Retraction

Retracted: A BP Neural Network Model for Evaluating the Literature and Art Career of College Students' Political and Ideological Education

Mobile Information Systems

This article has been retracted by Hindawi following an investigation undertaken by the publisher [1].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.

References

[1] Y. Jing, "A BP Neural Network Model for Evaluating the Literature and Art Career of College Students' Political and Ideological Education," *Mobile Information Systems*, vol. 2022, Article ID 3020040, 9 pages, 2022.

Research Article

A BP Neural Network Model for Evaluating the Literature and Art Career of College Students' Political and Ideological Education

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The evaluation of the literary and artistic carrier of the political as well as the ideological education of college students is an important research topic in contemporary college education concepts. Since it consists of multiple variables, there are still many difficulties in evaluating the ideological productivity of college students. The same statement is true for political education as well. This paper builds a model for the literary and artistic carrier of the political as well as the ideological education of college students based on the backpropagation neural network (BPNN) structure. Furthermore, we study the current status of the literary and artistic carrier of the political along with the ideological education of college students. This paper implements the BP neural network to model the literary and artistic carrier of college level graduate students' political and ideological education in order to analyze the dynamics of contemporary college students' ideological differences. Finally, we provide an adequate theoretical basis for inquiry, from qualitative description to quantitative analysis. The suggested approach may successfully avoid the old model's instability and sluggish convergence issues as well as significantly increase the correctness of the evaluation findings for literary and artistic carrier of the political as well as the ideological education of college students.

1. Introduction

The backpropagation (BP) neural network is a type of multilayer feedforward neural networks in the field of artificial neural network (ANN) when taken within the context of artificial intelligence (AI). The network output error is used in the gradient descent approach to alter and adjust the network connection weights and lessen, as much as possible, error modulation. People's ideological status has demonstrated traits of diversification, complication, differentiation, and personalization against the backdrop of ongoing globalization, rapid advancement of information technology, and ongoing deep reform and opening up. This has presented challenges to the conventional mode of political as well as the ideological education method in a number of ways. It renders conventional educational approaches ineffective, sluggish, simplistic, and full of tiredness, making it challenging to address the intricate political along with the ideological issues facing modern society [1]. In [2], the authors have tried to develop abilities that exhibit a holistic

development of morals, intelligence, and art in the modern context of the diversified development of colleges and universities. The different sorts of college student communities are examined, and the primary purposes and practical importance of the college student community are clarified [3].

Based on a thorough examination of WeChat's attributes and capabilities, the authors in [4] evaluated how to utilize WeChat to its fullest potential for college students' political and ideological education. The classification model is developed by the logistic regression approach using the prior student data in order to assess the students' political as well as the ideological health [5]. Yang et al. [6] made a contribution to colleges and universities in the new age by "educating individuals for the party and fostering talents for the country." The enactment of the party's educational strategy, the accomplishment of the essential and vital job of cultivating moral individuals, and the education of skilled and competent builders and dependable socialists with Chinese individualities who are professional and have both

aptitude and political uprightness as well as comprehensive development people are all made possible by the ideological education of college students (CSs) carried out with the aid of BD technology. The goal of Yang et al. [7] is to study the function of BD in the process of carrying out targeted political as well as ideological education for CS. It is utilized to highlight the up-to-date issues come across in the study.

First, the fundamental guidelines for building assessment models of university students' political as well as the ideological learning are presented in [8]. Furthermore, in light of the deficiencies of assessment goals, single assessment approaches, shortage of applicability of assessment indicators, and bias of assessment benchmarks are presented in assessment systems. The application of machine learning, big data, mobile Internet, and cloud-edge technology in the teaching rehearsal of political along with the ideological course in universities and colleges can increase the affinity of both political as well as the ideological course. Similarly, according to the work demonstrated in [9], investigation of the requirement, teaching techniques, and teacher-student characters of the application of mobile Internet and big data technology in the teaching rehearsal of political as well as ideological course are demonstrated. Moreover, the work demonstrated in [10] is another influential piece that addresses similar concepts.

