# Original Paper

# Selection Method of Network Ideological and Political

# Education Resources under Big Data

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#### Abstract

The continuous development of network information technology has prompted people to use big data to process information in order to improve work efficiency. All kinds of data are affecting people's lives. Under the background of the big data era, college students' values, studies and lifestyles, and access to information have changed obviously. Therefore, colleges and universities should make full use of the convenience of information in the era of big data to improve the informatization of ideological and political work in colleges and universities. The ideological consciousness and values of contemporary college students are strongly impacted by big piece of data. Based on the characteristics of big data, this paper conducts research and analysis on ideological and political education in colleges and universities in the era of big data, and makes full use of network resources to improve the ability of ideological and political education.

## Keywords

Big data, Network ideological and political education, Educational resources

# 1. Introduction

The continuous development and progress of network technology has promoted the development of big data. Big data can make use of network space resources, improve the ability of information processing, and strengthen the construction of campus network ideological and political platforms, so as to enhance the construction of campus network information. Through the establishment of an online platform for online ideological and political education, the cognitive level and ability of college students will be improved. It has great advantages. It can effectively save the cost of ideological and political education, complete a wider range of educational work by using more diversified data. Because college students have imperfect values and are susceptible to external influences, therefore, schools should strengthen the ideological and political construction of college students, improve their ability to distinguish right

from wrong, and help them build correct values, so as to achieve the development of their own comprehensive capabilities. Using the big data network platform to build an Internet ideological and political education system can deeply strengthen and improve the ideological and political level of students, and ensure the comprehensive development of students. Through the online interactive teaching platform, high-quality ideological and political services can be provided to college students. While the ideological and political system are developing at the same time, schools should also keep up with the development trends of the times, update teaching concepts, and dig into in-depth teaching resources to promote the harmonious development of society. When constructing an online teaching platform, it is necessary to put students in a dominant position, fully consider their interests and hobbies, and conduct ideological and political content propaganda in a way that students are willing to accept. Teachers can update class content and teaching methods, provide students with an interactive and vivid classroom, and improve the quality of ideological and political education (Li & Yun, 2021). Therefore, this article launches the big data time network though political education method discussion has vital practical significance.

## 2. Big Data Overview

The so-called big data actually refers to the size of the traditional scale has been completely beyond the application of software tools to complete the analysis and management of large data. At the same time, with the continuous progress of science and technology, big data has been fully integrated with mass media, mobile platforms and the Internet, greatly improving the efficiency of information dissemination. Everyone can access, publish, comment on and forward information on the Internet platform. At the same time, big data has social and scientific value, resulting in the emergence of a great deal of redundant information, and people's political beliefs, values and ways of thinking have had a comparative impact, which has also brought new challenges to the ideological and political education on the Internet (Hu & Tang, 2020). In addition, the big data based on the Internet and computers can interpret the real world more objectively, comprehensively and profoundly, and transform human society into a brand-new "mirror world", which has played a great role in expanding the content, it can improve the ideological and political level of college students. With the rapid development of the Internet, big data has gradually changed people's lifestyles and learning methods, so colleges and universities can make full use of the networked interconnection and convenience of big data to improve the teaching effect of online ideological and political education platforms. In order to effectively promote the all-round development of college students and improve the overall quality and ability, teachers should clearly recognize the new situation of big data, and then, through big data technology, analyze the method logic, inherent law and value concepts contained in the huge information, in order to construct a new model of ideological and political education (Gao & Ai, 2021).

#### 3. Big Data and Network Ideological and Political Education in Colleges and Universities

The development of network information technology promotes the generation of a large amount of data information, shared and used in people's work and life, and the concept and technology of big data are gradually gaining importance. Big data is based on computers, the Internet, through a strong data generation and computing capacity for quantitative analysis, in order to obtain higher value products and services and deep insights. Victor Myernberg's research on big data addresses its characteristics: Large, high speed, diverse, low value, authenticity. Big data has a significant impact on college students' learning style, living habits, communication and thinking, and has a far-reaching impact on college students' ideas and values.

