

Innovation of Intelligence Teaching Model for the Improvement of Normal School Students on Wisdom Literacy

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Abstract: In order to study the teaching mode to improve the intelligence literacy of normal students, promote the effective reform and innovation of the teaching mode, and improve the teaching quality and efficiency of normal universities, this paper first analyzes the characteristics of the existing precision wisdom teaching mode, then outlines the teaching mode to improve the intelligence literacy of normal students, and then analyzes the innovation principles of the teaching mode to improve the intelligence literacy of normal students. Finally, based on the perspective of big data, in order to improve the wisdom teaching quality of normal university students, several strategies for innovating relevant wisdom teaching models are proposed, aiming to meet the students' personality and diversified learning needs, promote the high-quality development of teaching models in normal universities, and provide reference for relevant personnel.

Keywords: Normal students; Intelligence accomplishment; Smart teaching; Innovate.

1. Introduction

Smart education is a new educational form and mode supported by the current Internet of Things, cloud computing, wireless communication and other new generation information technologies. The education big data has become the basis for the construction and implementation of smart education. As an important producer and user of education big data, front-line teachers' data literacy will become an important foundation for the construction of national smart education. Therefore, in the context of the era of smart education, teachers should not only improve their ability of education informatization, but also improve their data literacy, so as to tap the rich value of education big data, which not only provides a basis for teaching decisions, but also can be transformed into knowledge to promote the optimization of teaching practice. In 2016, Mandinach, an American scholar, put forward the concept of Data Literacy for Teachers/Teaching (DLFT for short) and analyzed its connotation. Therefore, based on the perspective of big data, it is not only a general trend, but also an effective way to promote the innovative development of normal universities to innovate the precise and intelligent teaching mode. As a teacher training institution for future teachers, how to improve students' intelligent teaching quality to meet the needs of future teaching has become an urgent task. The connotation of intelligent teaching quality is a comprehensive ability that teachers embody when conducting intelligent teaching, including four levels of intelligent teaching awareness and attitude, basic knowledge of intelligent teaching, core skills and thinking methods of intelligent teaching. The fundamental way to improve the wisdom teaching quality of normal students and even teachers is to master the precise wisdom teaching mode driven by big data. And through the dynamic collection of smart teaching big data, timely innovate the precise smart teaching mode from the perspective of big data.

2. Characteristics of precise and intelligent teaching mode

(1) Online and offline integration.

The precise and intelligent teaching mode is the combination of online and offline teaching. In terms of online teaching, it is not only a supplement to offline teaching, but also a solid foundation for in-depth offline teaching based on the evaluation and analysis of students' learning. At the same time, online teaching is an effective way for students to consolidate, feedback and expand offline teaching content. Therefore, precise and intelligent teaching is characterized by the combination of online and offline teaching.

(2) Big data aided analysis.

Under the precise and intelligent teaching mode, it can help teachers analyze students' learning level, learning status and effect more carefully by analyzing network platform data, accurately grasp students' personality characteristics, so as to build a real-time map of students' knowledge ability, and aid with teachers to effectively carry out teaching design and other related work [1].

(3) It has the function of screening information and guiding teaching.

In the process of carrying out accurate and intelligent teaching, teachers can obtain a large number of data and information from students' feedback on teaching activities. Through effective screening and timely screening, teachers can better understand students' needs, lay a solid foundation for providing a more targeted and more suitable teaching model for students to learn, so as to achieve the goal of accurately pushing learning resources and personalized service for students.

(4) It has rich teaching resources.

As the resource library of precise and intelligent teaching mode is built on the cloud of the Internet, it contains comprehensive and diverse resources and information, covering not only video and audio resources of various disciplines, but also professional materials and tools such as feedback sorting, courseware guidance, practice

consolidation, and analysis of key points, which can meet the different learning needs of students. In the context of information interaction and teaching research, both teachers and students can quickly find the resources they need in accurate and intelligent teaching.

(5) The interaction between teachers and students is diversified.

With the support of the application of intelligent devices and the Internet, the precise and intelligent teaching mode can break the traditional time and space boundaries and barriers, which can not only make the communication between students more three-dimensional and diversified, but also make the communication and feedback between teachers and students more timely, effective and diversified.

(6) It has dynamic and comprehensive evaluation function. Under the precise and intelligent teaching mode, the evaluation of students is more comprehensive and scientific, including pre-class learning situation analysis, real-time monitoring in class, review and consolidation after class and other related teaching activities. Then, according to the data of students' activities and the track of students' activities, the students' academic situation is comprehensively analyzed to achieve dynamic and comprehensive evaluation goals.

