Intelligent Optimization Algorithm for Teacher Teaching Quality Evaluation Under the Environment of Intelligent Eye Feedback Information Collection

Wei Liu
College of Teacher Education
Yibin University, Yibin
Sichuang, China 644007

Abstract:The three-dimensional eye feedback technology is used to digitize the teaching information of teachers, and the digitized information is subjected to in-depth processing such as denoising and threshold segmentation; then the state space reconstruction of the subway passenger flow information is carried out in a time series, and the developmental classroom teaching quality evaluation is based on each The development of professional quality of famous teachers and the improvement of teaching ability are the main focus and foothold, which can fully mobilize the enthusiasm and initiative of teachers to participate in teaching quality evaluation. The intelligent information collection system is not only for the information collection of traditional information collection system The process is simplified and realized, absorbing enterprises and industries to participate in the evaluation, expanding the evaluation connotation, and gradually establishing a teaching quality evaluation system that is conducive to the growth of "dual teachers and dual abilities" teachers and improving the school's ability to cultivate applied talents.

Keywords: Intelligent Optimization, Teacher Teaching Quality Evaluation, Eye Feedback, Information Collection

1. INTRODUCTION

Colleges and universities are the main body of education. Among the major topics of sustainable development of colleges and universities [1], the training of teachers has always been the top priority. The quality of teacher training directly affects the future development of a school. Improving the teaching quality of teachers is the key [2] and difficult problem in the current teaching in colleges and universities, and it is also the key problem in the construction of teaching staff. Combined with the practical work of our college, this research studies the intelligent reform of the teaching quality evaluation system in higher vocational colleges from multiple perspectives and levels [3], and provides a useful reference for the intelligent reform of the quality evaluation in higher vocational colleges. The application of traditional computer sensing technology is severely limited [4].

Due to the high accuracy requirements, small scope, strong timeliness and fast speed of subway passenger flow information collection [5], it is necessary to perform in-depth processing of subway passenger flow image information to improve the query and utilization of user information. The intelligent web information collection system combines the classification method of webpage content with the method based on hyper-connection analysis [6], which achieves real complementary advantages, realizes the improvement of webpage searcher, improves the collection efficiency of webpage resources, and saves costs [7]. However, in the process of collecting network information resources through computer systems, on the one hand [8], due to the limitations and constraints of traditional information collection systems in the process of collecting information resources, a seminar with representatives of experts in the fields of education [9], culture, health and sports held in September 2020 At the meeting, General Secretary [10] Xi Jinping emphasized that it is necessary to do a good job in the introduction and implementation of the overall plan for deepening the reform of education evaluation in the new era [11], and build a world-

class evaluation system that is in line with China's actual situation [12].

On the other hand, due to the continuous increase and enrichment of the content and quantity of network resources, people [13] not only need to spend a lot of time in the process of information resource collection, but also the work efficiency of information collection is relatively low, which is very unfavorable [14]. In order to improve the quality of higher education, we must first improve the teaching quality of colleges and universities, and the evaluation of the teaching quality of college teachers is one of the important means to improve the quality of college education [15]. As early as the beginning of the founding of New China, the evaluation of teachers in my country began to sprout. It was not until the mid-1980s that there was a more formal teacher evaluation. Since the 1990s [16], the overall environment of higher education in my country has also undergone tremendous changes. For a long time, teaching evaluation has always been the key content of teaching work in colleges and universities, running through the whole teaching work [17], and the evaluation of classroom teaching quality is an important component. Scientifically carrying out classroom teaching evaluation activities is an important guarantee for improving teaching quality [18].

The literature proposes an intelligent collection algorithm of subway passenger flow information based on video, and uses the background method to extract subway passenger flow target information [19]. The algorithm has the problems of complex content of subway passenger flow information collection and inaccurate information. The development of information technology has made the network the main way to obtain information [20]. The function of the search engine based on network resources to be discussed in this paper can realize the intelligent information collection system that collects and extracts the required expert information resources through keyword search [21]. The workflow of information collection and processing is the process of collecting and processing information resources [22], but the expansion of

network information seriously affects the efficiency of network work. Although Google and Baidu fixed engines have solved the problem of people's access to information [23] to a certain extent, due to the large amount of information in the results, it takes a lot of time for users to search for information manually. In December 2020, Beihua Institute of Aerospace Engineering, Eight pilot schools [24] including Shijiazhuang University, Hebei Normal University for Nationalities.

2. THE PROPOSED METHODOLOGY

2.1 The Intelligent Eye Feedback Information Collection

The 3D vision technology is used to reconstruct the state space of the time series of the fixed position information in the subway passenger flow information, and the time series analysis method of the subway passenger flow information is used to carry out the statistics and preprocessing analysis of the subway passenger flow information. The specific description process is as follows. According to the collection workflow of the intelligent expert information collection system, the information collection process of the intelligent information collection system is mainly divided into the extraction of the main text of the information to be collected, the determination of the characteristics and weights of the collected information, and the selection of the information text. At present, when colleges and universities evaluate teachers' teaching quality, the highest evaluation weight is student evaluation, which is to reflect the concept of "student-centered".

