; informationization; innovation development*

## **1. Introduction**

The use of information technology can deal with the processing of massive information in traditional databases. This technology can solve the problems that cannot be solved in the traditional processing methods and form an information database. And these information data and resources have an important role. Under the background of the current information age, colleges and universities can make rational use of information data in the process of teaching, constantly innovate the management methods and means of colleges and universities, and effectively promote the progress and development of management information technology, and then effectively promote colleges and universities. The level of information management of education.

## **2. University education management informationization**

At present, informatization has penetrated into various industrial fields and provided favorable conditions for the progress and development of society. To a certain extent, the use of informatization in various fields of society indicates that it has great application value and informationization[1]. It refers to an information database formed by solving the problems that traditional databases cannot store and process massive amounts of information, but in the context of informatization, it does not give a clear definition, and applies informationization and informatization to college education. China is an inevitable trend of social development. Under the background of informationization, colleges and universities have changed to some extent.

## **3. Existing problems in the development of education management information in colleges and universities**

### ***3.1 Lack of information technology application awareness***

Applying information technology to the education management of colleges and universities requires the education management staff of colleges and universities to establish information technology and improve the thinking ability of personal information application. However, in the current college work, most of the staff did not have the awareness of applying information technology[2], and the advantages of information technology were not recognized by the student management staff. In the actual work of college education management, there are many problems such as inconsistent data model, insufficient technical ability, insufficient use of methodological evidence, insufficient research and application of information technology, and limited funds. All of these problems have affected the application of information technology, and most universities have not yet formed an information technology management system.

### ***3.2 lack of standardization of education management data***

The complexity of student education and management work, colleges and

universities must combine information technology to do a good job in student education management, and need to rely on a variety of information application systems. For example, the educational management system, the student information collection system, the student employment information system, etc., through the joint use of various systems to complete the internal education management of the school, to promote the unification of information within and outside the school. However, when colleges and universities have applied many information management systems, although the management data of the students is clearly visible[3], the consistency and uniformity of the data are not strong, which makes the data normative. The original raw data and the newly added student information cannot be organically combined. The problems of non-standard and imperfect are widespread. The data cannot be circulated and difficult to share, making the informationization process of college education management work slower.

### ***3.3 Independent management of education in all departments of universities***

In the education management work, the various departments and units of the university have different functions and powers. Their functions are different, and the way of obtaining information, the content of information and the means of processing information are different[4]. The application of diverse information processing systems in different departments and different units has led to loopholes in information management within schools. Information independence has affected the establishment of a unified database in colleges and universities. In the current college education management work, many colleges have not yet established a complete information platform and data processing mechanism, so that independent data can only be integrated through restrictive data flow and channels.

### ***3.4 difficulties in the integration of management information for students of various majors***

The education management of colleges and universities is related to the future development of students. The various industries chosen by students will be closely related to the content of education management. Colleges and universities are important places for cultivating social talents. By obtaining the necessary social and

economic data, and integrating these social and economic development data with student personal information data, we can understand the future development trend of higher education, which is also the information technology in colleges and universities. Application advantages in education management. However, it is difficult for university education administrators to obtain social and economic data. The data obtained from relevant departments is not comprehensive enough, the update degree is insufficient, and the socio-economic development characteristics of performance are insufficient, which will affect the accuracy of information technology analysis results. Affect the development of students' personal potential and the improvement of the scientific degree of career planning.

#### **4. Innovative path to the development of information management in colleges and universities**

##### ***4.1 Establish the correct information application concept***

At the level of education management workers, education management workers should recognize that university data is the resources of college education. Pay attention to the accumulation of historical data of colleges and universities, continuously generate real-time data, collect real-time data, combine school data with external industry data, and use information technology to analyze and mine, in order to promote the educational advantages of college education management system and improve The core competitiveness of colleges and universities finds the direction of future development of colleges and universities[5]. Recognizing that data is a resource can promote the application of information technology.

