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Research on Ideological and Political Education and Precise Employment Services for Students Based on Big Data

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Abstract: With the rapid development of big data technology, its application in the field of education is becoming increasingly widespread. This paper aims to explore the research on ideological and political education by counselors and precise employment services for students based on big data. By analyzing the current application of big data in ideological and political education and student employment services, the paper proposes strategies for constructing a big data-based precise service system for counselors' ideological education and student employment services. The goal is to improve the targeted and effective nature of ideological education and promote high-quality employment for students.

Keywords: Big data; ideological and political education; student employment

Introduction

In today's information age, big data has become an important tool and medium for driving social progress and development. As a key base for talent cultivation, how universities can utilize big data technology to improve the quality and efficiency of counselors' ideological education and student employment services has become crucial. This paper first analyzes the current application of big data in counselors' ideological education and student employment services, introducing the necessity and feasibility of constructing a big data-based precise service system.

1. Application of Big Data Technology in Ideological and Political Education by Counselors

1.1 Analysis of Student Psychological Characteristics

Big data technology has opened new avenues for analyzing student psychological characteristics. In the past, counselors primarily relied on observation, communication, and students' self-reports to understand their psychological traits. Although these methods are intuitive and authentic, they are often influenced by subjective factors and limited by sample sizes, making it difficult to gain a comprehensive understanding of students' psychology. Now, by analyzing students'

behavioral data, academic data, and social interaction data, counselors can objectively understand students' psychological characteristics and behavioral patterns. Behavioral data refers to the quantification and recording of students' actions, such as the times they enter and exit classrooms, their performance in class, and participation in extracurricular activities. This data reflects students' activity preferences, behavior habits, and time management skills. Academic data includes information on students' academic performance, homework completion, and engagement with online learning platforms. It helps to reveal their academic levels, study habits, and learning interests. Social data refers to the quantification of students' posts and interactions on various social platforms and campus forums, reflecting their social styles, circles of interaction, and personal emotions. When analyzed using big data technology, these data sources can present a complete profile of student growth. Through understanding this profile, counselors can gain a comprehensive grasp of students' ideological trends and psychological needs. For example, if a student misses class or performs poorly, the counselor might infer that the student is struggling with low motivation or high academic stress. Similarly, for students with fluctuating grades or poor-quality assignments, the counselor might deduce that the student is either using ineffective learning methods or experiencing emotional instability. By analyzing and interpreting students' specific behaviors, counselors can then provide targeted guidance and theoretical support.

1.2 Design of Personalized Ideological and Political Education Programs

The analysis results based on big data can assist counselors in analyzing students' psychological characteristics and behavioral patterns, enabling them to design personalized ideological and political education for different students. Personalized education is the future educational model, which provides precise education based on the individual characteristics of students and tailors education according to their specific traits. For students with psychological confusion, counselors can use students' social interaction and behavioral data to identify the most likely psychological issues these students may face and offer professional psychological counseling and guidance. Counselors can also guide students to participate in relevant campus activities or join campus clubs based on their interests and social circles, helping to relieve psychological stress and address difficulties related to social skills. For students lacking motivation, counselors can analyze students' academic and behavioral data to pinpoint the most vulnerable areas in their learning, identify subjects they are interested in, and customize targeted motivational measures and learning plans[1]. For students who lack interest in a particular course, counselors can introduce real-world applications of the course or use more engaging teaching methods to spark the students' interest in learning. For students with poor time management skills, counselors can offer time management training and guidance to improve their learning efficiency. Additionally, big data analysis can help identify students who excel in specific skills. Counselors can use this information to identify and cultivate high-potential students with significant future development prospects. For instance, by analyzing students' works, participation in competitions, research projects, and other data, counselors can discover and extract talented individuals with innovative thinking and practical abilities, providing them with more opportunities and resources for development.

