Retraction

Retracted: Exploration on the Action-Oriented Teaching Mode of Higher Vocational Political Courses under the Background of Internet + Education

Advances in Multimedia

This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

(1) Discrepancies in scope
(2) Discrepancies in the description of the research reported
(3) Discrepancies between the availability of data and the research described
(4) Inappropriate citations
(5) Incoherent, meaningless and/or irrelevant content included in the article
(6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

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[1] J. Li, "Exploration on the Action-Oriented Teaching Mode of Higher Vocational Political Courses under the Background of Internet + Education," *Advances in Multimedia*, vol. 2022, Article ID 3268477, 9 pages, 2022.

Research Article

Exploration on the Action-Oriented Teaching Mode of Higher Vocational Political Courses under the Background of Internet + Education

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With the advancement of the "Internet +" time, school lessons, family education, and social education, today's college students present some characteristics that are different from those of previous college students. They are more active, dare to express, have the courage to express, can acquire knowledge through various channels such as the Internet, and are extremely concerned about current hot topics or current affairs. Therefore, they have higher requirements for teaching content and are not interested in outdated knowledge topics. Therefore, looking at mobile phones in class is a common phenomenon in college classrooms, which brings great confusion to teachers' teaching. The so-called water can carry a boat and it can also capsize it. When the flood comes, it cannot be blocked, so we need to find a way to divert it. In this paper, by adopting the personalized recommendation algorithm based on collaborative filtering, the recommendation algorithm in the recommendation system is applied to the action-oriented online teaching platform of higher vocational political courses, and a hybrid programming method of cross-platform compatibility HTML5 and high-performance MUI framework is designed. Personalized online education platform for political courses in higher vocational colleges is based on a collaborative filtering algorithm. The server-side development selects a mature B/S architecture, adopts the currently popular MVC5 development model, and uses HTML5 and MUI frameworks for mobile terminals. In order to improve the effectiveness of ideological and political courses in higher vocational colleges, a three-in-one ideological and political course teaching model with thematic action orientation, "Internet +" action orientation, and practical action orientation has been explored, and good educational and teaching effects have been achieved.

1. Introduction

In 2008 and 2009, various universities successively welcomed the "post-90 s" generation of college students who have become the main force on campus. They lived in an era of remarkable results in reform and opening up and faced a peaceful rise. They will play an important role in the political, economic, cultural, and other fields. With the development of the times, among the students of "s" University, the independence, selectivity, variability, and difference of the "post-90s" young people are more and more obvious. Compared with the "Post-70s" and "post-80s," they have obviously different psychological and ideological characteristics. The survey shows that the "post-90 s" college students have a firm political stance, a strong sense of social responsibility, a strong sense of competition, easy to accept new things, and have outstanding innovation ability [1]. As they are in the period of social transition and prominent contradictions and they are faced with the impact of diversified values and some other negative effects, some of their enthusiasm for political pursuit has cooled down and they are practical and utilitarian in their political orientation. They have outstanding personalities, good communication, network dependence is psychologically heavy, their heart is more withdrawn, and their psychological endurance is fragile. The objective reality of ideological and political teaching mode old and the carrier of single, part of the teaching team professional is not strong, the unequal status between teachers and students requires that we must fully

understand the "90" the necessity and urgency of ideological and political education innovation, must adhere to inheritance and innovation, theory and practice, time and timeliness, systemic, and openness of the four principles. The innovation of ideological and political education mode is a very complex and systematic project, which needs to mobilize various forces to work together and promote it together. It is urgent to innovate ideological and political theory teaching mode, shaping high-quality professional teachers, establishing mutual respect and equal trust of new relationship between teachers and students. As a key course for cultivating people by virtue, lessons are essential for talent cultivation [2]. The teaching effect courses in higher vocational colleges concern that it can provide high-quality talent support for the realization of the country's strategic goal of building a strong country [3]. Subsequently, the Ministry of Education clearly stated that "encouraging qualified colleges and universities to teach ideological and political courses based on an online and offline hybrid teaching model based on the application of high-quality online open courses." The Party Central Committee and the State Council attach great importance to the ideological and political work in colleges and universities, which has pointed out the direction and path for promoting the reform and innovation of ideological and political courses in higher vocational colleges and has also created a good atmosphere for the application and practice of the mixed teaching model in the teaching of ideological and political courses in higher vocational colleges.