College students are the mainstay of the country's future development, so the ideological and political education of college students is of vital importance. By improving the ideological and political education system of colleges and universities, the ideological quality of college students can be improved, and the harmonious and stable development of society can be promoted. When constructing a network ideological and political education platform for colleges and universities, it is necessary to fully consider the preferences of the university, build an interactive platform in a way acceptable to college students, improve the interactivity of network information, and promote the improvement of college students' learning ability. The ideological and political education mode in colleges and universities combined with information technology have new characteristics (Tang, 2019): First of all, the huge amount of data and information on the Internet impacts the minds of college students, which affects students' outlook on life and world outlook. Secondly, the network provides a convenience for college students to search for information, communicate and express personal views, and it is not limited by time and space, so it faces new challenges. Finally, the big data technology based on informatization has enriched the content of ideological and political education of college students, using diversified communication methods and content to promote the cultivation of college students' ideological value, changing the current ideological and political education mode, and promoting it to form a comprehensive and comprehensive and multi-angle ideological and political education platform.

3.1 Problems in Ideological and Political Education of College Students in the Big Data Era

## 3.1.1 Low Accuracy of Internet Ideological and Political Education

The network ideological and political education platform constructed by colleges and universities has the function of disseminating information, publishing and updating content resources through the Internet, played a network ideological and political purposes. In recent years, the network ideological and political education, there is a certain effect: college students according to their needs log in to find relevant information to achieve their personal goals. However, the ideological and political education websites of many colleges and universities mainly release information. Students learn information through receiving resources, and improve their ideological and political level under the relevant requirements of the school, and have been able to fulfill the relevant requirements to complete the educational task in practice (Wang, 2020; Hao, 2021). However, the interactive characteristics of the

online ideological and political education are not fully manifested. College students often ignore the establishment of the online opinion mailbox, and what they need more is an interactive interface. They attach importance to the network, campus and youth communication methods that college students are accustomed to, and can provide answers at any time when they are confused, or, like the AI (artificial intelligence) in online shopping, timely respond to the relevant questions, through this way of communication, it will increase the emotional dependence of college students and affect the generation of college students' ideology. For example, in the past, the ideological and political work generally focused on the statistics and analysis of college students, such as returning to school, leaving school and violating discipline. However, the attention to individual college students is short of the guidance of total data. What has been paid attention to for a long time is that individual college students should solve whatever problems they have, and there is no deep research on the data value of individual problems and the data relationship with other individuals.

## 3.1.2 Weak Data Processing Capability of Ideological and Political Teams

The network connotation that has entered the big data era is increasingly enriched, including not only the relatively mature technologies and means, and the networks for transmission and delivery among computing equipment, communication equipment, machines and man-machine, but also the Internet of Things, the Internet, big data technology, etc. (Oco, Scotter, et al., 2021). In the process of catering to the needs of college students, many companies have found their own marketing ideas for survival and development. At the same time, college students are influenced by the value of network technology and transmission, and have changed their cognitive logic passively which does not belong to them. As a part of the social group, the ideological and political workers in colleges and universities are hard to get rid of the influence of the network on their own thoughts and behaviors. Great changes will also take place in the structure of the ideological and political workers. The ideological and political quality must be the minimum condition for all the staff of colleges and universities to get employed. Only with the ideological and political quality can the ideological and political workers correctly use big data to carry out the analysis and research work, it can effectively improve the ideological and political data processing capabilities of university workers and ensure the efficient operation of platform data information. Further improve the data processing capabilities of ideological and political workers to ensure the high-quality operation of the big data processing process (Hu, Wang, & Xu, 2020). At present, ideological and political workers in some colleges and universities are too old to use Internet resources effectively, and still use traditional written teaching methods in the teaching process. They can operate and analyze the structured data of small data of college students to some extent, and the effect is ideal. However, faced with the huge volume of large data overflow, it seems helpless, often choose to continue to use the old method, the loss of data, exile and ideological and political work diverge. In order to take the lead, computer technicians have introduced to manipulate ideological and political data. Only a small amount of valuable data information can be presented in the massive data, and it is difficult to distinguish the important data in various data and the relevance between the data

and the data.

### 3.1.3 Imperfect Information Construction

Universities have been promoting information technology for many years, and have achieved remarkable results. The most obvious dividend for college students is the realization of Wifi free coverage, convenient interconnection. In the process of promoting the rapid development of information technology, the concept of a smart campus, mainly embodies the campus learning and living more intelligent, more humanized. However, the promotion of smart campus is a difficult project. It is not only a new caliber and new concept of smart campus in the big data era, but also a small version of smart city. In recent years, with the cancellation of the three forms of voluntary enrollment, economic pressure exists to varying degrees, and the undergraduate colleges and universities are cautious about major investments. In particular, the exploration and promotion of the construction of smart campuses are slow. Some colleges and universities are still too conservative. The promotion of smart campuses has stopped after the full coverage of Wifi, and the composition function of smart campuses has not been extended (Zhang, 2019; Wang & Jing, 2020). For example, with the focus on the personal safety of college students, the comfort of dormitories, the cleanliness of the environment, medical treatment and employment and other aspects, provide corresponding intellectual functions, integrate big data, the Internet, the Internet of Things, cloud computing and other technologies into the study, life and work of college students, and orderly change the lifestyle, communication mode and service mode of college students from the process of continuous improvement of informatization to achieve new breakthroughs in technical education.