1.3 Evaluation of the Effectiveness of Ideological and Political Education

Big data technology can also be used to assess the effectiveness of ideological and political education. Traditional methods of measuring the effectiveness of ideological and political education, such as student self-assessments, counselor evaluations, and school exams, are limited in their ability to objectively reflect the essence of ideological and political education. The input data for big data technology consists of empirical data from ideological and political education, such as students' academic performance, behavioral indicators, and social interactions. These data can be used to measure the effectiveness of ideological and political education, thereby reflecting improvements in students' academic achievements, behavioral recognition, and emotional growth, including academic behaviors, social behaviors, and emotional behaviors. In terms of academic performance, for example, by tracking changes in students' grades in ideological

and political education courses as well as changes in their grades in other subjects, counselors can compare students' performance before and after ideological and political education. This helps to understand the impact of ideological and political education on changes in students' academic performance. In terms of behavioral performance, the level of students' engagement in ideological and political education activities, their performance, and their expression of differing opinions can serve as indicators of the effectiveness of this education. These factors reflect the extent to which students have accepted and are satisfied with the ideological and political education. Regarding social relationships, changes in students' social circles, improvements in interpersonal relationships, and emotional growth after ideological and political education can also be used to measure its effectiveness. These factors reflect the development of students' social and emotional behaviors[2]. For instance, if a group of students shows poor outcomes in ideological and political education, counselors can use data analysis results to identify the issues and adjust their educational strategies. For groups of students with positive outcomes, counselors can summarize the successful strategies and share them with other counselors to promote effective case studies. The evaluation mechanism enabled by big data helps counselors continually improve their ideological and political education strategies.

2. The Application of Big Data Technology in Providing Precision Employment Services for Students

2.1 Analysis of Students' Employment Intentions

In traditional student employment services, schools often rely on methods such as surveys and in-person communication to understand students' employment intentions and needs. However, due to the complexity and workload involved, these methods are often limited in providing a comprehensive and accurate understanding of students' true thoughts. Big data technology plays a crucial role in overcoming these challenges in employment services. By collecting and analyzing data related to students' majors, interests, career plans, and employment intentions, schools can use big data technology to gain a more timely, accurate, and comprehensive understanding of students' employment needs. The data sources required for this analysis may include the school's academic management system, student information management system, online surveys, and social media platforms. For example, schools can obtain information on students' academic backgrounds and abilities, such as their major grades and course preferences, from the academic management system; the student information management system can provide insights into students' internship experiences, social practices, and career readiness; online surveys can directly capture data on students' future career expectations and career plans; and social media platforms can reveal students' hobbies, interests, and social circles, which are useful for understanding their employment intentions. Based on this data, a student employment intention database can be established, creating detailed profiles for each student's employment needs. This allows for more targeted employment services, such as providing students with specific job information and recommendations. For example, students interested in the internet industry can be provided with job listings from related companies, industry trends, and career development paths. Meanwhile, students planning to pursue graduate studies or go abroad can receive various resources and guidance on these paths.

2.2 Employment Market Trend Forecasting

Furthermore, the employment market is constantly evolving, and accurately understanding market dynamics is a challenge that school employment services must address in order to provide effective employment advice and guidance to students. Big data technology plays a crucial role in analyzing employment market trends. By collecting and analyzing industry data, company data, macroeconomic data, and other relevant information, big data technology can offer a comprehensive understanding of employment market dynamics and trends. Industry data can provide insights into the development status of various industries, talent demands, and salary levels; company data can reveal information about recruiting companies and available job positions; macroeconomic data can reflect the overall economic situation, policy directions, and future growth trends. Based on this data, schools can predict the emerging industries, in-demand positions, and changing talent needs in the future

employment market, enabling them to quickly adjust their employment services and provide more relevant guidance to students in line with market requirements[3]. For example, if big data analysis reveals that a particular industry will experience rapid growth in the future, the school can strengthen collaboration with that industry and offer students more internship and job opportunities. If certain job positions are found to be in high demand, the school can guide students to pursue careers in those fields and provide relevant training and career development support.

