

Research on the Path of Recommendation Algorithm Empowering Ideological and Political Education in Colleges and Universities

Di Meng, Shangli Wei

Shanghai University of Political Science and Law, Shanghai 11835, China

Abstract: *In the era of artificial intelligence, recommendation algorithms have reconstructed the network information dissemination environment and have had a huge impact on the ideological and political education of colleges and universities. As an important technology for information distribution and personalized services, recommendation algorithms can accurately identify the ideological characteristics and personalized needs of the subjects of ideological and political education in colleges and universities, improve the pertinence, effectiveness and coordination of educational activities, and well empower the ideological and political education of colleges and universities. This paper first summarizes the concept and characteristics of recommendation algorithms, then examines the opportunities for recommendation algorithms to empower ideological and political education in colleges and universities; then studies the dilemma of recommendation algorithms in empowering ideological and political education in colleges and universities; finally, the empowerment path is explored, in order to provide theoretical support and practical reference for the high-quality development of ideological and political education in colleges and universities.*

Keywords: Recommendation Algorithm, Ideological and Political Education in Colleges and Universities, Empowerment, Path.

1. Concepts and Characteristics of Recommendation Algorithms

1.1 The Concept of Recommendation Algorithm

Recommendation algorithm is an emerging technology that can extract network information and match and push user preference information [1]. Recommendation algorithms mainly include content-based, collaborative filtering-based, and hybrid recommendation algorithms. Content-based recommendation algorithms mainly make recommendations based on users' past behavioral preferences and item content characteristics. The recommendation algorithm based on collaborative filtering is mainly divided into user-based collaborative filtering and item-based collaborative filtering. The core basis of its recommendation is the similarity of users and the similarity of items. A hybrid recommendation algorithm refers to an algorithm that combines two or more recommendation algorithms for recommendation. The hybrid algorithm can complement each other and make up for the shortcomings of a single recommendation algorithm.

1.2 Characteristics of Recommendation Algorithms

As an important part of modern information processing technology, recommendation algorithms have demonstrated significant characteristics such as accuracy, personalization and timeliness in the process of processing massive data.

First, accuracy. The accuracy of a recommendation algorithm refers to the degree of match between the items recommended by the algorithm and the actual needs of the user. The recommendation algorithm needs to accurately identify the content that the user may be interested in from the massive amount of data on the Internet and accurately push it to him. The more accurate the push is and the more it meets the actual needs of the user, the higher the accuracy of the

recommendation algorithm. The recommendation algorithm will be calculated based on the user's historical behavior, user portrait, and item features. As the user's historical search and browsing behavior on the Internet increases and the user portrait becomes clearer, the accuracy of the recommendation algorithm will increase, and people will find it easier to obtain information that interests them, and will become more and more dependent on platforms that recommend accurate information.

Second, personalization. In an era of rapid development of information and communication technology, the amount of data generated every day is growing exponentially. How can users find what they need among the vast amount of information? This is a question that everyone is concerned about. The personalization of the recommendation algorithm is reflected in the fact that the recommended content received by each user is customized based on the analysis of their browsing history, search history, stay time and other data. On the same platform, different users see different recommendation lists. The personalization of the recommendation algorithm can meet the personalized needs of users to the greatest extent, making it easier for users to find content that interests them.

Third, timeliness. The recommendation algorithm can adjust the recommended content in a timely manner according to the user's latest behavior and the update status of the item, and can make recommendations efficiently and accurately, improving the user's usage efficiency and experience. The recommendation algorithm has a high computing speed and response speed, and can respond to the user's search needs in real time. The recommendation algorithm can quickly process multivariate data and provide the most timely and valuable information according to the user's needs, making the recommended content more in line with the user's current needs.