With the advancement of the "Internet +" time, school lessons, family education, and social education make today's college students present some characteristics that are different from those of previous college students. They are more active, dare to express, have the courage to express, can acquire knowledge through various channels such as the Internet, and are extremely concerned about current hot topics or current affairs. Therefore, they have higher requirements for teaching content and are not interested in outdated knowledge topics. Therefore, looking at mobile phones in class is a common phenomenon in college classrooms, which brings great confusion to teachers' teaching. The so-called water can carry a boat and it can also capsize it. When the flood comes, it cannot be blocked, so we need to find a way to divert it. The 2017 Horizon Report highlights that blended learning will be widely used in schools in the near future and will become a central trend [4]. As the main channel of mind and political lessons for college students in higher vocational colleges advance from time to time, we make new changes due to the situation, make full use of new media and new technologies, innovate the teaching mode of ideological and political courses, and make ideological and political courses come alive. In recent years, the teaching model under the background of "Internet +" represented by the blended learning model has emerged and developed. In recent years, great achievements have been made in the education informatization work of higher vocational colleges in my country. Most colleges and universities have been equipped with advanced multimedia classrooms and a good network environment. However, as far as ideological and political courses are concerned, the adequacy of the application of the network teaching environment and rationality needs to be strengthened.

This paper aims to integrate the action-oriented teaching mode into the teaching of higher vocational political courses through a collaborative filtering algorithm, focus on cultivating students' ability to analyze and solve problems, and give full play to the main role of students and the leading role of teachers, so that students can solve problems . Effective learning is carried out in social practice learning, so as to turn the learning of politics into an interesting process of "building blocks" and improve the teaching effectiveness of higher vocational politics classrooms.

2. State of the Art

2.1. The Basic Concept and Scope of Action-Oriented Teaching. The action-oriented teaching mode is different from the traditional teaching method. It mainly sets the learning scope and learning content according to the characteristics of students, majors, and learning situations. Vertical relevance, with the principle of the first theory, then practice, and emphasis on action as the main guiding ideology allows students to participate in classroom practice to learn theoretical knowledge. Therefore, the action-oriented teaching mode is used in higher vocational politics courses to provide students with different cases and projects to guide students to conduct inquiry-based learning, so that students can discover problems, analyze problems, deal with problems in the process of analyzing cases, and then summarize their experience [5]. Through the abovementioned concepts, it is not difficult to find that the action-oriented teaching mode is an education and teaching method that focuses on improving personal ability in professional activities. The main role and the leading role of teachers are the ultimate goals [6].

The use of an action-oriented teaching mode in the teaching of political courses in higher vocational colleges can fully implement the student-oriented teaching concept and help to improve the equality and interaction of political teachers and students [7]. The author found that the teaching methods of the action-oriented teaching mode mainly include the project teaching method, the task-driven method, the case teaching method, and the guiding text teaching method. These methods do not exist independently but can be mixed and matched for flexibility [8]. The use of teaching methods requires teachers to perform according to the learning content of the course and the characteristics of students. The action-oriented teaching mode is different from other teaching modes [9]. It combines the actual situation of students and focuses on cultivating students' comprehensive learning ability, professional practice ability, and social development ability in the teaching process [10]. It emphasizes starting by improving students' interest in learning, focusing on practical teaching links, and highlighting the comprehensive training of students' professional practical ability. It has unique advantages in cultivating peoples overall quality and comprehensive ability [11].

The main teaching goal of the action-oriented teaching model is to cultivate students' independent work ability and problem-solving ability, which to a certain extent conforms to the teaching philosophy and teaching goals of higher vocational political courses [12]. The ultimate teaching goal of the political course is to cultivate new young people who have ideals, beliefs, responsibilities, and shoulder the important mission of building socialism. Therefore, the use of an action-oriented teaching mode in the teaching of higher vocational politics has an important practical value [13].

2.2. The Characteristics of the Times in the Teaching of Political Courses in Higher Vocational Colleges under the Background of Internet + Education.

