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Retraction

Retracted: Dynamical Alert of Thought and Politics Teaching Based on the Long- and Short-Term Memory Neural Network

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1].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] X. Hu and D. Sturdivant, "Dynamical Alert of Thought and Politics Teaching Based on the Long- and Short-Term Memory Neural Network," Wireless Communications and Mobile Computing, vol. 2022, Article ID 7465860, 11 pages, 2022. Hindawi Wireless Communications and Mobile Computing Volume 2022, Article ID 7465860, 11 pages https://doi.org/10.1155/2022/7465860



Research Article

Dynamical Alert of Thought and Politics Teaching Based on the Long- and Short-Term Memory Neural Network

Xiaodi Hu¹ and David Sturdivant D²

¹Ideological and Political Department of Chongqing Vocational College of Architecture and Engineering, Chongqing 400072, China ²The King's School, BP1560, Bujumbura, Burundi

Correspondence should be addressed to David Sturdivant; davidsturdivant@ksu.edu.bi

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To strengthen and develop the thought and politics work in state-owned schools, schools must explore the theoretical system of thought and politics construction in the practice of scientific development ideas guiding school development, actively innovate the practice model and implement early warning management for thought and politics projects. This is because only by accurately analyzing the problems and causes can we seek more reasonable measures for the laws of thought and politics practice education for modern students. At present, promoting the deep integration of thought and politics teaching projects with information technology has become an important means of thought and politics teaching projects in schools. However, with the explosive growth of network data, the structure becomes more and more complex, and learners face the problem of information overload as more and more information overflows in the network environment. Precise support for students with learning disabilities is a research direction for precision thinking education, and most existing support strategies in schools include manual statistics of failed subjects, written warnings, or corrective measures through simple correlation algorithms. In this paper, we propose a dynamical alert for thought and politics teaching based on the Long-Short-Term Memory Neural Network (LSTM), which uses a powerful global optimization function to optimize the parameters of the deep LSTM neural network. The experimental results show that the average execution time of LSTM is 19.46 seconds and 8.24 seconds lower than that of SCB-DBSCAN and CFSFDP, respectively, which shows that the execution time of the LSTM algorithm is faster and more accurate. Therefore, the LSTM algorithm is feasible and effective. The LSTM-based dynamic warning of thought and politics teaching can predict students' subject performance more accurately and has certain validity and feasibility.

1. Introduction

Unlike other disciplines, knowledge education in thought and politics teaching can solve the existing cognitive problems but not the problems of firm will and emotional experience in practical activities [1]. The Internet, as an emerging telecommunication operator, has completely changed the thought and politics teaching [2]. Therefore, it is important to take the lead in preventing destabilizing factors that affect the safe, civilized, and harmonious development of schools [3]. This will enable timely resolution and dissolution of hotspots, grievances, and problems at the forefront of student

tendencies and effective prevention of destabilizing factors in the school reform process [4]. Whether it is student-specific learning process data, quantitative learning outcome data, or behavioral data such as consumption and eating habits generated during the process, they are all relevant from the perspective of campus management and student education [5]. This can directly or indirectly reflect the quality of school training or the effectiveness of students' learning behaviors and of course can suggest quantitative directions for improving school or student behavior [6]. LSTM is a deep learning model that can learn from historical data to dig deeper into the patterns inherent in time series

data and provide optional advanced memory-based machine learning capabilities suitable for processing thought and politics teaching data [7].

Artificial neural networks have been widely used in many fields such as education, healthcare, and economy and have played an important role in social life during the epidemic [8]. How to use educational data mining technology to reveal the behavioral patterns present in learning, so as to improve teaching and learning in a targeted manner, is a problem worthy of in-depth study [9]. However, the setting and division of majors are characterized by dynamic changes, and the professional environment is potentially risky [10]. Therefore, there is a need to gradually establish a professional early warning mechanism to strengthen the overall pulsation and dynamic adjustment of professional settings. How to discover sensitive information in time and guide and control the development of the information wave of thought and politics teaching is the imperative of China's thought and politics teaching security construction oriented to the network environment to create thought and politics teaching [11].