2. Review of the Opportunities of Recommendation Algorithms to Empower Ideological and Political Education in Colleges and Universities

In recent years, General Secretary Xi Jinping has repeatedly emphasized in many meetings that improving the pertinence, attractiveness and effectiveness of ideological and political courses is the top priority of the reform and innovation of ideological and political education in colleges and universities. "As a new 'technical object' that integrates artificial intelligence and big data, algorithm recommendation realizes the segmented, precise and efficient matching between information and people [2]." The application of recommendation algorithms in the process of ideological and political education in colleges and universities can improve the pertinence, effectiveness and coordination of ideological and political education in colleges and universities.

2.1 Recommendation Algorithm Improves the Pertinence of Ideological and Political Education in Colleges and Universities

Recommendation algorithms accurately identify education targets. Recommendation algorithms collect users' online behavior data, organize and analyze the data using algorithms, and accurately identify users. In the application of recommendation algorithms in ideological and political education in colleges and universities, it can achieve a "precise portrait" of the education target and accurately identify the ideological situation and behavioral characteristics of the education target. In addition, recommendation algorithms can also identify and analyze the personalized needs and development needs of education targets, and improve the pertinence of ideological and political education in colleges and universities.

Recommendation algorithms provide educators with accurate feedback. Recommendation algorithms can provide educators with accurate feedback on the basic situation of education objects, helping educators to accurately grasp the ideological, psychological and behavioral conditions of education objects, and then accurately provide the content required by education objects. Recommendation algorithms can provide periodic feedback on the needs of education objects. Recommendation algorithms can set a certain cycle, summarize the needs of education objects within the cycle, and make periodic evaluations of education objects. Educators can adjust the ideological and political education activities of the next cycle based on the current status of education objects in this cycle, or compare the current status of multiple cycles and multiple stages to set the next ideological and political education activities from the perspective of long-term cultivation. Recommendation algorithms can provide accurate feedback on the impact of ideological and political education in colleges and universities, helping college educators to timely adjust ideological and political education activities in colleges and universities. Recommendation algorithms can help educators capture and analyze feedback information, help adjust education plans and education content as well as the implementation of education processes, and thus improve the pertinence and accuracy of ideological and political education

in colleges and universities.

Recommendation algorithms can accurately provide educational content. Recommendation algorithms can achieve accurate personalized recommendations and improve the personalization of ideological and political education content in colleges and universities. In the era of artificial intelligence, the role of data and algorithms in the production and dissemination of ideological and political education content in colleges and universities continues to be highlighted. Recommendation algorithms determine to a certain extent what content will be disseminated. Personalized educational content recommended by algorithm technology can effectively resolve the mismatch between the supply and demand of ideological and political education content in colleges and universities, and "realize the shift from 'one size fits all' to 'self-portrait'" [3]. It accurately provides ideological and political education content according to the personalized needs of the education objects, and continuously adjusts and optimizes the content supply according to the changing personalized needs of the education objects. Recommendation algorithms can accurately provide the content required by the education subjects. From the perspective of the ideological and political education objects in colleges and universities, recommendation algorithms can accurately provide the content they need. From the perspective of ideological and political educators in colleges and universities, recommendation algorithms can accurately provide the content they need to launch, organize and promote ideological and political education activities.

2.2 Improving the Effectiveness of Ideological and Political Education in Colleges and Universities

The recommendation algorithm efficiently meets the needs of education objects. The recommendation algorithm can realize the efficient supply of learning resources and improve the convenience of learning for education objects. In the massive amount of information, the algorithm can quickly identify the high-quality ideological and political education content required by the education objects and recommend it to the education objects. This not only saves the time of education objects to select the required information from the vast data information, but also ensures the high degree of adaptation between information supply and demand, and improves the effect of ideological and political education. The ubiquitous nature of the application of recommendation algorithms can efficiently meet the needs of education objects for ubiquitous learning scenarios and efficiently expand the time of ideological and political education in colleges and universities. The recommendation algorithm can recommend ideological and political education content based on the historical learning records or learning progress of the education objects and the current mood and willingness without being restricted by space. It can meet the learning needs of education objects in real time at any location and improve the timeliness of ideological and political education in colleges and universities.