Under the background of Internet + education, everyone has access to massive information resources and has the characteristics of fast and efficient information acquisition. We only need to use the search software in our smartphones to find the information we need [14]. By browsing various websites, we can easily understand the latest social hotspots, current affairs news, scientific and technological information, and other content. In such a social environment, higher vocational students, as members of the social group, will inevitably actively explore the new and interesting learning content brought to them by the online world. Look at the free choice of time and place to study through Internet technology and realize the "dual freedom" of learning space and time, has improved the convenience and initiative of higher vocational students to a certain extent. At the same time, in the teaching process of higher vocational political courses, political teachers are no longer the only providers of learning resources in the teaching process, and the rights of teachers are gradually decentralizing. Among them, Figure 1 shows the development of the Internet + education industry [15].

Since the outbreak of the epidemic in 2020, in order to suspend classes without stopping, most vocational colleges have used the advantages and convenience of "Internet + teaching" to carry out online teaching [16]. In order to complete their teaching tasks as scheduled, many teachers of political courses in higher vocational colleges have moved their offline political classrooms to online and are teaching through online media such as DingTalk, Xuetong, and QQ online classrooms. When it comes to "behind the screen," live broadcast experts, Internet celebrity teachers, and knowledge experts have all become another identity label for current political teachers. It can be seen that political teachers are no longer simply teaching, and their roles are diversified. The multiple identities of political course teachers require them to plan, design, and process higher vocational political courses on the basis of integrating new media and Internet technologies, so as to realize the effective use of information technology in political classrooms. Political teachers can also mobilize the enthusiasm of students to participate in the classroom by recording microclasses, recording and broadcasting classes, and live-streaming classes [17].

With the development of "Internet +" technology, the traditional "cramming" political teaching method will be gradually subverted. With the application and development of information technology, the teaching mode and method of political courses in higher vocational colleges are gradually changing compared with the previous teaching methods [18]. Nowadays, higher vocational political classrooms are also paying more and more attention to students' personalized learning experience. In terms of teaching methods, some higher vocational colleges also vigorously promote blended teaching that combines online and offline teaching. Through the online wisdom tree and SPOC platform Knowledge point learning, and offline thematic focus learning allow students to better grasp the knowledge points. Vocational colleges pay more attention to the individual development of students in the teaching process and make great efforts to improve students' enthusiasm for participating in political classrooms and students' innovative abilities [19]. It is undeniable that this information-based and intelligent teaching method is one of the important magic weapons to improve the teaching quality of political courses in higher vocational colleges [20].

2.3. The Key Capabilities and Significance of Action-Oriented Teaching Mode in Higher Vocational Political Courses under the Background of Internet +.

As we all know, most of the content of higher vocational political textbooks are about basic theoretical knowledge, which is theoretically strong. For higher vocational students with relatively weak basic knowledge, it is difficult to simply accept theoretical education. Applying the thematic teaching method in the action-oriented teaching mode in the political classroom of higher vocational education is helpful to improve students' acceptance and mastery of knowledge points. For example, when the author talks about the great achievements in the reform and opening up of the socialist economic system with Chinese characteristics in the introduction class in order to let the students deeply understand the great national policy of our party, we make full use of the project-based action-oriented teaching model. Teaching method. Finally, the change in each group will present the results of the survey and statistics in front of their classmates. To a certain extent, through such teaching methods, higher vocational students have been stimulated to have a deeper understanding of the reform and opening up policy, and their comprehensive quality ability has been further improved [21].