## 3.1.4 Limitations in the Application of New Technologies

The big data this kind of new technology in society applications household names, its application value most manifests in commercial value. The big data also therefore has a very high prestige. But the application and exploration in the field of education is not enough, and the typical cases of ideological and political education have not been put forward. We still hold a wait-and-see attitude to the development of big data, and are used to waiting for the education administrative department to promote this technology, or wait for the typical cases of pilot colleges to popularize, and then learn from them, so as to avoid detours. At the early stage of the application of new technology in colleges and universities, the collection and protection of college students' data by ideological and political workers is a realistic problem. For college students in Taobao, Tmall, Only, Jingdong, Dangdang and other shopping sites consumption data, Google, Baidu, 360, Bing and other search engines, as well as online learning, chat, comments and other behavior traces are all recorded, data can be traced and constantly monitored, from the data to find the value behind. However, in the process of collecting student data, even if the data protection is strictly required, it is very difficult to protect the data of college students completely, and there will be leakage to some extent or data stolen and illegally used by hackers, which will lead to the conflict between the application of new technology and data protection and make college students feel insecure about the data produced. On the other hand, big data technology in the initial stage of operation is easy for college students to personal data collection quickly, lack the whole process of data, eager to make analysis results for college students labeled, premature for college students to make no objective comprehensive evaluation, to college students' physical and mental development has a serious impact, and even to their life to bring indelible bad records, completely destroy their acquired motivation.

3.2 Causes of Problems in Ideological and Political Education of College Students in the Big Data Era

### 3.2.1 Subjective Awareness

Using big data technology can change the ideological consciousness of ideological and political workers in colleges and universities. After years of training, the subjective consciousness of ideological and political workers has been built up, and through years of practical experience, they have formed their own ways and methods, so that their ideology can accept innovation, but they can not quickly have the ability of data analysis. In addition, the ideological and political education website has become the main front to issue the notice, and the audience has been transferred from the college students to the college students.

#### 3.2.2 Educational Philosophy

Ideological and political education discipline is a young discipline, after more than 40 years of development, initially formed the basic theory and practice of the discipline. However, in the era of big data, the ideological and political education of colleges and universities has not reached the level of information technology, and has not carried out the upgrading and transformation of old and new ideas in the era of big data in time. The educational authorities have not given voice to the phenomenon of big data thinking, which means educational ideas lag far behind the practice of big data thinking, and lack guidance about ideas and work.

#### 3.2.3 Educational Practice

Some ideological and political workers in colleges and universities are not satisfied with their jobs, lack of ideals and beliefs, and poor working conditions. Some people also have unpractical ideas, such as buck-passing and accidents, which lead to the decline of the effectiveness of ideological and political education of college students. Due to the lack of interactive practice, their own work often falls into a passive situation, such as online usury problem, can only act as firefighters emergency response, did not do beforehand intervention.

## 3.2.4 Institutional Safeguards

There are no relevant laws and regulations at the national level. Colleges and universities have not formed special measures to protect the data privacy brought by big data. To some extent, the ethical dilemma caused by data abuse of college students appears. For example, one campus card is connected with all the data on students' access to dormitories, bath records, Internet access time, consumption records and so on, as well as whether data protection should be given to students after their violation of discipline is lifted. These linked data not only create a negative orientation for students' employment, but also generate a potentially discriminatory injustice, which affects students' life development.

Moreover, it involves the private security of students. Once the system fails, information about students is leaked, which will cause great hidden dangers to the safety of students.

3.3 The Realization Mode of Network Ideological and Political Education in Colleges and Universities in the Big Data Era

## 3.3.1 Innovating Educational Ideas by Using Data Thinking

In order to achieve the goal of network ideological and political education, colleges and universities need to use data thinking to innovate educational ideas. First of all, colleges and universities need to make full use of big data technology to improve students' ideological and political education. In the era of rapid development of information, people's way of knowing the world is changing greatly, and it is also a clear sign of the progress of the way of knowing the world. It is necessary for colleges and universities to collect data on students' ideology and behavior, analyze the collected data deeply, understand the trend of students' thoughts, and predict the direction of students' thoughts change according to the data.