In this research, we construct a model grounded on the well-known BP neural network architecture while enhancing the performance of conventional BP neural network. Moreover, we briefly discuss the idea and model of artificial neural networks. We then go into how the BP neural network model was put to use in assessing the literary and aesthetic components of college students' political as well as the ideological education. In this study, the literary and artistic carriers of college students' political as well as the ideological education are evaluated using an improved BP neural network model [11]. By doing so, the paper successfully avoids the unsteadiness and sluggish convergence issues with the outdated model and substantially increases the correctness of the assessment findings. In terms of literary and artistic carriers of the political as well as the ideological education of college students, the significant innovations of the research done in this paper can be summed up as follows:

(1) We give a thorough explanation of the BP neural network's concept, topology, and network structure so that we can understand it in its entirety.

(2) We construct a BP neural network model and assess literary and artistic carrier of the political as well as the ideological education of college students based on the model.

(3) We study the current status of the literary and artistic carrier of the political along with the ideological education of college level graduate students.

The remainder of the paper is arranged as follows. We discuss The basic principles of the BP neural network in Section 2. In Section 3, model establishment and analysis is discussed, and conclusion and future work in are given in Section 4.

2. The Basic Principles of the BP Neural Network

2.1. The Model of BP Neural Network. The BP network uses back-up advertising algorithms, usually comprising an input layer, a hidden layer or several hidden layers depending upon the depth of the network model, and an output layer. In fact, in the model structure, information is transmitted from the input network layer to the hidden layer and, subsequently, to the output layer. If in case there is an error, then the error is reversed among the output of the output layer and the anticipated output. The basic structure of the BP network model is shown in Figure 1.

Regarding the selection of the activation function, if the output layer uses the sigmoid function, then the output is between [0, 1]. However, if in case a linear Pauline function is used, then the output can take any value [12]. The expression of the sigmoid function is given by $y = 1/1 + e^{-x}$, and its figure is shown in Figure 2.

2.2. The BP Neural Network Algorithm. We assume that there is only a single hidden layer in our proposed network model [13]. Furthermore, let us assume that i, j, and k inputs represent neurons in the hidden and output layers, and we input the jth neuron in the hidden layer. This relationship is mathematically modelled as

$$s_j = g(\text{net}_j). \tag{1}$$

The input of the neuron in the output layer is given by

$$\text{net}_k = \sum_j^m w_{kj} s_j. \tag{2}$$

Therefore, the final output is represented by y_k and is given by

$$y_k = g(net_k), \tag{3}$$

where g is the sigmoid function and is mathematically defined as

$$g(x) = \frac{1}{1 + e^{-(x+\theta)}}, \tag{4}$$

where θ is the threshold and the final output of the BP network model is characterized in the following formula:

$$s_j = \frac{1}{\left(1 + e^{\left(-\left(\sum_i^n w_{ji} x_i + \theta_j\right)\right)}\right)}. \tag{5}$$

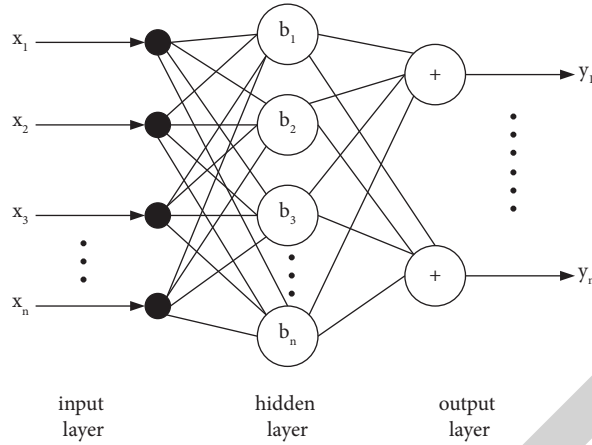The output s_j is given in formula (6) which is obtained by putting the values of formula (5) into formula (3):
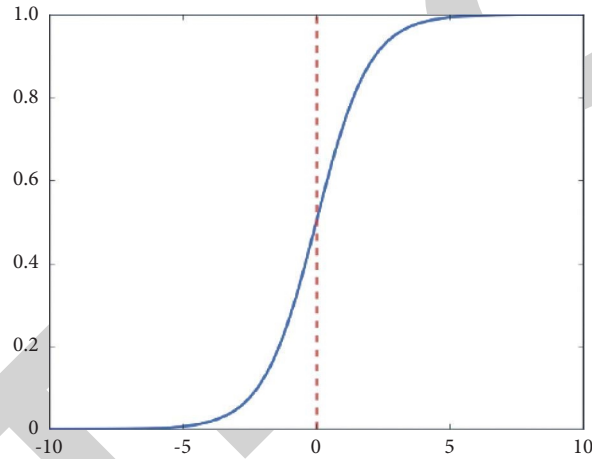
FIGURE 1: The BP network structure.

