

Application of Artificial Intelligence Model in the Teaching Curriculum of Civic and Political Education Integrating Red Culture

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Abstract. As an emerging technology, artificial intelligence, with its dynamic data collection, accurate portrait drawing, intelligent information pushing and virtualized scene construction, provides an opportunity to promote the precision of ideological and political education and realize the personalized development of students. This paper takes red culture as the guide, takes contemporary students as the research object, and constructs the precise ideological and political education mode of colleges in the era of artificial intelligence. By defining the concepts of artificial intelligence and precise ideology and politics, clarifying the elemental composition of artificial intelligence technology and precise ideology and politics, further explaining the characteristics and significance of precise ideology and politics in the era of artificial intelligence, and providing direction guidance for technological empowerment. Finally, through the empirical research, it is found that 65.48% of students believe that the precise civic politics wisdom classroom teaching mode can effectively make up for the traditional civic politics teaching problems, so this study believes that AI technology injects technological vitality into the ideological and political wisdom classroom, and is able to realize the depth of fusion on the basis of modern science and technology. It is expected that this study will provide lessons and references for further research and development of smart classroom teaching design in the future, as well as provide a theoretical basis for ideological and political education work.

1. Introduction

Against the background of rapid development and changing times, the urgency and importance of the Civic and Political Education in colleges and universities have become more and more prominent. The new era requires that Civic and Political Education closely follows the development of the country and cultivates high-quality talents with faith, innovation and responsibility. However, in the face of the complex social environment, students' diversified ideological concepts, value fragmentation and other challenges make the ideological education need to be innovative and sublimation, therefore, it is particularly urgent to integrate the red culture into the ideological education [1, 2]. As the crystallization of revolutionary history and revolutionary spirit, red culture not only witnesses history, but also enlightens the present. The goal of Civic and political education in the new era is to cultivate students' firm beliefs, correct values and

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practical ability. In the process of realizing this goal, red culture becomes a powerful aid [3, 4]. We need to find a suitable and feasible path of ideological education for the times, deeply integrating the red culture and cultivating the integration of ideological education, which not only helps to inherit the heroic spirit of the revolutionary martyrs, but also can unite the national consensus of all teachers and students [5, 6]. Currently artificial intelligence technology has been widely used in the field of red culture, whether it is the use of VR, AR technology in the revolutionary venues, or party history stories, revolutionary characters in different media platforms to recommend the dissemination of artificial intelligence technology has shown a unique advantage in the field of red cultural communication [7, 8]. Based on this to further explore the topic of accurate communication of the integration of red culture and ideological education supported by AI technology, it is quite innovative to discuss how AI technology can realize the differentiated communication and diversified communication of red culture and ideological education to ensure that the spiritual needs of different audiences for red culture are met, and to better realize the wide dissemination and in-depth dissemination of mainstream ideology [9, 10]. Therefore, the integration of ideological education and red culture under the artificial intelligence model not only helps to improve students' personal ideological awareness, but also lays a solid foundation for the cultivation of a new generation of Chinese people who are more excellent and more responsible.

Literature [11] believes that it is feasible to integrate red culture into ideological education, further improves the theory and method of ideal belief education for students. Literature [12] integrates red culture into ideological education classroom, innovates ideological education classroom from multiple aspects, multiple levels and multiple angles, builds a red culture network platform, improves students' values, and effectively enhances students' sense of self-belief. Literature [13] analyzes the significance of the combination of red cultural resources and political education from the theoretical level. Literature [14] utilizes the rich red cultural resources of Guizhou to carry out political education in colleges and universities. Literature [15] combines red culture and ideology and politics, establishes a perfect system management system, enriches the content and value of practical teaching, and is of great significance to the innovative dissemination of red culture, so as to maximize the effect of red culture in ideological education. Literature [16] uses fuzzy analysis model to evaluate the integration of red culture and ideological and political education.

This study systematically analyzes the intelligence of ideological and political education, integrates the relevant theories of the intelligence, and provides a theoretical foundation for the research of the intelligence of ideological and political education in colleges and universities. Based on the artificial intelligence model, it makes a systematic discussion and explanation on the intellectualization of ideological and political education, emphasizes the integration of technology and value of ideological and political education in the era of artificial intelligence, and constructs a precise ideological and political education model. Adopting the method of empirical research, the precision ideological and political education model is practiced by using the questionnaire survey method and interview method, and the data is recovered, processed and analyzed. Based on the research results, the authenticity of the effectiveness and dilemma of the precise ideological and political education model is verified, which is more innovative than the traditional text research. Finally, a variety of artificial intelligence technologies are utilized to promote the in-depth integration of red cultural resources with the practical teaching of civic politics by strengthening the construction of teachers, developing digital creative products of red resources, building a digital sharing platform of red resources, and constructing a new mode of red cultural civic politics education.

2. Accurate Civic Education Model Based on Artificial Intelligence Models

2.1. Artificial Intelligence and Precision Civic Education

In the traditional vision of technology, technology is usually considered as a skill complementary to the subject, a dispensable ability or tool. However, with people's understanding, development and application of technology, the qualitative changes brought about by the application of technology to a certain field can no longer be ignored. The analytical framework of empowerment theory is shown in Figure 1 [17].

