

Analysis of value orientation and realization strategy of moral education in primary schools empowered by big data

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ABSTRACT

With the rapid development of big data technology, primary school moral education is facing new opportunities and challenges. With the empowerment of big data, schools can more accurately grasp the ideological trends of students, innovate the content and methods of moral education in primary schools, and improve the relevance and effectiveness of moral education. Big data-enabled moral education in primary schools also faces many practical dilemmas, such as the difficulty of data collection and the challenge of privacy protection, the technical limitations and insufficient training of educators, and the limitations of big data in achieving educational goals. In order to effectively deal with these challenges, it is necessary to improve the regulations and policies on data collection and use, establish a big data moral education system, improve the training mechanism for teachers' information literacy, and strengthen the ability to analyse and interpret big data in primary schools, so as to enable the schools to better play the role of big data technology in moral education, further enhance the modernization and intelligence level of moral education, and achieve the fundamental goal of moral education.

KEYWORDS

big data; moral education in primary schools; value orientation; realisation strategies

1 Introduction

Moral education is the soul of school education. It is committed to the cultivation of students' ideological and personality qualities, embodies the fundamental goal of school education, and is of great significance to the promotion of students' healthy growth. In the new era, the development of digital technology has brought new opportunities to improve the quality and efficiency of moral education in schools, and the integration of digital technology and moral education in schools has become an inevitable trend. Therefore, the school moral education should actively comply with the development trend of digital technology, make full use of digital technology to promote the quality development of moral education in schools.

2 The Value Orientation of Big Data Enabling Moral Education in Primary Schools

The application of big data technology in moral education in primary schools aims to strengthen talent cultivation and improve the quality of education. The empowerment of big data can help promote the concept of moral education in primary schools, innovate the way of moral education, enrich the content of moral education, and cultivate new talents who can take on the great responsibility of national rejuvenation^[1].

2.1 Update the concept of moral education

Traditional moral education in primary schools often relies on periodic surveys and one-way classroom lectures, making it difficult to capture the dynamic changes in students' thinking. The application of big data technology enables schools to more accurately analyse and understand the dynamics of students' thinking, and facilitates the updating of schools' moral education concepts. Through the analysis of students' daily behavioural data, primary school moral education workers can deeply understand students' ideological changes, interests and attitudes towards hot issues in society, and adjust the content of moral education in a timely manner, so as to make it closer to the real needs of students. At the same time, through the integration of multiple disciplines, primary school moral education workers can cultivate students' comprehensive literacy and critical thinking in their work, and help them to have a stronger ability to analyse and solve problems in the face of complex social issues. In conclusion, the application of big data technology provides a scientific basis and powerful technical support for primary schools to update the concept of moral education.

2.2 Innovative Moral Education Methods

Through big data analysis, primary school moral education workers can clearly understand students' learning habits, interests and ideological tendencies, so as to develop personalised moral education programmes for them. For example,

for students who are active and concerned about social hotspots, more challenging and interactive teaching content can be designed to guide them to deeper thinking and discussion; for students who need to consolidate basic knowledge, more systematic and basic learning materials can be provided to help them lay a good foundation for theoretical learning. Through the personalised teaching method, primary school moral education educators can provide more accurate and effective education services according to the individual differences of the students, truly tailored to the needs of the students, and improve the effect of moral education. In addition, primary school moral education educators can use the big data platform, real-time understanding of students' learning progress and changes in thinking, and timely adjustment of educational content and teaching methods according to the results of the analysis. Based on the learning management system of big data, primary school moral education educators can analyse students' learning trajectories, predict their possible confusion or learning difficulties, and provide relevant learning resources or counselling suggestions. In short, through the empowerment of big data, moral education in primary schools has achieved intelligent development, which not only enriches the means of education, but also improves the accuracy and personalisation of education^[2].

2.3 Enrichment of moral education resources

The application of big data technology has greatly enriched the moral education resources of primary schools, not only broadening the access to moral education resources, but also improving the effectiveness of moral education resources. Through big data analysis, primary school moral education educators can quickly collect and integrate high-quality resources from different fields and platforms, such as online courses, expert lectures, social practice cases and so on. Primary school moral education educators can use big data technology to filter out the network resources that are highly relevant to the content of education, and introduce them into educational practice to expand the depth and breadth of educational content. Big data technology can also help primary school moral education educators to discover social hotspots and academic cutting-edge topics that students are interested in, so as to enhance the realism and relevance of education.

