International Journal of Intelligent Information and Management Science
ISSN: 2307-0692, Volume 7, Issue 6, December, 2018

Modelling Analysis of the Function of Cooperative Learning in Sunshine Evaluation of Primary School English Teaching

Hui Li
Second Primary School of Licheng Street, Zengcheng District, Guangzhou, 511300, China

Abstract: Influenced by subjective consciousness, the function of cooperative learning in the Sunshine Evaluation of primary school English teaching can not be analysed accurately by regular teaching evaluation function analysis, so the modeling analysis of the function of cooperative learning in Sunshine Evaluation of primary school English teaching is presented. Based on the analysis model platform and function architecture, the construction of the analysis model for the function of Sunshine Evaluation is realized, while based on the loading of the analysis object and the output of the result, modeling analysis of the function of cooperative learning in Sunshine Evaluation of primary school English teaching is realized. The test data show that analysis precision of the presented modeling analysis is 21.12% higher than that of regular teaching evaluation function analysis method.

Keywords: Cooperative learning method; Primary school teaching; Sunshine evaluation; Modelling and analysis

1. Introduction

Regular teaching evaluation function analysis relies on subjective consciousness, combined with questionnaire, to analyse functions. It can be used to analyse the function of cooperative learning in Sunshine Evaluation of primary school English teaching, but it is difficult to give an accurate objective quantitative analysis conclusion Because of subjectivity and investigation methods, leading to lower precision of the conclusion [1]. Therefore the modeling analysis of the function of cooperative learning in Sunshine Evaluation of primary school English teaching is presented. The SJG.NET platform structure is used to build an analysis model platform, while function architecture is used to construct the function analysis model for the Sunshine Evaluation. And based on the loading of the analysis object and the output of the result, modeling analysis of the function of cooperative learning in Sunshine Evaluation of primary school English teaching is realized. In order to ensure the effectiveness of the analysis method, two different analysis methods are used to analyze the data of analysis precision, which proves that modeling analysis method has higher precision.

2. Construction of the Function Analysis Model for the Sunshine Evaluation

2.1. Construction of analysis model platform

The analysis model platform of cooperative learning in Sunshine Evaluation of primary school English teaching is the basis for the evaluation model, and the stability of this platform will directly affect its analysis results.

The analysis model platform of cooperative learning in Sunshine Evaluation of primary school English teaching is built based on SJG.NET platform structure, which mainly includes Data Source and Propensity assessment.NET. Data Source provides data support for the model operation platform, and Propensity assessment.NET, also known as PA.NET, provides network technology support [2].

Data Source is divided into four core objects, including Operations, Passes, Loads, and Runs. Operations are to build platform basic data, execute basic arithmetic programs, and build relational commands. Passes is to build a data interface for the running platform, to transmit and receive data information, such as the loading interface , the sunshine evaluation interface, and the data comparison interface of group members. Loads are the platform load port, which implements the response of information loading [3]. Runs is the data running end, which integrates the information end, analyses the data source and matches the execution program. And based on the network technology support provided by PA.NET, it realizes the construction of the analysis model platform of cooperative learning in Sunshine Evaluation of primary school English teaching.

The matching computer should use IPX/SPX or XEROX'S Network System (XNS) communication protocol. The CPU(central processing unit) Clock Speed should be at least 2.8GHz.The dynamic acceleration frequency should be no less than 4GHz.The third-level cache memory should be no less than 9MB. The dual Gigabit Ethernet adapter should be used and all these requirements are to ensure that the analysis model platform works well.

2.2. Function architecture of the function analysis model for the Sunshine Evaluation

The function architecture of the function analysis model for the Sunshine Evaluation is built on the analysis model platform of cooperative learning in Sunshine Evaluation of primary school English teaching to realize the function analysis of cooperative learning in Sunshine Evaluation of primary school English teaching. The function architecture of the function analysis model for the Sunshine Evaluation can mainly be divided into six parts including level of morality and socialization, the level of learning development, the level of physical and mental development, the potential of interests and specialties, the situation of learning burden, and the identification of the school[4].

