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Computer-Aided Design AND APPLICATIONS

Evaluation System Construction Industry for Kindergarten Teachers based on Digital Big Data Art

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Abstract. In order to improve the development evaluation effect of kindergarten teachers, this paper analyzes the problems existing in the current development evaluation of kindergarten teachers. Moreover, for massive data, this paper combines big data technology to construct an evaluation system, and proposes a multi-parallel extreme learning machine model based on error compensation. In addition, this paper uses data mining algorithms to analyze the characteristics of the development evaluation of kindergarten teachers, analyze the system function structure according to the actual situation of the development evaluation of kindergarten teachers, and carry out the system role setting and the realization of system function modules. After constructing the complete system framework, the reliability of the system is analyzed through experiments, and the results of the experiments are displayed through statistical methods. From the research results, it can be seen that the intelligent system constructed in this paper can play a reliable effect in the development evaluation of kindergarten teachers.

Keywords: Big data technology; kindergarten teachers; development evaluation; intelligent system; Construction Industry; Digital Art-Based Development.
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1 INTRODUCTION

"Improving quality" is one of the current work policies for education development. Since the promulgation of the "National Ten National Notices of Preschool Education", China's preschool education has developed rapidly in reforms, and the team of kindergarten teachers has continued to grow. However, the overall level of team quality is not satisfactory, and many quality problems of kindergarten teachers have surfaced. At present, the quality of kindergarten teachers in our country has gradually developed into the main obstacle to the improvement of preschool education quality, which has attracted the attention of the government and scholars [4].

Traditional evaluation methods are all relative evaluations. It is based on the overall level of the kindergarten teachers participating in the kindergarten to determine the evaluation standard. Moreover, it uses one or several teachers as the benchmark, and compares other teachers with the benchmark teachers to determine the position of the participating teachers in the group, and then selects the outstanding kindergarten teachers. This evaluation method has a certain degree of objectivity, but the evaluator's own standards are not different. Moreover, the results produced in this way are still not scientific. At the same time, neither the evaluator nor the implementer has a complete quality evaluation standard with an absolute level, and the true level of each kindergarten teacher cannot be truly presented. In addition, the excellent kindergarten teachers produced in this situation cannot serve as a role model and take the lead for the entire team of kindergarten teachers, and it is also not conducive to other teachers to plan their own professional development. Therefore, from the perspective of preschool teacher team construction, kindergarten development and individual professional development of kindergarten teachers, it is necessary to establish a scientific evaluation index system for excellent kindergarten teachers. Moreover, it is necessary to achieve a scientific evaluation model based on absolute evaluation and to use relative evaluation as the standard reference in the evaluation of the quality of kindergarten teachers, and to take into account the specific cases of individual differences. Collaborate with construction industry stakeholders to understand their specific needs and expectations for kindergarten education.

Kindergarten teachers are the backbone of kindergarten education and the soul of educational activities. At present, the number of kindergartens, the number of children in kindergartens and the number of kindergarten teachers are increasing year by year, and the quality of kindergarten teachers is getting more and more attention from the society. However, it was found in the survey that currently some kindergartens in the province do not have all kindergarten teachers holding a certificate, and some teachers who have a teacher qualification certificate also include some transferred teachers [11]. The transfer of these teachers from primary and secondary schools to kindergartens alleviated the serious shortage of kindergarten teachers to a certain extent, especially in rural areas. However, under the current situation that rural kindergarten teachers account for a large proportion of the province's kindergarten teachers, whether the quality of rural kindergarten teachers can be improved, and whether the transferred teachers can successfully transform is directly related to the improvement of the overall quality of kindergarten teachers in the province. In the face of this situation, the improvement of the quality of kindergarten teachers provides a solid and reliable foundation for the improvement of the quality of kindergartens and the healthy growth of children. By doing a good job in the quality evaluation of kindergarten teachers, teachers can recognize their own shortcomings from all aspects and multiple angles and learn excellent standards. The purpose of evaluation is to improve and pursue perfection, not to prove the strength of ability or quality. Only the improvement of the overall quality of preschool teachers can ensure the quality of preschool education to a higher level and enable every child to obtain "high quality" preschool education. Collaborate with educators and industry experts to create a curriculum that integrates digital art into construction-related teaching

The quality evaluation of kindergarten teachers is an important part of the teacher evaluation system. It is an important content that cannot be ignored to improve the quality of teachers and preschool education, and it is an important way to promote the professionalization of kindergarten teachers. In view of the current problems in the quality evaluation of kindergarten teachers, scientific evaluation concepts and methods are used to change the current phenomenon of deviating from theory and relying too much on subjective judgment in the quality evaluation process, and to provide a theoretical reference for highlighting the scientific and professional quality evaluation work [8].

Based on the above analysis, this paper uses big data technology to analyze the development evaluation of preschool teachers, and construct a corresponding intelligent system, which is convenient to effectively improve the evaluation effect of preschool teacher development.

2 RELATED WORKS

The literature [16] believed that teacher performance appraisal is based on certain values, goals and behavior indicators to establish teacher literacy, to provide effective help for teacher learning, research, education and teaching activities, and to conduct systematic analysis and scientific value judgment of the completed work status. The literature [22] pointed out that the purpose of teacher performance appraisal is the application of appraisal results. Colleges and universities closely integrate the results of teacher performance appraisal with teachers' salary, appointment and dismissal, training, education fund allocation and other related aspects, and the appraisal results are the basis for implementing corresponding incentives and constraints. The literature [21] believed that the purpose of teacher performance appraisal should be dynamic development, rather than immutable and relevant departments should continuously reconstruct the index system and value orientation of teacher performance appraisal according to the characteristics of the times and the needs of development. Moreover, in the context of knowledge management, performance appraisal focuses on "the ability to do the job", which is process-oriented.