Traditional moral education resources often have a long update cycle and lagging content, while the monitoring and analysis functions of big data greatly accelerate the update speed of moral education resources. Through the big data platform, primary school moral education workers can track social hotspots, policy changes and the latest theoretical research results, and quickly integrate this information into moral education, so that the content of education advances with the times. Big data technology can also reflect students' learning progress and understanding in real time, helping primary school moral education workers to dynamically adjust the supply of teaching resources. When students generally have difficulty in understanding a certain knowledge point, primary school moral education workers can immediately supplement the relevant resources, and targeted explanations and counselling. In short, through the empowerment of big data, schools can make moral education resources more flexible and efficient to serve the educational practice, and comprehensively improve the level and effectiveness of moral education^[3].

3 The Realistic Dilemma of Big Data Enabling Moral Education in Primary Schools

Under the background of the rapid development of big data technology, moral education in primary schools has gradually formed a data-driven model to improve the educational effect through accurate data analysis. However, there are still a lot of practical dilemmas in the process of big data-enabled moral education in primary schools.

3.1 Difficulties of Big Data Collection and Challenges of Data Privacy

In the process of big data empowering moral education in primary schools, data collection faces many challenges. Moral education in primary schools involves a variety of data, which are usually scattered in different management platforms and systems. The diversity and complexity of data sources increase the difficulty of data collection, and there is a huge technical challenge in integrating and analysing the data efficiently. On the one hand, there is the challenge of data quality and accuracy. Inappropriate collection methods or technological limitations may lead to incomplete and inaccurate data in some areas, thus affecting the validity of data analyses. On the other hand, there is the challenge of data privacy. When collecting students' personal data, how to ensure data security and privacy becomes an unavoidable issue. Students' data include sensitive information such as mental health status and social relationships. If these data are leaked or misused, it will not only infringe on students' privacy, but also lead to ethical issues and legal disputes. Currently, many schools still have insufficient measures to protect data privacy, and the lack of unified standards and effective regulatory mechanisms increases the risk of data leakage; at the same time, students' right to know and right to choose about privacy protection are often ignored during the data collection process, which further aggravates the data privacy problem.

3.2 Lack of technology and insufficient training for educators

The application of big data technology requires educators to have a certain degree of information technology literacy and technical skills, but many teachers still lack the ability in this regard. Traditional moral education in primary schools relies on face-to-face communication and theoretical teaching, while the introduction of big data technology requires educators to master data analysis, data mining and other skills. At the same time, many educators are limited by traditional teaching methods and their own subject knowledge, and they have insufficient reserves in the application of big data, making it difficult to effectively use big data technology to promote the modern development of moral education. In addition, the training of teachers in schools is also insufficient, some schools have not yet formed an organised training system for the application of big data, and teachers have insufficient motivation to systematically and theoretically learn the skills of applying big data, resulting in a lot of teachers not being able to adapt to the new situation and requirements of the era of big data, and it is difficult to make full use of the technology of big data to carry out effective educational interventions, thus restricting the effect of the application of big data technology in moral education.

3.3 Limitations of big data in achieving educational goals

The application of big data technology in moral education in primary schools often relies on the analysis and processing of a large amount of data to reveal the behavioural patterns and ideological tendencies of student groups. In the process of collecting and processing large amounts of data, it is necessary to distinguish between valuable information and noisy data. If educators are unable to filter and interpret data effectively, they may deviate from the educational goals due to data overload, leading to a decline in the effect of moral education. For example, Technological dependence may lead to a lack of humanistic care. Over-reliance on big data technology in the process of moral education can easily lead to the neglect of emotional communication and personalised guidance. The use of big data technology to develop moral education programmes may not take into account the differences in students' emotions and experiences, which may have a negative impact on the educational effect^[4].