As an effective monitoring tool in economic management, early warning systems play an important role [12]. The wide audience of school thought and politics teaching has failed to form a unified standard model of complex system engineering [13]. It is necessary to analyze and study the theory of collaboration, build a collaborative platform using a systematic approach, improve the collaboration mechanism, cultivate a collaborative culture, and build a dynamical alert model [14]. Therefore, it is necessary to actively address the issue of balanced development of compulsory education and achieve educational equity. However, despite the new demands for developing socialist education with Chinese characteristics, there are still some difficulties and challenges in achieving balanced development of comprehensive compulsory education [15]. Dynamic tracking of students' learning status and timely warning of abnormal learning behaviors help students to successfully complete their studies.

The innovative points of this paper are as follows:

- (1) The paper analyzes the LSTM algorithm and initial weight optimization through experimental research, contrasts and analyzes the implementation process of LSTM in dynamical alert, and to some extent complements the performance of the LSTM recommendation to obtain gains and make up for the weaknesses of other algorithms in the case of large data volume
- (2) In this paper, based on the previous research, we systematically study and construct an innovative early warning index system for school education professionals
- (3) By theoretically analyzing the configuration of network parameters in the LSTM early warning model, this paper demonstrates the effectiveness and rationality of a neural network approach for the study of dynamical alert of school education

The full paper consists of five main areas.

The thesis begins with a description of the background and significance of the research, followed by a description of the main content of the thesis. Section 2 introduces the work of dynamic early warning and long- and short-term memory neural networks in ideological and political education. Section 3 is the development of the LSTM early warning model and a detailed analysis of the network parameters of the LSTM early warning system to provide a more complete understanding for the readers of this paper. Section 4 is the focus of this paper, which mainly completes the research on the application of LSTM in ideological and political education from two perspectives: the optimization of LSTM initial weights and the analysis of the LSTM implementation process in dynamic warning. The last chapter of this paper concludes this work.

2. Related Work

2.1. Dynamic Warning of Thought and Politics Teaching. For practical teaching methods, many scholars at home and abroad have conducted extensive research and investigation, forming a more systematic theoretical system. Using new media and new technology to revitalize labor, the traditional advantages of thought and politics work are highly integrated with information technology to enhance the sense of modernity and attractiveness. Establish a mechanism for information control of hidden thought and politics problems of students, build a platform for thought and politics work, actively carry out thought and politics work from multiple angles, and better organize thought and politics work of students, leading to safe production, quality service and enterprise management, and effective carrier.

Abdalkafor et al. emphasized observational learning as a fundamental learning method for behavioral acquisition and based on this proposed a social learning methodology that argues that motivation, attention, and generative processes limit observational learning [16]. Neller studied school student performance data, improved the Apriori algorithm to analyze association rules between courses, and combined association rules with academic performance to assist school education administrators in early warning of academic performance [17]. Li suggested ways to strengthen ethics, best practices, etc. For example, it is important to pay attention to the influence of the environment, good education, and good laws as an important tool for thinking and education [18]. Yang et al. developed a school-assisted decisionmaking system that focuses on using the WNBC algorithm to obtain association rules for student performance and classification rules for student employment analysis and to provide early warning of dropout rates [19]. Zhao attaches great importance to the creation of a moral climate and believes that it is important to focus on moral education from an early age and create the social environment necessary for ethical behavior [20].

Most of the thought and politics teaching in schools adopts the method 5of statistical communication at all levels to control the thought and politics risks of students. Establishing a whole set of early warning system suitable for the balanced development of compulsory education in China is

very important to promote the balanced development of compulsory education in China and adjust and control the existing unbalanced development.

2.2. LSTM. Social learning theory is the basic theory of educational psychology, the core of which is the product of the interaction between the environment and the individual. Focusing on the close integration of quarterly student thinking analysis and daily dynamic analysis, it analyzes and studies trends and new issues in student thinking. In recent years, the number of online learners has increased dramatically with the continuous development of Internet strategies, and more advanced network technologies have greatly facilitated the education system to carry more and more cultural resources. Among the current deep models, the LSTM-based recurrent neural network model is more suitable for dynamical alert processing in thought and politics teaching because it can effectively utilize the long range-dependent information of serial data.