The literature [9] pointed out that the balanced scorecard broke the dominance of traditional performance appraisal methods with financial indicators. Moreover, the literature pointed out that it is an organic combination of financial indicators and non-financial indicators, a multi-dimensional performance appraisal system, and a complete organizational evaluation system. When it is applied to the field of teacher performance appraisal, it can meet the needs of many aspects of the school, overcome the one-sided and subjective weakness of the traditional performance appraisal system, and strengthen a series of management systems from goal setting, behavior guidance, performance improvement, and optimization of the organization. The literature [14] proposed to introduce 360-degree feedback as a brand-new performance evaluation method to teacher performance appraisal. It can overcome many shortcomings of traditional performance evaluation, can conduct a comprehensive, fair, and objective evaluation of teachers' performance and receive feedback in time, and is conducive to improving the overall quality of the teaching team and promoting the professional development of teachers. The literature [1] proposed to construct a performance appraisal method for college teachers in four steps based on the BSC theory and AHP method. The four steps are: determining school development goals, constructing school development strategies based on BSC theory, designing specific evaluation indicators based on BSC theory, and finally using AHP method to calculate indicator weights. The literature [17] took university teachers as the research object, discussed the problems that appear in the current university teacher performance salary system, and proposed to use KPI assessment methods to construct a quantitative university teacher performance evaluation system to improve and enhance the performance management level of university teachers. In summary, there are many teacher performance appraisal methods, and they are showing a trend of more and more diversification. In this process, how to use the method of combining quantitative analysis and qualitative analysis, how to choose the assessment subject, how to determine and improve the difference between the quantitative and qualitative analysis ratios in teacher performance assessment all need further investigation [7].

Literature [6] believes that a scientific and reasonable assessment system should have four characteristics. The first is that the starting point and destination should be the actual contribution of employees to the organization, the second is to focus on motivation, the third is that the evaluation system should be comprehensive and cover all aspects of employee value contributions, and the fourth is to focus on quantitative indicators. The literature [2] pointed out that to establish a scientific and efficient teacher performance evaluation index system, the following principles should be considered: the principle of unity of teaching and scientific research, the principle of procedural rationality, and the principle of operability. The literature [20] proposed that the establishment of a scientific, reasonable, clear and specific performance evaluation index system is the key to doing a good job in teacher performance evaluation. The establishment of a scientific and reasonable performance evaluation index system can not only standardize performance evaluation, but also create a good and fair competition environment.

The literature [10] believes that teachers must have information and evaluation abilities in their personal practical skills. Moreover, it believed that teachers should allow information to flow freely in the educational context, constantly check students' behavior and make them aware of what is happening, and make students feel that their learning efforts and contributions are valuable through timely feedback. Literature [18], from the perspective of teacher management ability, believes that teachers should have the ability to give guidance and evaluation in the management of student behavior. In addition, through the teacher questionnaire survey, it is found that among the eight major abilities of management ability, the highest support rate is cognitive ability and guidance and evaluation ability. There are also scholars from the perspective of the new curriculum standards and the implementation of new requirements for teacher abilities that teachers must have the ability to correctly evaluate student development, and teachers must take the initiative to adapt to new changes in student evaluation. On the one hand, teachers need to work hard to improve their observation skills, and on the other hand use a variety of methods to evaluate students [19]. At the same time, when teachers evaluate students, encouragement and appreciation must be built on the basis of objective evaluation, and cannot be praised blindly [15].From combing, we find that the description of the researcher’s evaluation ability is generally embedded in the description of other abilities, such as the evaluation in the education and teaching ability, the guidance evaluation in the management organization, etc., and there is no systematic and complete discussion of the teacher's evaluation ability.

3 EVALUATION SYSTEM KERNEL ALGORITHM

The information transmission process of biological neurons has the following characteristics: (1) The signal can be excitatory or inhibitory. (2) The cumulative effect received by the neuron determines the working state of the neuron. (3) Each neuron has a "threshold".

Inspired by biological neurons, additional layers are added to process the output information to make MEI-ELM have excitatory and inhibitory properties. The network layer G of the additional layer will process the transmitted information through the data processing function, and its structure diagram is shown in Figure [23].

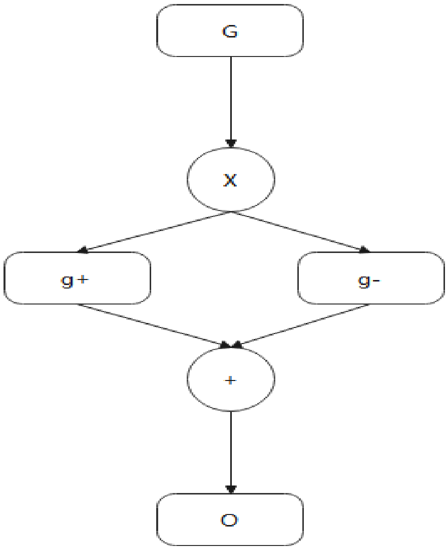

Figure 1: Additional Layer G Layer Structure Diagram.

$$g^{+}(x)=\min\left(\max\left(0,\frac{x-\alpha}{1-\alpha}\right),1\right) \tag{1}$$

$$g^{-}(x)=-\min\left(\max\left(0,\frac{x-\alpha}{1-\alpha}\right),1\right) \tag{2}$$

In the formula, x —— the input of the additional layer;
o—— the output;
α ——is the threshold, and the range is between $(0,1)$.