FIGURE 2: The sigmoid activation function.

$$y_k = \frac{1}{\left(1 + e^{\left(-\left(\sum_j^m w_{ki} s_j + \theta_k\right)\right)}\right)}. \tag{6}$$

The BP network background advertising algorithm idea can significantly minimize the error function. In the error return process, y_k is the true output of the kth node, t_k is the desired output, and the error function is given by

$$E = \frac{1}{2} \sum_k^p (t_k - y_k)^2. \tag{7}$$

2.3. Evaluation Metrics. We use three evaluation metrics, i.e., accuracy, recall rate, and $F1$ value to measure the prediction performance of the proposed BP network model.

2.3.1. Accuracy. By dividing the total number of texts by the number of texts for which accurate predictions were

produced, the accuracy rate is determined [14]. (8) can be used to define and estimate the accuracy rate.

$$\text{Accuracy} = \frac{\text{TP} + \text{TN}}{\text{TP} + \text{TN} + \text{FP} + \text{FN}}, \tag{8}$$

where TP stands for true positive, TN stands for true negative, FP stands for false positive, and FN stands for false negative.

2.3.2. Recall Rate. The recall rate is defined as the number of texts that are correctly identified as belonging to a positive class and as a percentage of all texts that are expected to do so [15]. It can be explained as given by

$$\text{recall} = \frac{\text{TP}}{\text{TP} + \text{FP}}. \tag{9}$$

2.3.3. The F1 Value. The $F1$ value is a specific kind of assessment index that fully takes into account both the

precision rate and the recall rate [16]. The predictive technique is superior and vice versa when the $F1$ value increases. The following equation can be used to define the $F1$ value:

$$F1 = \frac{(2 * \text{accuracy}) * \text{recall}}{\text{accuracy} + \text{recall}}. \tag{10}$$

We particularly assess the effectiveness of the suggested classification model using these evaluation metrics for each class for classification accuracy, recall, and $F1$ value.

3. Model Establishment and Analysis

Evaluating the political as well as the ideological educational status of college students is primarily a matter of identifying patterns, that is, comparing the actual monitoring result evaluation standards with the evaluation system of the political as well as the ideological educational status of college students. The result of identifying the BP artificial neural network model, i.e., the corresponding assessment of the students' political as well as the ideological educational status, is the level of environmental quality corresponding to the nearest standard value array to assess the political as well as the ideological educational status of college students [17].

The BP neural network, a multilayer feedforward neural network, offers excellent non-linear mapping capabilities. The internal neurons are not connected to any layer of the neural network model, rather only nearby neurons are connected to each other. Hidden layer, input layer, and output layer are the parts of neurons. The objective function in a standard BP neural network learning method is the sum of squares of network errors, and the gradient algorithm is used to determine the least value of the objective function. Error rectification is the guiding principle. The network error is output using the gradient descent approach, which also implements backpropagation and modifies and adjusts the network connection weight. Figure 3 shows the neural network learning process after minimizing error modulation [18].

3.1. The Patriotism Model of Literature and Art Careers. This paper uses a three-layer BP neural network with 20 neurons in the middle layer. If the training step scale in this paper is set to 100, the error accuracy of the network model training is 0.002 and the post-training output results are satisfactory and relatively satisfactory. The program in the MATLAB software is as follows:

    (i) $P = [0.7\ 0.3\ 0\ 0;\ 0.5\ 0.4\ 0.10;\ 0.5\ 0.5\ 0\ 0;\ 0.3\ 0.2\ 0.4\ 0.1;\ 0.4\ 0.4\ 0.20;\ 0.1\ 0.5\ 0.3\ 0.1;\ 0.4\ 0.3\ 0.1\ 0.2;\ 0.30.60.1\ 0;\ 0.34\ 50\ 0.6\ 0]; >>T = [0\ 1;\ 0\ 1;\ 0\ 1;\ 1\ 0;\ 1\ 0;\ 1\ 0;\ 1\ 0;\ 1\ 0]; >>P';\ >>T = T; >> \text{net} = \text{newff}$ (minmax (P), [2, 19], I′ tansig′, logsig′, ‘trainlm’);