In order to analyze the level of morality and socialization, the level of learning development, the level of physical and mental development, the potential of interests and specialties, the situation of learning burden, and the identification of the school accurately, big data technology has been introduced to expand the base infinitely and achieve more objective analysis.

In the evaluation of the level of morality and socialization, some key indexes are introduced including moral characteristics, social responsibility, national identity and international understanding. In the evaluation of the other five aspects, we introduce some key indexes such as learning ability, mental health, aesthetic accomplishment, interests and specialties, innovation awareness, difficulty degree of lessons, cultural identity, and teacher-student relationship. See the diagram of function architecture of the function analysis model for the Sunshine Evaluation for details, as shown in Figure 2.

3. Realization of the Function Analysis of Sunshine Evaluation of Primary School English Teaching

3.1. Loading the analysis object

Loading the analysis object means to load the cooperative learning method and related data into the function analysis model of Sunshine Evaluation of primary school English teaching, and to prepare to analyze the data, which is the first step to realize the function analysis of Sunshine Evaluation of primary school English teaching.

The loading technology of related data of cooperative learning method is the core technology in the realization of the function analysis of Sunshine Evaluation of primary school English teaching. The incomplete loading will not be able to properly operate the function analysis model of Sunshine Evaluation, leading to the inability to realize the function analysis of Sunshine Evaluation of primary school English teaching.

This paper relies on SDC data loading technology to optimize data encoding, image encoding, and analog units. With the strong compatibility of SDC, the JSF rating file, DSE record file, and MUT program file are packaged to complete the modulation scaling of the data and to prepare loading of the data.

SDC data loading mainly includes three stages including data preparation, data processing and data display. Data preparation includes information preparation of cooperative learning method, preparation of sunshine evaluation, parameter setting, etc. The data processing is to use the SDC data loading method to load the prepared data into the function analysis model of Sunshine Evaluation of primary school English teaching, and to prepare to analyze the data. The data display stage is to show the loaded data through the display, which will be checked by the staff. And the result will be output if there is no error.

3.2. Outputting the analysis result

The outputting of the result of the function analysis of cooperative learning in Sunshine Evaluation of primary school English teaching mainly includes quantification and display. The quantification is to quantify the level of morality and socialization, the level of learning development, the level of physical and mental development, the potential of interests and specialties, the situation of learning burden, and the identification of the school. Then the function of cooperative learning in Sunshine Evaluation of primary school English teaching is obtained, and the result is outputted. The quantification of Sunshine Evaluation is based on the quantitative spatial description function studied by A. N. Kolomogorov, constructing a quantification function to achieve quantification.

Suppose the quantitative index of moral characteristics is a, social responsibility b, national identity c, international understanding d, system state coefficient k, conversion function F, A. N. Kolomogorov coefficient Γ, bounce rate coefficient W, learning resources S, then the quantification equation of the level of morality and socialization can be expressed by the formula (1)[5].

$$X(h) = SF(k \mid a-1)X(b-1) + \Gamma(c-1)W(d-1) \quad (1)$$

$F(k|a-1) \in IRm \times n$ is a linear function which plays a positive role in quantifying the level of morality and socialization. In the same way, based on Kelmogorov's quantitative spatial description function, a quantification equa-

tion for learning psychological aesthetic is constructed, as shown in formula (2).