For artificial neurons, traditional neural networks usually do not consider or rarely consider inhibiting the function of neurons. However, the process of information suppression and selection is mainly controlled by inhibitory neurons. Therefore, more accurate results can be obtained by adding a simple data processing function whose basic operation principle is similar to that of excitement and inhibition of neurons.
Therefore, the final result can be expressed by the following formula.

$$y_g = g(y_t) \tag{3}$$

$$y_g = g\left(f\left(\sum_{j=1}^{m} \left[\delta(a_{jt}) \varphi(b_{jt}) \right] + c_{kt} + d_{mt} + e_{mt} \right) \right) \tag{4}$$

In order to make the process of MEI-ELM clearer, the algorithm process of the proposed MEI-ELM is given [3].

Step 1: Initialization: the algorithm randomly generates the weight matrix w^T、w^B、w^{TO}、w^{BO} and bias x_{0t}.

Step 2: The algorithm calculates the output matrix H^T、H^B of the hidden layer.

Step 3: The algorithm calculates the output matrix H_h、H of the hidden layer.

Step 4: The algorithm calculates $\tilde{\beta}$.

Step 5: The algorithm solves β^i.

Step 6: The algorithm output y_t.

Step7: According to y_t, the algorithm calculates $g^+(x)$ or $g^-(x)$.

Step8: The algorithm calculates the actual output y_g.

Some machine learning methods for regression can achieve good performance when the data set has less corrupted data. However, when the data sets are highly noisy, their performance may decrease significantly. One possible reason is that a lot of useful information in the input disturbance is deleted or not modeled. That is, the error may contain useful information, but it is not fully utilized. Therefore, it is difficult to obtain an accurate model. Therefore, designing a method for extracting error information and making full use of the useful information in the error for compensation will help to further improve the prediction accuracy.

For arbitrarily complex objective functions, machine learning methods such as BPNN, SVM, and ELM can only be approximated due to their nonlinear characteristics and parameter coupling, and may produce errors in the created model. Similarly, unless all predicted values can be equal to the true value, there will be valid information in the unmodeled error. However, in real life, this situation basically does not occur. Therefore, making full use of the useful information in the error is a meaningful problem in the field of machine learning [5].

The learning process of MEC-ELM that only performs error compensation once is shown in Figure 2. Taking the structure of only two layers of network as an example, when only a single error compensation is performed, in the training phase, the basic layer MEI-ELM is from input to output In the feature mapping model, the MEI-ELM1 of the second layer is the predicted value of the error of the base layer MEI-ELM. The effective information in the error is extracted twice, and finally, it is combined with the result of the base layer to represent the final output of the network. The specific mathematical description process is as follows [12].

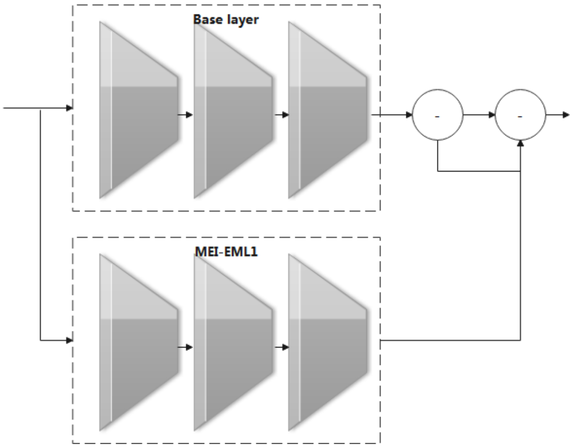

Figure 2: MEC-ELM Model of Single Error Compensation.

In the figure, the predicted output of the base layer MEI-ELM is denoted as $\tilde{y}$, the true value of the sample is y, the error between the true value and the predicted value of MEI-ELM is denoted as e_1, and the predicted error value is $\tilde{e}_1$. Then, the calculation process of MEC-ELM is as follows:

In the base layer, the prediction output of the base MEI-ELM can be simply expressed as:

$$\tilde{y} = H\tilde{\beta} = HH^{+}y \tag{5}$$

The error e_1 is calculated as follows

$$e_1 = y - \tilde{y} = y - H\tilde{\beta} \tag{6}$$

As shown in Figure 2, when e_1 is reloaded into the network as input, the predicted value $\tilde{e}_1$ can be obtained:

$$\tilde{e}_1 = H_1\tilde{\beta}_1 = H_1H_1^{+}e_1 = H_1H_1^{+}\left(y - \tilde{y}\right) \tag{7}$$

In the formula, H_1 —— the output matrix of MEI-ELM 1 layer;

$\tilde{\beta}_1$ ——the output weight of MEI-ELM 1 layer;

e_1 ——the error of MEI-ELM 1 layer.

At this point, the output after one error compensation can be deduced as:

$$\hat{y} = \tilde{y} + \tilde{e}_1 \tag{8}$$

Obviously, in order to make full use of the useful information in the error, an error compensation mechanism is necessary. However, for the proposed error compensation structure, only one compensation is not sure that all the information has been used. Therefore, in order to fully extract the information, it is compensated many times.