    (ii) >> net.trainParam.epochs = 100;

    (iii) >> net.trainParam.goal = 0.0014;

    (iv) >> net = train (net, P, T);

    (v) $P\_\_test = [0.4\ 0.4\ 0\ 0;\ 0.2\ 0.8\ 0.2\ 0]'$

    (vi) >> Y = sim (net, P. test)
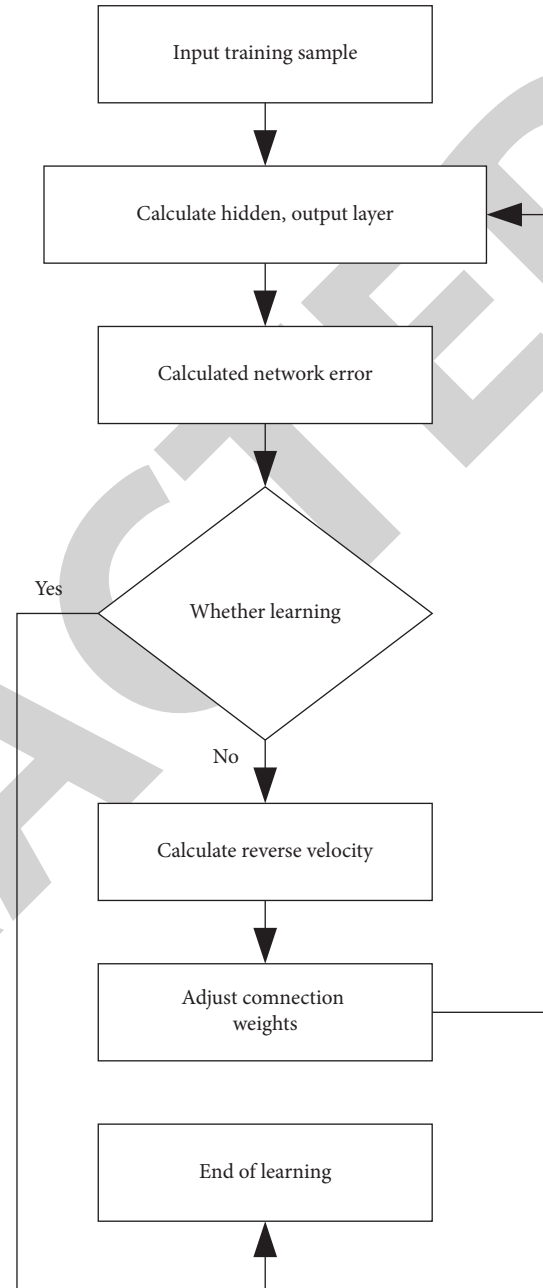
Figure 3: Neural network learning flowchart.

  (vii) $Y =$

 (viii) 0.0000

  (ix) 1.0000

  (x) 0.9989

  (xi) 0.0014.

The actual accuracy of the test and the reference error accuracy are shown in Figure 4. As shown in the figure, the test results meet the requirements after 14 steps.

The weights input to the input layer during network training are shown in Table 1.

The weights input to the output layer during network training are shown in Table 2.
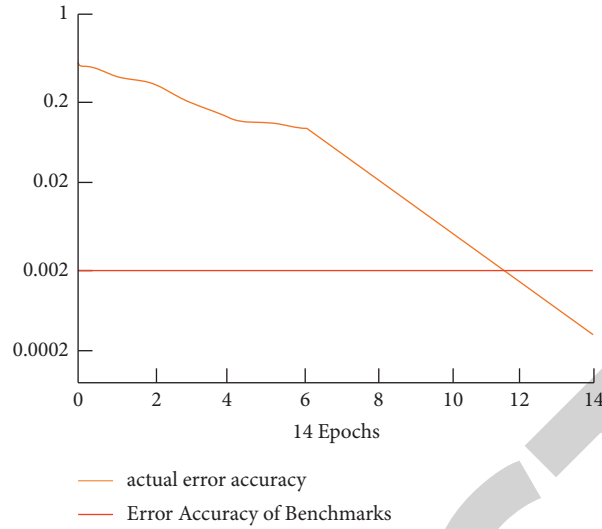
Figure 4: Error accuracy of the model.

