

Modernization of Minority School Education under Big Data

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Abstract: with the Continuous Progress and Development of Science and Technology, China Has Entered the Data Age. the Function and Function of Big Data Has Been Widely Recognized and Applied in Various Fields, Which Has a Great Impact on People's Work and Life. Continuous Innovation and Progress in the Field of Education Combined with Big Data is the Inevitable Way for the Development of Chinese Education, and Also an Important Way for the Modernization of Education. through Literature Review, This Paper Finds That Minority School Education Should Conform to the Development of the Times and Use Big Data Technology to Help Improve the Quality and Level of Teaching. Subsequently, the Characteristics of the Independence of Minority School Education and the Challenges Faced by Minority Schools in the Era of Big Data Are Analyzed. Finally, the Paper Puts Forward the Way of Modernization of Minority School Education under the Big Data, in Order to Provide Reference for Minority School Education.

1. Introduction

1.1 Literature Review

The birth and development of the concept of big data has always been concerned and studied by people all over the world. Many international leaders in China have also begun to pay close attention to big data and its development trend. From the 2007 CPC Central Conference, it can be seen that in order to achieve the goal of building a strong manufacturing country in China, it is necessary to strengthen the integration of real economy and Internet, big data and artificial intelligence, and to promote reality with big data. Implement the National Big Data Strategy. From this, we can see that big data has become one of the important factors to realize the strategy of China's powerful country (Yuan, 2010). For education, especially for minority education, we must not ignore the arrival of the era of big data, on the contrary, we should take a positive attitude to meet new opportunities and challenges. The development of big data provides a new possibility for the development of minority school education (Liu et al., 2012). Ethnic minority school education should not only actively meet the changes brought about by the data age, realize the data-based changes in curriculum, teachers'comprehensive quality and students' personalized development, but also take into account the particularity of ethnic minority school education and realize the new challenges brought by the big data age. Generally speaking, minority school education should not only pay attention to the opportunities brought by big data, but also reduce the negative effects brought by big data (Gu, 2017). In the process of educational practice in ethnic minority schools, the realization of talent cultivation goal must rely on big data technology, use diversified and quantified objective data results, and make constructive guidance to ethnic minority school education, curriculum and teachers on the basis of scientific data. In the process of running schools in ethnic minority schools, we should make full use of big data technology to promote students'learning of the latest social development and scientific dynamics, so that students' thoughts and behaviors can be integrated with the world in the process of understanding and mastering the frontier knowledge. In order to help students establish the correct three views, and then form the core quality of comprehensive talents needed in the new century (Ma, 2010). Due to the large and complex social environment of China's ethnic minorities, a unique geographic structure and different cultural customs have been formed. Under the background of big data, minority school education is facing many challenges and vitality. In order to carry out minority school education

smoothly, we must make full use of the advantages of big data to promote the current quality of minority school education.

1.2 Purpose of Research

As China enters the era of big data, people's knowledge system, life concept and thinking mode are greatly affected. In order to meet the development needs of the new era, it is an inevitable trend to reform and innovate in the field of education with the help of big data technology. At the same time, in the big data environment, it provides new possibilities for the modernization of minority education. Big data analysis can provide more scientific and reasonable basis for ethnic minority education policy, avoid experiential mistakes, realize the diversification and individualization of ethnic minority education, shorten the gap with mass education, and realize the real sense of diversified education in China. By means of big data, ethnic minority educators can obtain more educational resources, accurately connect with the mode of mass education, adjust the teaching mode at any time, constantly improve the quality and level of education in ethnic schools, and promote the modernization of ethnic minority education.

2. An Analysis of the Independence of Ethnic Minority School Education

Education is independent, which means that education has its own law of development and should not change at will with the influence of the external environment. The current research results show that one of the important reasons why the educational reform has not achieved good results is that teachers can not change their traditional educational concepts. Many scholars believe that education reform includes curriculum reform, which changes with the external objective environment, such as the impact of globalization, rapid economic development, including the arrival of the era of big data, education will be transformed, but this is not the inherent demand of education. It should be noted that the independence of education is relative, because education belongs to a “subsystem” of society, so it is inevitable that education will be influenced by society, such as politics, culture, economy and other aspects. Especially the arrival of the era of big data has a great impact on education, and the integration of big data into education is also the inevitable trend of education development (Lei, 2011).

As for the concept of big data, there is no uniform standard definition in academic research. Some scholars believe that the greatest feature of big data is to digitalize everything that has not been quantified in the world. Ethnic minority school education is an important part of education as a whole. Therefore, ethnic minority school education not only has the general characteristics of education, but also has a particularity, that is, it points to ethnic minorities. Some scholars have studied the education of minority schools by classification method, and concluded that the education of minority schools refers to the modern education of minority nationalities, most of which is an activity to promote the socialization of individual students in minority areas. From this study, we can see that the birth and development of minority school education depend on the social environment. The purpose of minority school education is to promote the socialization of individual students (Xu, 2016).