In the era of artificial intelligence, precision ideological and political education mainly relies on the advantages of intelligent technology, equipment and platforms in graph analysis, voice recognition, scene

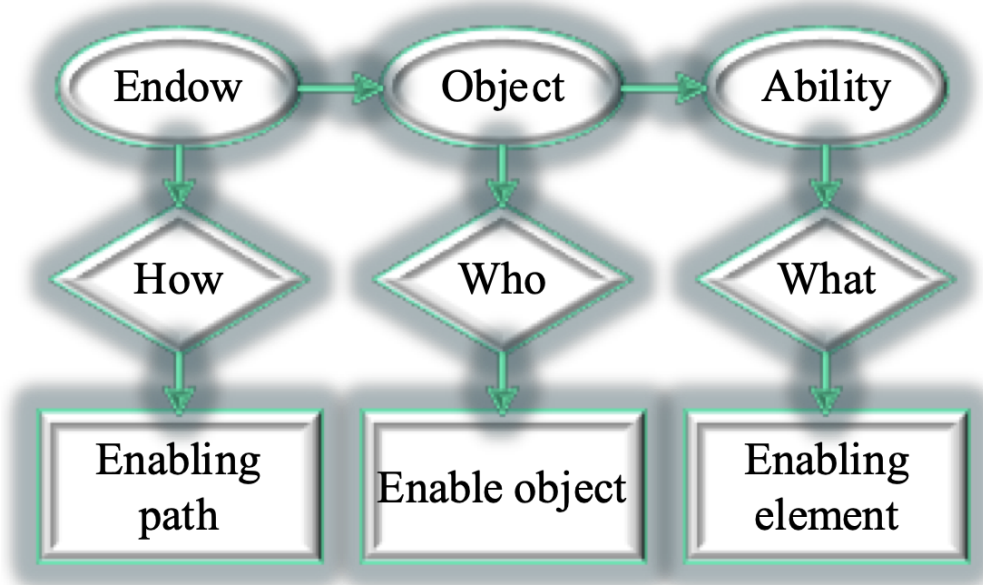


Figure 1: Analysis framework of empowerment theory

simulation, path research and planning, etc., and combines them with all kinds of software and hardware facilities to predict and identify the needs of educational objects. It customizes all-round and personalized education programs for the education objects in universities, and diagnoses, analyzes and evaluates the effectiveness of ideological education in a timely manner.

The realistic application of artificial intelligence model is shown in Figure 2, according to the stage of development of technology application, artificial intelligence is mainly divided into weak artificial intelligence stage, strong artificial intelligence stage and super artificial intelligence stage, and the current stage is still in the weak artificial intelligence stage [18].

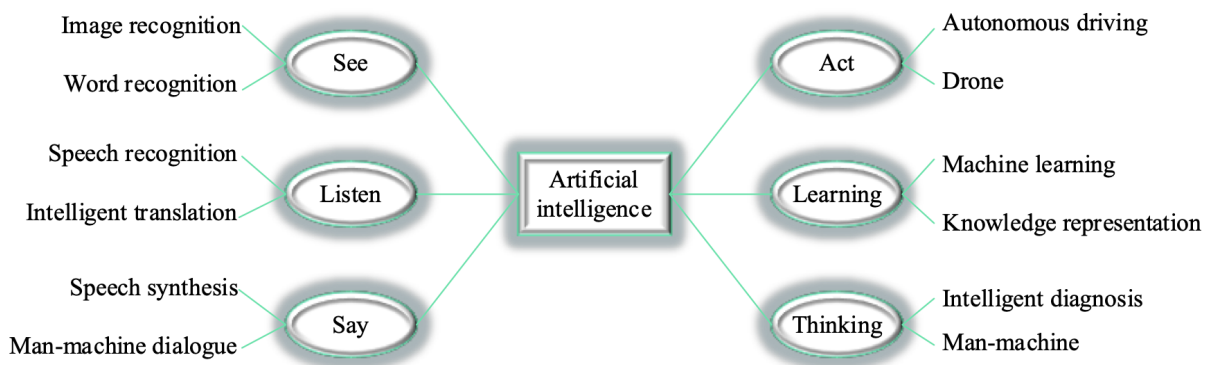


Figure 2: Realistic application of artificial intelligence

Based on the application of artificial intelligence in the field of education, this paper focuses on the study of the impact brought about by AI technologies under the weak AI perspective, such as machine learning, natural language processing, big data and cloud computing, computer vision, knowledge mapping, AR/VR and other technologies empowering accurate Civics.

2.2. Precision Civic and Political Education Model Construction

This paper draws on the artificial intelligence model and uses big data technology to provide technical support for the active construction of a smart campus, which is of great significance to the pioneering and innovation of ideological and political education methods [19]. With the increasing maturity of artificial intelligence technology and the coming of the big data era, ideological education is no longer only the traditional sense of regulating social behavior, but also expands the scope of its education to the scope of service and management. With the support of artificial intelligence technology, the management and service mode will also change quietly, and the mode will no longer rely solely on traditional classroom indoctrination, but will be able to intervene from the side of the student's life habits, the student's emotional condition, the student's learning condition and other aspects. In turn, it guides the ideological activities of young students, helps young students establish a correct outlook on the three views, and identifies with the mainstream values of the new era. The school develops a smart campus platform with the help of an artificial intelligence model, which records students' behavioral trajectories such as the frequency of campus network usage, the frequency of library punching, the number of meals in the cafeteria, and the frequency of entering and exiting the campus at school. Through the collection of the above behavioral data, the correlation between the data and the data is mined, more attention is paid to students with special circumstances, and the ideological condition is analyzed through the behavior, so that timely intervention and guidance can be provided.

