Innovation and development: The application of big data to the work of university Moral and political education

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Abstract. Entering the era of big data is the inevitable trend of the future development of human society. Its emergence and rapid development are having and will have profound effects on all aspects of social life. In the aspect of ideological and political education, the era of big data will present the brand-new request and challenge. So we have lots of things to do to highlight the value of big data technologies in the field of ideological and political education. To start with, we should study the essential characteristics of big data and establish the data awareness of the education. Furthermore, the analysis timeliness in the age of big data should be strengthen, the paradigm of the network ideological and political education need to be innovated and the focal point of it must be identified effectively.

1. Introduction

In the world today, with the revolution in information technology changing with each passing day, the development and application of Internet, cloud computing and big data encouraged the integration between different disciplines to some extent and at the same time opened up new research methods and perspectives in innovative way. Standing in the forefront of the times, President Xi grasps the general trend of information society profoundly. He explicitly points out that we should not only adhere to the fundamental principle and system of ideological and political education work, but also actively promote the information, legalization standards of it. This important instruction points the right direction and provides basic rules for the work.

2. The characteristics of the big data

2.1 Volume refers to huge chunks of data with its integrity in big data. In this age people can receive, save or publish data whenever and wherever possible with the help of the extensive use of instruments and communication devices. So the data size is easy to accumulate to a level of TB, or even jumps to the PB level.

2.2 Big data contains not only structured data but even various kinds of unstructured one by breaking the boundaries of structured data, which makes data types become more complex and diversified so that it's important to find inter-relations from a wide range of data.

2.3 Velocity means to meet the needs of real-time with a faster speed. Big data is a kind of speed-critical data. Only when the mass data which is being produced continuously is processed with a high speed and fluency in a short time, can value of big data be maximized.

3. The benefits and challenges of big data brought to political education

3.1 Big Data breaking the traditional political education knowledge frame structure

The ideological and political education, referring to the educated ideology, values and ethics which are selected and designed by the educators based on certain social requirements and ideological essence of educates. The various elements are organic integrated, interconnected and

correlated, reflecting the very strong theoretic character, systematic and integrity. September 2015, Sina Finance, Sina cooperation strategy with Market and Media Research Institute of Peking University jointly issued Report on media habits of the generation after 90s. From the report, we found that: the cell phones occupy the first place with an average of 3.8 hours of using time per day, becoming the most familiar media; while newspaper, radio and other traditional media are in the doghouse. The students under the age of big data background had been "no longer get information line by line, page by page, or in a linear way" ,but "linked to information in an intuitive and associative way."

3.2 Big data crashes on traditional value system of political education

In the era of big data, the core of students' information literacy is the judgments and grasp about the dissemination of information value .The information obtained by the college students is diverse and messy. Those information sometimes differentiate and erode our traditional social belief systems, which makes teachers' authoritative knowledge were shaken gradually, the unified values being questioned and the orthodox value system being affected. Due to the flexibility, massive characteristic, openness, interactivity and virtual, big data reflects the characteristics about double-edged sword when it comes with the ideological and political work. On the one hand, it allows students to get a quick access to information and knowledge in the "data explosion" and it provides students a great degree of freedom. On the other hand, the rapid spread of the data does a lot harm with negative information and backward values are favorable while the traditional mainstream values are crashed.

3.3 Big data challenges the traditional political education mode

The traditional model of ideological and political education is a one-way educational activity. Educators teaching, while educates listening. The educators have the right to speak and decide the content to teach, but educator can not choose what their want to learn. Because of being open and interactive of the data platform, every college student can combine their own need to dig, to analyse, to form their own knowledge, and question the educators, which gradually shake the status of ideological and political education workers. Due to the fact that there are many differences between the college students and the ideological and political educators when they meet the conditions like getting the data or searching for the information at the same time, the college students are always getting more comprehensive information, which contributes to a condition that the college student are more likely to choose the information they want in their own judgement, weakening the leading position of the ideological and political educators. What's more, because of the big data has the characteristics of fast, openness and pluralism, students can get the education of "getting out of the classroom".

4. Use big data to strengthen the analysis of the political education

4.1 Improve the information technology capability of political educator

In February 2015, CNNIC (China Internet Network Information Center) released the "35th China Internet Development Statistics Report." The report shows that as of December 2014, the number of Chinese netizens reached 649 million, the annual total of 31.17 million new Internet users, mobile phone users scale up to 557 million, representing an increase of 0.5672 million by the end of 2013. After entering the era of big data, mass data is becoming a huge amount of resources and factors of production, and has penetrated to various fields. And a big data capacity, which means an effective use of data aggregation, will bring life an endless stream of innovation. Only adapt to big data, and establish a large data awareness can we get the reoccupation of a commanding point of University ideology. Therefore, the ideological and political educators of the colleges and universities should fully understand the concept of big data, learn and master its technical principles and applied skills, analyze the meeting point among the big data, the network of ideological, political education, and the ideological and political education of new media systematically. Educators should strive to get the dynamic and synchronization of the research status, problem analysis and the development of measures, explore how to make the big data play the transformative power in the ideological and political education.

4.2. Improve the effectiveness of information analysis in big data conditions

In the era of big data, the core part of the ideological and political education of college students are the mining, collection, analysis and processing of all kinds of information. The so-called data mining, refers to the revealed information aggregation and refining process, which comes from the large amounts of data of the database and has potential value. To apply the big data to the ideological and political education, we need to analyze what the impact of big data may produce to the education further and add more specialized training in aspects of big data. what's more ,we need to make the educators not only have awareness and ability to collect the relevant data but also have the ability to tap the regular information from the students, aiming at providing a reliable basis for the ideological and political education and enhancing the scientific level of information of ideological and political education. Currently, the major colleges and universities have faced with problems caused by a limited power of single education body and students' ever-changing and multivalent thinking. So if we want to obtain more comprehensive information about the students' ideological dynamic, we need to establish a cross-border thinking consciousness, and discuss and analyze the obtained data from many aspects and levels with the help of sharing and convenience of the data and gathering different education body, departments and learning resources.

4.3 Finding innovative research paradigms of ideological and political education

Big data allows everything including people's thoughts and feelings have become quantifiable. Just like networking changes the world, big data will also change our lives. It created unprecedented quantifiable dimension to our lives. Different from the traditional study which starts with the illusion, big data will inevitably bring about a new rise of quantitative research paradigms. Collecting students' information data and establishing students' database are important parts in the process of combining the big data and the ideological and political education. The collection of students' data can not be only confined to internal university activity data, but also should be extended to all the social activities of college students, even the information before they entering the school. So I think it's important to build the mechanism about information exchanging and data sharing between institutions and institutions, institutions and families, institutions and societies. Research team of interdisciplinary-based research should be actively built, so that it can take full advantage of the various disciplines in the related topics, which effectively promotes the scientific development of ideological and political education. In addition, to promote the innovation of its paradigm actively, we have to promote quantitative research network of ideological and political education under the big data era and finish the establishment of research paradigm related to the combining of the qualitative research and the quantitative research.

5. Summary

In the age of big data, the ideological and political education is facing problems about how to treat the data and how to use the data. We must keep pace with the era of Information Network and promote the ideological and political work to be better with a big data-driven. Furthermore, we need to finish the organic combination of the network carriers and the bulk of the ideological and political education, promoting the amalgamation of the ideological and political education and the Network Information System.

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