Table 1: Weights of the input layer.

7.3676	6.7460	2.3132	−14.8766	1.7256	9.3173	10.1660	−3.5217
2.2961	−3.2459	12.6376	4.9848	6.4536	−0.7091	8.0472	6.9200
−1.3416	−13.4564	5.8914	2.2320	−5.3377	6.0507	8.6658	−10.6664
3.6785	5.9507	−11.6827	9.6164	1.1409	4.2388	−11.6314	−12.3859
−1.1803	12.8118	5.5029	11.0229	5.4328	0.2668	11.4821	−6.7897
6.2897	−4.1297	−8.6129	−6.8403	−3.1781	10.9147	7.5309	−5.4834
2.4587	−9.3093	−4.5662	−18.4676	5.1269	1.8168	−9.4137	15.7556
−4.9813	−4.8113	6.6864	−15.6568	5.6251	1.6632	−8.7323	16.8907

Table 2: Weights of the output layer.

−2.5391	0.3575	−0.8567	−0.1907	1.8130	−1.0057	−0.3211	0.4689
3.1670	2.1021	1.5061	0.5655	−2.9186	0.3298	−0.1584	−0.6670
−2.5391	0.3575	−0.8567	−0.1907	1.8130	−1.0057	−0.3211	0.4689
3.1670	2.1021	1.5061	0.5655	−2.9186	0.3298	−0.1584	−0.6670
−2.5391	0.3575	−0.8567	−0.1907	1.8130	−1.0057	−0.3211	0.4689
3.1670	2.1021	1.5061	0.5655	−2.9186	0.3298	−0.1584	−0.6670
−2.5391	0.3575	−0.8567	−0.1907	1.8130	−1.0057	−0.3211	0.4689
3.1670	2.1021	1.5061	0.5655	−2.9186	0.3298	−0.1584	−0.6670
1.5876	−1.1987	1.1235	3.5891	1.5421	−1.6895	0.9671	1.7012
−2.9912	−0.3013	0.6122	−3.8971	−2.1465	0.0587	−1.9268	−0.6451
−2.9912	−0.3013	0.6122	−3.8971	−2.1465	0.0587	−1.9268	−0.6451
−2.9912	−0.3013	0.6122	−3.8971	−2.1465	0.0587	−1.9268	−0.6451
−2.9912	−0.3013	0.6122	−3.8971	−2.1465	0.0587	−1.9268	−0.6451
−2.9912	−0.3013	0.6122	−3.8971	−2.1465	0.0587	−1.9268	−0.6451
−2.9912	−0.3013	0.6122	−3.8971	−2.1465	0.0587	−1.9268	−0.6451
−2.9912	−0.3013	0.6122	−3.8971	−2.1465	0.0587	−1.9268	−0.6451
−2.9912	−0.3013	0.6122	−3.8971	−2.1465	0.0587	−1.9268	−0.6451
−0.6354	1.2891	0	0	0	0	0	0

According to the survey data, the results obtained after the online training show that the patriotic political beliefs of college students are positive and healthy. Furthermore, they are optimistic about the social situation in the Republic of China and the situation they face, especially those who are concerned about social hotspots. However, the independence, choice, variability, and difference in the ideological activities of some students have clearly improved and the influence of various political, ideological, and cultural influences has increased significantly.

3.2. Moral Idea Model of Literature and Art Careers. In this article, the training steps are set to 100, and the error accuracy of the network model training is 0.002. Outcomes after training show that college students have strong
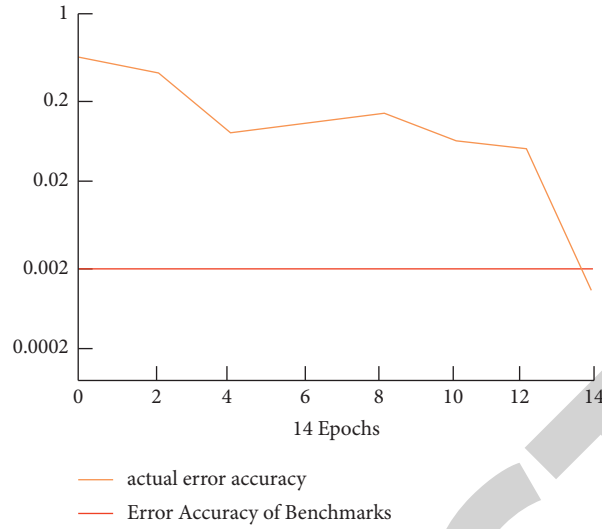
FIGURE 5: Error accuracy of the model.