3. Overview of precise and intelligent teaching mode based on big data perspective

Based on the perspective of big data, the precision intelligent teaching mode needs to design the common learning progress of all students, and also needs to consider the development direction of different students' individual abilities. Therefore, when carrying out precision intelligent teaching, students' individual abilities should be taken as the teaching core, and students' behaviors and characteristics should be mastered through data analysis, laying the foundation for giving full play to the function of precision intelligent teaching. In the process of precise and intelligent teaching, teachers need to conduct dynamic and accurate analysis of students' pre-class preview, after class review and other learning conditions, and select appropriate resource banks to carry out teaching work according to the analysis results. If students are different, they can use different teaching resources and learning paths to assist teaching, such as intelligent devices, exercises, lessons, videos, pictures and texts. After the plan and goal of precise and intelligent teaching are effectively formulated, students can choose learning resources from the main source according to their own learning situation and needs, and can also use the tool library pushed by big data to learn and carry out activities such as cooperation and communication between teachers and students. Under the precise and intelligent teaching mode based on the perspective of big data, teachers will monitor the whole process and adjust students' teaching and learning methods in real time. At the same time, in case of problems, teachers and students can use the big data platform to timely feedback and evaluate, and effectively improve the quality of teaching while dynamically adjusting the teaching and learning methods

4. Innovation principle of precise and intelligent teaching mode based on big data perspective

Under the background of more mature, diversified and information-based education models, teachers' teaching concepts are gradually changing, and they generally hope to achieve the goal of innovative and diversified teaching methods with the help of big data, modern equipment, etc. However, when teachers apply modern technologies such as big data, they often use them superficially and superficially, which makes the precise and intelligent teaching model unable to give full play to the functions of communication, intervention, adjustment and preset. Therefore, based on the perspective of big data, when innovating the precise and intelligent teaching mode, we should take its operating characteristics as the basis, and carry out the innovation of the precise and intelligent teaching mode on the basis of following the innovative principles of flexible teaching objectives, open and interactive classroom, and procedural teaching evaluation.

(1) It is flexible to pay attention to teaching objectives. Different from the traditional teaching mode, the precise and intelligent teaching emphasizes inquiry, active and cooperative learning. Therefore, when setting teaching goals, we should break the traditional thinking and effectively cultivate students' abilities of practice, communication, reflection and information application on the basis of giving full play to the students' standard and initiative, so as to make them become all-round development talents. Therefore, based on the big data perspective, we should innovate a precise and intelligent teaching mode, and make real-time adjustments to the teaching objectives according to the data analysis, evaluation and other results to ensure that they have a certain degree of flexibility. This cannot only dynamically analyze the learning situation at different stages of the classroom, but also enhance the wisdom and timeliness of the classroom.

(2) The classroom should be open and interactive. Compared with the traditional crammed classroom teaching, the precise and intelligent teaching classroom emphasizes the initiative, autonomy and subjectivity of students' learning. Therefore, based on the big data perspective, teachers should innovate a precise and intelligent teaching mode, ensure that students' learning rights are open, enable them to independently adjust and optimize their learning plans, and meet the personalized needs of the learning context. At the same time, teachers should guide students to learn in groups, so that they can improve their experience and learning effects in open communication and interaction.

(3) It is a process to pay attention to teaching evaluation. Each student has different personality characteristics and learning abilities, and there are also some differences in their learning progress and learning effectiveness. Therefore, based on the big data perspective, when carrying out the evaluation of precise and intelligent teaching, normal universities should change the single evaluation model in which the test scores are the main evaluation indicators, and conduct more accurate and comprehensive evaluation on the basis of analyzing the knowledge mastery map and learning curve of students, so as to enhance students' learning motivation Improve the learning effect and provide guarantee [3].

5. Strategies for innovating the precise and intelligent teaching mode of normal universities based on big data perspective

Based on the perspective of big data, in order to effectively innovate the precise and intelligent teaching mode, normal universities must change the traditional teaching thinking, reform the existing teaching mode, teaching content and teaching strategies, and carry out teaching based on materials on the basis of focusing on students' differentiation, personalization and other characteristics. Specifically, normal universities can carry out the innovation of precise and intelligent teaching mode from six aspects: collecting data related to learning behavior, mining and analyzing teaching data, formulating precise and intelligent teaching goals, intelligently pushing curriculum content and teaching strategies, carrying out evaluation and diagnosis of precise and intelligent teaching, and promoting precise and intelligent control and intervention, so as to achieve the innovative goal of precise and intelligent teaching mode. To provide strong guarantee for improving the teaching quality and teaching level of normal universities.