4 The Path Choice of Big Data Enabling Moral Education in Primary Schools

Actively responding to the reality of the dilemma of big data-enabled moral education in primary schools is the key to promoting the intelligent and modern development of moral education. Schools should take the initiative to improve the collection and use of data in terms of policies and regulations, and actively strengthen the informatisation quality of teachers, so as to break the dilemma of big data in empowering primary schools to achieve the goal of moral education.

4.1 Improve the laws and regulations on data collection and use of the lake

In view of the data collection difficulties and privacy protection challenges in the process of big data-enabled moral education in primary schools, relevant laws and regulations should be formulated and improved to provide a clear legal framework for the collection, storage, analysis and sharing of data. Relevant laws and regulations should clearly specify the scope of data collection, use and processing methods to ensure that data operations are carried out within the scope permitted by law and to prevent data abuse. In the process of data collection and use, the principle of privacy protection must be strictly adhered to, and the rules of data sharing should be clarified to ensure that students' information will not be abused or leaked. The government should strengthen the supervision of the use of educational data, check the compliance of schools in the process of data collection and use, and seriously deal with violations. Improving the regulations and policies on data collection and use can not only provide legal protection for big data-enabled moral education, but also effectively reduce the potential risks in the process of data collection and use, and ensure that the application of big data technology in moral education is safer, more legal and more effective.

4.2 Improve the moral education system of big data technology

In the process of big data technology-enabled school moral education, schools not only introduce digital technology into the moral education process, but also to change the entire moral education model. To promote digital technology-enabled school moral education, schools should carry out systematic planning from top-level design, improve and optimise the relevant mechanisms, and promote the digital transformation of moral education in an orderly manner. Schools should stand at the overall height of the digital transformation of moral education, from the guiding ideology, basic principles, key tasks, implementation paths and other aspects of the overall planning, the construction of a perfect big data moral education system, to enhance the teaching, curriculum, and other aspects of the awareness of the data, to

promote the overall change of the moral education system.

4.3 Establish a mechanism for training teachers in information technology

In the face of the lack of skills and insufficient training of moral education educators in primary schools, schools should establish a systematic training system to provide targeted training content for moral education educators. The training content should cover the basic knowledge of big data, the use of data analysis tools, the application of educational technology, etc., to ensure that moral education educators can master the necessary skills of applying big data technology. The training content should be closely integrated with the actual needs of moral education to help moral educators effectively apply big data technology in educational practice. Schools should increase the investment in training for moral education educators, through a combination of online and offline ways to help moral education workers to continuously improve information technology literacy: pay attention to the continuity of the training, timely update the training content, so that moral education workers to adapt to technological advances and changes in educational needs: the establishment of incentives to participate in the training of moral education workers and the evaluation of titles, job promotion, etc., to motivate the moral education workers to take the initiative to learn and master the skills. Moral education workers take the initiative to learn and master big data technology. In short, through the establishment of a perfect training mechanism, we can help moral education workers to continuously improve their informatisation literacy, so as to better play the role of big data technology in moral education.

4.4 Strengthen the school's ability to analyse and interpret big data

In the face of the limitations of big data technology in the application of moral education, schools should take the initiative to strengthen the ability to analyse big data and deeply integrate big data with educational content. Schools can establish or introduce professional data analysis teams, so that they can use their professional knowledge to extract data related to moral education from the large amount of data about students, and strengthen their cooperation with the moral education team to jointly interpret the students' ideological tendencies reflected in the data. In addition, it is necessary to strengthen the humanistic care for students through the introduction of personalised teaching programmes, strengthening face-to-face communication, and taking the initiative to care for students' special experiences. In short, schools need to strengthen their ability to analyse and interpret data, and take effective measures to overcome the inherent limitations of big data technology.

5 Conclusion

The lack of informatisation literacy of primary school moral education workers restricts the in-depth application of big data technology in ideological and political education, while many moral education workers lack the necessary technical training to make full use of the advantages of big data for effective educational practice, resulting in unsatisfactory results of big data-enabled moral education. Therefore, primary schools and moral education teachers should not only make clear the importance of big data-enabled moral education, but also make clear the realistic dilemmas faced in the process of its implementation, adhere to the problem orientation, explore the new form of moral education in primary schools, and promote the intelligent development of moral education.

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