The teaching quality evaluation conducted before the final exam, for teachers, the lag in the feedback of the evaluation results is not conducive to timely improvement of teaching, and the extraction of the main text of the information needs to be collected. At present, most of the web pages on the Internet are written in HTML language, which provides various tags to control the display format of web page content. Classroom teaching quality evaluation can be divided into two categories according to the classification of achievement goals, one is reward and punishment teaching evaluation, and the other is developmental teaching evaluation. The purpose of reward and punishment evaluation is to reward and punish teachers. Through the evaluation of teachers' work performance, the annual teaching quality is determined and corresponding material and spiritual rewards are given. At the same time, it is used as reference information for teachers' professional titles.

2.2 The Intelligent Optimization Algorithm for Teacher Teaching Quality Evaluation

As an important tool for information retrieval, the network information collection system has the following characteristics: First, it has strong versatility and the complexity of collection rules. Since users can manually set information collection rules, this improves the user's understanding of Requirements, the user must go through certain training or learning, in order to have the skills to use the information collection system. The web pages searched by the search engine come from many different websites and have the following characteristics: First, HTML documents are semi-structured data, this data has a certain structure, and these structures are mixed with the content of the data, or not clearly described.

"Full participation" means that in the process of teaching quality evaluation, participants should be from school leaders to administrative staff, including ordinary teachers and ordinary students. Teachers are not only the objects of teaching quality monitoring and evaluation, but also the It is the main body of teaching quality monitoring and evaluation. The operation of the classroom teaching quality evaluation mechanism, through the analysis of the traditional higher vocational college teaching quality evaluation system, we learned that the traditional higher vocational college teaching quality evaluation system has a certain one-sidedness and subjectivity.

In order to reduce the possibility of mistakes made by teaching managers in higher vocational colleges in the decision-making process and better serve the teaching work, cloud computing technology should be fully used to effectively extract teaching evaluation data. Based on the calculation results of the subway passenger flow information autocorrelation function, the collected subway passenger flow information is uploaded to the subway information center by using GPS, wireless communication system, subway card charging system, etc. to complete the collection of subway passenger flow information. The specific process is described as follows. Second, web pages often contain a lot of other "noise". Compared with ordinary text, the design of web pages is more casual, and usually contains various kinds of advertisements, designer's notes and copyright notices and other information unrelated to the content.

Sometimes the same web page even contains multiple different themes. Again, there are many problems in web page coding, such as some opening tags without closing tags. The automatic station announcement system can automatically identify the name and code of the subway passengers arriving at the station, and the subway on-board toll collection system can identify the validity of the subway card held by the passengers, and upload the information to the information center through three-dimensional vision technology. The information collection algorithm of the subway vehicle terminal is as follows. In order to give full play to the maximum utility of data and do a good job in data collection, it is necessary to organize the collected data accordingly, and data warehouse technology can be used to store data.

2.3 The Teacher Teaching Quality Evaluation System Based on Intelligent Eye Feedback Information Collection Environment

Assume the feature mining dataset of subway passenger flow information under D three-dimensional vision; $dist()q, o$ is the Euclidean distance between the subway passenger flow information space feature vector value o and the subway passenger flow information adjacent space vector value p. Then the Euclidean distance expression between the spatial vector values of the two data cluster centers in the subway passenger flow information sample set can be calculated.

The acquisition of information is mainly completed through the following four steps: downloading the source file of the web page, extracting the main text of the web page, determining the correlation calculation rule and selecting the text. This requires firstly extracting the link address from the search result page, and downloading the content of the web page, and secondly, extracting the title and body text of the web page through the HTML structure tree.

General Secretary Xi Jinping pointed out that "ideological work is an extremely important work of the party". Colleges and universities must clearly recognize that "our colleges and universities are colleges and universities under the leadership of the party and socialist colleges with Chinese characteristics", and implement the mission of educating talents for the party and the country. Summative evaluation mainly refers to making a summary conclusion on the educational activities after the educational activities come to an end, in order to understand the teaching quality of teachers, identify the pros and cons, identify and classify the grades, and help decision-makers in seeking a reasonable distribution of educational resources. provide a basis for reference in decision-making. First of all, according to the actual design requirements, when organizing the subject data, it can be set to three subject domains of teachers, courses, and units. Teachers include supervisory evaluation, expert evaluation, peer evaluation, student evaluation and self-evaluation. The data fields of the first-level unit include the actual number, name, title, department and school. In the transmission of subway passenger flow information, when the subway starts and runs smoothly for a period of time, the information recorded in the subway on-board system is sent to the subway information center.

3. CONCLUSIONS

Classroom teaching quality evaluation is a more scientific evaluation method. It is a process of motivating teachers to continue learning, improving and improving in a targeted manner based on the evaluation of teachers' classroom teaching quality. The intelligent information collection system has played an important role. It improves the efficiency and accuracy of users' search for information, and provides powerful technical support and guarantee for the convenience of users' query of information. It can improve the quality of teacher training and the quality of school teaching. Do a good job in systematic design and research in order to better reform the teaching mode of higher vocational colleges and better serve the education and teaching work of higher vocational colleges.

