The Model Construction of Student Party Member Education and Management System Based on Data Warehouse

Wenfeng Liu, Xiang Ning[*]

Hunan College of Foreign Studies, Changsha, Hunan, 410203, China

*Corresponding Author

Keywords: Data warehouse, Student party members, Management model

Abstract: With the popularization of computer application technology and the development of information technology, more and more information management database systems are used in our daily work management. How to analyze a large amount of data accumulated during the system operation and find useful knowledge is a problem that decision makers need to solve. The emergence of data warehouse technology provides technical support for solving this problem. The implementation of data warehouse in colleges and universities can bring great space for students' personality development, and it is conducive to the healthy and stable cultivation of talents. It is a more flexible form of higher education on a higher basis. Its implementation not only has a profound impact on the teaching, scientific research and management of colleges and universities, but also brings challenges to the education and management of college student party members. Based on the analysis of the current situation of college student party members' education, we should deeply grasp the basic characteristics of college student party members, explore the construction of advanced dynamic models that conform to the laws of education and students' growth, and create a more scientific, systematic and long-term education mechanism for college student party members.

1. Introduction

Due to the increasingly complicated objective environment in the teaching process under the continuous construction of educational informatization, which challenges the teaching management, contingency theory is an effective way to further promote the effectiveness of teaching management. With the popularization of computer technology and the improvement of informationization of educational administration management in colleges and universities, schools have accumulated a large amount of data in the process of daily teaching management. How to find useful knowledge from a large amount of information to serve teaching and improve the teaching management level has become a problem that must be considered at present. The development of party members among college students is a routine work of party building in colleges and universities. Under the background of comprehensively and strictly administering the party, it is a new requirement of the new era for party building in colleges and universities to focus on quality and make the development of party members among college students more standardized and scientific. To implement management innovation, we must start from the idea of system theory, analyze the constituent elements of the management system, get the basic idea of management innovation, and finally find innovative countermeasures from the aspects of management subject, management system and management means. The challenge of teaching management is mainly reflected in that the increase of student managers is less than the increase of student scale, resulting in the complexity of education management environment; Under the informationization, the traditional discourse power of managers is weakened; Before the transformation of "fine management to fine management" in the educational management of colleges and universities, there is still a phenomenon of paying more attention to progress than education, and the quality of Party member development is worrying.

Therefore, the mathematics warehouse is the so-called "Eastward trend" of the reform of colleges and universities. Its implementation poses a new challenge to the education and management of college student party members. Due to the flexibility of the school system, the original college student Party branch based on administrative classes must find a new carrier; Therefore, the education and management of student party members must seek new ways and methods, take effective management, improve teaching quality and cultivate high-quality talents, so as to better promote students' employment. At this stage, various database systems have been developed at an unprecedented speed and widely used in various industries, making transaction processing more accurate and efficient. The accumulated data is growing at an exponential rate. Massive data is facing management and analysis. Data flooding and lack of information disturb decision makers. We should constantly assess the situation, innovate the education management system, strengthen the fundamental purpose of "Building Morality and cultivating people", take the opportunity of vigorously promoting information construction, further improve the collaborative education mechanism, deeply integrate modern information technology and education management, and strengthen management and service education driven by big data precision, so as to significantly improve the quality of school education management.

2. The Necessity of Building a Data Warehouse

2.1 Current Status of Party Member Management

With the rise of big data as a national strategy, the application of big data in all walks of life has become more common. With the deepening of reform and opening up, especially economic globalization, political multi-polarization, diversified values, the rapid development of the Internet and the continuous expansion of the scale of colleges and universities, under the new situation that China's socialist market economic system is gradually established, the party organizations in colleges and universities are facing many new challenges in the development, education and management of college student party members. The ranks of college students are huge, and colleges and universities are becoming an important position for the party to absorb fresh blood. Grass-roots party workers in colleges and universities have a heavy task, and counselors are the backbone of grass-roots party organizations in most colleges and universities in China. Naturally, the development and management of student Party members has become a more important link in ideological education in colleges and universities, which reflects the ability of a school's political and ideological education and the management level of students.