TABLE 3: Weights of the input layer.

6.04885	3.72024	2.24081	1.12211	11.8194	−1.01276	−4.74083	−5.35803
10.89497	10.30148	9.61658	−8.4031	8.38868	6.61068	6.58202	4.26048
3.27458	6.04277	−5.18018	−2.73316	−16.579	−1.22214	−1.31496	2.01035
−2.90705	−8.74892	15.78325	−3.47418	13.19126	−1.59275	4.01227	1.07633
5.26108	2.94701	18.15992	6.18717	11.54132	5.1998	−3.20252	6.24576
−7.3828	−4.03316	−7.47613	−8.47961	12.57663	−7.19551	8.04153	−7.7778
9.44116	−7.45209	−2.26017	6.6755	−1.40548	4.13559	6.45987	−2.56684
11.20591	−3.83321	−8.25948	3.29138	−7.57593	7.40503	−1.05792	2.45248

TABLE 4: Weights of the output layer.

0.22573	−0.03089	−0.62916	−1.39002	−0.90343	1.45663	−0.7676	−0.1165
0.0025	0.20163	−0.25954	−0.04103	2.15207	0.53647	−1.52321	−0.05108
0.84457	0.57801	−0.55455	−0.31738	−1.4757	0.19498	−0.76045	0.55839
−1.30605	0.68744	−0.08132	−0.47084	0.84694	0.04539	−1.0064	−0.38912
0.99988	−0.11157	−0.04137	−1.3391	1.78616	−0.01061	−1.18454	0.95058
0.19114	−1.04189	0.56102	−1.44906	0.43575	2.80189	1.92293	−2.07846
0.41613	−0.44639	−0.91885	1.07607	1.50254	1.95454	−0.09109	0.45215
0.48692	−0.24985	−1.68021	−0.34228	−2.14601	0.86631	1.20702	0.42063
0.05008	−0.14151	−0.82789	−1.61919	0.37738	0.62707	0.88191	0.26026
2.2748	1.43447	1.7732	−0.02147	2.54335	−0.4241	−0.20788	0.34809
−0.41439	−1.60332	−1.09206	−0.68144	0.40043	−1.36376	2.23108	−0.43029
−1.01772	−1.09372	0.89603	−0.50595	−0.87311	0.93515	0.72299	−1.26683
−1.06426	0.83431	−0.14861	−1.56036	−0.86864	−1.12675	1.36848	−0.31647
−1.11885	1.83703	0.49612	1.08022	−0.12933	−1.06788	−1.29981	−0.11329
−0.10704	0.1113	−0.40218	1.43299	−0.1705	−1.87078	0.8331	1.00442
−0.24762	0.3619	2.29663	2.52692	1.07595	0.9462	0.07523	0.97375
0.42349	0.55768	−0.13797	−1.41793	−0.70576	0.87428	−1.39419	−1.60202
−0.26269	−0.51762	0.78542	1.21152	0.56807	0.69691	−1.83565	−1.97498

ideological and moral concepts. The program in the MATLAB software is as follows:

    (i) P = [0.8 0 0 0.1; 0.8 0.2 0 0; 0.9 0 0 0.2; 0.8 0.1 0 0; 0.8 0 0.1 0; 0.9 0.2 0 0; 0.4 0.5 0.2 0; 0.9 0.2 0.2 0; 0.5 0.2 0.1 0; 0.2 0.5 0.3 0; 0.6 0.4 0.2 0; 0.4 0.1 0.2 0];

    (ii) T = [0 1; 0 1; 0 1; 0 1; 0 1; 0 1; 1 0; 1 0; 1 0; 1 0; 1 0; 1 0];

    (iii) $P = P$';

    (iv) >> $T = T$°;

    (v) >> net = newf (minmax (P), [4, 20], 'tan-sig' log-sig', trainlm');

    (vi) >> net.trainParam.epochs = 100;

    (vii) net.trainParam.goal = 0.002;

TABLE 5: Weights of the input layer.