When only performing error compensation once, the network structure is simple, but it is not certain that the effective information has been extracted as much as possible. Therefore, it is very necessary to perform multiple extractions. Figure 3 is a network structure diagram of multiple error compensation [13].

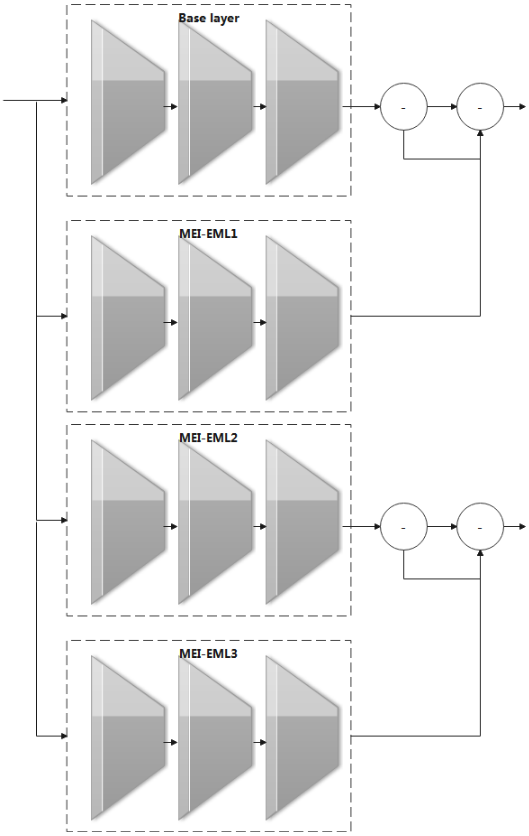

Figure 3: MEC-ELM Model of Multiple Error Compensation.

After one error compensation, the output of the compensation layer MEI-ELM 1 is $\tilde{e}_1$.Therefore, it is only necessary to use $\tilde{e}_1$ as the input of the compensation layer MEI-ELM 2 to test it again. Based on this, the cyclic calculation is performed, and the process is as follows:

The input e_2 of MEI-ELM 2 is expressed as:

$$e_2 = e_1 - \tilde{e}_1 \tag{9}$$

In the second compensation layer, the predicted value of e_2 can be calculated as:

$$\begin{aligned} \tilde{e}_2 &= H_2\tilde{\beta}_2 = H_2H_2^{+}e_2 = H_2H_2^{+}\left(e-\tilde{e}_1\right) \\ &= H_2H_2^{+}\left[\left(y-\tilde{y}\right)-H_1H_2^{+}\left(y-\tilde{y}\right)\right] \\ &= H_2H_2^{+}\left(y-\tilde{y}\right)\left[I-H_1H_1^{+}\right] \end{aligned} \tag{10}$$

In the formula, H_2 ——the output matrix of MEI-ELM 2 layers;
$\tilde{\beta}_2$ ——the output weight of the MEI-ELM layer 2.
Therefore, the error compensation output formula of the k-th compensation layer can be deduced:

$$\begin{aligned}\tilde{e}_k &= H_k\tilde{\beta}_k = H_k H_k{}^{+} e_k = H_k H_k{}^{+}\left(e_{k-1}-\tilde{e}_{k-1}\right)\\ &= H_k H_k{}^{+}\left[\left(y-\tilde{y}\right)-H_{k-1}H_{k-1}{}^{+}\left(y-\tilde{y}\right)\right]\\ &= H_k H_k{}^{+}\left(y-\tilde{y}\right)\left[I-H_{k-1}H_{k-1}{}^{+}\right]\end{aligned} \tag{11}$$

According to the above analysis, it can be found that there is a coupling relationship between the layers, and the proposed error compensation algorithm is not a stack of some nonlinear layers. Therefore, the calculation of the prediction error of the next compensation layer always involves the parameters of the previous layer. In addition, the value of $\left(y-\tilde{y}\right)$ affects the calculation of the prediction error of each compensation layer. It shows that the base layer MEI-ELM has a great effect in the proposed MEC-ELM.

For convenience, only the calculation process of the first three layers of MEC-ELM is shown because it is enough to show the coupling relationship between the layers.

In MEC-ELM, the results used for error compensation may be inaccurate, so weights are added to each prediction error to reduce the negative impact of inaccurate modeling of the final result. Therefore, the final output of the proposed MEC-ELM can be calculated as:

$$\hat{y} = \tilde{y} + \lambda_1\tilde{e}_1 + \lambda_2\tilde{e}_2 + \cdots + \lambda_k\tilde{e}_k \tag{12}$$

When λ_l is the corresponding weight value of each MEI-ELM, $\sum_{l=1}^{k}\lambda_l = 1$. Obviously, when the square error $\left(e_l-\tilde{e}_l\right)^2$ of the corresponding ELM is larger, λ_l should be smaller.

As shown in the following formula, λ_l can be obtained;

$$\lambda_l \propto \frac{1}{\left(e_l-\tilde{e}_l\right)^2} \tag{13}$$

$$\lambda_l \propto \frac{1}{\left(e_l-\tilde{e}_l\right)^2}\Bigg/\sum_{l=1}^{k}\frac{1}{\left(e_l-\tilde{e}_l\right)^2} \tag{14}$$

The final output of MEC-ELM is highly related to the base layer MEI-ELM. When the base MEI-ELM is close to the objective function, the error contains less useful information, so the contribution of the compensation layer is relatively small. On the contrary, if the basic MEI-ELM deviates significantly from the objective function, the error may contain relatively useful information, and the contribution of the compensation layer will be relatively large at this time.