Through the case-based, project-based, topic-based, and research-based teaching methods in the action-oriented teaching model, students become the main "actors" of the classroom, and the political class teacher becomes the general "director" of the class, so as to improve the teaching quality of the political class. While teaching political courses, political teachers should respect students' maverick personalities, deeply tap students' potential, and transform the teaching process into a process of students' active learning and self-learning knowledge. In the context of the Internet + education era, political teachers should abandon the traditional teaching model, change from the role of simply passing on knowledge, and establish the role of guiding students in learning [22].
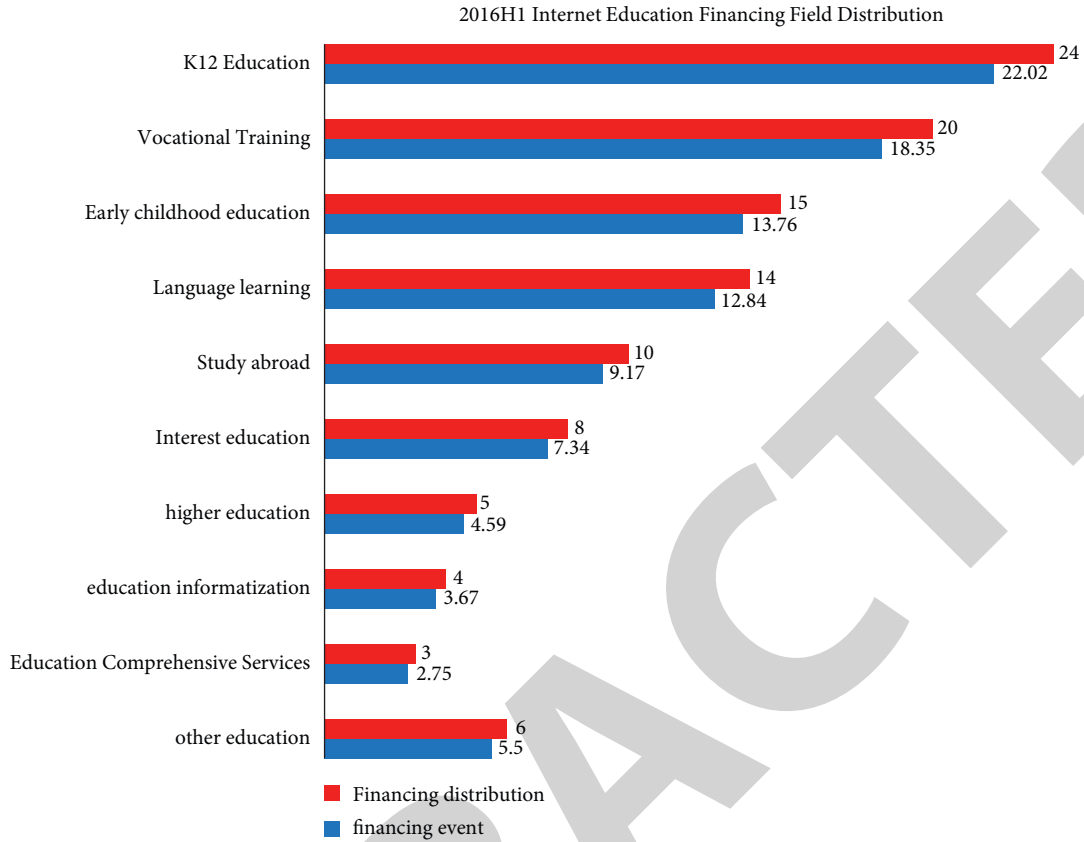
2016H1 Internet Education Financing Field Distribution

FIGURE 1: Development of Internet + education industry.

3. Methodology

3.1. The Principle of the Collaborative Filtering Algorithm and Its Educational Application. The basic idea of the collaborative filtering algorithm is that users with similar interests may like the same item, or a user may have similar preferences for an item that is similar to the item he is interested in [23]. It is actually a typical method of utilizing collective intelligence. For example, when the target user wants to find some good music, he usually asks his friends to recommend some songs that they think are good. Of course, the target user will try his best to choose those friends who share similar interests [24].

Collaborative filtering algorithms can use a variety of scoring methods, but no matter which scoring method is used to collect user preference information, a user-item rating matrix can be obtained in the end as shown in Table 1.

The collaborative filtering process uses the item as data to obtain the recommendation result. The content of the item is not taken into account during the calculation, which is very appropriate for the teaching purpose. It is difficult to determine the complete meaning of some educational data through keywords alone. If the method of counting is in line with the content and is aimed to recommend it, it may cause problems such as inaccurate recommendation results.

3.2. Similarity Comparison Method in the Collaborative Filtering Algorithm. The counting method needs to locate

TABLE 1: User-item rating matrix.

	item_1	item_2	$\ldots$	item_j	item_n
user_1	r_11	r_12	$\ldots$	r_1j	r_1n
user_i	r_i1	r_i2	$\ldots$	r_ij	r_in
$\ldots$	$\ldots$	$\ldots$	$\ldots$	$\ldots$	$\ldots$
user_m	r_m1	r_m2	$\ldots$	r_mj	r_mn

similar objects and users before it can be advanced, so it is also extremely important to choose a suitable similarity comparison method, and different similarity comparison methods adapt to different scenarios. Figure 2 shows the user similarity calculation process [25].