−10.2685	−4.8812	−11.0432	8.5458	−16.2349	1.5714	6.4851	−1.3277
11.0055	−3.6714	15.3104	1.1071	−14.2671	−8.9461	−2.3404	−4.7309
−6.4599	−7.3809	−8.6406	−8.0818	6.9495	10.0914	−1.0865	−9.0226
−5.4358	2.6676	7.9580	−7.6349	−8.0096	−18.2486	−10.1283	7.6802
−8.6268	−2.4587	−9.1686	−12.3538	1.3491	−8.3351	−12.0357	−6.1084
−2.9058	−1.5327	−2.6401	10.4688	−2.1581	−6.1432	1.0494	10.0883
1.5016	1.1871	−3.2485	−9.3791	−5.9565	−1.8321	−10.2374	17.0144
−4.4741	1.1297	−1.4010	11.7655	−1.1020	3.5183	−10.5253	13.4325

TABLE 6: Weights of the output layer.

|							
0.2587	1.3039	−2.0412	1.0624	−0.3185	1.5132	−0.1739	0.8385
−0.3723	−0.4344	−0.2955	−1.9166	−1.2622	−0.3775	1.2976	0.3699
0.4148	0.2760	2.2330	−1.4782	−1.5535	−0.5334	1.4785	2.2711
−0.1677	−0.7346	0.1404	0.1340	0.8468	0.6383	1.7941	0.4387
0.2147	0.9603	0.0436	1.3116	0.3209	−0.3078	−1.5502	−1.5503
−1.1838	−1.2842	0.4377	−1.2849	−1.1625	−0.2893	2.0491	−0.1560
1.3069	0.0470	1.7865	−0.2858	1.0079	0.9097	−1.6071	−0.7772
2.4971	0.5390	−0.9341	−0.6938	−0.3640	−0.0792	−1.5120	−0.9671
−0.7886	0.4177	−0.2681	−0.0839	−0.5934	−0.7231	0.2972	0.3353
0.2918	0.8025	0.5843	1.5742	−2.2164	−1.7408	−2.1675	−0.1958
−2.0408	0.3499	−0.8359	−2.2153	0.2272	0.8622	−0.8025	0.4036
−1.5150	−0.3144	0.1833	0.3971	0.9109	0.9232	1.1224	−0.9528
1.3664	0.6800	0.6865	−0.6987	−0.1001	−1.7787	0.9875	0.2162
0.3475	−0.2403	1.1430	0.7008	0.8143	0.0297	−0.3305	0.7893
0.9255	−2.1345	−1.6414	−1.1673	−1.0571	0.2663	1.0766	−0.9000
−1.1458	1.4958	−1.3619	0.5228	0.0679	−1.8427	−0.2770	−0.0372
0.0948	0.3928	−0.1448	0.9659	0.1533	0.5714	−2.6806	0.8984
−1.8176	0.0272	0.2209	−1.9536	−0.8938	−0.6577	1.1292	−1.0603
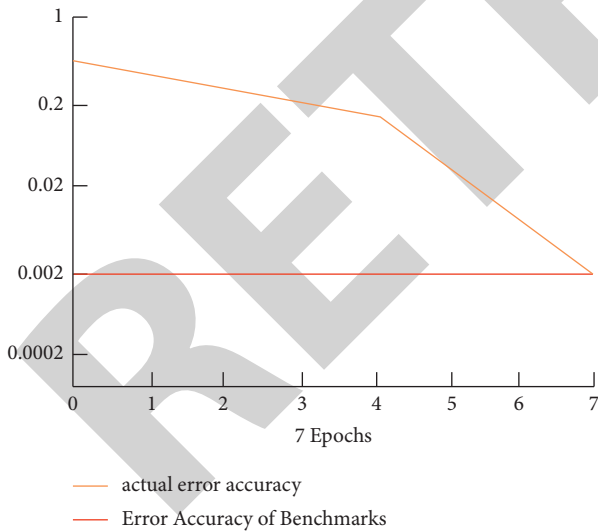
FIGURE 6: Error accuracy of the model.