4 DEVELOPMENT EVALUATION SYSTEM FOR KINDERGARTEN TEACHERS BASED ON BIG DATA TECHNOLOGY

The preschool teaching evaluation system is mainly used to assist preschool teachers and principals in teaching evaluation. The system is mainly divided into three parts: teaching management, comprehensive quality management, and system management. Among them, the teaching management is mainly responsible for the arrangement of daily preschool education activities and the management of teaching materials. System management mainly completes daily affairs such as personal information management and student information management. Comprehensive quality management is the evaluation platform of children's personal quality. It combines data warehouse technology and uses the historical evaluation records of each child and the overall evaluation of the class to analyze the quality development of the individual and the entire class, and provide reference information for teachers and administrators. The function diagram of teaching evaluation is shown in Figure 4.

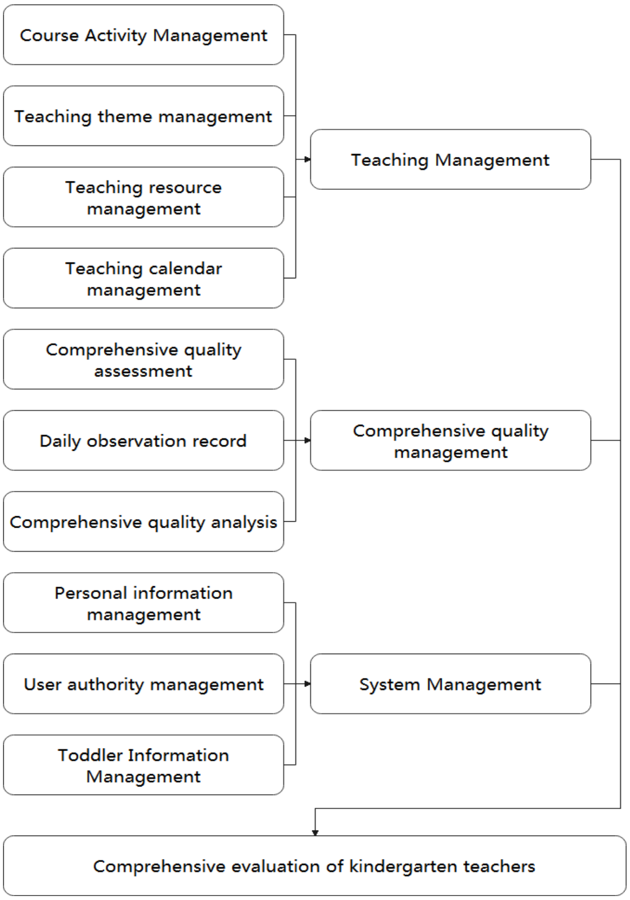

Figure 4: Function Diagram of Teaching Evaluation.

From the perspective of users, the system is divided into three user roles: administrator, teacher group leader, and ordinary teacher. They have different authority settings and can use different system functions. The administrator can also adjust the authority through authority management. Figure 5 analyzes the functional requirements of the system from the perspective of user roles. As a multi-user system, the system authenticates the user's identity when the user logs in. If the user is not a valid user, he cannot enter the system and return to the login interface to log in again. If it is a valid user, confirm the user's identity after the login is successful, the administrator enters the administrator interface and exercises the administrator authority; the teacher group leader enters the group leader interface to exercise the teacher group leader authority. For users with the status of ordinary teachers, in addition to being able to use ordinary teacher functions, if the administrator has given the teacher other rights, they can use the rights and functions granted by the administrator.

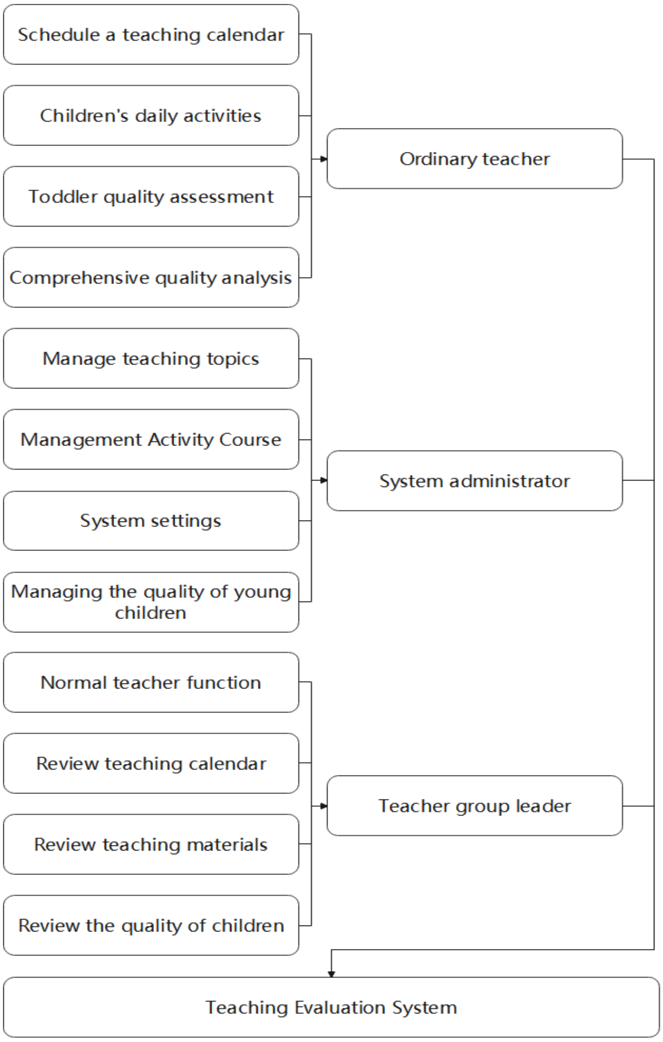

Figure 5: Function authority diagram of teaching evaluation system.