The recommendation algorithm effectively helps educators teach. The recommendation algorithm effectively helps educators organize educational activities, assists college educators in selecting educational content, and assists

educators in summarizing and evaluating educational activities and making timely adjustments. The recommendation algorithm can give the greatest attention to the education objects, respect the subjectivity of the education objects, greatly increase the learning enthusiasm and participation of the education objects, and further improve the high-quality operation of the ideological and political education process in colleges and universities. The recommendation algorithm effectively helps educators to resolve doubts and confusions, and helps college ideological and political educators to use the Marxist standpoint, viewpoint and method to solve the doubts and confusions in the education objects' thoughts, and helps college ideological and political educators to guide the education objects to understand social phenomena and problems with correct thinking methods.

Recommendation algorithms promote the dissemination of educational content in colleges and universities. Recommendation algorithms use the Internet as a carrier to promote the efficient dissemination of ideological and political education content in colleges and universities. The Internet is also an important carrier of ideological and political education in colleges and universities. With the development of the Internet, the huge amount of data generated every day has brought information overload to ideological and political educators and education objects. Recommendation algorithms can efficiently and accurately connect educators and educated people, so that both parties can quickly establish contact and efficiently carry out ideological and political education activities on the Internet. Recommendation algorithms can achieve real-time updates and continuously enhance the timeliness of ideological and political education content. The content of ideological and political education is constantly enriched and expanded with the innovative development of ideological and political education theory and practice, which also requires real-time updates to spread the latest theories and policies. Recommendation algorithms can achieve real-time updates of ideological and political education content with algorithm technology, and push ideological and political education content to educators and education objects in real time.

2.3 Promoting the Coordination of Ideological and Political Education in Colleges and Universities

The recommendation algorithm promotes the synergy of educational content. The recommendation algorithm integrates online educational content and promotes sharing and synergy by sharing online classic works resource databases, online party history education resources, and online excellent traditional Chinese culture. The recommendation algorithm coordinates online and offline resources, offline college ideological and political theory courses and online theoretical resource databases, offline red education bases and online party history education resources, as well as offline intangible cultural heritage inheritance and online excellent traditional Chinese culture resources, to promote effectiveness and synergy.

Recommendation algorithms promote the collaboration of educators. Recommendation algorithms can achieve the collaborative use of educational information resources among

educators. The use of recommendation algorithms can improve the efficiency of information resource use, so that educators can effectively avoid repeated investment in relatively complete educational resources, improve the overall effectiveness of educational resources, and enable educators to pay more attention to areas where educational resources are relatively scarce, and then further research and promote the improvement of educational resources in a collaborative manner. Recommendation algorithms help educators work together, promote educators to collaboratively improve their self-cultivation, and promote educators to collaboratively deal with contradictions and emergencies in the process of ideological and political education. Educators are faced with various contradictions and emergencies in the complex and dynamic ideological and political education process. In the traditional ideological and political education model, educators can only rely on their own strength or seek help from other educators around them to solve contradictions and emergencies together, but this situation often has great limitations. Recommendation algorithms can collaborate with educators to share successful experiences, encourage and affirm each other, further enhance educators' confidence and cohesion, and jointly deal with difficulties and setbacks in the process of ideological and political education in colleges and universities. Recommendation algorithms promote the collaboration of education objects. Recommendation algorithms can increase collaborative learning among education objects and promote common progress. Recommendation algorithms can help education objects create a good ideological and political education environment.

3. The Dilemma of Recommendation Algorithms Empowering Ideological and Political Education in Colleges and Universities

Recommendation algorithms are widely used in e-commerce, news dissemination, and music streaming, but they were applied relatively late in the field of ideological and political education in colleges and universities. In addition, the technical requirements for the operation and application of recommendation algorithms are relatively high, while the capabilities of the ideological and political education subjects in colleges and universities are limited. Therefore, the application of recommendation algorithms in ideological and political education in colleges and universities is full of difficulties.