(viii) net = train (net, P, T);

(ix) P_ _test = [0.8 0 0.1 0; 0.8 0.2 0.4 0]';

(x) >> Y = sim (net, P._test)

(xi) Y =

(xii) 0.0216, 1.0000

(xiii) 0.9764, 0.0000.

The actual accuracy of the test and the accuracy of the reference error are shown in Figure 5. As shown in the figure, the test results meet the requirements after 14 steps.

The weights input to the input layer during network training are shown in Table 3.

The weights input to the input layer during network training are shown in Table 4.

According to the survey, the results obtained after the network training show that college students have strong moral values, love for the motherland, and desire to be talented and aggressive. They are full of ideals, active in thought, and willing to accept new things. They care about their own development, practical instincts, and personal utility consciousness coexistence. At different levels, however, there are issues such as poor moral cultivation and self-control, poor understanding of ambition, poor sense of integrity, lack of social responsibility, weakened spirit of hard work, lack of unity and cooperation, and poor mental quality.

3.3. The Ideal and Belief Model of Literary and Artistic Careers. In this article, the training steps are set to 100, and the error accuracy of the network model training is 0.002. Out-of-pocket results after training show that college students have strong ideals. The program in the MATLAB software is as follows:

(i) P = [0.8 0.1 0 0; 0.4 0.1 0.2 0.1; 0.8 0 0.1 0.1; 0.6 0.2 0.1 0; 0.4 0.1 0.1 0; 0.8 0.1 0.1 0; 0.9 0 0.1 0; 0.9 0.2 0 0; 0.6 0.3 0 0; 0.9 0.1 0 0; 0.2 0.9 0 0; 0.4 0.1 0.3 0.2; 0.2 0.6 0 0.2; 0.5 0.2 0.3 0; 0.5 0.4 0.1 0; 0.5 0.3 0.2 0; 0.4 0.1 0 0.2];

(ii) >>T = [0 1; 0 1; 0 1; 0 1; 0 1; 0 1; 0 1; 0 1; 0 1; 0 1; 1 0; 1 0; 1 0; 1 0; 1 0; 1 0; 1 0];

(iii) PP';

(iv) >> T = T;

(v) >> net = newf (minmax (P), [4, 20], {tan-sig', logig'rainlm');

(vi) >> netrainParam.epochs = 51000;

(vii) net.trainParam.goal = 0.002;

(viii) net = train (net, P.T);

(ix) P_ test = [0.6 0.1 0.2 0; 0.1 0.4 0.5 0.1 1]';

(x) >> Y = sim (net, P. _test)

(xi) Y =

(xii) 0.0078

(xiii) 1.0000

(xiv) 0.9892, 0.0000.

The actual accuracy of the test and the accuracy of the reference error are shown in Figure 6. As shown in the figure, the test results meet the requirements after 14 steps.

The weights input to the input layer during network training are shown in Table 5.

The weights input to the input layer during network training are shown in Table 6.

This proposed technique is applied to the collected data, and the results are used to strengthen and guide the life confidence of college students. The confidence level of contemporary college students is generally good and it is a stage of development from a low level of irrational belief to a high level of rational belief. But it is undeniable that there is a certain degree of trust crisis among university students, which is mainly expressed in pluralism, variability, irrationality, non-scientificization, and secularization.

4. Conclusions and Future Work

In this paper, we implemented the BP neural network to model the literary and artistic carrier of college students' political and ideological education, to analyze the dynamics of contemporary college students' ideological differences, and to provide an adequate theoretical basis for inquiry, from qualitative description to quantitative analysis. We provide quantitative analysis and calculation methods for student-specific questions in this paper. The entire evaluation findings of college students' political and ideological education grounded on the model of the well-known BP neural network are acquired through empirical analysis. The outcomes are more reliable, and it is now a more popular method for assessing college students' political as well as the ideological education through literature and arts. On the other hand, nothing is known about Chinese education quality. The model of the BP neural network, which is

developed and suggested in this research study, is purely hypothetical and has not seen extensive use in real-world applications. Later on, it needs to be practiced and put into use. These restrictions will be the main area of our forthcoming study. We will further take into account more sophisticated procedures, for instance, the CNN, GCN, and the attention networks [21].

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The author declares that there are no conflicts of interest.

Acknowledgments

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