Second, we need to change the thinking of students' education management work. Applying information technology to the education management of colleges and universities not only supplements the traditional student education management work, but also reforms the mechanism of education management, but changes the educational management thinking at the macro level and promotes the formation of analytical thinking and comprehensive thinking. . Recognizing the correlation and continuity between data, college education management can break the traditional causal relationship.

Third, in the application of information technology, we need to pay attention to the way, not just simple data analysis. Using information technology and related methods to innovate the education management of colleges and universities, so that the education management system and data within the school can be fully circulated, in order to effectively analyze the relationship between student education management data and relevant data inside and outside the school, and understand the application value of talents in the school. In the education management of colleges and universities, the implementation of refined management principles, in the information technology environment to update the educational concept, can usher in a greater educational revolution.

#### ***4.2 Strengthening the construction of university student management information platform***

Establishing a platform for the full-factor circulation of various data is a necessary measure for making education management work by using information technology. Such a big data platform can provide unified data access and storage, management and analysis, calculation and cleaning functions for data systems. Deepening the development of big data platforms and promoting the construction of big data platforms will enable the advantages of the big data era to be reflected. The application of big data technology in the process of college student management makes it impossible to use independent data or a broken data platform as a tool to build a university's big data exchange platform and data processing platform to the greatest extent possible, so as to lay a foundation for the application of big data technology[6].

#### ***4.3 Solve the problem of independent management of various departments***

The management institutions within the university each carry out their respective functions, and the data between the various departments is not shared and integrated. In the process of applying information technology to update the education management of colleges and universities, this is a major mechanism hinder. Promote the sharing of information and information between various departments within the school to ensure the application of technology. University administrators should pay

attention to the reform of education management and give necessary support for the reform of education management. To promote the development of information management in education management, it is necessary to unify standards and promote the sharing and unification of information. In the context of the information age, integrating all student information into one system for analysis and processing requires promoting the integration of information processing functions in various departments and improving the quality of education management.

#### ***4.4 Improve the information integration mechanism inside and outside the school***

Colleges and universities cannot develop independently of society, and universities have a direct relationship with economic and social development. The development of external data of colleges and universities will put the social data collection and analysis work related to students in an important position, which can improve the core competitiveness of education management in colleges and universities, and make education management work more valuable. Colleges and universities should establish an external data collection and processing mechanism, and establish a university information fusion platform with the help of big data technology. Through the integration of internal data of colleges and universities and social industry data, the management of college students has become a service for students, and it has exerted maximum effectiveness for the work of social service.

### **5. Conclusion**

In summary, the application of information technology in education has become an inevitable direction of education reform. University administrators should seize the opportunity of the times, do things with the times, and actively apply big data technology to promote the informationization of student education management.

### **References**

[1]Sun K, Liu R(2014). Inheritance and Innovation of Engineering Management Informatization. *Frontiers of Engineering Management*, vol. 102, no. 1, pp. 76-80 .

- [2]Lin C,University J N(2015).Research on the Characteristics of China Vocational Education Informatization Innovation. *Modern Educational Technology*, vol. 28, no. 1, pp. 384-387.
- [3]Liu C(2016).Sustainability of rural informatization programs in developing countries: A case study of China's Sichuan province. *Telecommunications Policy*, vol. 40, no. 7, pp. 714-724.
- [4]Bible W(2013).Reform,sports information service innovation based on the analysis of university informatization. *Electronic Test*, vol. 16, no. 2, pp. 244-247.
- [5]Zhou, Qiang(2013). Analysis on Building Information-Based Platform in University Health Education. *Applied Mechanics and Materials*, vol. 415, no. 18, pp. 377-380.
- [6] Fei W F W , Juwei Y J Y , Bing S B S , et al(2013). The Research on Informatization of Construction Project Cost Control. *Cell Proliferation*, vol. 8, no. 5 pp. 441-453.