3.1 The Recommendation Algorithm is Not Fully Integrated with the Ideological and Political Education of Colleges and Universities

The goal orientation of recommendation algorithms and ideological and political education in colleges and universities is inconsistent. The goal of ideological and political education in colleges and universities is to cultivate socialist builders and successors with all-round development of morality, intelligence, physical fitness, aesthetics and labor for the society. The goal of recommendation algorithms is often mainly pursued with commercial interests, and is committed to meeting the personalized needs of users to improve user participation, click-through rate and consumption frequency,

in order to create more economic value for platforms and enterprises. The goal of recommendation algorithms and ideological and political education in colleges and universities is inconsistent, which has brought certain obstacles to the empowerment of ideological and political education in colleges and universities by recommendation algorithms. The goal of ideological and political education plays a guiding role in the process of ideological and political education. Only by correctly grasping the goal of ideological and political education can the pertinence and effectiveness of ideological and political education be enhanced. This requires that in the process of empowering ideological and political education in colleges and universities with recommendation algorithms, it is necessary to ensure that the application goals of recommendation algorithms are consistent with the goals of ideological and political education in colleges and universities, and to promote the development of ideological and political education in colleges and universities.

The integration of recommendation algorithms and ideological and political education in colleges and universities is not deep enough. As a digital technology, how to give full play to the technical advantages of recommendation algorithms in the process of ideological and political education in colleges and universities is a problem that must be considered when integrating the two. At present, the academic community has not formed a systematic understanding of this issue and lacks research on the integration mechanism. Limited by professional knowledge, ideological and political educators in colleges and universities lack algorithmic literacy, weak relevant basic knowledge, and lack in-depth research on the integration of algorithmic thinking and ideological and political education. At present, some colleges and universities have applied recommendation algorithms in daily management. For example, the course selection system of colleges and universities will recommend courses suitable for students based on their majors and previous course selection preferences; the book recommendation system of university libraries analyzes students' reading preferences based on their borrowing history, browsing records, etc. to recommend books. The practice of these recommendation algorithms in colleges and universities proves that colleges and universities have reached a certain level of understanding of recommendation algorithms, but it is still necessary to promote in-depth development, improve the depth of application and research, and effectively promote and deepen the integration of recommendation algorithms and ideological and political education in colleges and universities.

3.2 There is a Contradiction between the Recommendation Algorithm Recommendation Mechanism and the Ideological and Political Education Content Supply Mechanism of Colleges and Universities

In the information age, in order to be able to pick out information data that can quickly attract users' attention from tens of thousands of data, recommendation algorithms on various platforms often choose personalized recommendation methods, and make precise, differentiated and personalized recommendations based on the user's personal portrait. Such a recommendation mechanism will make users surrounded by homogeneous information, and the so-called "heterogeneous"

information will be excluded from the recommended candidate list, which will narrow the scope of personal information acquisition. Over time, users will be trapped in a closed information cocoon, resulting in an "information cocoon" effect. This is completely different from the supply of ideological and political education content in colleges and universities, which makes there an irreconcilable contradiction between the recommendation mechanism and the content supply mechanism.

The supply of ideological and political education content in colleges and universities is not compatible with the recommendation mechanism of the recommendation algorithm, which limits the dissemination of this content. The content of ideological and political education has a strong ideological nature, a clear purpose, and a strong political color. [4] This natural characteristic makes the educated feel a certain sense of alienation and distance from the content of ideological and political education. When the content of ideological and political education in colleges and universities is digitized and disseminated in cyberspace, the recommendation mechanism of the recommendation algorithm can easily classify it as "heterogeneous" information that users are not interested in. In the application process of ideological and political education in colleges and universities, the recommendation algorithm has higher requirements for the integration of political content and life content of ideological and political education. This requires college ideological and political educators to connect political content with the lives of the educated, so that it is closer to reality, life, and the educated; it also has higher requirements for the combination of holistic and global educational content with daily and specific micro-education content. This requires college ideological and political educators to use holistic and global educational content to provide direction for ideological and political education, and then refine the goals and use daily and specific micro-education content to achieve the goals.