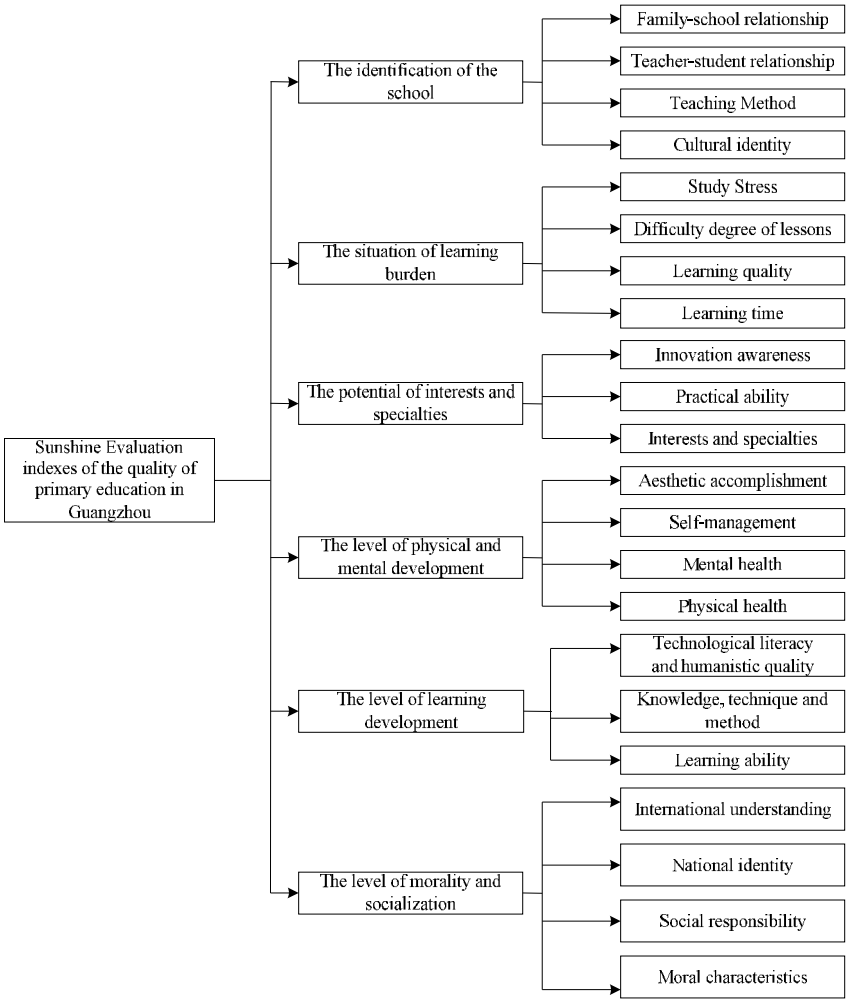

Figure 1. The diagram of function architecture of the function analysis model for the Sunshine Evaluation

$$P = \frac{1}{n}\lim_{x\to\infty}\frac{X(h)!\sum_{e}^{i=5}(e_1+e_i)}{\Gamma(k-F)!W(k-c)} \quad (2)$$

In the formula, suppose the quantitative index of learning ability is e1, knowledge, technique and method e2, technological literacy and humanistic quality e3, physical health e4, mental health e5 and self-management e6.

Construct a quantitative equation for specialties, innovation and cultural identity, as shown in equation (3).

$$C = FP\sum_{g}^{i=5}(g_1+g_i)\frac{kW}{\Gamma} \quad (3)$$

In the formula, suppose the quantitative index of aesthetic accomplishment is g1, practical ability g2, innovation awareness g3, learning quality g4, teaching method g5, teacher-student relationship g6 and regional development coefficient t.

According to formulas (1) to (3), the quantification of the level of morality and socialization, learning psychological aesthetic and specialties, innovation and cultural identity have certain relevance. Collated he formulas (1) to (3) and discard the same sub-items and invariant to obtain a proportional equation, as shown in formula (4).

$$Q \propto St \quad (4)$$

In the formula, Q represents the function of cooperative learning in Sunshine Evaluation of primary school English teaching, S learning resources, and t regional development coefficient.

In the case of relatively balanced development, we can draw the following conclusions from the modeling conclusion formula.

An ideal cooperative learning method plays an active role in Sunshine Evaluation of primary school English teaching if the learning resources are abundant.

The promoting function of cooperative learning method in Sunshine Evaluation of primary school English teaching is not obvious if the learning resources are at a general level.

Cooperative learning method in Sunshine Evaluation of primary school English teaching is not helpful if the learning resources are scanty.

That is to say, cooperative learning method plays an active role in Sunshine Evaluation of primary school English teaching if the operation result is positive, while cooperative learning method can not promote Sunshine Evaluation of primary school English teaching if the result of the operation is negative.

