Retraction

Retraction: Analysis on the Application of Ideological and Political Education in Student Management Based on Big Data (J. Phys.: Conf. Ser. 1744 032069)

Published 16 September 2022

This article has been retracted by IOP Publishing following an allegation that raises concerns this article may have been created, manipulated, and/or sold by a commercial entity. In addition, IOP Publishing has seen no evidence that reliable peer review was conducted on this article, despite the clear standards expected of and communicated to conference organisers.

The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

Retraction published: 16 September 2022
Analysis on the Application of Ideological and Political Education in Student Management Based on Big Data

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Abstract. The age of big data has come, and it will lead to a huge wave of change in many fields. Big data's excellent characteristics make its use in various fields to a state such as fish drinking water. The ideological and political education in student management, as the foundation of the student education system in schools at all levels, needs to be combined with new technology, so as to improve the defects of traditional education methods. This study discusses the basic situation of big data, the basic ways and possible challenges of ideological and political education in student management under the background of big data, in order to offer impetus for accelerating the process of combining big data with education.

Keywords: Big Data, Ideological and Political Education, Student Management

1. The basic exposition of big data

1.1. The definition of big data
In the late 1990s, NASA researchers coined the term big data. Since its birth, it has been a vague and attractive concept. It is not until recent years that it has become a mainstream word. Big data is also a kind of data. However, this kind of data is usually not available by ordinary software and tools, nor can it be easily managed and analyzed. A large number of these hard-to-obtain data are put together to form the embryonic form of big data. As the name implies, big data's data is very large, and the growth rate is very fast, so researchers usually think that big data is a new type of social information asset. In order to deal with big data smoothly, users and processing tools must have keen observation, strong decision-making ability, and flexibility for acquisition and processing processes.

1.2. The characteristics of big data

[1]
Figure 1. 4V characteristics of big data.

1.3. Large number
Only when the data volume arrives the PB level or above, can it be called big data. Social networks, mobile networks, a variety of intelligent tools, service tools, etc., have become the source of data.

1.4. High speed
Big data came into being very quickly, mostly over the Internet. And all the data have to be processed in time. Based on this background, big data has extreme strict needs of processing speed.

1.5. Many kinds
A wide range of data sources determine the diversity of big data's forms. Every region, every time period, there will be a variety of data diversity. Any form of data can have an effect, and the platform further recommends what users like by analyzing the user's log data.

1.6. High value
This is also one of its main features. As we all know, unlike the virtual world, most of the data do not have the value of acquisition and analysis when they are generated in the real world. Therefore, the amount of data that can produce value to production and life is very small, accounting for a very small percentage. Generally speaking, in order to save time and increase the accuracy of processing results, researchers are usually willing to use artificial intelligence and other methods to deal with big data. When using these algorithms that can be used for data mining, the new knowledge contained in big data can be easily summarized. In modern society, big data has a wide range of applications, including agriculture, medical care and other social basic industries. Also big data can help to achieve the effect of promoting the degree of social development, increasing the level of science and technology, and improving the methods of production, so as to make a fundamental leap in efficiency.

1.7. The use significance and value of big data
From a strategic point of view, the focus of the technology that big data relies on is not just to master enough information. The main focus of the technology is to be able to quite professionally distinguish whether the data itself is meaningful or not, and to deal with the useful data separately. Therefore, it can be seen that big data is actually equivalent to some kind of company in real life. Whether the company can make a profit mainly lies in improving the leadership's ability to analyze the market situation and deal with thorny problems, through obtaining valuable information and solving various problems, so as to realize the profit of the company and the increment of cash flow. Here, the former represents the ability to process data, and the result is that data is not only simple data, but also a collection of knowledge.

Because of the similarity of technology, big data and cloud computing are essentially complementary and not independent of each other. A certain computer does not have the ability to deal with big data alone. Usually, the distributed structure is a useful tool for dealing with big data. However, the distributed architecture itself can not be run alone, and cloud computing offers a guarantee for the operation of this architecture. This is because cloud computing has the functions of
virtualization technology, distributed database and cloud storage. As the development continues, the ways to deal with big data will become more and more diverse, and the technology to deal with it will be updated.

2. The basic types of ideological and political education for student management under the background of big data

2.1. Information embedding
Big data's form of expression is data. Meaningful data can be presented as information, but also can be mined to get knowledge, and then sublimated into mechanisms and laws. Ordinary data and information mainly record calendars, but the knowledge and laws extracted are predictable. The application of these knowledge to education can grasp the regularity and scientific nature of political education from a deeper level and enhance the timeliness of political education.