3.3 The Contradiction between Recommendation Algorithms and the Privacy Security of Ideological and Political Education Subjects in Colleges and Universities

The data collection of recommendation algorithms threatens the privacy and security of the educated. In the application of recommendation algorithms, data collection and user information privacy security have always been an important topic. Recommendation algorithms often use direct data collection, third-party data collection, data crawling and grabbing, user-provided data and sensor data collection to collect user behavior data, attribute data, content data, social and group data. Although the current country has formulated relevant laws and regulations to protect user information privacy, there are still problems such as excessive data collection, personalized recommendations without consent, and opaque data use in the actual data collection process, which pose a great threat to user privacy security. In the process of ideological and political education in colleges and universities, understanding the ideological status and actual needs of the educated is an important way to improve the effectiveness and pertinence of ideological and political education, but excessive data collection also threatens the information security of the educated. Recommendation algorithms analyze and understand the learning situation,

ideological state and behavioral tendencies of the educated through real-time and accurate data collection, but the degree of data collection is difficult to define and grasp. In order to ensure the adequacy of collected data, there is often a situation of excessive data collection, resulting in the problem of infringing the privacy of the educated.

The data security of recommendation algorithms affects the privacy security of the educated. While providing personalized services, recommendation systems involve a large amount of user personal data, behavior data, and preference data. The collection, storage, and use of these data will bring certain data security risks. Therefore, ensuring the data security in the recommendation algorithm is the top priority of the recommendation algorithm application. At present, in order to ensure the data security in the recommendation algorithm, the platform generally adopts measures such as data encryption, data de-identification and anonymization, differential privacy, data access control, and authority management. Despite this, there are still data security risks in the process of data transmission and storage. The data of ideological and political education in colleges and universities mainly includes the content of ideological and political education, the relevant data of the subject of ideological and political education, etc. These data are extremely important, so their data security issues are more valued by people. If the data security of the recommendation algorithm cannot be guaranteed, it will pose a great threat to the privacy security of the educated.

4. Research on the Path of Recommendation Algorithm Empowering Ideological and Political Education in Colleges and Universities

4.1 Strengthen the Integration of Recommendation Algorithm Mechanism and the Construction Mechanism of Ideological and Political Education Team in Colleges and Universities

Strengthening the integration of recommendation algorithm mechanism and the construction mechanism of ideological and political education team in colleges and universities should be carried out from two aspects: strengthening the integration with recommendation algorithm mechanism in the construction plan of ideological and political education team in colleges and universities, and improving the collaborative education function of recommendation algorithm and ideological and political education team. Ideological and political educators in colleges and universities in the new era not only carry the professional mission of spreading knowledge, spreading ideas, and spreading truth, but also shoulder the important task of shaping souls, shaping lives, and shaping new people. To promote the empowerment of ideological and political education in colleges and universities, the first priority is to build a team of high-quality and high-level ideological and political education teachers in colleges and universities. Build a team system led by the party committee of colleges and universities, supported by various functional departments of the school, and with educators as the main body. The party committee of colleges and universities should lead and coordinate all elements, fields,

and processes of recommendation algorithm empowerment, and grasp the key and difficult issues of recommendation algorithm empowerment of ideological and political education in colleges and universities in strategic decision-making.

To enhance the collaborative education function of recommendation algorithms and ideological and political education teams, we must first collaborate with humans and machines to educate people, insist that technology empowerment should serve the ideological and political education of colleges and universities, strengthen the close cooperation between recommendation algorithms and humans in special tasks or fields, and coordinate the advantages of all parties to more effectively solve the problems in the ideological and political education process of colleges and universities and efficiently complete the tasks of ideological and political education in colleges and universities. Secondly, all staff should collaborate in educating people. Recommendation algorithms can provide a communication platform for multiple parties, connect the three major subjects of family, school, and society, and promote interactive exchanges among multiple subjects; recommendation algorithms should make good use of the social classroom to better realize “bringing in” and “going out” and realize collaborative education among multiple parties.