As shown in Figure 3, the precise ideological education model can intervene as early as possible through data monitoring, which has a very positive effect on the life education of young students. In addition, for students whose families have encountered sudden changes but are difficult to ask for help from counselors or ideological teachers, they can discover certain behavioral data changes through the number of meals in the cafeteria, the number of times the library clocked in and other campus behaviors monitored by the smart campus, analyze their potential problems, and then carry out targeted individual political education to truly achieve precision education.

The deep integration of artificial intelligence technology and ideological and political education is conducive to the enhancement of emotional communication between teachers and students, and the enhancement of the effectiveness of the work of ideological and political educators. The ideological and political work carried out by ideological and political workers for the student population is not just reading from a book, but the strong indoctrination of the language of the textbook in the traditional classroom. In the new era, the era of personalization, a traditional teaching will only go downhill, will only bring the work of the ideological and political work into a dead end. Speaking of personalized teaching, the premise is to have an in-depth understanding of personalized groups, only in a more comprehensive grasp of the specific situation of the students and the ideological dynamics of the basis to develop a personalized teaching program. Ideological and political education work in addition to attention to the dynamic changes in the student body, should also be fully aware of the differences between individuals. Ideological and political education educators should fully understand the individual differences, focusing on teaching students according to their aptitude and respecting the differences of each student, in order to better serve the students.

2.3. Refinement of the Civics Teaching Process

The smart classroom empowered by artificial intelligence, as the application of wisdom education in traditional teaching, can create an intelligent learning environment for students, help guide students to form independent thinking analysis and processing ability, and inspire students to form creative thinking [20]. The overall theoretical model is shown in Figure 4.

2.3.1. Intelligent Diagnostics to Optimize Pre-Class Preparation

The ideological and political wisdom classroom pre-course pre-study process is shown in Figure 5. At this stage of pre-course pre-study, teachers first need to sort out and analyze the textbook, organize the important and difficult knowledge, and then carefully screen the pre-study materials from the high school ideological and political related platforms according to the content of the teaching, including the