Euclidean distance calculation method in two-dimensional space is as follows: Let $a(x1, y1)$, $b(x2, y2)$ be any two points in two-dimensional space; then, the Euclidean distance d_{12} between two points a and b is as follows:

$$d_{12} = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}. \tag{1}$$

Euclidean distance calculation method in three-dimensional space.

$$d_{12} = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2}. \tag{2}$$

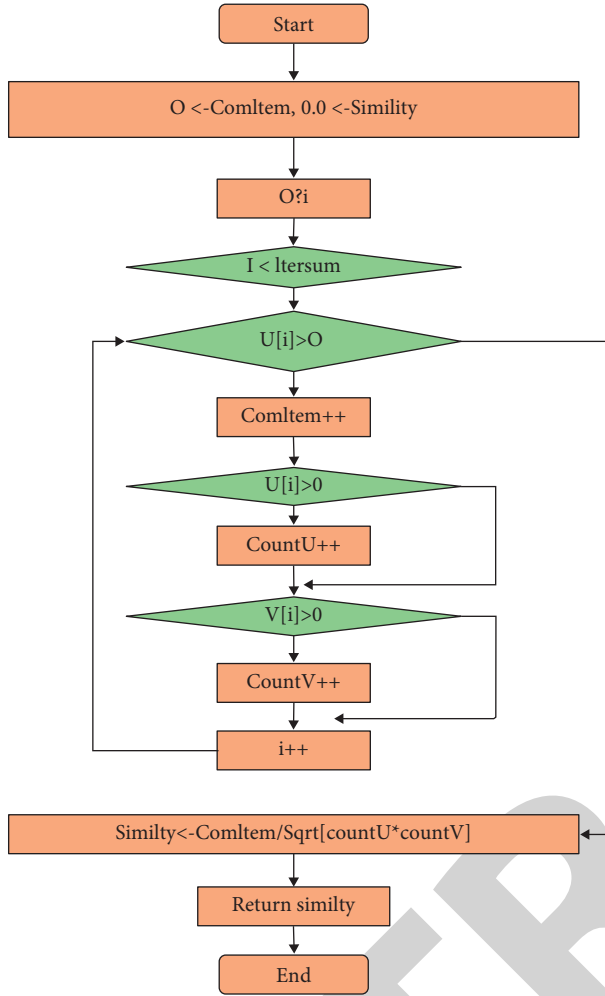Euclidean distance calculation method in n-dimensional space.

FIGURE 2: User similarity calculation process.

$$d_{12} = \sqrt{\sum_{k=1}^{n} (x_{1k} - x_{2k})^2}. \tag{3}$$

The similarity between two vectors is judged by calculating the angle between them. This method is commonly used in collaborative filtering algorithms. The cosine similarity calculation method in two-dimensional space: set vector $A = (A1, A2)$, $B = (B1, B2)$. The formula for the cosine value is as follows:

$$\cos\theta = \frac{A_1 \times B_1 + A_2 \times B_2}{\sqrt{A_1^2 + A_2^2} + \sqrt{B_1^2 + B_2^2}}. \tag{4}$$

The presimilarity calculation method in N-dimensional space: set vector $A = (A_1, A_2, \ldots, A_n)$, $B = (B_1, B_2, \ldots, B_n)$. The formula of cosine value is as follows:

$$\cos\theta = \frac{\sum_1^n A_i \times B_i}{\sqrt{\sum_1^n A_i^2} \times \sqrt{\sum_1^n B_i^2}}. \tag{5}$$

3.2.1. Pearson Correlation Coefficient. We set the vector $\mathbf{X} = (X_1, X_2, \ldots, X_n)$, $Y = (Y_1, Y_2, \ldots, Y_n)$, then the Pearson correlation coefficient is defined as follows:

$$\rho_{xy} = \frac{\text{cov}(X, Y)}{\sqrt{D(x)}\sqrt{D(y)}} = \frac{E(X - EX)(Y - EY)}{\sqrt{D(x)}\sqrt{D(y)}}. \tag{6}$$

The value range of the correlation coefficient is [1, 1]. The closer the value is to 1 (negative correlation) or 1 (positive correlation), the higher the correlation, and the closer to 0, the lower the correlation [26].

3.3. Classification of the Collaborative Filtering Algorithm. The algorithm first finds the neighbors of the target user by comparing the user vectors and then filters out neighbors with greater similarity to the target user, and finally recommends them based on the interests of these neighbors [27]. An example of a user rating matrix is shown in Table 2.