## 3.3.2 Conduct Ideological and Political Education Activities through Major Network Platforms

The platform of ideological and political education in colleges and universities should embody multi-dimensional characteristics to achieve the goal of all-round ideological education for students. Broadening education channels in colleges and universities can be carried out from the following two aspects: First, to strengthen the construction of ideological and political education platform. For example, in order to build and popularize the website of changing classes, colleges and universities need to formulate training courses for changing classes and publicize the educational advantages of changing classes, so that changing classes can play a leading and guiding role. At the same time, colleges and universities should share teaching resources with the new network technology. Second, expand the scope of contact through rich propaganda methods and methods, and improve the ideological level of students. For example, we can use WeChat, Weibo, QQ and other platforms to understand students' thoughts, according to the change of students' acceptance abilities and the characteristics of network development. Adjust the content of the online teaching platform according to the characteristics of students' hobbies, improve students' learning enthusiasm and initiative, and enhance their personal ideological and political level.

# 3.3.3 Improve the Ideological and Political Education System in Colleges and Universities

By constructing a network ideological and political education system to ensure the orderly development of network ideological and political education in colleges and universities, and to improve the quality and efficiency of educational work. In the context of information development,, there is a huge amount of data, so it is necessary to strengthen the security mechanisms in order to analyze the real value and potential of the data. In order to perfect the educational management system. First, analyze the traditional ideological and political education system in colleges and universities, and fully analyze the actual teaching effect, so as to achieve the steady development of ideological and political education. Secondly, we should refine the management regulations of educational activities, clarify the

responsibilities and educational objectives of each educational post, and make the network ideological and political education develop towards a more systematic and professional direction.

3.3.4 Improving the Comprehensive Quality of Network Ideological and Political Education Teams in Colleges and Universities

In order to improve the efficiency of the online ideological and political education platform, it is necessary to train college teachers, increase the teachers' network utilization rate, innovate teachers' teaching concepts, and adjust the teaching plan at any time according to the development of students. Therefore, schools should regularly organize teachers to participate in training on big data concepts, establish the awareness of applying data in educational activities, learn the skills of using new media platforms to carry out educational activities, and skillfully apply Weibo, WeChat and other platforms to increase exchanges with students, so as to timely understand the ideological trends of students. After mastering theoretical knowledge, we should strengthen the training practice, so that educators can really improve the ability to teach using big data technology. Finally, we should cultivate the network backbone in the student troop, positively display outstanding student model function. Is advantageous in the advancement university ideological and political education.

## 4. Discussion on Network Ideological and Political Education Resources in the Big Data Era

4.1 Challenges of Network Ideological and Political Education in Colleges and Universities in the Big Data Era

The Internet has the characteristics of quantification of resource data, so college ideological and political education platforms can rely on the Internet to collect available resources and improve the level of ideological and political education in colleges and universities through efficient integration of resources.

## 4.1.1 Students' Values will be Affected

Under the background of the big data era, college students are in a complicated data environment, and can obtain all kinds of data information through various network tools. These data messages have both positive and positive content and negative and negative content. Facing complex data information, students need to discriminate on this data information, but because students lack experience, less experience, it is difficult to make judgments and choices, vulnerable to the impact of information, may make wrong judgments, increase the difficulty of ideological and political education.

#### 4.1.2 Data Information Processing is Difficult

With the popularization and application of the Internet, the network has almost become a part of the life of contemporary college students. Students who study, live and work every day produce a large amount of data information, such as browsing the Web, QQ, WeChat, Weibo and sending a circle of friends to record their situation. This data are hidden behind the students' state of mind and behavior. It is difficult to discriminate and analyze the data in a short time because of the variety and quantity of the data, and with the increase of the data, it is more difficult to judge the authenticity of the data. Once the judgment

of the data information is wrong, it will have a bad impact.

4.1.3 Data Thinking Consciousness and Processing Ability of Ideological and Political Workers are not Strong

At present, although many higher vocational colleges are developing network courses, some teachers think that the network courses are not so intuitive and vivid as classroom teaching, there is a lack of data thinking awareness, and the use of big data technology is insufficient, which causes the ideological and political education work to be divorced from the development of the times. In the era of big data, building a huge data link and data platform is conducive to understanding and mastering students' thoughts and behavior comprehensively and objectively, but this data information needs network ideological and political educators to have certain data technology and information literacy to analyze and use. Therefore, the ideological and political workers in higher vocational colleges must have strong data analysis and processing ability, so as to better use data technology for network ideological and political education.