However, at this stage, the professional theoretical level of our party affairs workers is not enough. At the same time, counselors are not full-time party affairs cadres. They are also responsible for students' daily affairs management, psychological counseling, awards, grants and loans. It is difficult to ensure that sufficient time and energy are allocated to party affairs. This has brought many difficulties to the management of students. Counselors are often tired of dealing with the heavy task of Party member development of college students, emphasizing quantity over quality and progress over education, forming a "punch in task" working mode of Party member development. At the same time, influenced by the Internet, social unhealthy tendencies and some erroneous ideological trends, it has brought unprecedented impact and challenges to the development, education and management of college student party members. Therefore, our current campus database system can efficiently realize data entry, query, statistics and other functions, but it is often unable to make effective use of data. We can't use effective tools to discover the connections and rules in the data, we can't predict the future development trend according to the existing data, and we lack the means to mine the knowledge behind the data, which leads to the phenomenon of "data explosion but lack of knowledge". Therefore, the construction of data warehouse management system is imminent.

2.2 Data Warehouse Concept

A data warehouse is defined as "a data warehouse is a subject-oriented, integrated, stable, and

time-varying data collection used to support the management decision-making process." The party organization system in colleges and universities is sound. From school to college, from department to class, there is a good organizational framework structure, there is a team of effective organizational cadres, and the school has a good external network and internal network network application environment. , A computer professional scientific research team can ensure the effective implementation of all links such as demand investigation and analysis, and the specific application of the application system. Compared with the traditional database, the data warehouse embodies the four characteristics of subject-oriented, data integration, data unmodifiable, and data related to time. While improving the network management level of school party building, it does not generate too much economic burden. Instead, it can improve work efficiency, save labor costs, and provide good technical support for applied research in colleges and universities. It can improve teaching to a certain extent. Used in combination with management and teaching. By facilitating the collection, analysis and processing of information through established organizational channels, it is conducive to the implementation of various aspects of party member education in colleges and universities, and improves the development quality and management level of party members. As a group of young people with a relatively high level of knowledge, college students generally have strong cognitive and speculative skills. They are more likely to agree with the party's advanced concepts and fundamental purposes, and are more willing to pursue self-growth and social progress. Ability to grow into talents through hard study and practice, and then make a positive and outstanding contribution to the cause of socialism with Chinese characteristics.