Zhao et al. analyzed the mathematical performance of freshmen through neural networks and classical discrimination to propose an efficient mathematics education program for Coastal Carolina University [21]. Bañeres et al. used LSTM for accurate classification of input instances [22]. Zubatyuk et al. classified the academic performance of first grade students by a random forest algorithm to predict student performance in a timely manner and suggest timely actions to improve student performance for the poor performers [23]. Wen et al. used a convolutional neural network-based LSTM model to analyze learners' online learning logs and predicted the learning status of learners well [24]. Cao used LSTM to predict the performance of students in Beijing Labor and Social Security Vocational University as an example, and based on this, he provided reasonable suggestions for teachers and schools to improve the quality of education [25].

Informatization has long been a buzzword in Chinese schools, but the degree of informatization also varies depending on regional differences in economic development and the actual situation of each school. There is a need to be at the forefront of research on LSTM-based dynamic alerting and to compare the performance of existing dynamic alerting algorithms. Therefore, it is essential to conduct credibility and evaluation at all stages of the thought and politics teaching process.

3. Thoughts on Dynamical Alert of Thought and Politics Teaching Based on LSTM

3.1. Construction of the Early Warning Model Based on LSTM. The LSTM neural network has good performance in processing and dynamically warning data with long time series interval and delay [26]. The student one-card data and library data are sequences that occur over a long period of time and are time-dependent, and ordinary neural networks often perform poorly in processing these data [27]. So LSTM is used for dynamical alert of thought and politics teaching. The LSTM network-based academic early warning model is shown in Figure 1.

First, after all the student data matrices are extracted by multidimensional normal distribution features, each matrix is divided into singular and standard classes. Students' thought and politics teaching cannot be separated from certain educational objectives, and different educational contents corresponding to different educational objectives have to choose different forms of practical pedagogy. The defined energy function can be derived from a set of joint probability formulas for the state values of the visible and hidden layers as follows:

$$P(v, h, W) = \frac{P(v, W)}{z(W)} = \frac{1}{z(W)} e^{-E(v, h, W)}, \tag{1}$$

where E(v, h, W) is the energy function and Z(W) is the parsing function.

In the process of implementing dynamical alert management of thought and politics work, we are deeply aware that students' ideological problems that are not solved in time can easily go to radicalization and affect the stability of the school [28]. This step is an analysis of potential problems and crises based on the information taken in and is the most primitive starting point in the whole risk early warning process. In the LTSM neural network, the input of its implicit layer unit consists of two main inputs: the output value of the previous layer and the output of the implicit layer at the previous moment. In order to improve the accuracy of the implicit layer unit, the weighted plain Bayesian model is

$$V_{\text{wnbc}}(E) = \arg \max P(C) \prod_{k=1}^{n} P(x_k|C)^{w_k},$$
 (2)

where w_k is the weight of the corresponding attribute and x_k is the median value of the corresponding attribute.

Secondly, for each type of student, the data matrix is passed through two networks, and for their different data types, data rows with high temporal dependence, such as one-card consumption records, are fed into the adaptive excitation function-based LSTM network for training. The LSTM neural network structure is shown in Figure 2.

Individual students are the target of the school's ideological and moral education, and there are great differences in the ideological and moral levels of different students, so in the implementation of practical education methods, the needs of students at different levels should be taken into account [29]. The school pays attention to the "face-toface" dialogue between teachers and students in various forms, such as democratic seminars and dialogues, and fully listens to the opinions and suggestions of students, so that "problems do not accumulate, and students do not accumulate grievances," which solves the conflicts at the source. The problem is solved at the source, and the students' emotions are smoothed out [30, 31]. The analysis of the source of the alarm is to trace the fundamental source of the alarm, which is the realistic basis for constructing the early warning index system, and the analysis path is generally considered from two aspects: endogenous and exogenous factors. In the implicit layer of the deep LSTM network, the input of

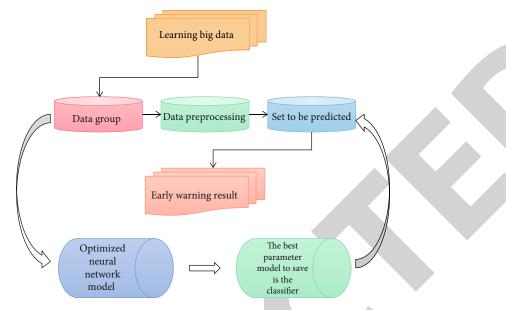


FIGURE 1: Academic early warning framework based on the LSTM network.