In the same way, in a good learning environment, the result of using cooperative learning method or not is different. The cooperative learning method has a significant promotion effect in Sunshine Evaluation of primary school English teaching. At the same time, compared with the regular teaching evaluation function analysis method, the modeling analysis method can accurately obtain the amount of promotion Q%.

4. Example Verification

In order to ensure the validity of modeling analysis of the function of cooperative learning in Sunshine Evaluation of primary school English teaching proposed in this paper, data analysis and test analysis are carried out. Using different analysis methods, the analysis precision data is analyzed and tested. Simulate the number of group members, learning environment, teaching facilities and equipment integrity of cooperative learning method. Use the regular teaching evaluation function analysis method as comparative object to perform data analysis and test.

4.1. Test preparation and process

The simulated data is sorted and packaged, and the modeling analysis method and the regular analysis method are used to analyze the function of cooperative learning in Sunshine Evaluation of primary school English teaching respectively.

The test environment is divided into four types, in which the comprehensive coefficients (such as teaching resources and the number of group members) of cooperative learning method are 0.15, 0.35, 0.55, and 0.75, to test the analysis precision .The number of group members is 6 to 8, and ensure that the differences in score, gender, and learning stability of each test group is not more than 0.5%. Analyze the function of cooperative learning in Sunshine Evaluation of primary school English teaching with two different methods.

4.2. Analysis of test result

During the test, two different analysis methods are used to simultaneously analyze the function and the changes of precision. Collecting and analyzing the changes of precision using different analysis methods, the test result is obtained. The simulation result of analysis precision is shown in Table 1.

Table 1. Simulation result of analysis precision

Comprehensive coefficients of cooperative learning method	Regular analysis method	Modeling analysis method
0.15	+1%~10%	+5%~7.5%
0.35	+10%~40%	+15.7%~22.1%
0.55	+30%~60%	+35.4%~40.1%
0.75	+50%~80%	+67.5%~70.2%

According to test profile, regular analysis method can analyze the function of cooperative learning in Sunshine Evaluation of primary school English teaching, but the precision range of the result is large. And its average precision range is 24.75%. However, the average precision range of modeling analysis method presented in this paper is 3.63%, which is 21.12% higher than that of regular analysis method.

5. Conclusion

This paper presents modeling analysis of the function of cooperative learning in Sunshine Evaluation of primary school English teaching. Based on the construction of the analysis model for the function of Sunshine Evaluation, the analysis in this paper is realized by loading the analysis object and outputting the result. The test data shows that the proposed modeling analysis method has good analysis precision. It is hoped that the research in this paper can provide a theoretical basis for the modeling analysis method of sunshine evaluation.

6. Acknowledgement

Educational Science Planning in Guangzhou - Study on Team Cooperation and Evaluation Strategies in English Classroom Based on Sunshine Evaluation (No. 2016: 1201574512).

References

[1] Wang Aiqin. Cultivating Political Core Literacy in Classroom Evaluation − − Taking the Teaching Evaluation of Classroom Pattern of Cooperative Learning as an Example. The Teaching of Thought and Political Study. 2017, (4), 36-38.

[2] Wu Jinfeng, Zhang Li, Ma Hengchang, et al. Problems and Solutions of Cooperative Learning in practical teaching activity of “English for Chemistry and Chemical Engineering”.Chinese Journal of Chemical Education. 2016, 37(4), 5-9 .

[3] Zhu Yan, Chen Xuyuan. Analysis of Theory of Behavior of Primary School English Classroom Teaching−−A Review of Research and Cases of Foreign Language Classroom Teaching Behavior. Journal of the Chinese Society of Education. 2016(3).

[4] Shao Xiaoxia. Reasons, Ideas and Paths of the Reform of English Classroom Teaching Methods in Primary and Secondary Schools in Digital Situation. Foreign Language Learning Theory and Practice. 2017, (1).

[5] Kang Yeqin, Chen Dongmei. Practical Research on Teaching Mode of the Integration Development of course,learning and teacher—Based on the Case of Immersion Teaching of Primary School English. Journal of the Chinese Society of Education. 2018, (2), 73-76.