Therefore, political education can embed different levels of data expressions into the education system, including data, information, knowledge, mechanism and laws. Embedding the data into the political education work shows that teachers can use big data comparison, big data visualization and other ways to deepen educational cognition and experience[2].

2.2. Thinking embedding
Big data's thinking requires that people be good at capturing the organic relationship between things and skillfully estimate the information needed through the correlation between things. Big data's thinking embedded in political education is reflected in four aspects: 1). Using big data's thinking to obtain ideological information, 2). Collaborative innovation using complex system thinking, 3). Using big data's brain to predict the trend of thought and behavior[3].

2.3. Carrier embedding
There are two main carriers of big data:

1). The big data platform of political education, as a technical carrier, integrates the relevant data of political education, which is used to support the big data application of rich and flexible political education, such as the analysis, mining and visualization of political information[4].

2). Intelligent environment
The intelligent environment can connect all the staff of political education, such as teachers and student counselors within the school, and realize intelligent education. The intelligent environment can also form a popular way of political education among students and achieve the goal of ubiquitous political education. This enables political education to be embedded in all aspects of education.

2.4. The selection and use of big data's technology
This kind of technology includes many methods, including big data collection, big data integration, big data monitoring, big data intelligence. Each field contains specific technologies, such as decision tree classification, anomaly detection, clustering, pattern comparison equivalence. Big data's technology is utilized to political education. Its main purpose is to make political education automatic.
and scientific, and to fully show the pros of the combination of scientific and artistic, quantitative and qualitative, machine intelligence and human wisdom. Big data's strategy has entered the work of political education, and its advantages are shown not only in the innovation of the methods of political education, but also in the reform of the management and organizational form of political education. For example, the school, family and society are linked together, or big data is utilized to realize the seamless docking of the operation of political education.

3. The challenge of political education based on big data

(1). There are difficulties in data acquisition.

Political education needs to collect lots of data, widely distributed. Therefore, timely access to the necessary information has become the biggest difficulty in the integration of big data and political teaching. The information collection efficiency of big data is not high, its information mainly comes from many sources. Data outside the school come from governments, social organizations or other business organizations, such as online consumption and various App. The data acquisition within the school mainly comes from the Internet, library, all-in-one card and educational administration system. Therefore, the primary problem to be resolved in the political education system is obtaining and collecting data and information scientifically.

(2). There are very few talents who can use the big data well.

The lack of talents leads to the challenge of data value mining. At present, most schools lack big data talent team, system and platform. Due to the lack of talents, the value of data is difficult to be fully excavated and used. Political education big data requires political educators not only to have professional knowledge and ability of political education, but also to have the ability to match big data's relevant information collection. In addition, the construction of the school's big data platform lags behind, and a series of software and hardware technologies needed by big data and the platform are difficult to achieve. The school has invested less money in big data's development, which makes the construction of big data system of political education more difficult[5].

(3). Big data technology based on computer may lead to privacy infringement.

The birth and use of new technology often give rise to new ethical problems, and so is the network political education under big data's technology. Big data may bring a series of security risks. All kinds of behavior data in students' life and study belong to the objects collected by big data, so it is very easy to produce serious security risks such as data abuse and privacy disclosure. If there are human management errors or loopholes in information system security, the privacy security of students will be seriously affected[6].

In addition, big data collects not only students' online characteristics, course selection examinations, book lending, classroom arrangement access, but also personal location and other information. Due to the characteristics, the process and methods of collecting data and use may deviate from the original intention of using big data for political education. Especially for the device data collected by sensors and microprocessors, the analysis and mining will also show the students' own life style, emotional state and location.

Therefore, the political educators in universities should explore a reasonable way to face and deal with these big data from the aspect of ethics and morality.

4. Conclusion

With the continuous development of the age of big data, people produce and need to face more and more information in their life and work. Ideological and political teaching is an important method to cultivate students' ideological and political literacy and comprehensive quality. This educational process is facing great transformation and challenges under the influence of the era of big data. All kinds of universities must reform the ideological and political education in time. Teachers should not only pass on the innovation of educating methods and big data's thinking to the students from the teaching process, but also make efforts to the construction of big data's technology and system and platform outside the classroom. Through the combination of internal and external, big data can really
serve the ideological and political education in student management.

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