4. REFERENCES

[1]Xian Xiaoying, Zhong Hongsen. Research on Teaching Quality Evaluation of University Teachers in my country [J]. Western Public Security Forum, 2020, 18(1):6.

[2] Xu Xiaoshuang. Analysis on the evaluation model of developmental classroom teaching quality [J]. Modern Salt Chemical Industry, 2020, 47(1):2.

[3] Wu Pengze, Yang Lin. Research on Hierarchical Performance Evaluation of Teachers' Information Technology Application Ability Training System [J]. 2021(2016-1):109-115.

[4] Pan Chunting. Thoughts on optimizing the teaching quality evaluation system of college teachers from the perspective of transformation and development [J]. Journal of Hebei North University: Social Science Edition, 2021, 37(6):4.

[5] Li Dongbing, Wang Kuo. Research on the hybrid teaching quality evaluation system of higher vocational colleges in the 5G era [J]. China Modern Educational Equipment, 2022.

[6] Gao Peng. Research on the evaluation of physical education teaching quality based on the optimized Apriori algorithm [J]. Modern Scientific Instruments, 2022, 39(1):5.

[7] Tang Like, Xu Ying. The Golden Sine Algorithm Optimized Neural Network for Physical Education Quality Evaluation [J]. Modern Scientific Instruments, 2021, 38(5):5.

[8] Zhao Min, Zhan Wei. Teaching Quality Evaluation System Based on Deep Learning Algorithm [J]. Modern Electronic Technology, 2020, 43(13):5.

[9] Cao Jin, Liu Xiaofen. Optimizing Hopfield Neural Network Military Training Effect Evaluation Based on Quantum Genetic Algorithm [J]. Ordnance Industry Automation, 2021, 40(10):5.

[10] Cai Xiaojun, Yang Fan, Xie Peixi, et al. Power point access line optimization method and technical system for intelligent multi-factor networks: CN111612240A[P]. 2020.

[11] Fang Liwei. Research on intelligent prediction method of project cost in ambient air pollution monitoring [J]. Environmental Science and Management, 2022, 47(1):5.

[12] Sun Xia, Hu Xiaofei, Zhang Xin, et al. Design of parking lot system based on pheromone optimization ant colony algorithm [J]. Journal of Chongqing Technology and Business University: Natural Science Edition, 2022, 39(2):7.

[13] Miao Kun, Chen Lei, Li Chao, et al. A method to improve the efficiency of Internet application by using transaction management model [J]. Electrical Automation, 2022, 44(2):4.

[14] Tian Wenwu. Design of smart library system based on big data technology [J]. Journal of Hulunbuir University, 2022, 30(1):5.

[15] Lu Jianqiang, Lan Yubin, Wu Zhiyun, et al. ICP point cloud registration optimization for plant 3D modeling [J]. Chinese Journal of Agricultural Engineering, 2022, 38(2):9.

[16] Zhu Pengyan, Yang Jinlin, Ma Shaojian, et al. Prediction of particle size distribution of cassiterite polymetallic sulfide ore grinding products based on MATLAB [J]. Nonferrous Metals: Mineral Processing, 2022.

[17] Shao Hui, Huang Zhaohui. Research on resource allocation strategy for first-line rescue and evacuation of wounded [J]. Operations Research and Management, 2022, 31(3):5.

[18] Lin Jun, Liu Yue, Wang Quandong, et al. Open Platform for Rail Transit AI Application [J]. Control and Information Technology, 2022(1):7.

[19] Qiao Weide. Design of position controller for permanent magnet linear synchronous motor servo system [J]. Journal of Anhui Electrical Engineering Vocational and Technical College, 2022, 27(1):5.

[20] Ding Shuo. Research on the optimization of enterprise accounts receivable management based on big data intelligence [J]. Modernization of shopping malls, 2021(7):3.

[21] Jing Yunxia, Tan Ji'an. Research on the "four-dimensional, three-dimensional" evaluation model of higher vocational classroom teaching quality from the perspective of diagnosis and reform [J]. Journal of Higher Education, 2022.

[22] Cao Chengmao, Sun Fu, Qin Kuan. On the construction and practice of the teaching quality evaluation system of theoretical courses in colleges and universities [J]. Education and Teaching Forum, 2021.

[23] Yuan Chunxia. Application and Research of Information Fragmentation System in the Multiple Evaluation System of

Higher Vocational Teachers' Teaching Quality [J]. Henan Agriculture, 2021.

[24] Lei Yu. Research on the evaluation system of classroom teaching quality for higher vocational teachers [J]. Literature Youth, 2020.

[25] Liu Xiru. Exploration on Differential Evaluation of Teachers' Teaching Quality Based on the New College Entrance Examination [J]. Fujian Education, 2020(32):2.