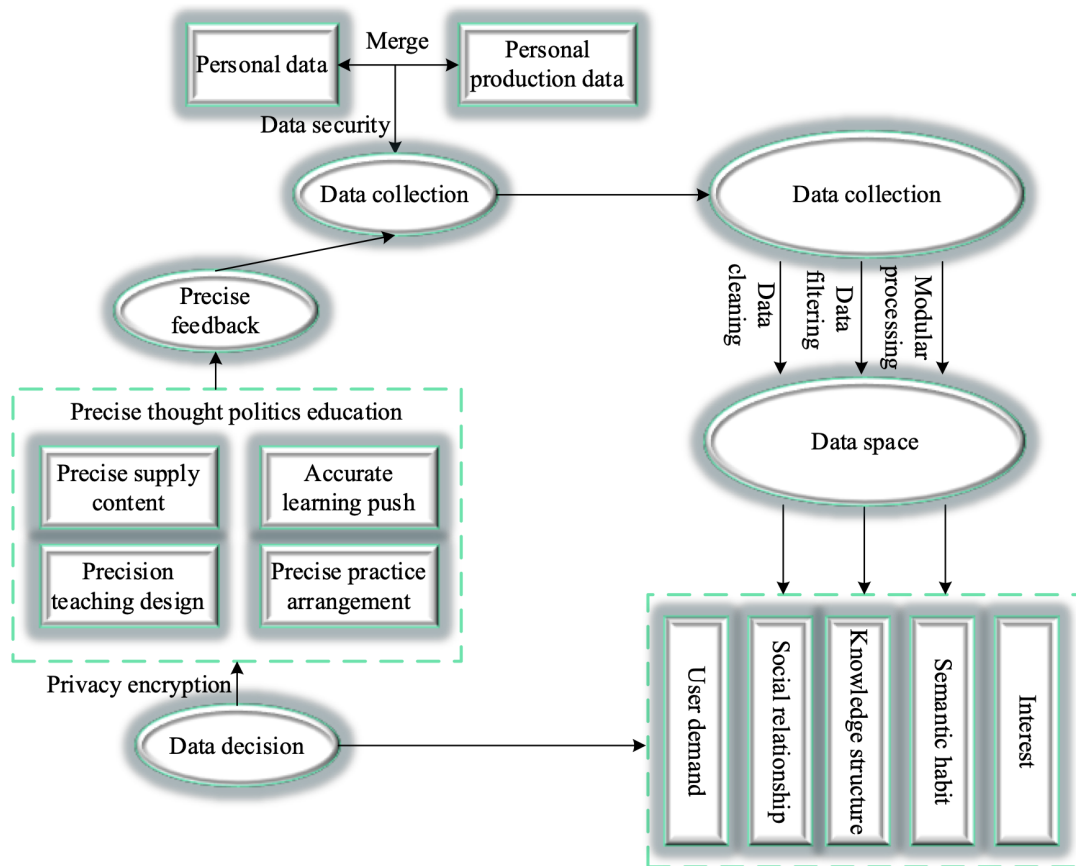


Figure 3: Precise ideological and political education model

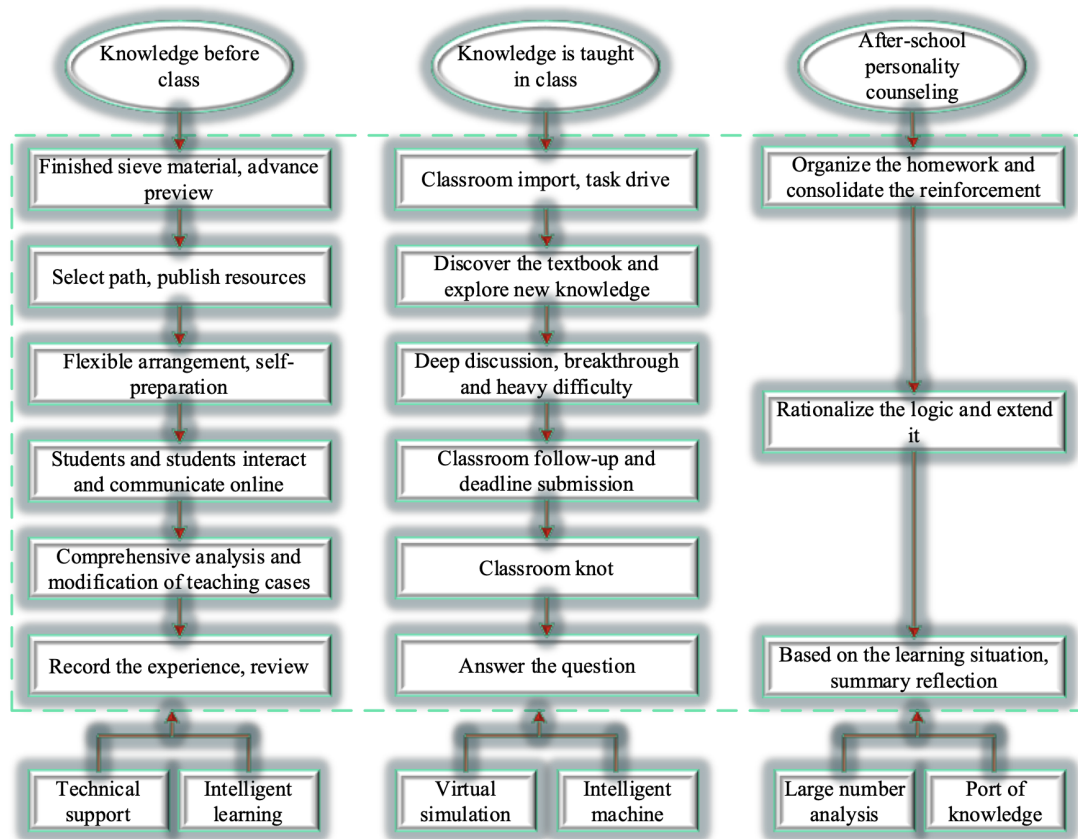


Figure 4: Theoretical model of ideological and political wisdom classroom teaching process

production of micro-videos, pre-study test questions, classroom materials, and so on. After receiving the preview materials, students should complete the preview tasks independently on the intelligent learning platform and leave their preview tips and difficult questions. Teachers need to flexibly adjust and improve the teaching program based on the students' actual preview status, and develop a more effective and feasible teaching implementation plan, so as to achieve the learning-based teaching, teaching for learning.