4.2 Strengthening Recommendation Algorithms to Empower the Upgrading of Ideological and Political Education Content in Colleges and Universities

Under the empowerment of recommendation algorithms, ideological and political education in colleges and universities should take the lead in adjusting the concept of content supply to adapt to the needs of educational development in the new era. First, ideological and political education in colleges and universities should adjust the concept of content supply under the empowerment of recommendation algorithms, and should change from “knowledge indoctrination as the main focus” to “capacity training as the priority”. With the development of technology and the advancement of digital education, it has become easier for education subjects to acquire knowledge, so the focus of ideological and political education in colleges and universities should be shifted to the cultivation of education subjects’ abilities. Ideological and political educators in colleges and universities should establish the concept of taking ability training as the core task. They should focus on improving the ability and quality of education subjects to master recommendation algorithms and promote the integration of recommendation algorithms and the ideological and political teaching process in colleges and universities. Secondly, recommendation algorithms should empower ideological and political education in colleges and universities to strengthen the actual needs of content supply. “Modern education must be data-driven, not purely empirical practice” [5]. Ideological and political education in colleges and universities should firmly grasp the development opportunities of the rapid development of digital technology and the transformation of education. Correctly use recommendation algorithms to empower ideological and political education, correctly respond to actual needs, and properly handle the relationship between historical experience and actual needs. The content supply of recommendation

algorithms should inherit and carry forward the rich theoretical and practical experience accumulated in the past, and should also gradually focus on responding to actual needs. Use artificial intelligence technology to help ideological and political education capture hot spots, discover and analyze problems in a timely manner, and optimize the content of ideological and political education in real time based on problems and actual needs. Facing the actual needs of the new era, use digital technology to build a new system of ideological and political education in colleges and universities. Recommendation algorithm empowerment should keep pace with the times and create new theories, new content, and new methods that meet the characteristics and requirements of the development of ideological and political education in the new era, to ensure that ideological and political education always stands at the forefront of the development of the times and is more vital and appealing.

To strengthen the recommendation algorithm to empower the ideological and political education content of colleges and universities, effective measures must be taken in content construction to improve the quality and production efficiency of educational content. First, construct the knowledge graph of ideological and political education in colleges and universities. Constructing the knowledge graph of ideological and political education is an important task with both academic value and social benefits. It is supported by the core theories in the field of ideological and political education and driven by big data and artificial intelligence technology. It aims to integrate high-quality ideological and political education resources across the country and form a structured and hierarchical knowledge network. The recommendation algorithm can achieve this goal. Secondly, update the content of ideological and political education in colleges and universities in a timely manner. The content of ideological and political education in colleges and universities is constantly enriched and expanded with the innovative development of ideological and political education theory and practice. Therefore, the optimization of ideological and political education content in colleges and universities is inseparable from the timely update of content. The recommendation algorithm quickly responds to changes in social hot spots and current political affairs, and pushes relevant educational content in real time to achieve timely updates of ideological and political education content in colleges and universities. Ideological and political education in colleges and universities needs to keep up with the pace of the times to ensure that the education objects can understand the current social dynamics and national policies. The recommendation algorithm can capture and integrate relevant information in a timely manner by monitoring multiple data sources such as news, social media and academic journals. When major events or policy adjustments of social concern occur, recommendation algorithms can quickly update educational content, help students understand and analyze the background of events, policy significance, and theoretical connections, and ensure that the content of ideological and political education in colleges and universities always keeps pace with the times. Finally, the quality and production efficiency of the optimization of ideological and political education content in colleges and universities are improved. Recommendation algorithms promote the optimization and reproduction of ideological and political education content in

colleges and universities, and improve the quality and production efficiency of ideological and political education content in colleges and universities. With the development of big data analysis, deep learning, and artificial intelligence technology, recommendation algorithms can quickly process large amounts of information, and can timely understand the needs of education objects based on feedback functions, push the needs to educators, and push relevant information resources to educators to help them update and reproduce content in a timely manner.