The first step of the algorithm is to calculate the similarity of users. The results obtained by different similarity comparison methods may be completely different, so choosing an appropriate measurement method is crucial to the final recommendation result. Cosine similarity measure treats each row of the data matrix as an independent user vector and calculates the cosine angle between each vector and the target user vector as the similarity between the user vector and the target user vector, which is calculated as follows:

$$\text{sim}(u, w) = \frac{\overrightarrow{u} \times \overrightarrow{w}}{|\overrightarrow{u}| \times |\overrightarrow{w}|} = \frac{\sum_{i \in I_{uv}} r_{ui} \times r_{wi}}{\sqrt{\sum_{i \in I_u} r_{ui}^2} \sqrt{\sum_{i \in I_u} r_{wi}^2}}. \tag{7}$$

The closer the value of $\text{sim}(u, w)$ is to 1, the greater the similarity between user u and user w.

The formula for calculating the Pearson correlation coefficient is as follows:

$$\text{sim}(u, w) = \frac{\sum_{i \in I_{uv}} (r_{ui} - \overline{r}_u) \cdot (r_{wi} - \overline{r}_w)}{\sqrt{\sum_{i \in I_{vv}} (r_{ui} - \overline{r}_u)^2} \sqrt{\sum_{i \in I_{wv}} (r_{wi} - \overline{r}_w)^2}}. \tag{8}$$

After obtaining the user's neighbors according to the calculation, you can recommend a list of items of interest to a user, and you can also predict the users rating for a certain item. The prediction result can be obtained using the following formula:

$$r_{ui} = \frac{1}{k} \sum_{w \in N} r_{wi}, \tag{9}$$

where r_{ui} is the rating of item i by user u, N is the set of neighbors calculated in step 2, w is a neighbor among the n neighbors of u that has a rating for item i, and k is the squadron of n neighbors of u. The number of all neighbors for which item i has a score [28].

Computing predictive scores in this way is simple, but there are some problems. Because each user has different scoring criteria for items, but their own scoring criteria for each product are consistent, so it is necessary to unify the criteria of all users and then weigh them to obtain the final

TABLE 2: Example of user rating matrix.

	Item 1	Item 2	Item 3	Item 4	Item 5
User 1	2	1	3	4	5
User 2	1	1	2	3	4
User 3	5	3	2	4	1
User 4	1	4	4	2	3

TABLE 3: Analysis of the advantages and disadvantages of each algorithm.

Recommended algorithm	Advantages	Disadvantages
Rule-based recommendation	Mining new interest points; no domain knowledge required	Recommended time; low degree of personalization
Utility-based recommendation	No cold start and sparse problems; sensitive to changes in user preferences; can consider nonproduct characteristics	The user must input the utility function; static recommendation, poor flexibility; attribute overlap problem

TABLE 4: Comparative analysis of algorithms.

	User based	Content based
Field	Strong timeliness	Strong personalized demand
Real-time	Users have new behaviors, which may not necessarily cause the recommendation results to change immediately	New user behavior will lead to changes in recommendation results
Cold boot	The user similarity matrix is calculated offline every other period of time, and new items can be recommended to interested users after they are online for a period of time	As long as a new user is interested in an item, he can recommend similar items to him

TABLE 5: Dataset related information.

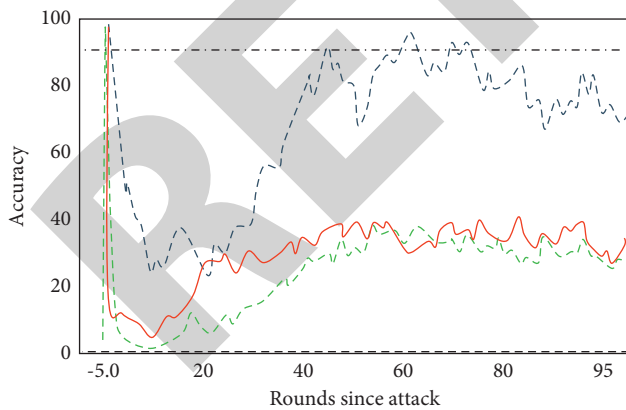| Data set	Number of users	Number of items	Sparsity (%)
Mobile autonomous school	305	2167	91.8
MovieLens 100 k	943	1682	93.7

FIGURE 3: Accuracy comparison.

prediction result. It can be calculated by the following formula:

$$r_{u\,d} = \overline{r_u} + z \sum_{w \in N} \text{sim}(u, w)(r_{wi} - \overline{r_w}), \tag{10}$$

where z is the normalization factor;

$$z = \frac{1}{\sum_{w \in N} \text{sim}(u, w)}. \tag{11}$$

$\text{Sim}(u, w)$ represents the similarity between user u and user w.

