Research on Teaching Evaluation Reform Based on New Generation Information Technology Support

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Abstract: Teaching evaluation is an important link in teaching activities, which can promote students' active learning, optimize teachers' teaching methods and improve the overall teaching quality. However, at present, there are still some problems in teaching evaluation in some schools, which hinder the overall improvement of teaching effect and teaching quality. Therefore, based on the background of the new generation of information technology, this paper analyzes the reform of teaching evaluation from the perspective of big data, summarizes the new generation of information technology and big data respectively, analyzes the existing problems in the current school teaching evaluation in China, and studies how to use big data to reform the teaching evaluation.

Keywords: New Generation Information Technology; Big Data; Teaching Evaluation Reform

Introduction

With the continuous progress of modern information technology, the traditional teaching evaluation method is no longer applicable to the current actual teaching. However, as the baton of school development, teaching evaluation helps teachers to know their own teaching effect and students' learning situation, and plays a role in diagnosis, screening, determination, evaluation and encouragement in teaching. Therefore, teaching evaluation must be reformed. However, the big data in the new information technology has many advantages, such as multiple data types, high processing speed and high authenticity. Using it in school teaching evaluation can improve the efficiency of teaching effect evaluation, rationality of indicators, accuracy of evaluation, etc., thus comprehensively improving the quality and efficiency of school teaching evaluation.

1. Overview of New Generation Information Technology and Big Data

1.1 Overview of the new generation of information technology

The new generation of information technology is one of the seven strategic emerging industries identified by the State Council, including cloud computing, artificial intelligence, big data, blockchain, Internet of Things, 5G, etc. In short, it is proposed as a higher form of information technology, and it is an organic combination of many new technologies represented by big data, cloud computing, artificial intelligence and other technologies, so as to achieve higher, faster and more accurate information collection, transmission, processing and execution.

Specifically, the digitalization of the new generation of information technology is characterized by comprehensive digitalization. Taking big data as an example, it has the characteristics of wide data sources, large volume, fast processing speed, great variability and high authenticity, and has super computing power in data acquisition, analysis and application.

1.2 Overview of Big Data

Big data is put forward by McKinsey, a world-famous consulting company. Information is mainly expressed in the form of words, numbers, voice, images, videos, etc., and contains massive data, which is characterized by scale, diversity and accuracy.

At present, with the characteristics of high processing speed and convenient resource search, big data is not only widely used in various industries, but also promotes the development of information technology and social economy. It is also favored by the educational field. Especially after the application of big data in teaching evaluation, through the collection, mining and analysis of the information of the evaluation object, it can make a process and result evaluation of teachers' teaching content design and students' learning situation from a more objective and comprehensive angle, and make the teaching evaluation more scientific and scientific.

3. The existing problems in the evaluation of school teaching in China at this stage.

3.1 The basis of teaching evaluation is unreasonable

In the school's education and teaching activities, students' mid-term and final exam scores and teachers' performance appraisal indicators will be kept at each stage, which is also the main reference for teaching evaluation. By analyzing these data, the school can make a more scientific and reasonable evaluation of teaching activities. However, from the actual situation of school education in China, it is deeply influenced by traditional educational ideas and methods, and these data and information are not used correctly. For example, when the school conducts teaching evaluation, it still focuses on the students' mid-term and final exam results, and evaluates the students' learning effect according to the exam scores. This evaluation method and basis are unreasonable and unfair to students. At the same time, because parents, teachers and students all pay more attention to the test scores, giving students greater study pressure, causing test anxiety. Even if they have mastered the knowledge points, they will forget the knowledge points in the examination room because of nervousness, resulting in poor test scores, which is not conducive to the healthy development of students' body and mind.

3.2 The content of teaching evaluation is not comprehensive

After the implementation of the new curriculum standard, schools are required to not only teach students knowledge and skills related to disciplines, but also pay attention to cultivating students' moral education and core quality of disciplines, so as to promote students' development in moral, intellectual, physical and aesthetic aspects. At present, while practicing quality-oriented education, major schools will also be influenced by traditional exam-oriented education, and will conduct in-class tests and final exams for students, which shows that schools still put students' knowledge mastery in the first place, ignoring the ability cultivation beyond knowledge [2].