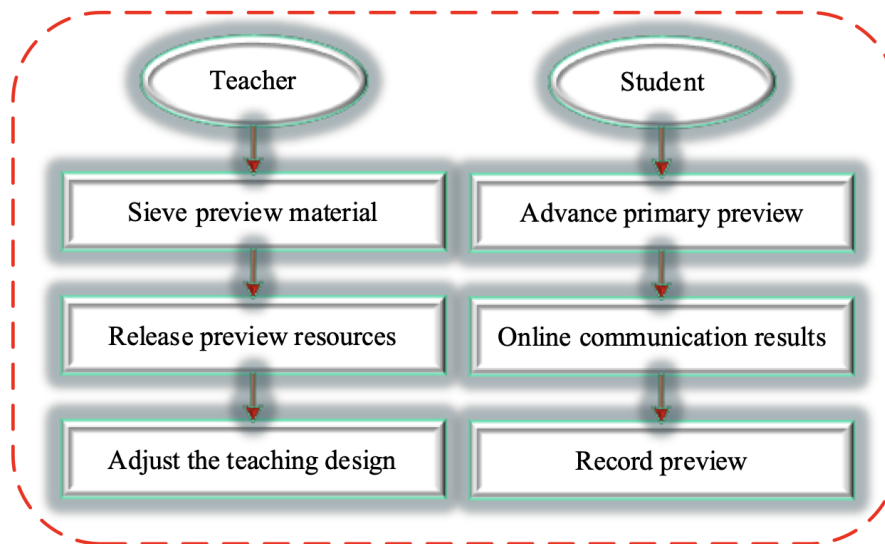


Figure 5: Ideological and political wisdom class before the preview process

1. *Fine screening materials and advance previews.* The production of pre-study materials is the focus of the design of teaching activities. In the traditional classroom teaching mode, the pre-reading materials cannot be effectively utilized in classroom teaching due to the limitation of funds, time and space. The application of information technology can effectively overcome this drawback, based on its own interactivity, non-linear and other characteristics, can provide high school politics teachers with a large number of teaching resources.
2. *Follow the information age and select media resources.* In the practice of smart classroom, students can make use of the rich media content for pre-course study, which can lay a good knowledge foundation for the learning of subsequent courses.
3. *Teacher-student interaction, online communication.* Through the use of intelligent technology, teachers and students can realize effective communication and interaction in the pre-study session. Students can rely on the intelligent learning platform, put forward to the teacher their doubts encountered in the pre-study process, and the teacher will give preliminary explanations of the problem and make corresponding records.

2.3.2. Smart Classrooms Empowering Teaching and Learning in the Classroom

The in-class teaching stage plays a pivotal role as the core stage of the whole teaching. Unlike traditional teaching methods, in the process of smart classroom teaching, teachers will utilize technologies such as the Internet, 5G, virtual simulation, big data, intelligent robots, etc., and start with five parts: classroom introduction, exploration of new knowledge, breaking through important and difficult points, accompanying testing, and classroom summary. Reasonably set up teaching situations, encourage group assistance, and guide students to actively explore knowledge, so as to improve the effectiveness.

2.3.3. Smart Navigation Aids After-School Refresher Courses

The post-course stage is a stage of enhancement and consolidation, which is mainly based on knowledge expansion and homework practice. In actual teaching activities, teachers should adjust the learning program for students based on the students' learning in the classroom and the problems of the classroom test, make up for the students' learning deficiencies, and deepen the students' understanding and awareness of the important and difficult knowledge and the knowledge that has not yet been grasped. In this process, teachers can make full use of knowledge mapping and big data technology, using the smart learning terminal as a platform to develop targeted practice content, assisting students in after-school learning and realizing personalized teaching.

1. *Personalized push to optimize after-school tutoring.* High school ideological and political after-class homework needs to be arranged by teachers based on the teaching content, combined with the learning situation of students, with the purpose of guiding students to check and make up for deficiencies by reviewing and reflecting on the knowledge of the course, so as to enhance the effectiveness of classroom teaching.
2. *Knowledge mapping facilitates after-class revision.* Knowledge mapping is mainly about transforming the knowledge of the objective world into digital data and stringing together the knowledge points in accordance with the established logical relationships, constituting a complete and interconnected semantic network. With the in-depth application of new technologies such as big data, the field of education has also embarked on the construction of informationization and is committed to transforming book knowledge into digital knowledge that can be processed and understood by computers. Knowledge mapping, on the other hand, utilizes advanced technology to visually express the correlation between different knowledge, facilitating students' rapid retrieval and tracing of subject knowledge and making data more valuable, thus effectively realizing high-quality extended learning for students after school.

3. Analysis of the Teaching Practice of the Precise Civic Education Model

Currently, the artificial intelligence technology with big data, deep learning and strong arithmetic as the main core has triggered the change of social form and social structure, and promoted the profound change. The study of artificial intelligence-enabled ideological and political education precision teaching not only needs to deeply analyze its theoretical foundation and dissect the intrinsic relevance, but also needs to explore the current situation of artificial intelligence-enabled ideological education, so as to provide a realistic basis for further proposing feasible countermeasures for the precise education model [21].

3.1. Processing of Research Data

In the empirical study of accurate ideological and political education model based on artificial intelligence model, the processing of survey data is the key to whether it is possible to make an objective and scientific evaluation of the current status of education intelligence. This teaching practice research began in 2023 between October and December through the online distribution of the way, in the country's 35 colleges and universities through the online platform way a total of 2978 questionnaires, the effective recovery of 2655 questionnaires, questionnaires recovered after the use of the main use of the SPSS25.0 software to process and analyze the data. The number of questionnaires is reasonable, and the distribution range of survey respondents is wide, which can basically ensure the reasonableness, comprehensiveness and scientificity of the original data of the empirical research on the AI-enabled precise ideological education model.

3.1.1. Description of the Study Sample

The demographic characteristics of this questionnaire survey were related to gender, education, professional category, and political profile, and the data description is shown in Table 1. In the 2 survey samples, the gender ratio is more harmonized, with more male students, accounting for about 57%. In the distribution of educational level, the number of people with bachelor's degree is the largest, as high as 57.2%,

followed by postgraduate degree accounting for 0.6056, and the number of people surveyed with specialist degree is the smallest, accounting for 0.1186. As for the professional category, 42.75% of the respondents are in the category of natural sciences, and a very small number of them belong to the category of humanities and arts, which accounts for only 17.63%. In terms of political profile, most of the sample are members of the Communist Youth League, accounting for 57.29% percent, followed by members of the Communist Party of China (CPC) accounting for 28.29%, and a very small number of the respondents are the general public, non-partisans and democratic parties.