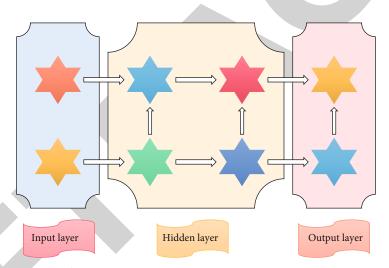


FIGURE 2: LSTM neural network structure.

each LSTM cell is mainly composed of three: the output value of the previous layer, the output value of the cell in the same LSTM cell at the previous moment, and the historical information retained by it. In the dynamic warning task, in order to know the magnitude of the impact produced by each experiment, the following method can be used to calculate the diagnostic weights:

$$X = \tanh(H), \tag{3}$$

$$\alpha = \text{soft max } (\omega^T X), \tag{4}$$

where α is the weight and H is the hidden state sequence of layers.

Finally, rows of data with low temporal dependence, such as students' grades in various subjects and grades 4 and 6, are fed into an MLP network based on a flexible backpropagation algorithm for training. A linear probability fit is

performed on the output results obtained from each network to achieve a cascade of networks. Then, the adjustment amount of each weight is calculated in turn, and the weights are adjusted:

$$\Delta w_{ik}(t+1) = \eta \delta_k y_k = W_{ik} = \eta \delta_i y_i, \tag{5}$$

where η is the positive gain constant for controlling learning speed and t is the iterations.

The hierarchical nature of the content and goals of students' ideological education determines that the development of practical education activities should also be carried out in layers. When the management makes decisions, it insists that the fundamental interests of students should be the starting and ending point of the work and strives to reduce the ideological problems of students to the minimum. The analysis of warning signs is the main part of constructing a risk warning index system, which is a

manifestation of making risk sources concrete and measurable. Finally, the comprehensive assessment of risks and the division of the degree of alertness were carried out. In the formula of the output gate, any letter with a subscript indicates that the item is associated with numerous LSTM units in the hidden layer. This is mainly due to the flexible connection in deep LSTM networks, where LSTM units can be directly connected to each other, in addition to cell units. The integration of the early warning classifier into the dynamical alert model for the thought and politics teaching can better solve the problems of the imbalance between the human cost and the actual effectiveness of the dynamical alert process of the school thought and politics teaching in the context of multidimensional applications and the lag in information feedback. It has the advantages of accurate dynamical alert, strong generalized early warning ability, and high efficiency in predicting the change trend of risk control.

3.2. Network Parameter Configuration in the LSTM Early Warning Model. The selection of hyperparameters for a neural network is an important factor in determining whether a network is optimal or not. The most important hyperparameters of a neural network consist of learning rate, momentum increment, and number of training iterations. A dichotomous-based parameter tuning method is used to obtain the theoretical optimal value through the initial determination of the range and then three layers of iterative cycles. The parameters of the multidimensional normal distribution are optimally tuned by a prefeedback method based on an iterative algorithm to obtain the global optimal solution for each parameter. The parameter adjustment process is shown in Figure 3.

The general form of ADMM cannot be applied to distributed algorithms yet, so the general form of ADMM evolves into the globally consistent ADMM distributed classification algorithm. The global consistency problem is as follows:

$$\sum_{i=1}^{n} f_i(x) + g(x), \tag{6}$$

where f_i is the loss function.

Just understand that the partial derivatives of the parameters that pass through each gate are to converge and correct the weights in the direction of the gradient. Therefore, the application of the practical education method should focus on social benefits and make sharing for the support unit and the region where it is located in order to get more social support. The early warning indicator system set up by the school education profession as the core element of building an early warning system is to reflect the abstract alarm situation with concrete sensitive indicators. The purpose is to sensitively warn and monitor the risk situation of school professional setting, so that education administration departments and schools can grasp the real situation and development of professional setting in time. The sample data are divided into very large, very small, and bipolar types for normalization, respectively:

$$F_j = \frac{X_j - X_{\min}}{X_{j \max} X_{j \min}},\tag{7}$$

where F_j is the implicit function, X_{\min} is the minimum value, and X_{\max} is the maximum value.