For ordinary teacher users, they need to read the user permission table when the page loads, and find the corresponding permissions based on the teacher ID. If the administrator grants the teacher the functional authority to upload teaching materials, the teacher and the teaching group leader have the same functional authority in the management of teaching materials. Otherwise, ordinary teachers can only query the teaching materials existing in the system and download them, and there is no function of uploading materials. Figure 6 shows the flow chart of teaching materials management for ordinary teachers.

The performance appraisal of kindergarten teachers is a more complicated issue, and there are many factors involved in the appraisal process. The application of Analytic Hierarchy Process to this field can solve the predicament faced by the assessment process in a targeted manner. Moreover, it can divide the many factors involved in the complex problem of assessment into interconnected and orderly levels. In addition, it can use scientific and rigorous calculations to quantitatively analyze many qualitative issues involved in the assessment. The KPI hierarchical structure of kindergarten teachers is shown in Figure 7.

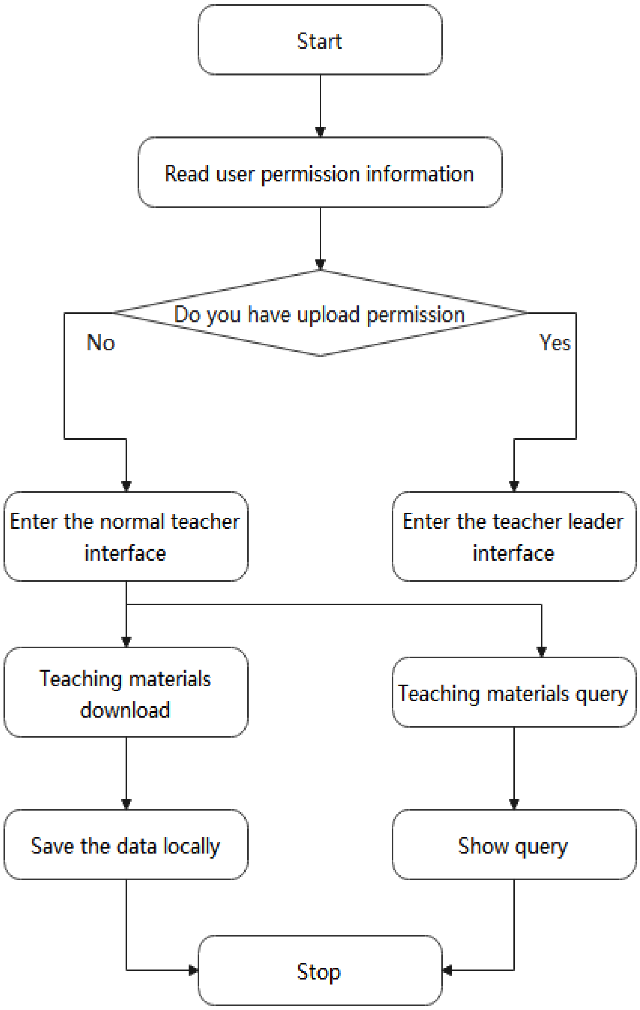

Figure 6: The Flow Chart of the Teacher's Part of Teaching Materials Management.

The B/S mode is superior to the traditional C/S-based mode. The features are: B/S mode separates the application logic from the user interface and data access, which makes the maintenance of the system using this mode very convenient, and the client does not It is necessary to install a special client again, and use a general Web browser to access the server, and program changes only need to be made on the Web server. After the server is connected to the Internet, users can use the system wherever they can connect to the Internet. . It can be seen that these two modes have their own advantages and disadvantages. However, considering that the evaluation system based on the C/S mode has weaknesses such as poor ease of use, unfavorable expansion, and high maintenance costs, the online evaluation system must have both for the realization of various functions, the design of the system should strive to have the characteristics of maintenance-free and easy to use. This online evaluation system adopts the B/S model. The architecture of this system is shown in Figure 8.