Table 1: Analysis of demographic characteristics of the sample

Basic information	Number	Percentage
<i>Gender</i>		
Man	1516	0.5710
Female	1139	0.4290
<i>Education</i>		
Junior college	315	0.1186
Undergraduate	1608	0.6056
Graduate student	732	0.2757
<i>Professional</i>		
Natural sciences	1135	0.4275
Social sciences	1052	0.3962
Humanities and arts	468	0.1763
<i>Political</i>		
Party member	751	0.2829
League member	1521	0.5729
Democrats	13	0.0049
Common crowd	256	0.0964
Independents	114	0.0429

3.1.2. Reliability Tests

Reliability refers to the degree of trustworthiness of a questionnaire. Specifically, it refers to the degree of stability and consistency of the measurement results when the same measurement object is measured several times under different conditions of time, occasions, observers or measurement tools, etc. Cronbach's Alpha coefficient is commonly used as a method to measure the measurement sample data, and Cronbach's Alpha coefficient values are between 0 and 1, and the closer the value of reliability is to 1, the higher the reliability is. In general, academics believe that a Cronbach's alpha coefficient higher than 0.8 indicates high reliability. If it is between 0.7 and 0.8, it indicates good reliability. If it is between 0.6 and 0.7, it indicates acceptable reliability. If it is less than 0.6, it indicates poor internal consistency reliability.

The results of the reliability test in this study are shown in Table 2, which shows that the Cronbach's alpha coefficient is 0.8372, indicating high reliability.

Table 2: Reliability test results

	Cronbach's Alpha	Cronbach's Alpha based on standardized terms	Number of terms
Reliability statistics	0.8372	0.8295	41

3.1.3. Validity Tests

Validity refers to the degree to which a measurement tool or method accurately reflects the nature and intrinsic characteristics of the concept or phenomenon to be measured. If the results measured by a measurement tool or method are consistent with what is being examined, the higher the validity of the tool or method. Conversely, the lower the validity. Reflected in the questionnaire is whether the same type of questions are relevant and can be replaced by a principal component vector set. Kaiser gives a commonly used KMO metric, which is calculated by the formula:

$$KMO = \frac{\sum a_i^2}{\sum a_i^2 + \sum r_i^2} \quad (1)$$

where a_i is the correlation coefficient between each variable in the deviation matrix and r_i is the partial correlation coefficient of each variable in the deviation matrix.

The results of the validity test of this study are shown in Table 3, which shows that after KMO and Bartlett's test, it can be seen that the KMO value of the accurate ideological and political education model teaching practice scale based on artificial intelligence model is 0.921, which is close to the value of 1.

Table 3: Validity test results

KMO and Bartlett tests	
KMO sampling availability number	0.921
Bartlett sphericity test	
Approximate chi-square	11508.651
Freedom	783
Significance	0.000

3.2. Content of the Study and Analysis of Results

In this study, the questionnaire data were analyzed by descriptive statistics through the SPSSAU online analysis platform, and the student interviews were used as the auxiliary research object, with the help of which the interview content was used to understand the learning experience of students' accurate ideological education model based on artificial intelligence model. It mainly includes the degree of recognition of students to the precise ideological and political intelligence classroom teaching, the use of the learning platform, and the learning process.

3.2.1. Analysis of the Recognition of Precision Civics Teaching Models

Students' attitudes toward the precise Civics smart classroom teaching mode are shown in Figure 6, and the proportion of students who are very satisfied and satisfied with the precise Civics smart classroom teaching mode are 0.4637 and 0.1921 respectively. Specifically, more than 65.48% of the students think that the smart classroom can effectively make up for the teaching problems of the traditional Civics classroom, and the majority of the students think that the precise Civics smart classroom teaching model can not only help teachers better classroom management. And it can also meet their own personalized learning needs, in which case the teacher-student interaction is more frequent. The fundamental reason may lie in the fact that the accurate Civics smart classroom based on artificial intelligence technology support can make learners have a better perception experience, which in turn improves the satisfaction of learners.

3.2.2. Functional Analysis of the Precision Civics Teaching Model

As shown in Figure 7, it can be seen that in addition to daily lectures, more than 70% of the students believe that teachers of Civics courses often use the platform's functions of classroom attendance, resource sharing, task release, and classroom communication. At the same time, Civics teachers will also use online exams, homework review, thematic discussion, random sampling and quiz functions.

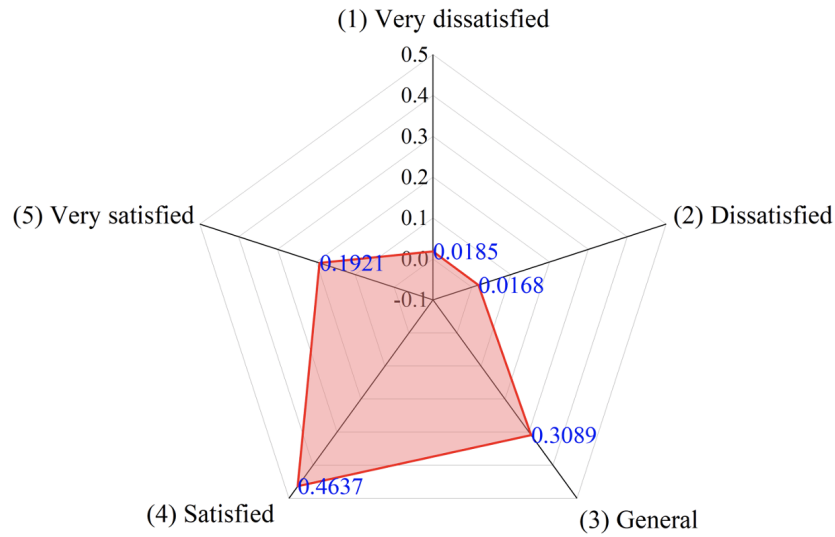


Figure 6: Students' attitude towards the wisdom teaching mode (N=2655)