The algorithm is used to first find an item with a higher score, then we compare this item with other items, find items similar to this item, and recommend these items to users directly. The advantages and disadvantages of each algorithm can be seen in Table 3 [29].

From the current situation, there are many kinds of recommendation technologies, but collaborative filtering recommendation is still the most effective recommendation technology. Collaborative filtering algorithms can quickly build models, discover new interests, and personally recommend courses to each user. There are two types, namely, content-controlled CF and model-controlled CF. The contrast is as shown in Table 4 [30].

4. Result Analysis and Discussion

4.1. Experimental Dataset and Preprocessing. Since this paper focuses on the personalized recommendation of educational resources, the information employed in this
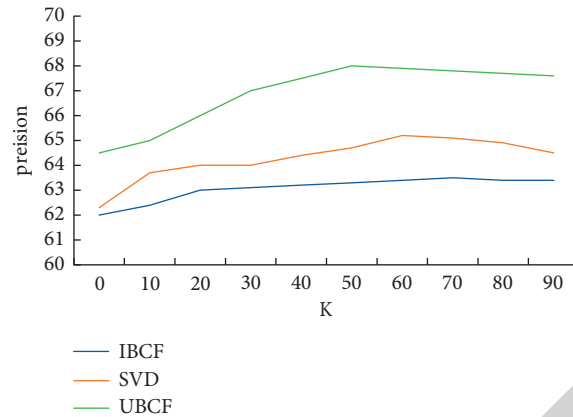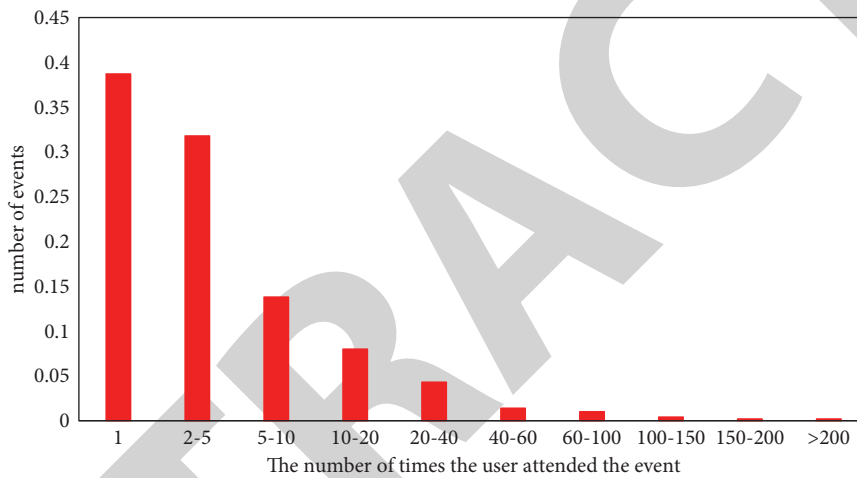
FIGURE 4: Precision comparison of the 3 ways for the *k*.

FIGURE 5: User similarity calculation results.

paper is from the autonomous set of schools mentioned above. The previous information includes various learners' performance ones to select the students' question-taking records, and gain the ending matrix. Under normal circumstances, the datasets used by the personalized recommendation algorithm are mainly some open source datasets, such as the MovieLens dataset. The MovieLens dataset mainly contains user ratings for movies. To make the application field more extensive and to promote such development of educational technology, we conduct experiments on educational data and analyze the correctness of the results. In addition, in order to study the particularity of the information, this paper will also conduct experiments on the MovieLens dataset, and finally compare the experimental results of the two to analyze the particularity of educational data. The composition of the dataset employed in the experiment will be shown in Table 5.

The user rankings in the MovieLens database will rank from 1 to 5, where 1 and 5 indicate the different reactions of users. Different ones show different preferences of users.

4.2. Experimental Results and Analysis. Experiment 1 was to test the effectiveness of the way for educational data. This experiment compares the UBCF algorithm with the random algorithm. Among them, the random algorithm randomly recommends 10 exercises that the student has not done each time. If the mobile autonomous school teaching system does not use the personalized recommendation algorithm to recommend the system to the students, when the students practice the exercises, it is equivalent to the system randomly generating questions. The evaluation method of this experiment is the classification accuracy measurement.