The early warning classifier-based dynamical alert system of school ideological education mainly realizes the coordination and interaction among school ideological education practitioners, school students, and school ideological education function departments. The system is designed to clarify the objectives and set the core tasks of the school's thought and politics teaching and to ensure that the school's thought and politics defense is solid and reliable. And make full use of a variety of meetings, class student learning, and other forms, and take the initiative to do a good job of solving doubts and confusion and cohesion with the ideological power of Nagaon.

Secondly, if it appears, then random increment superposition is carried out for further attempts; we generate a random increment by a random function, so that the current value plus the random increment is neither less than the range minimum nor greater than the range maximum. The objective function with the minimum sum of cross-entropy losses for each node is used under the condition that the depth model parameters are constrained consistently for each node. The objective function is as follows:

min
$$\sum_{i=1}^{n} f_i(w) + g(w)$$
, (8)

$$s, t.w_t - w = 0, \tag{9}$$

where w_i is the model parameters of nodes and w is the global model parameters.

5The LSTM network mainly uses a one-way propagation method, and the neural nodes in the adjacent layers are all connected to each other within it. That is, each neural node is connected to the neural node in its next layer. The dynamic warning error of the LSTM hybrid neural network model can be evaluated using the root mean square error:

RMSE =
$$\sqrt{\frac{1}{n} \sum_{i=1}^{n} (\widehat{y}_i - y_i)^2}$$
, (10)

where *n* is the number of students, \hat{y}_i is the early warning grade point, and y_i is the true credit score.

In the implementation of the practical education method, the practical education activities carried out for students of different levels are mutually influential and interrelated. It is necessary to reasonably coordinate the practical education activities for students at different levels, follow the principle of overall optimization, make overall arrangements and systematic planning for the implementation of the practical education method for students' civic and political education, and form educational synergy. Insist on major decisions for students to participate to enhance students' ventilation. And widely solicit opinions from various aspects,

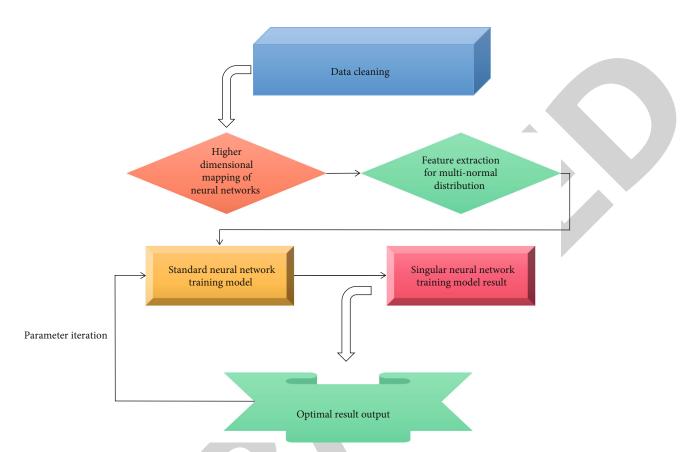


FIGURE 3: Parameter adjustment process based on feedback.

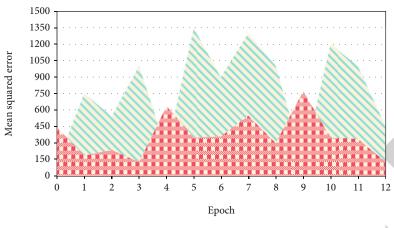
take students' emotions and voices as the first signal, fully consider students' ability to bear, first easy and then difficult, and advance steadily.