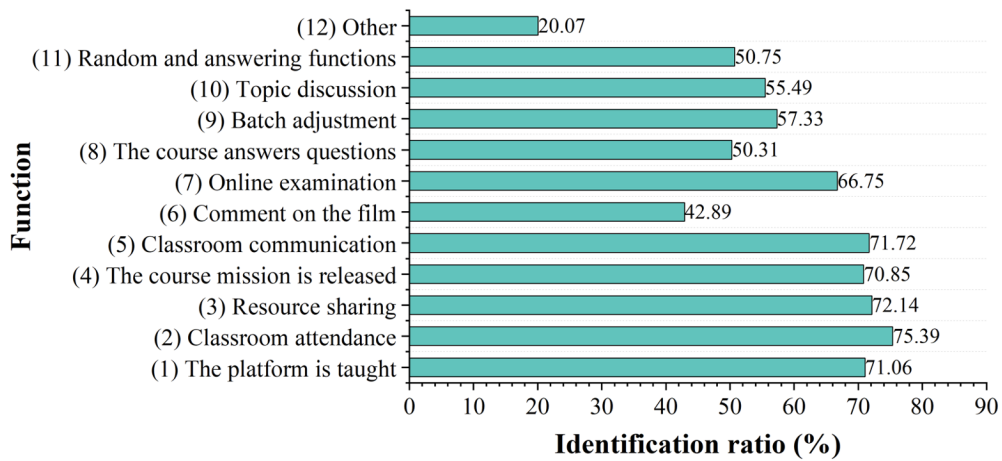


Figure 7: Cognition of the functions of intelligent teaching platform (N=2655)

The functions possessed by the Precision Civics and Politics Smart Teaching Platform are shown in Figure 8, and it can be seen that most of the students believe that the Smart Teaching Platform plays an important role in promoting the teaching effect (81.51%), the enhancement of cooperation and communication among peers (69.91%), the stimulation of students' participation (68.42%), and the activation of the classroom atmosphere (66.37%), and so on. Other roles of the Precision Civics Intelligent Teaching Platform identified by the students include, among others, the expansion of course resources, the enhancement of students' independent learning ability and the increase of self-presentation opportunities.

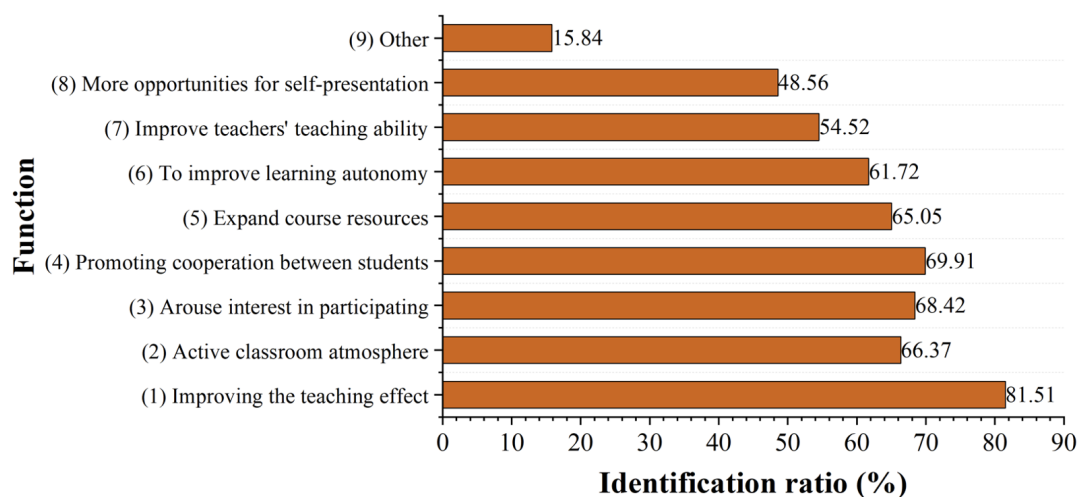


Figure 8: Main functions of ideological and political wisdom teaching platform (N=2655)

3.2.3. Analysis of the Resources of the Precision Civics Teaching Model

Students' recognition of the access to red cultural resources for the integration of Civic and Political Education is shown in Table 4, which reveals that in the pre-study session, 69.68% of the students said that the Civic and Political Science teachers would release the relevant pre-study tasks through the Smart Teaching Platform before the class. More than 75.21% of the students thought that the materials shared by the Civics teachers through the Smart Teaching Platform before class were very helpful for them to carry out relevant studies. During the class period, about 74.58% of the students thought that Civics teachers would often expand the content related to the course through the Smart Teaching Platform. Nearly 67.41% of the students thought that the course resources expanded by the teachers of the Civics and Political Science course just matched their own interests. In the classroom, nearly 69.64% of the students thought that Civics teachers would often push course-related review content through the Smart Teaching Platform. For the review materials pushed by the class teachers, 68.00% of the students thought that they could meet their personalized learning needs.