In Figure 3, the UBCF way of counting is featured by when *k* value is 40, reaching 65.53%, and even in the worst case, the accuracy can reach 62.33%. The accuracy rate of the random algorithm is 22.67%. It implies that the use of the UBCF algorithm holds a very clear influence on the educational data used in this article.

In the second and the first experiment, the UBCF way of counting was compared with the random algorithm, and the correctness of the personalized recommendation algorithm in the educational data was obtained. In this experiment, the UBCF, the IBCF, and the SVD collaborative filtering ways
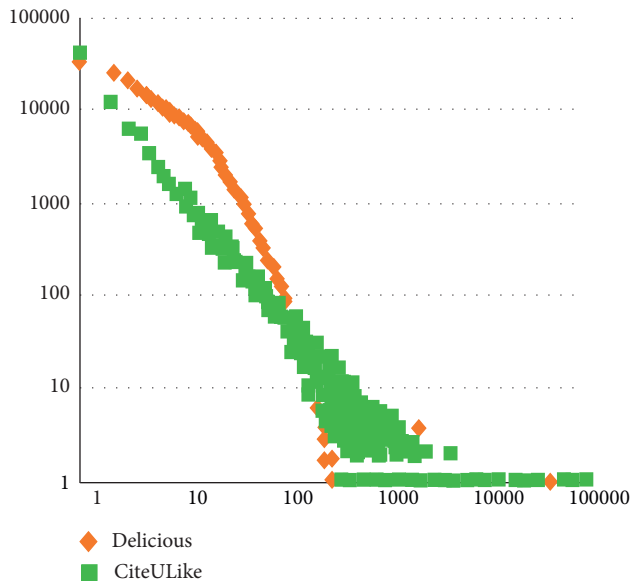
Figure 6: Activity distribution of students' ideological and political courses in higher vocational colleges.

will be compared. When the value of k is 80, the accuracy obtained by the IBCF algorithm is the highest at 63.49%, but it is still lower than the accuracy of the UBCF algorithm. The number of students is not bigger than in the exercises before, resulting in a decrease in the accuracy as shown in Figure 4.

In this experiment, the performance of the UBCF algorithm, the IBCF algorithm, and the SVD-based collaborative filtering algorithm on MoviesLens data are used to test user similarity. The frequency of participation in political education courses by vocational students is mostly concentrated 5 times as shown in Figure 5.

Figure 6 presents the activity distribution of minds and politics in the college and the consequences are in Figure 6. From Table 5, it is known that the abovementioned experiments that the use of collaborative filtering algorithms in the minds and politics lessons data of higher vocational colleges can make such recommendation results more accurate. The ability of the counting ways has also been enhanced. So, when the collaborative filtering algorithm will be employed to the ideological and political educational model of higher vocational colleges, and it will give more advice to the teachers and the information about how these students can grasp the courses.

5. Conclusion

The fast advancement of IT has promoted such a realization for educational informatization. Since such development in educational informatization has brought massive educational resources, the urgent need for personalized learning has become a key concern. For the thesis, such use of a behavior-dominated education mode in the education of lessons with political features for the high trade school can fundamentally increase the initiative from the tutors and students and contribute to such effective realization of the teaching goals. When using the action-oriented teaching

model in political lessons, we need to focus on the scale as well as use correct teaching methods reasonably. As political teachers, we need to eliminate difficulties and apply the action-oriented teaching model through our own efforts to improve the effectiveness of political education. In addition, it is essential as well to consider the particularity of political courses, so that there is no deviation in teaching, so as to maximize the role of politics in study, work, and life. In order to realize personalized learning, the key technologies used are collaborative filtering recommendation, content-based recommendation, etc. A personalized recommendation model for educational resources is constructed, including the following three models: user model, educational resource model, and knowledge point model. Various methods of similarity measurement in collaborative filtering algorithms and two commonly used collaborative filtering algorithms are described in detail. Aiming at the matrix sparsity way combined with SVD is proposed. Experiments show the correctness of collaborative filtering algorithms in educational data.

Data Availability

The labeled dataset used to support the findings of this study is available from the corresponding author upon request.

Conflicts of Interest

The authors declare that there are no conflicts of interest.

Acknowledgments

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