According to the relevant research and literature foundation, under the background of big data, ethnic minority school education refers to an activity of ethnic minority students transforming from individual to socialized in China. Socialization means that minority students must learn a new way of life and learning under the background of big data. Ethnic minority students need to absorb the social thoughts, concepts and behavioral accomplishments of the new century, and cultivate the core competencies required by the big data social environment, so as to meet the needs of today's social development (Wei et al., 2017).

3. Challenges Faced by Minority Schools in the Era of Big Data

With the development of economy, the arrival of the era of big data has brought many opportunities and challenges to the education industry, especially to the minority school education.

First of all, in the era of big data, people will look at problems with general thinking, related thinking, fault-tolerant thinking and intelligent thinking. When big data is analyzing something, it is not a small amount of local analysis, but all the data related to it. That is to say, it will not take samples, but will analyze it from the overall thinking. However, at present, the actual situation of minority school education requires that all teaching data of minority schools be collected, preserved, managed and analyzed in a short time, which is also one of the problems facing minority school education. Therefore, under the background of big data, it is a great challenge to improve minority school education rapidly. The Ministry of Education and the local government need to strengthen the investment in minority school education, so as to shorten the time of information construction of minority school education.

Secondly, large data contains abundant and complex huge data resources, which do not require high accuracy between data and have relatively mixed fault-tolerant thinking. In the era of big data, in the face of huge databases, we no longer blindly pursue accuracy, but allow a certain degree of error. Large amounts of unstructured data can be saved, managed and analyzed under the big data technology, and knowledge and experience can be obtained from the analysis results. Furthermore, it can make a clear contrast with the traditional precise thinking, at the same time, it puts forward higher requirements for researchers and forms a new challenge.

Thirdly, big data technology attaches great importance to the analysis of the relationship between data, ignoring the causes encountered in data analysis, that is to say, it does not care about “why”, but only pays attention to “what”. The implicit relationship behind things will be mined under the processing of big data technology, and it can get more rich knowledge and experience, so as to capture the present and predict the future. The era of big data emphasizes results, not the complex relationships behind things. Therefore, people are required to have relevant thinking, but because of the complexity of education, especially the ethnic minority school education pays attention to the relationship between students and society, teachers and society. Therefore, the minority school education not only emphasizes “what” but also “why”. Therefore, the big data has brought challenges to educators' thinking.

Finally, the development of big data era has promoted the development of artificial intelligence and robots. Scholars predict that in the near future, standardized education will depend on machine intelligence of large data systems. “Intelligence” and “wisdom” will become synonyms of the era of big data, which can improve the social computing ability and intelligence level of the system. The thinking requirement of the big data era can stimulate the education of minority schools and urge educators to innovate constantly. At the same time, it also brings challenges to their wisdom and intellectualization.

4. Modernization of Minority School Education under Big Data

4.1 Establishing the Idea of Modern Education

In order to keep up with the development of the big data era, minority school education needs to change the traditional educational concept. Minority schools should be aware of the advantages of big data and the inevitable trend of using big data in educational activities. Relevant education departments, schools and teachers should actively learn and understand the latest developments of Education under the background of big data, and promote the teaching development of minority school education in the era of big data from the ideological dimension. Starting from the actual situation and aiming at the special nature of minority areas, this paper scientifically orientates minority school education under the background of big data, and plans the future development process. With the development of big data technology, the current education of ethnic minority schools has been constantly transformed, thus promoting the continuous development of ethnic minority school education. Because different ethnic minorities have different development history and cultural customs, the process of running schools should be combined with local cultural characteristics. Combining big data with ethnic education and culture, we can really give full play to the advantages and opportunities of ethnic minority education in the era of big data. Under the

background of big data, the development of minority school education needs a long-term development process, which can not be achieved in a hurry.

4.2 Increase Investment in Education

If we want to develop education, we must have the guarantee of funds, especially for school teaching in minority areas. In recent years, the state and local governments have begun to increase investment in minority school education, but there are still some shortcomings. In order to realize the smooth development and continuous development of minority school education under the background of big data, relevant departments need to provide corresponding policy support to help minority schools establish special support funds for the development of big data education, while ensuring special funds. Financial support for big data education cannot be transferred to other areas. On the other hand, local governments of ethnic minorities need to establish and improve a sound education investment system to achieve the goal of preparing funds through multiple channels. In order to help the coordinated development of software and hardware equipment of ethnic minority schools, and provide comprehensive support for the development of education in ethnic minority schools.

4.3 Establishing Teachers Team with Strong Idea of Big Data

Teachers are the guides of educational activities in minority schools. The strength and weakness of teachers'big data concept will directly affect the modernization of minority school education. The current educational concept has obviously failed to keep up with the pace of social and technological development. Therefore, schools should recruit a group of skilled teachers who can use modern technology to promote the development of minority school education. These teachers should have modern teaching ideas and concepts, be able to skillfully use modern technology and equipment, and make full use of the advantages of big data. At the same time, we should provide modern technical training for teachers in schools, and encourage teachers to innovate constantly. In organizing training activities, we should pay attention to the combination of theory and practice, so as to increase the assessment of technical application for teachers appropriately, and then ensure the high efficiency of training.

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