Finally, the theoretical optimal learning rate of the hidden layer of the neural network, the theoretical optimal momentum factor, and the theoretical optimal number of iterations are determined by repeated iterative calculations of the elastic backpropagation algorithm. We also combine the results of early warning to strengthen the macroguidance, reasonable layout, and dynamic adjustment of school professional settings and promote the professional settings to continuously tend to be scientific and reasonable. In order to ensure the balance of the labor force structure and promote the effective implementation of the practical education method for the continuous upgrading of regional industrial structure students' civic and political education, the main thing is to see the effective combination of students' civic and political education and practical education activities. To achieve the effective combination of the two, it is necessary to correct the school teachers' understanding of the concept of practical education. We firmly establish the idea of all relying on students in the actual work decisionmaking process, adhere to the cohesion of student thinking, and unify the ideological understanding of students, thus making it a good working mechanism conducive to the thought and politics work of students.

4. Application Analysis of LSTM in Dynamical Alert of Thought and Politics Teaching

4.1. Optimization Analysis of Initial Weight of LSTM. A number of more active schools have emerged in the process of applying the practical education method for students' thinking and political education and have accumulated a wealth of successful experiences. The school teachers responsible for organizing practical education activities should go into these schools, learn their successful experiences in the exchange, and strengthen the concept of practical education method. The LSTM neural network algorithm adjusts the model parameters (i.e., the weight values of the network) through several training iterations and finally judges whether the algorithm has achieved the ideal deep neural network model by the decreasing trend of the loss function. The qualitative data is transformed into quantitative output by the LSTM network model, and then, the aggregated output results are evaluated comprehensively, and the LSTM training curves before and after the transformation are shown in Figure 4.

In order to improve the accuracy of dynamic warning, the above-mentioned research results are used for the effective selection of data features for specific educational scenarios and prediction targets, combined with the access and difficulty of data collection.



- Before transformation
- After transformation

FIGURE 4: LSTM training curve before and after transformation.

First, the weights of the deep LSTM network are mapped to the particles in MHPSO. The data of users in each module are collected and stored in categories according to the type and source of data. The number of weights in the deep LSTM network represents the number of particles. For students, based on the dynamic alert results, we can screen out the courses that are below the passing line and on the edge, so as to remind and warn students about their course learning. This allows students to focus on reviewing or breaking through weak subjects to reduce the risk of failing the course. The data set made in the adaptive network matching experiment was tested, different networks were trained for student data, and different results were obtained for different numbers of training sets, as shown in Table 1.

Secondly, it is only necessary to encode the connection weights between each neuron node as particles, one weight corresponds to one particle, and set the appropriate fitness function; at this time, the training process of the deep LSTM network can be seen as the process of finding the optimal solution. Sample data preprocessing is the most important part of the data mining process for the data preparation stage, where there may be unreasonable data in the sample which affect the overall effect of the research malefactor. The number of neurons in the output layer is set to 5; the key to the evaluation process whose setting will affect the objectivity of the evaluation, the actual output of LSTM, and the expected output are shown in Figure 5.

For teachers, by screening the failure rate of lecture subjects, they can understand students' learning status qualitatively or semiquantitatively, focus on students who are at the passing line and its edge, and proactively provide academic help. By using decision trees and clustering methods to dynamically alert students' performance, it is found that by focusing on exceptionally good and exceptionally poor courses, it is possible to provide advice to students who perform well academically and timely alerts to students who perform poorly academically. This method has achieved good results in dynamic alerting of student learning, but

Table 1: Comparison table of early warning accuracy of different algorithms.

	Random forest	SVM	LSTM
2000	0.261	0.453	0.887
4000	0.453	0.598	0.983
6000	0.562	0.631	1.226

the accuracy of dynamic alerting needs to be further improved because of the need to specify features manually. This optimal solution refers to the initial weights that give the best performance of the deep LSTM network. It also identifies and interprets various forms of problems and phenomena effectively, so as to discover the risks and crises caused by the improper setting of school majors and provide a realistic basis for the dynamic adjustment of majors. The average recall rate reflects the proportion of relevant items to all relevant items, and the change of the average recall rate of LSTM when setting batch size as 10, 20, and 30 is shown in Figure 6.