2.3 Optimization of Employment Services

The application of big data technology extends beyond analyzing students' employment intentions and predicting job market trends; it can also be used to optimize employment service processes and content, enhancing both the efficiency and quality of employment services. On the one hand, universities can establish intelligent employment service platforms to deliver precise job information and personalized recommendations. These intelligent platforms can automatically filter and push job information and position recommendations that match students' conditions based on their employment intentions and needs. Additionally, the platform can leverage big data technology for intelligent matching, aligning students' resumes and job preferences with the recruitment needs and position requirements of companies, thus increasing the success rate and satisfaction of job matching. On the other hand, universities can strengthen their collaboration and communication with enterprises to provide students with more diverse internship and employment opportunities. Through big data technology, universities can gain insight into companies' recruitment plans and talent requirements, ensuring timely dissemination of recruitment information to students[4]. At the same time, universities can jointly undertake internship training, school-enterprise cooperation, and other projects with companies to offer students more practical opportunities and career development space. Furthermore, universities can use big data technology to assess the credibility and development prospects of companies, ensuring the safety and reliability of students' internships and employment opportunities.

3. Strategies for Building Counselor Ideological Education and Student Employment Precision Service System Based on Big Data

3.1 Strengthening Big Data Talent Development and Team Building

Universities should place high importance on the cultivation and recruitment of big data talent, making the development and enhancement of counselors' big data literacy a key component of counselor team building. On the one hand, universities should organize relevant training, such as big data analysis, data mining, and host competitions on big data analysis skills, to continuously improve counselors' ability and proficiency in using big data. On the other hand, universities should also focus on recruiting professionals with a background in big data to strengthen the counselor team, providing a talent guarantee for building a precise service system based on big data. Furthermore, counselors should be encouraged to actively engage in big data-related research and project practice to continually enhance their big data literacy and innovative capabilities.

3.2 Constructing Big Data Platforms and Information Systems

Universities should establish unified big data platforms and information systems to achieve centralized management and sharing of student information. A unified platform should be created to manage student data resources, including academic records, grades, scholarships, and employment management, forming a complete unified student information database. Counselors can use data analysis tools to easily access comprehensive student information, providing data support for ideological education and student employment services. Universities must ensure data security and privacy protection, establishing rules and regulations for data usage to guarantee the legal and compliant use of student information and prevent violations of student privacy.

3.3 Promoting the Deep Integration of Ideological Education and Employment Services

It is important to actively encourage the integration and interaction of ideological education and employment services. Ideological education should be embedded throughout the student employment service process,

applying methods and strategies of ideological education to student employment services. Through ideological education, students should be guided to establish correct career and employment views, while cultivating professional qualities and comprehensive abilities to make them talents suitable for market demands. Employment services should be regarded as an important practical teaching segment of ideological education. By utilizing internships, career planning, recruitment negotiations, and other employment service activities, students will gain a better understanding of society, increase their social responsibility, and strengthen their sense of mission.

3.4 Implementing Personalized and Precise Service Strategies

Universities can leverage the advantages of big data technology to implement personalized and precise service strategies. By using big data analysis technology, universities can understand students' interests, academic strengths, career plans, and other needs and expectations, providing tailored educational services and employment guidance. Special attention and support should be given to vulnerable groups, such as economically disadvantaged students or students with disabilities, ensuring that every student receives sufficient attention and assistance. This personalized and precise service approach will improve the targeting and effectiveness of education, promote students' overall development.

Conclusion

The construction of a counselor ideological education and student employment precision service system based on big data is one of the important ways to enhance ideological education and employment services. The implementation of measures such as strengthening big data talent development and team building, constructing big data platforms and information systems, promoting the integration of ideological education and employment services, and enhancing personalized and precise service strategies, can further improve the targeting and effectiveness of ideological education and facilitate high-quality employment for students. With the continuous development and expanding applications of big data technology, the precision service system based on big data will play an even more significant role in ideological education and employment services in universities.

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