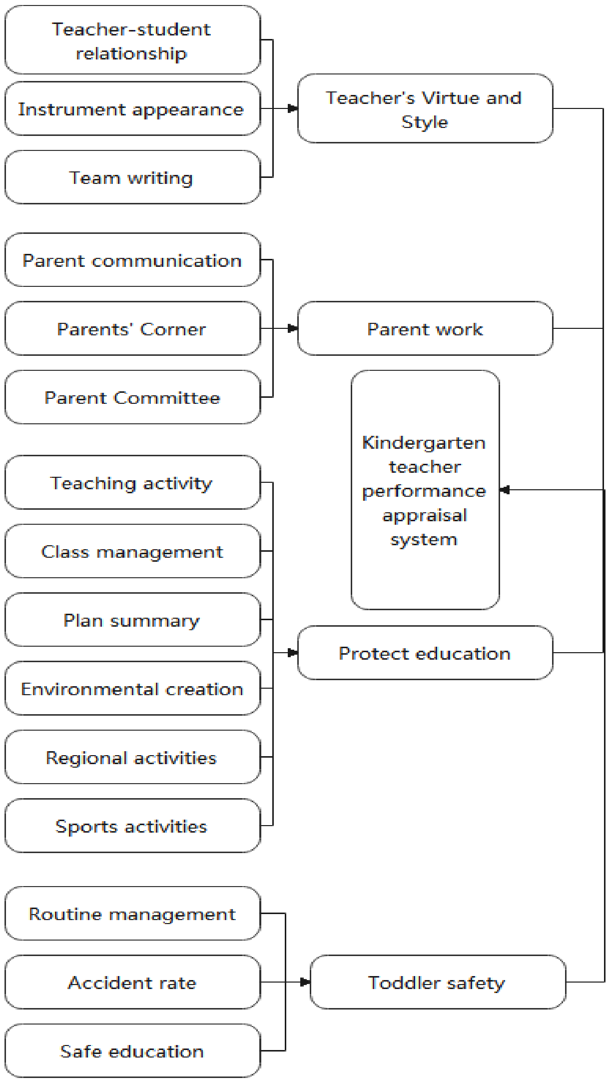

Figure 7: Development Evaluation Map of Kindergarten Teachers.

A structure is composed of several elements, but these elements are subject to some laws that can explain the system as its characteristics. The structure has the characteristics of integrity, transformation and self-adjustment. It is constructed by the subject of cognition and can be represented by some form. According to the understanding of the structure, the evaluation structure of kindergarten teachers not only includes the constituent elements, but also includes the relationship between the constituent elements. At the same time, the evaluation behavior or practice of kindergarten teachers is not a purely technical operation, but is always guided by certain attitudes or beliefs, using certain knowledge or skills to collect children's learning and development information for the value judgment process and results. Moreover, it is also an active construction of psychology. According to this rule, this research proposes possible structure ideas for the kindergarten teacher evaluation system, as shown in Figure 9.

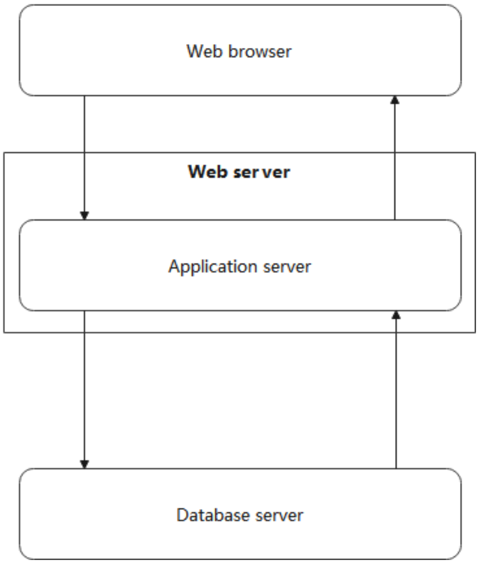

Figure 8: System Structure Diagram.

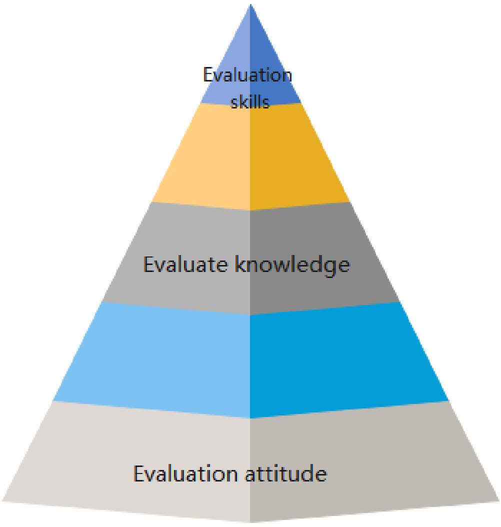

Figure 9: Model Diagram of the Evaluation Structure.

5 PERFORMANCE ANALYSIS OF THE DEVELOPMENT EVALUATION SYSTEM FOR KINDERGARTEN TEACHERS BASED ON BIG DATA

After constructing a development evaluation system for kindergarten teachers based on big data analysis, the performance of the system is evaluated, and data is collected through experimental research and input into the system constructed in this paper. The system constructed in this paper can perform big data analysis and teaching evaluation of kindergarten teachers. Therefore, this paper mainly analyzes the performance of the system from two aspects: data mining ability and teaching evaluation. The data mining ability analysis results are shown in Table 1 and Figure 10, and the teaching evaluation results are shown in Table 2 and Figure 11.

Num	Data mining	Num	Data mining	Num	Data mining
1	89.17	29	84.53	57	85.02
2	92.00	30	86.84	58	84.89
3	81.24	31	81.72	59	92.59
4	82.75	32	83.25	60	84.48
5	88.86	33	90.52	61	87.28
6	81.79	34	92.99	62	90.05
7	92.18	35	84.22	63	86.05
8	83.54	36	85.22	64	91.03
9	86.45	37	87.70	65	87.58
10	86.19	38	92.52	66	85.87
11	87.64	39	92.83	67	82.98
12	82.04	40	83.98	68	93.52
13	86.83	41	81.31	69	92.31
14	86.74	42	91.24	70	88.87
15	92.82	43	90.72	71	90.37
16	91.82	44	84.35	72	85.84
17	85.43	45	87.80	73	84.56
18	82.36	46	92.16	74	87.55
19	88.96	47	89.51	75	91.09
20	81.29	48	91.60	76	89.30
21	91.69	49	86.86	77	92.25
22	83.65	50	85.25	78	82.83
23	93.01	51	85.56	79	85.38
24	85.62	52	83.14	80	85.76
25	86.74	53	90.35	81	81.10
26	85.72	54	93.53	82	82.85
27	84.26	55	88.99	83	93.93
28	93.43	56	93.82	84	84.61

Table 1: Statistical Table of the Evaluation of Data Mining Effect.