Finally, the mean square error of the output of the deep LSTM network is used as the fitness function of MHPSO. Data downscaling and transformation mean that a certain migration method is used to translate the original highlevel dimensional field into a minimum dimensional field. The main purpose of this design is to fully utilize the powerful global optimization-seeking capability of MHPSO, so as to minimize the mean square error of the output of the deep LSTM network. It can give students more intuitive alerts or hints, so that they can pay more attention to the study of a certain subject, solve the problems in learning in time, and prevent the occurrence of failure to graduate on time. The process of gathering information provides an in-depth grasp of the dynamic process and a dynamic warning of possible future disadvantages. It is also able to conduct a comprehensive analysis of the signs and symptoms that appear in the

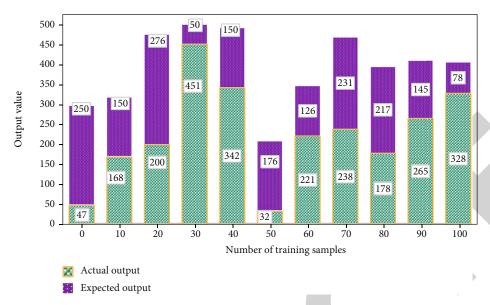


FIGURE 5: Actual output and expected output of LSTM.

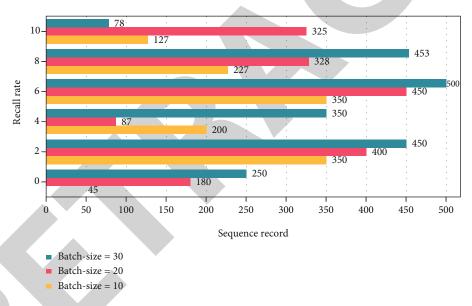


FIGURE 6: Changes in recall rate of LSTM average.

alert in order to guide the relevant departments to take timely and favorable measures to avoid or reduce the occurrence of unnecessary losses.

4.2. Analysis of the LSTM Implementation Process in Dynamical Alert. Educational philosophy refers to people's objective understanding of practical educational activities, which has a certain guiding effect on people's educational behaviors, and the correct educational philosophy has a driving effect on educational activities. Therefore, the mean square error of the real data of the deep LSTM network and the dynamical alert value is used as the fitness function, and the smaller value of this function indicates the better performance of the corresponding particle. In layman's terms, suppose that a certain class of information has two

characteristics and we project it onto a two-dimensional plane. We can find a straight line to divide the sample into two parts, so that the two parts of the nearest point to the straight line is the farthest away from the straight line, which we call the classification line, and the two points are called support vectors. In the early warning test of LSTM, when the set of neighbors is set to 5, 10, and 15, the model generated by the training is tested and the evaluation criterion used is SPS. The test results are shown in Figure 7.

First, the initialization of the deep LSTM network mainly includes the number of population particles, the number of population structure stratification, the number of iterations, and the initial position and velocity of each particle. Factors such as enjoyment of the course and the number of questions answered also affect students' course grades, which

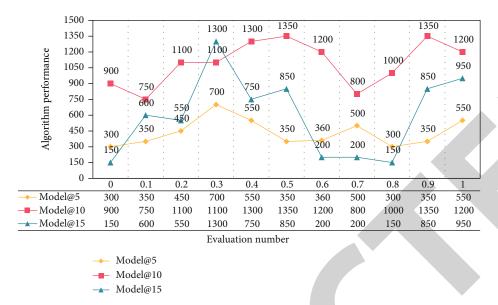


FIGURE 7: LSTM early warning algorithm performance test.

may be one of the reasons for the slightly poorer accuracy of dynamic warning scores. It is necessary to reverse the idea that some school teachers only treat the practical pedagogy as an aid and supplement to the theoretical pedagogy and further study the documents and conference spirits that attach importance to practical activities to change the idea that they do not pay enough attention to it, have a rather one-sided understanding, and cope with it. When designing the training data set, also consider the possible noise. In order to reduce the noise near the boundary caused by the network error judgment, a larger number of training samples should be used. To further verify the feasibility and performance of the LSTM algorithm, the SCB-DBSCAN algorithm, the CFSFDP algorithm, and the LSTM algorithm are compared. The results are shown in Table 2.

As shown in Table 2, the average running time of LSTM is 19.46 s and 8.24 s lower than SCB-DBSCAN and CFSFDP, respectively, which shows that the LSTM algorithm has faster running time and higher accuracy rate. Therefore, the LSTM algorithm is feasible and effective.