3.3 Some teaching evaluations are subjective.

Subjective evaluation means that the evaluators evaluate from their own feelings, classroom behaviors, etc., through which students' actual learning effects can be known. However, there are many problems in this evaluation method. Students are easily influenced by their own subjective emotions, the relationship between students, teachers' impressions of students, and the mood of the evaluators, which leads to low evaluation credibility, reliability and reference value. Because students in different classes have differences in basic knowledge, age, etc., and have different degrees of recognition and love for different teachers' teaching methods, the evaluation results can't be compared horizontally, but can only be compared vertically among teachers in the same class and classmates. Due to the increase of teachers' workload and students' lack of serious treatment, the evaluation subject keeps a negative attitude towards this evaluation method. Therefore, this evaluation method is mainly a mere formality, often stored in teaching materials in the form of tables, which are not taken seriously and implemented by teachers and students [3].

4. The impact of big data on teaching evaluation reform

4.1 Big data enriches the content of teaching evaluation

First of all, in the traditional data collection of teaching evaluation, sample = total, which is limited by geographical and technical conditions. Only representative samples can be selected in our school, collected and analyzed, and then the overall

teaching effect can be inferred. After the introduction of big data into teaching evaluation, the range of data information is collected more widely, which can not only input students' learning information, but also increase the number of teaching evaluation objects. Secondly, big data makes the content of teaching evaluation more comprehensive, which is mainly reflected in the collection of personal information, all kinds of data generated when studying in different schools or places, and it is quantified to make students' learning data look more comprehensive.

Finally, big data visualization technology can collect information that teachers can't capture in class.

4.2 Big data promotes the differentiation of teaching evaluation standards

Under the background of the new curriculum reform, in order to implement the requirements of teachers to pay attention to students' individual differences and help them fully develop their potential, schools need to build an educational environment for students to learn knowledge systematically and develop individually, and teachers should give targeted guidance according to students' basic knowledge level, academic performance and personality. Big data devices or teaching platforms can effectively record students' specific learning situations, accurately evaluate students' daily performance through big data, and adopt personalized evaluation standards for students' individual differences, so that schools or teachers can know the real learning situation of each student, thus helping students to complete personalized development.

4.3 Big data promotes the diversification of teaching evaluation methods

In the teaching of "fundamentals of photography", teachers can make use of the barrage of online teaching platform and the real-time connection of Tencent meeting to let students participate in discussions and debates, and guide students to appreciate typical photographic works, so as to extract the core elements of the aesthetic feeling of photographic works and learn the relevant skills of photography. Teachers use online teaching platform tools to obtain students' online learning data in time, adopt self-,group-and teacher-combined evaluation methods, and integrate the overall situation from before class to during class to after class. Students' preview before class, discussion in class and homework completion after class are included in the teaching evaluation, which not only pays attention to students' professional learning results, but also completes the overall assessment of students' overall quality.

At the same time, it is also reflected in the innovation of teachers' and students' thinking modes. For example, teachers will gradually improve their teaching contents and methods through the feedback of students' learning effects in class; Students will think deeply about the questions raised by teachers, further analyze the deep connection behind the questions, and find out the meaning that the questions want to express.

4.4 Big data helps teaching evaluation subjects achieve diversification.

After the application of big data in teaching evaluation, it helps the evaluation subjects to realize diversification, so that the evaluation subjects are no longer limited to teachers' subjective evaluation, and students can evaluate themselves effectively and quantitatively.

For example, there is a practical learning module in the teaching of "fundamentals of photography". Teachers can let each group shoot in a scattered way on campus, shoot and punch cards on the spot in the WeChat exchange area every 15-20 minutes, and feed back the problems encountered. Teachers can give timely guidance and dynamic tracking to improve the situation where monitoring is not in place; This class is a photography assignment, and the next class will comment on the students' photographs. As time is limited, students can make internal comments first, and then draw five groups to show and share the final works. Students and teachers are all involved, so that students' works can get timely feedback and praise, and further improve students' learning enthusiasm and classroom participation.

Conclusion

To sum up, with the support of the new generation of information technology, the school relies on big data technology to carry out in-depth reform of teaching evaluation, which not only ensures the objectivity, fairness, comprehensiveness and scientificity of teaching evaluation, but also enriches teaching evaluation content, promotes students' individualized

development, broadens evaluation ideas and promotes the diversification of evaluation subjects, so that teachers can continuously optimize their teaching content and methods according to students' learning feedback while successfully completing teaching evaluation. It is helpful for students to know their actual learning situation, check for defects and catch up in time, improve their academic performance, and then promote the smooth realization of the reform goal of school teaching evaluation.

References

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