4.3 Creating a Safe Environment Empowered by Recommendation Algorithms

Strengthening the security integration of recommendation algorithm technology in college ideological and political education is not only an inevitable requirement for educational innovation, but also an important measure to ensure the security of educational information. From the perspective of instrumental rationality, recommendation algorithms can help enhance the pertinence and effectiveness of college ideological and political education, and promote the reform and innovation of college ideological and political education. However, recommendation algorithms need to collect a large amount of user information and activity records during operation, which may lead to disordered data collection and excessive use, thereby threatening the data security of users. Therefore, it is necessary to strengthen the security research and development of recommendation algorithms. The application of recommendation algorithms to college ideological and political education is a process. Therefore, it is necessary not only to strengthen the security research and development of recommendation algorithms, but also to insist on continuous updating and improvement of algorithms. In this process, it is necessary to strengthen the communication, interaction and feedback between college ideological and political educators and algorithm engineers. By strengthening the communication and interaction between educators and algorithm engineers, college ideological and political educators can put forward corresponding update and upgrade requirements based on their own needs and usage experience. Algorithm engineers can provide basic algorithm knowledge and operation technology guidance to college ideological and political educators, promote algorithm development, algorithm upgrade and update, and algorithm improvement, and work together to enhance the effectiveness of recommendation algorithms in empowering college ideological and political education. At the level of value rationality, ideological and political education has established the correct goal orientation and value criteria for the recommendation algorithm. To make the recommendation algorithm fully and reasonably used in ideological and political education, we must always adhere to the application of the recommendation algorithm around the goal of ideological and political education. When analyzing, predicting and pushing data on the subjects of ideological and political education in colleges and universities, we must adhere to the correct direction and follow the laws of ideological and political education development. In the process of empowering ideological and political education in colleges and universities with recommendation algorithms, we should use algorithm technology to timely push the latest theoretical achievements of the sinicization of Marxism to the

education subjects, enhance the timeliness and effectiveness of theoretical learning, and play the leading role of ideological and political education.

At the same time, improving the privacy and security system mechanism for empowerment is the core foundation for ensuring the healthy development of recommendation algorithms. Laws and regulations are the core foundation for ensuring the healthy development and efficient empowerment of recommendation algorithms. In recent years, China has continued to promote the introduction and improvement of laws and regulations related to algorithm governance, providing strong institutional support for algorithm applications. In the process of recommendation algorithms empowering ideological and political education in colleges and universities, it is necessary to strengthen the guidance of technology for good from the legal level and prevent the possible risk of information leakage of education objects. Algorithms, as rules for information push by software and various platforms, are highly concealed. For a long time, the business model of algorithm recommendation services has lacked transparency, so it is necessary to strengthen legislation to ensure the transparency and explainability of algorithm recommendations so that user privacy and security are guaranteed.

References

- [1] Jiang Junming. Challenges and countermeasures of mainstream ideology dissemination under the influence of recommendation algorithms[J]. Journal of Marxism Studies, 2024, (03): 143-154+156.
- [2] Xue Yonglong, Wu Xueqin. Power transfer and value guidance in the field of algorithm recommendation[J]. Studies on Socialism with Chinese Characteristics, 2022, No.1 66(04):95-102.
- [3] Lv Zhimin. The value, risks and responses of artificial intelligence empowering precise ideological and political education[J]. Research on Socialist Core Values, 2023(6):34-42.
- [4] Editorial Group of Principles of Ideological and Political Education. Principles of Ideological and Political Education[M]. Beijing: Higher Education Press, 2018.
- [5] Wu Rongjin. "Cloud Classroom" Enhanced Education Model: Precision Teaching Driven by Data[J]. People's Education, 2022, (7).