3. Data Warehouse Construction

3.1 Establishment of Teaching Management Data Warehouse Model

Transaction processing can no longer meet the demand of end users for analytical query of databases, and simple query of large databases by SQL can not meet the demand of end users for decision analysis. Based on the examination of many problems existing in the current practice of student party members' education in colleges and universities, especially the understanding of the particularity of the object of student party members' education, the education of student party members in colleges and universities is constructed as an advanced dynamic system model. This requires that analysts, managers or executives can quickly, consistently and interactively access the information transformed from the original data, which can be truly understood by users and truly reflect the characteristics of enterprise dimensions, so as to gain a deeper understanding of the data. By matching the sequence of the education stage of party members with the academic career stage of college students, and rationally allocating various elements and resources in the system, the subjective initiative of student party members can be fully stimulated, and then the effectiveness of the education of student party members in colleges and universities can be significantly improved. The design steps of data warehouse mainly include three aspects: data warehouse module, data extraction module and data maintenance module. The functional module of student party member management system is shown in Figure 1.
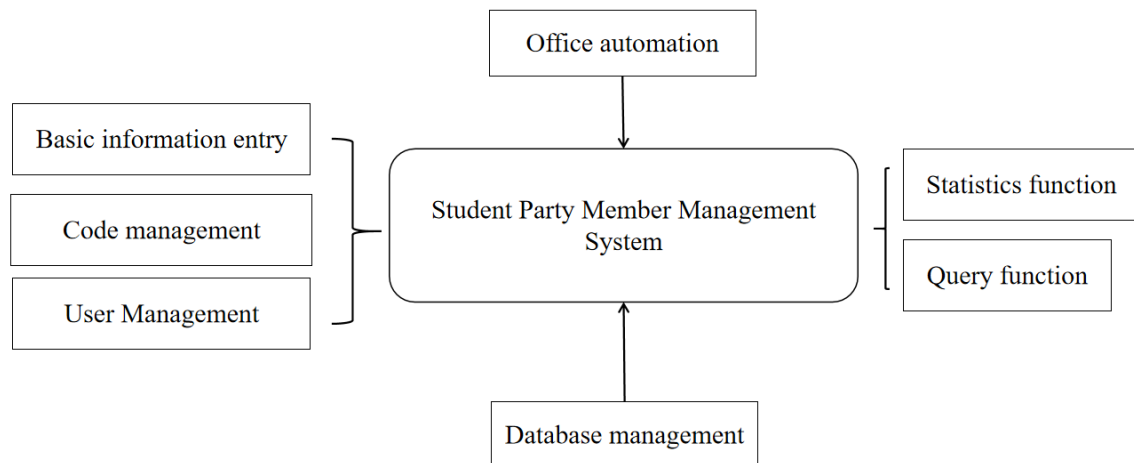
Fig.1 The Functional Modules of the Student Party Member Management System

In the educational administration of colleges and universities, users of decision analysis are mainly divided into school leaders and educational administrators who are responsible for educational administration or teaching management. It needs to provide comprehensive information for decision makers. The organization of this kind of information should focus on the theme of business work in enterprises, which is the unity of data and algorithms. Classify the details of the data source in detail, including the used computer platform, owner, data structure, use process, data plan update, etc. When extracting data, it has short development cycle and low cost, and can meet the needs of users' decision-making in a short time. In the model, teaching objectives and predictive analysis are interactive. We take teaching objectives as guidance and teaching methods as means, and collect data of learning environment, teachers' teaching characteristics and students' behavior characteristics as data sources. The teaching management model of data warehouse is shown in Figure 2.
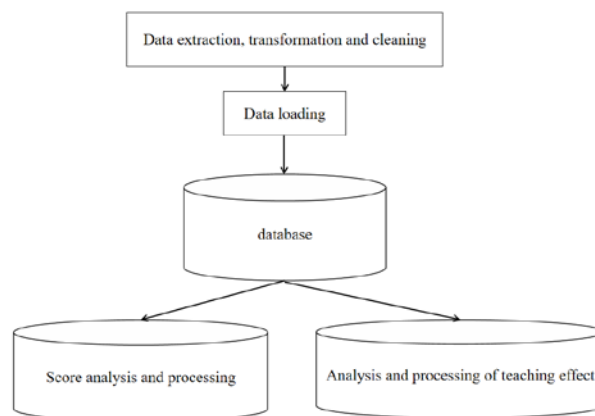

Fig.2 Teaching Management Model of Data Warehouse

A database system which is different from previous databases is formed after a large amount of business data are properly sorted, converted, integrated and synthesized, and advanced data storage technology is adopted, thus reducing the corresponding data amount, shortening the query response time and facilitating decision makers to analyze.

3.2 Party Member Education under Big Data

Firstly, the teaching method is not fixed under the contingency teaching management mode. In the traditional teaching process, the indoctrination teaching method based on Teachers' teaching, the management mode supported by big data, the independent support teaching method based on the combination of teachers' teaching and inquiry and the independent learning teaching method based on students' independent inquiry. Emancipate the mind and keep pace with the times. In the construction of the model of education and management of college student party members, it is

conducive to the development and growth of student party members. As a measure of the characteristics of education and management of student party members, emancipate the mind, study, practice and summarize, and gradually build a perfect education and management system of student party members. Through IOT sensing technology, video recording technology, image recognition technology and platform acquisition technology, we can collect teachers' teaching data, students' learning data and learning environment data in the process of teachers' teaching, and analyze whether this teaching method can better achieve the teaching objectives.