The input number of samples is transmitted by the entry level via the implicit level to the output level, where the condition of every level only influences the condition of the next bit, and the reverse transmission is performed when the output value of the output level does not match the desired result.

Next, the fitness values of all particles in the population are calculated and the hierarchical structure is constructed. The fitness values of all particles are calculated, and then, the hierarchical structure of the population is constructed according to the magnitude of the fitness values. Under the hypothetical conditions, the LSTM recurrent neural network model is used for the dynamic alerting of performance with good experimental results, which shows the effectiveness and practicality of the method. The optimized deep LSTM network is able to find better network connection weights in the optimization process due to its better optimization performance compared with other algorithms. The results

TABLE 2: Statistical table of algorithm performance comparison.

	SCB-DBSCAN	CFSFDP	LSTM
Average running time (s)	87.34	76.12	67.88
Average accuracy (%)	0.156	0.067	0.032

of the function optimization comparison are shown in Figure 8.

Each school makes training plans for teachers, forms a perfect training system, strengthens the study of the theory of thought and politics teaching through the training of school teachers, corrects the understanding of the concept of thought and politics teaching, and forms an advanced concept that meets the needs of society. The connection weights of the neurons in each layer are corrected layer by layer according to the error between the actual output value and the desired output value from back to front until the error reaches the allowed range.

Finally, the fitness function value of each particle is compared with the individual extreme value, and if the fitness function value is smaller, that fitness function value becomes the new individual extreme value. Teachers can start from students' learning interests, self-efficacy, and learning strategies to carry out teaching management by stratification and classification. Schools everywhere should create various favorable conditions for teachers to participate in learning and study activities and social practice exchanges and organize various forms of academic exchange activities, learning and study activities, social practice interactions, etc. To increase teachers' insight, broaden their horizons and increase their understanding of how society needs talents. Specifying the evaluation content of professional setting early warning activities is the concretization and behavior of the professional setting early warning goal and also a reflection of the value judgment of professional early

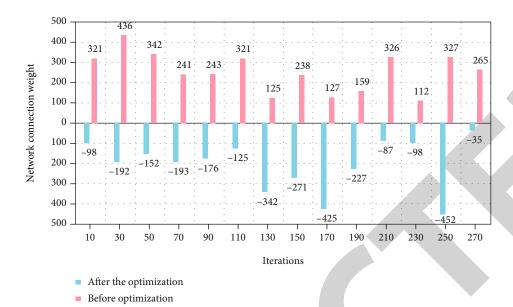


FIGURE 8: Comparison of function optimization.

warning, which determines the direction and level of the school's professional setting early warning. The above process completes one learning iteration, and LSTM repeats this iteration many times until the preset number of learning or the error requirement is met, so that the training process is finished.

5. Conclusions

Early warning of academic dynamics is a hot topic of concern for educators, and the rapid development of information technology has led to the rapid development of student behavior data collection and analysis techniques. The problems of practical education of students' thinking and political education are mainly the formalism in the organization of practical education activities, the lack of proper content, the relatively single form, and the lack of incidentality. These problems are different concepts of practical education methods, imperfect relevant mechanisms, and relatively lagging theoretical research. Big data technology shows the role of big data by mining the deep relationships and laws of data, and the huge data waste has become a treasure trove of data. LSTM outperforms other deep neural network models in terms of prediction and dynamic warning features. In order to better meet the needs of school thought and politics teaching programs and overcome the current problems of lagging school thought and politics teaching programs, imperfect prediction mechanism, and weak control ability, this paper proposes dynamical alert for thought and politics teaching programs. LSTM-based thought and politics teaching, i.e., the introduction of the deep LSTM neural network model in deep learning, is used for dynamical alert of thought and politics teaching. LSTM-based dynamic warning for thought and politics teaching, dynamic warning model with high fit, robustness, stable system performance, and reasonable division of functional modules can better achieve the expected design purpose and can provide more functions. The exact dynamic warning students' course performance has a certain validity and practicality and has a certain promotion and practical value.

Data Availability

The figures and tables used to support the findings of this study are included in the article.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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