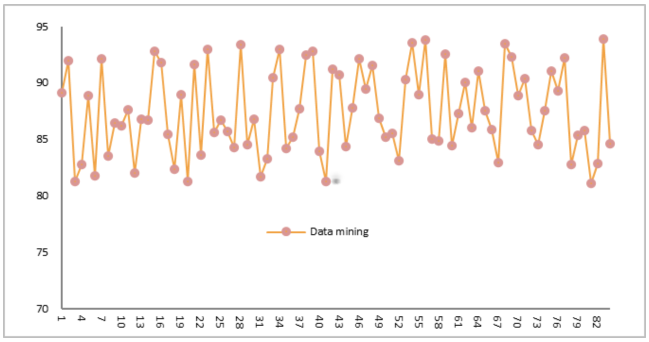

Figure 10: Statistical Diagram of the Evaluation of Data Mining Effect.

Num	*Teaching Evaluation*	*Num*	*Teaching Evaluation*	*Num*	*Teaching Evaluation*
1	*81.62*	*29*	*81.70*	*57*	*88.05*
2	*81.41*	*30*	*89.16*	*58*	*88.94*
3	*90.46*	*31*	*86.99*	*59*	*83.15*
4	*90.39*	*32*	*85.31*	*60*	*80.75*
5	*82.90*	*33*	*85.86*	*61*	*81.46*
6	*85.29*	*34*	*79.98*	*62*	*82.84*
7	*83.80*	*35*	*90.84*	*63*	*90.35*
8	*85.70*	*36*	*84.57*	*64*	*86.85*
9	*80.22*	*37*	*89.39*	*65*	*89.02*
10	*81.87*	*38*	*87.61*	*66*	*83.76*
11	*79.80*	*39*	*78.10*	*67*	*88.02*
12	*80.02*	*40*	*89.62*	*68*	*82.84*
13	*83.69*	*41*	*88.64*	*69*	*81.04*
14	*82.65*	*42*	*82.44*	*70*	*86.59*
15	*87.18*	*43*	*80.66*	*71*	*86.00*
16	*89.83*	*44*	*82.84*	*72*	*81.82*
17	*81.85*	*45*	*78.19*	*73*	*88.19*
18	*81.32*	*46*	*82.08*	*74*	*87.04*
19	*83.97*	*47*	*80.54*	*75*	*83.92*
20	*86.48*	*48*	*84.58*	*76*	*89.95*
21	*87.54*	*49*	*84.86*	*77*	*83.49*
22	*81.23*	*50*	*82.51*	*78*	*79.29*
23	*85.37*	*51*	*89.98*	*79*	*83.52*
24	*86.96*	*52*	*88.78*	*80*	*80.14*
25	*84.98*	*53*	*87.47*	*81*	*81.52*
26	*82.77*	*54*	*78.78*	*82*	*90.95*
27	*87.60*	*55*	*90.18*	*83*	*89.54*
28	*82.58*	*56*	*80.57*	*84*	*78.17*

Table 2: Statistical Table of Teaching Evaluation Effect.

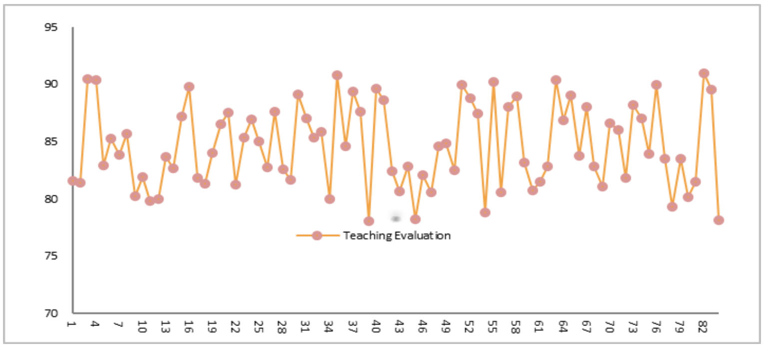

Figure 11: Statistical Diagram of Teaching Evaluation Effect.

Judging from the above experimental results, the development evaluation system for kindergarten teachers based on big data analysis constructed in this paper has performed well in the teaching data mining and teaching evaluation of kindergarten teachers. It can be seen that the system constructed in this paper has certain effects.

6 CONCLUSIONS

Kindergartens are the foundation stage of national education and play a very important role in the entire society. As a kindergarten in the new era, it is responsible for a better tomorrow for the motherland. It is facing the critical period of children's growth. How to improve the development evaluation effect of kindergarten teachers and promote the development of kindergartens has become a hot topic for more and more scholars. This article combines big data analysis technology to analyze the development evaluation of kindergarten teachers, and build an intelligent development evaluation system. In real life, the collected data set always has some noise due to various reasons. These noises will interfere with the accuracy of the network model, thereby reducing the stability of the model. Moreover, some useful information that exists in the error may not be modeled. Based on this problem, this paper proposes a multi-parallel extreme learning machine model based on error compensation. In addition, this paper combines data mining algorithms to analyze the development evaluation characteristics of kindergarten teachers, and combines experiments to evaluate system performance. From the research results, it can be seen that the system constructed in this paper has a good effect.

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