## 4.1.4 Security of Students' Personal Information is Threatened

At present, the data information really provides help for educators to grasp students' ideological trends accurately and effectively, and also improves the level of ideological and political education. However, this data relates to all aspects of student information, such as family background, education, contact information and other information. Once leaked out, it will cause a lot of unnecessary trouble. Therefore, under the big data background, student personal data information security protection is particularly important, needs the ideological and political educators to realize information security importance, when the analysis processing data pays attention to the data information protection work.

# 4.1.5 Weakening the Dominant Position of Teachers

With the popularization and application of big data, higher vocational college students have more access to learning resources. Students can access the database through the Internet or mobile client. Faced with the development and convenience of the Internet, students prefer to use the Internet to complete the understanding of knowledge. Students prefer to use the Internet to complete their learning tasks freely and efficiently. At the same time, once students encounter problems in their studies or life, they can search for the data and information they need through the Internet, solve problems and difficulties, reduce the link and time to communicate with teachers, and thus weaken the dominant position of teachers.

#### 4.2 Selection of Network Ideological and Political Education Resources in Big Data Era

The new features of the big data era can effectively promote the reform of ideological and political education in colleges and universities, update ideas, improve working methods and explore new working modes.

The big data time requests the university to set up the data thought, the innovation work method. Ideological and political workers should learn to use new techniques and methods to dig into the value of mass information. In daily management, it is necessary to make full use of big data statistics, analyze

and predict the ideological trends and daily behavioral characteristics of college students, and present the ideological and behavioral trends of students in a discernible way, and establish an early warning mechanism by paying attention to the students' WeChat, Weibo and other media platforms to prevent emergencies and extreme events.

Big data provides a brand new platform for the development of online ideological and political education. Therefore, colleges and universities should take the initiative to use Internet technology to enrich the forms of ideological and political education, fully analyze the hobbies and interests of contemporary college students, and publicize ideological and political education information in the form that students love, and improve the interest of publicity. In addition, colleges and universities should use the advantages of big data informatization to strengthen the formation of a modern campus teaching system and provide students with a better learning platform to improve their cognitive ability. For example, colleges and universities can enhance the performance of network services, optimize the Internet teaching platform, use professional talents to maintain the daily operation of the network platform, and provide teachers with exchanges and answers to provide students with professional knowledge interpretation, and serve students' study and life more comprehensively.

Finally, the big data needs the university through careful management, the perfect long-term effective mechanism. The content of network ideological and political education is complicated, so colleges and universities need to carry out fine management, set up special leading group, and define personnel responsibility and division of labor. In addition, schools need to develop network ideological and political education work plan and assessment mechanism to form a multi-dimensional management platform to promote the standardization of work. According to the big data information content of the management platform, it can effectively and fully integrate ideological and political education resources, improve students' thinking consciousness, and cultivate students' core socialist values. Innovate ideological and political education programs based on the learning characteristics of students and the characteristics of big data, improve teaching effects, and form an efficient and collaborative education platform.

# 5. Conclusion

On the background of education modernization, the network education method has been widely used in knowledge teaching, and has obtained very outstanding results. In real life, it is more convenient to obtain more resources. To a certain extent, the resource utilization rate of ideological and political education resources in colleges and universities has been improved. At the same time, the information society of big data provides students with a platform for communication and interaction, which can better learn the content of ideological and political education. The use of online platforms to upload data and materials and reduce the cost of use can strengthen and consolidate students' thinking and promote steady development. However, in the actual application process, there are still some defects and deficiencies in the current network ideological and political education, which has greatly affected

its role. Therefore, teachers should change their teaching concepts, clearly recognize the important value of network ideological and political education, optimize teaching methods and the educational environment with students as the main body, so as to further improve the novelty and interest of network ideological and political education, obtain more audience's recognition and favor, enhance the effect of network ideological and political education, bring its role into play to a greater extent, guide students to establish a correct value concept, and provide more powerful support and guarantee for their comprehensive quality improvement and all-round development.

To sum up, in order to effectively improve the level of ideological and political education in colleges and universities, big data technology can be used to enhance the exploration ability of colleges and universities and strengthen the awareness of network security. And train college students to have the value of correct Internet access. Therefore, colleges and universities need to use big data thinking and improve the ideological and political education system, improve teachers' data literacy, and ensure the quality of ideological and political education.

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