

Research on the Promotion of Big Data to the Development of Higher Education

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Abstract: with the Rapid Development of Information Technology, in Recent Years, Data Mining, the Emergence of Large-Scale Data Technology Based on Mobile Internet, Data Collection, Accumulation, Analysis, Decision Support of Education Research. under the Background of Big Data and Basic Education Informatization, the Detailed Analysis of the Generation of Big Data, the Function Mechanism of Big Data in China's Higher Education, and the “Bottleneck” of Big Data in Order to Promote the Development of Higher Education. Measures to Improve the Effectiveness of Big Data in the Development of Higher Education.

1. Introduction

The State Clearly Points out That Information Technology Should Have a Revolutionary Impact on the Development of Education and Pay High Attention to It. in the 1990s, the Internet Began to Have an Impact in Various Fields in China. Now, 20 Years Later, the Influence and Role of the Internet Has Covered All Industries in the World, and the Development of Information Technology Has Entered the Right Path, Generating Big Data[1]. in the Field of Higher Education, the Impact of Big Data is Increasing. It Promotes the Sustainable Development of Higher Education, Which Needs Higher Education to Cope with Higher and Higher Data Accumulation.

2. The Relationship between Big Data and Higher Education and Its Mechanism

2.1 Relationship between Big Data and Higher Education

In order to promote the development of higher education, we should discuss the relationship between big data and big data. The relationship between higher education and big data is not simply application[2]. We believe that the role of the University of science development is not only to passively welcome big data into higher education. Function, the process of higher education development is also the process of big data development. Big data and higher education have the relationship of mutual promotion, mutual restriction and common development.

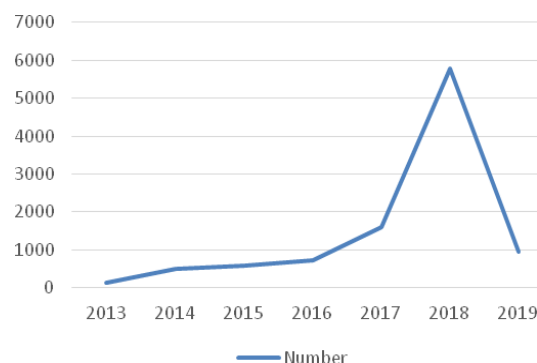


Fig.1 Annual Distribution of Chinese Literature Related to Big Data

2.2 Mutual Promotion

As a tool, the application of big data in higher education not only conforms to the process of

educational informatization, but also brings a series of changes to higher education. First, using big data in learning data can change traditional teaching methods, break the boundaries of time and space, and promote the popularization of higher education. At the same time, in order to grasp the information of students comprehensively and realize individualized education[3]. Second, the application of big data in scientific research, more comprehensive information and data in natural science, the bottom of traditional research methods in the field of Social Science in both micro and macro Sciences, and the reliability and feasibility of improved results. Third, the society, universities, and universities have made great contributions to data application, social needs, understanding the connection between society and promotion, and better able to carry out various social services. Finally, the application of cultural heritage and innovative big data is not only a more comprehensive information. Please better record and inherit the existing culture, and build a “data culture” to quantify the world and predict the future based on the integration of value rationality and device rationality. At the same time, higher education is also developing big data[4]. First, as a big data source, university information system improves the data base of big data; second, through the research and application of big data, universities improve and develop big data technology, innovate and improve big data analysis methods; finally. By reviewing and reflecting the culture and ethics of big data, universities have improved the theory of big data and standardized the development of big data.

2.3 Common Development

From the relationship between big data and higher education, we can see that the two developments are carried out at the same time. Big data through the collection and analysis of university big data, improve the quality of the four functions of University, improve the internal management efficiency of University and University, thus promoting and limiting the development of higher education. At the same time, it limits the real-time processing of big data in universities and colleges, and restricts the development of higher education. At the same time, higher education promotes and restricts the development of big data through the application and research of human data. The comprehensive development of technology, theory and different culture provides talents training for the development of big data[5]. The current attitude of higher education limits the comprehensive level of higher education and big data. The support of higher education for big data efforts limits the development of big data. The strong coupling relationship between big data and higher education will inevitably lead to two kinds of development of mutual reaction state, one is within reach, the other is to maintain the common development trend of the two.

3. Data Penetration into the Development of Higher Education

The driving force for the sustainable and in-depth development of big data in higher education mainly comes from four aspects of government policy and financial support, as well as the United States, the European Union and Japan. China and other countries and regions announced policies on big data survey and big data promotion. It is an indispensable research force for universities to invest a large amount of money in financial support. The application and promotion of big data in education, especially in higher education, is also an important part of the policy of promoting and directly participating in business groups[6]. They will apply business sensitivity to university or university big data, University and University sponsorship and self-development of big data collection and analysis system and investment tools, University and university support big data, in order to promote business operation. Universities with strategic vision, these universities have great impetus in the development of the potential value and unique functions of big data, and recognize the transformation of their own information systems, and upgrade to build data centers and data centers. Construction, software development, data analysis, input and output, and the realization of providing big data for higher education[7]. In order to provide essential experience for thorough promotion: human resources of big data talents and higher education as part of social system, it is responsible for the training of higher specialized industries. The rapid development of big data industry has led to a sharp increase in the demand for professional talents, and there is a big gap in

the ability of big data talents. Universities at home and abroad specialize in data science and big data.