Secondly, the construction of learning environment will promote the change of teaching methods. Traditional classroom teaching methods focus on the defects of explicit knowledge teaching, but under the requirements of today's personalized teaching objectives, it is necessary to stimulate students' creative ability, subjectivity and uniqueness. In a media era, when every member of society has the opportunity and ability to obtain information and express opinions through the media, people's working style, learning style, lifestyle and social interaction style will greatly change. Party members' teaching can also be classified through data warehouse, so that our students can choose their favorite content, keep pace with the times, blaze new trails, actively respond to the new situation and occupy new positions, actively create new methods and mechanisms of party building with the characteristics of the times, and strive to expand.

4. Conclusions

With the development of information technology and the application of teaching management software, the amount of teaching management data will increase day by day. The application of data warehouse technology in university educational administration system will fully excavate the high-value information hidden behind the data, provide effective basis for university educational administration personnel to make decisions, further promote the process of university educational administration and informatization, and improve the quality of training talents. At the same time, let party members carry out various personalized analyses according to the data generated and shared by themselves, find out their own shortcomings by data comparison, set a digital benchmark, and lead the personal ideological direction; It can be used for accurate management and service of party members, help curriculum management and enhance self-awareness path of party members. At the same time, aiming at the problems of the current database, school leaders can also formulate optimization measures according to the actual situation to improve the utilization rate of the database. The model of education and management system has been deeply explored, and the effective overall planning of students' information is conducive to the control of the overall development state of students by school management departments and decision makers, and it is convenient to carry out targeted education and management of different student groups, so as to improve the synchronization of administrative management and information management, improve work efficiency and promote the pace of school informatization construction.

References

[1] Du Liang. Construction of an advanced dynamic model of college student party member education in the new era[J]. College Counselor, 2019(4): 5.

[2] Ye Caihong. Constructing a fuzzy evaluation model for the education and management of college student party members based on the analytic hierarchy process [J]. Journal of Xiangyang Vocational and Technical College, 2016, 15(1): 4.

[3] Sun Xianshui, Jiang Guoming, Chen Shanxiao, Guo Weijie. Based on big data to accurately build a university management and education innovation system--Taking Zhejiang Sci-tech University as an example[J]. China Education Informatization, 2020(21): 3.

[4] Student Qian, Liang Zhang. Traceability and model construction of contingency teaching management theory under the background of big data[J]. Think Tank Times, 2019(38): 2.

[5] Ren Xiaoyuan, Chai Zhilei. Construction of "workshop" learning model in online experimental teaching[J]. Experimental Technology and Management, 2018, 35(8):5.

[6] Zhang Zhulin, Zhang Meiyun. The construction of the regional model of the integration of urban and rural education: based on practical thinking in Fengxian District, Shanghai[J]. Educational Development Research, 2017, 037(020): 14-22.

[7] Lei Xiuya, Peng Yue, Yu Shixing, etc. The construction and application of the quality training model for college students in professional curriculum teaching--Taking the professional curriculum of the Department of Psychology of Beijing Forestry University as a sample[J]. China Forestry Education, 2021, 39(5): 5.

[8] Li Daogan, Kuai Haizhang. Research on the Ideological Education Model of College Student Party Members in the "Internet+" Environment[J]. Old District Construction, 2017(18): 4.

[9] Gao Shengtao, Lu Jinmei, Wang Xinlin. Construction of the model of innovation and entrepreneurship education system in colleges and universities[J]. Journal of Anhui University of Science and Technology: Social Science Edition, 2017, 19(6): 5.

[10] Chen Yuanhui. The construction of a data literacy evaluation system for college students based on the KSAO model: Taking management science and engineering graduate students as an example [J]. Science and Technology Entrepreneurship Monthly, 2021, 34(8): 3.