Overall, more than 60% of students believe that the Precision Civics Smart Teaching Platform has rich teaching resources, and it can not only meet students' needs for diversified learning resources. It can also automatically and precisely push personalized learning resources for students based on their previous learning behaviors and habits. To a certain extent, the above data show that the accurate Civics smart teaching platform based on artificial intelligence model provides a good platform for the Civics classroom to realize pre-course preparation, in-class teaching and post-course consolidation practice under the blended teaching mode. The smart teaching platform provides the possibility for students to carry out various forms of precise learning with its characteristics of sharing and mass.

Table 4: Students' recognition of resource acquisition (N=2655)

Survey project	Strongly disagree	Not agree	Normal	Agree	Very agree
Thinking teachers will often publish pre-acquisition tasks through the intelligent teaching platform	4.05%	5.86%	20.41%	45.33%	24.35%
The information shared by the intelligent teaching platform before the teacher's class is helpful for your study	2.87%	1.09%	20.83%	50.31%	24.90%
Thinking teachers will often expand the course related to the education platform	2.56%	1.64%	21.22%	52.45%	22.13%
Thinking politics teachers are in line with your interest points through the education platform	2.45%	2.08%	28.06%	49.68%	17.73%
Thinking teachers will often push relevant review through the intelligent teaching platform	0.84%	1.66%	27.86%	50.85%	18.79%
The review content of the thinking teacher through the wisdom teaching platform can meet your personalized learning requirements	2.89%	3.15%	25.96%	49.91%	18.09%

3.3. Integration of Red Cultural Resources into Civic and Political Education in the Age of Artificial Intelligence

Red culture is the precious crystallization of the 100-year history of the Communist Party of China (CPC), which shows the revolutionary spirit of the CPC of hard struggle and serving the people. As the specific content and physical embodiment of red culture, red cultural resources help to inherit the red gene, continue the national spirit, and strengthen ideological and moral education, and are vivid resources for carrying out the practical teaching of ideology and politics. After entering the era of artificial intelligence, the state attaches great importance to the construction of digitalization, and the rational use of artificial intelligence, VR virtual technology, 3D images and other digital technologies can further make the red cultural resources "come alive", promote the red genes to infiltrate the minds of students, cultivate their patriotic feelings, and guide them to set up a correct world view, outlook on life and values.

1. *Breaking the time and space limitations, enriching the practical teaching resources of Civic and Political Classes.* Red cultural resources are the specific expression of red culture, which contains profound ideological and political connotations. Integrating red cultural resources into the practical teaching of Civics and Politics can enrich the practical teaching resources of Civics and Politics, expand the channels of Civics and Politics practical teaching, and make the spirit of history realize the inheritance of the spirit across time and space. The advent of the age of artificial intelligence allows red cultural resources around the world to be expressed in a more specific and vivid way, realizing the close integration with the practical teaching of civics and politics.
2. *Aggregating resources from various parties and revolutionizing the way of teaching civic politics.* In the context of the artificial intelligence era, with the large-scale application of big data, virtual reality and other digital technologies, red cultural resources break through the limitations of technical equipment, capital and talents, geographical problems and other aspects to be aggregated to realize the empowerment of ideological education.
3. *Strengthening emotional identity, expanding the space and time domain of ideological and political courses.* Red cultural resources include the remains of major historical events and the former residences of patriotic martyrs left behind during the party's century-long struggle, as well as all kinds of revolutionary spirit and cultural traditions, and also the major political policies and local regulations formulated by the CPC. In the era of artificial intelligence, the integration of red cultural resources into the practical

teaching of ideology and politics can transform the single static way of red cultural resources into a multi-dimensional dynamic mode, and present red cultural resources in the form of video, image and sound that are integrated with each other. Let the students immersed experience the hardships and dangers experienced by the revolutionary forefathers, and experience the spirit of struggle of the revolutionary heroes, in order to strengthen the red emotional identity of the students, and enhance the students' civic and political literacy.

4. Conclusion

Precision teaching is the paradigm shift and change of ideological and political education in the era of artificial intelligence, which has achieved remarkable results but also faces great challenges. This study carries out a comprehensive analysis, exploration and judgment by combining quantitative and qualitative research. The investigation shows that the precision ideological education model based on artificial intelligence model has important epochal value in terms of students' learning autonomy, teachers' teaching digitization, school management informatization, and social cultivation intelligence.

It is also found that precision ideological education also faces dilemmas such as educational philosophy, educational resources, talent team, and ethical risks. It is hoped that it will be strengthened in the following two aspects in the future: on the one hand, the application products of artificial intelligence in education still need to be studied in case studies to further construct the application model in the field of ideological and political education and highlight the intelligence; on the other hand, the specific practical path of the intelligence of education empowered by artificial intelligence still needs to be further tested in practice.

In summary, in the era of artificial intelligence, the intelligence of ideological and political education has shown a powerful dynamic in empowering education. But at the same time, we should also see the "double-edged sword" quality of intelligent technology itself, and be alert to the risks of technological alienation, data worship, and subject masking. Based on this, this study analyzes the causes of the dilemma, explores the practical way forward for the intelligentization, and hopes to provide reference for the promotion of ideological and political education.

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