4. Big Data for the Development of Higher Education

In today's world, promoting the reform of higher education has become a consensus to improve the quality of higher education. A series of new education concepts, such as informatization, popularization, personalization and globalization, reflect the requirements of the new era. All countries are trying to explore the development of higher education. The new method also reflects the emergence of big data needed in the new era.

4.1 Data is an Important Technical Force to Promote the Development of Higher Education

In today's information age, the impact of information technology on all aspects of society is questionable. Information technology is an important means to improve the quality of higher education and promote the reform of higher education. The education plan outlines that information technology will have a revolutionary impact on the development of education. We must attach great importance to it. As the “integrator” of information technology in the new era, big data has become an important force to promote the development of higher education. First, big data is based on the impact of computer and network development, data accumulation, internationalization and globalization. That is another peak of information technology development[8]. The arrival of the era of big data means the significant enhancement of computer computing power, storage information storage function and information transmission speed. Moreover, the integration of the Internet of things and the most cutting-edge information technology such as cloud computing. The power of higher education, in order to calculate is a substantial improvement, more data analysis possibilities, more comprehensive education, scientific research, and data information of management process can be analyzed. The research scope includes the rapid development of accumulated information memory capacity, which is the range of data collection, which is the foundation of huge growth. The collection of “management, research, research” information of universities and colleges is on their own The huge increase in cars has helped. Data collection, which was only held in the past few months - perhaps, as well as previous data, is for the sake of the redundancy of data memory system today, my system and data analysis system must be abandoned. In addition, regional, national and global sharing of educational resources provides great convenience[9]. At present, the global popularity of online international academic conferences of several universities can be carried out, and then MOOCS relies on the combination of the most cutting-edge information technology of the network, which provides new means in data collection, transmission, analysis and sharing. And it will produce huge benefit improvement and become a big data booster to promote the development of higher education.

4.2 Big Data Provides Technical Support for the Global Sharing of High-Quality Education Resources, and Promotes the Realization of Education Equity and Personalized Learning in Higher Education

In today's information age, with the development of information technology in higher education, the development of related online education resources is the initial stage of accumulation, through a variety of network, open, high-quality video, public, venue like high-quality education resources. It is important to break the current geographical, cultural, economic and other constraints. However, the sharing of educational resources is not only to produce several teaching software, but also to provide relevant learning support. As the interaction of teaching students, educational video and other services, in order to enable learners to access online, discuss problems, evaluate teaching, the development strategy of learners is of high quality, which can guarantee the learning quality of learners. This is right. MOOC, learners, learning environment and learning methods all have very low restrictions. Why do large-scale online courses start. Only through the comprehensive collection of big data technology, process receipt and real-time and effective analysis and processing of a large number of data learning, which contains the equality and openness of the

accommodation of millions of learners who learn online together by MOOCS, and can realize individual flexible learning methods. Personal learning arrangements and personal learning support.

4.3 Data Will Provide Environmental Support for the Deep Integration of Modern Education and Information Technology, and Further Promote the Reform of Higher Education

Big data is another peak of information technology development. In higher education, the education environment of highly unified information standard of information and data constructs the integrated and integrated promotion of information technology and higher education. The change of education activities makes various elements deepen the change of education methods. Teaching tools, teaching contents and other links, to promote comprehensive innovation in the fields of higher education mode and learning environment. First, with the continuous integration of information technology and higher education, the traditional education mode characterized by stage, selectivity and closeness has changed in higher education. Educational needs such as sexual needs and open needs not only promote the transformation of traditional education model, but also give birth to new education models such as MOOC and National Open University. Represented by big data, the continuous integration of information technology and higher education. In higher education, the traditional education methods focusing on teachers, students and education are changing. The requirements of subjectivity, individuation and initiative to cultivate students' innovative quality have gradually changed the traditional teaching methods, and also provided opportunities for the emergence of new teaching methods such as flipped classroom and micro classroom. In the information technology and higher education represented by big data, the continuous integration of higher education, innovation of educational tools and contents are also carried out at the same time. It is multifunctional, flexible, portable and real-time. Interaction and other characteristics ensure the advantages of new educational tools on the basis of traditional educational tools, which can effectively improve the quality of classroom teaching. The innovative role of information technology in society and science has changed the new knowledge framework including educational content and information technology. The combination of knowledge skills and social needs enables students to learn useful things.

5. Conclusion

Today's world is an era of information explosion, rapid technological change and knowledge economy. As the times require, it is the era of big data. Big data, from the change of quality, leads to a large-scale and diverse data-based. Accumulate, acquire new knowledge, and then create new value. In order to feel the universe telescope using microscope to observe the micro world, big data is to understand the human exploration world, another new method, it is a new tool and technology of "data" in the world. The birth of big data depends on the progress of information technology and the accumulation of historical data, which is because big data has great value creation ability. Mining the transformation value of big data is the full of the whole society. The development of higher education informatization has brought about a huge amount of data accumulation. The use of big data to turn value into something for me has become the meaning of asking questions. But the merger with higher education is still in its infancy. In the wave of global higher education reform, the role of big data in promoting higher education cannot be ignored.

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