(1) Collect data related to learning behavior.

Based on the perspective of big data, when innovating the precise and intelligent teaching mode, normal colleges can first collect and analyze relevant data such as learning behavior with the help of online vocational education and other cloud platforms. Among them, learning behaviors include learning preferences, enthusiasm, interests, habits, etc. Relevant data include discussion participation, frequency of logging in to the platform, completion of homework, browsing of learning materials, and learning duration. Through the collection and analysis of these relevant data, teachers can dynamically and timely master the learning situation of students. By recording the collected and analyzed data, they can lay a solid foundation for subsequent data mining.

(2) Mining and analyzing teaching data.

Based on the perspective of big data, normal universities can mine the collected information and data through online vocational education and other cloud platforms, and build a big data teaching center to compare, test and analyze students' behavior, performance, results, etc., so as to accurately and intelligently predict students' future performance trends. In addition, normal colleges can use SPSS software to mine and analyze students' motivation, tendency, style, preference, etc. On the basis of combining the analysis results, they can intelligently diagnose the data, obtain the learning situation results of each class and student, and push them to teachers to effectively promote accurate and intelligent teaching.

(3) Develop accurate and intelligent teaching objectives.

On the basis of mining and analyzing the results of learning situation, potential, trend, etc., normal colleges should combine these data to quantify the internalized learning behavior into the external precise and intelligent teaching goals, so that it can be measured and clear. When formulating precise and intelligent teaching objectives, normal colleges and universities should fully consider the actual situation such as students' characteristics, establish sub objectives at each stage on the basis of precise and intelligent decomposition, conduct in-depth analysis and continuous optimization of sub objectives, and finally develop a precise and intelligent teaching goal decision-making database to lay the foundation

for intelligent promotion of curriculum content.

(4) Intelligent push course content and teaching strategy.

After the establishment of the accurate and intelligent teaching goal decision-making database, normal universities should design matching curriculum content and teaching strategies based on the perspective of big data. Teachers colleges can combine big data analysis results and accurate and intelligent teaching goal decision database to intelligently push curriculum content and teaching strategies. If some students fail to achieve the goal of accurate and intelligent teaching, normal universities should make circular adjustments to the curriculum content and teaching strategies to achieve the goal of a virtuous circle of accurate and intelligent teaching mode [4].

(5) Carry out accurate and intelligent teaching evaluation and diagnosis.

Based on the perspective of big data, normal colleges and universities should accurately and intelligently evaluate and diagnose the behavior characteristics of students in the whole learning cycle, fairly and objectively evaluate whether students' enthusiasm, preference, ability, etc. at all stages of learning reach the expected goal of accurate and intelligent, and make multi-dimensional and authentic diagnosis of learning effects. Through the application of cloud platform related data such as vocational education, it can ensure that normal colleges can more accurately grasp the effect of learning on the basis of combining students' characteristics such as individuality and differentiation, and achieve the goal of transforming traditional single evaluation and summary evaluation into comprehensive evaluation and process evaluation while improving the feasibility and accuracy of accurate and intelligent teaching evaluation and diagnosis.

(6) Promote precise and intelligent control and intervention

Based on the perspective of big data, in order to effectively innovate the precise and intelligent teaching mode, normal universities should start from the individual needs of students and focus on teaching students in accordance with their aptitude to promote precise and intelligent control and intervention. Precise intelligent control and intervention is to use big data to record and diagnose students' behaviors, judge whether they have achieved the sub goals at this stage, and take appropriate control and intervention methods. If students have achieved the sub goals of this stage, they can start the sub goals of the next stage; If students fail to complete the sub goals of this stage, they will take control and intervention measures for teachers' teaching and students' learning. Generally speaking, they can accurately and intelligently control the three stages of teaching class, discussion group and students. By promoting precise and intelligent control and intervention, we can achieve the goal of precise and intelligent teaching while continuously optimizing teachers' teaching and students' learning methods. While effectively creating goals, we will provide comprehensive, developmental and innovative talents for the society.

6. Training path of teachers' students' intelligent teaching skills

(1) Building a Multi-functional Intelligent Teaching Environment

The intelligent teaching environment is the basis and guarantee for the implementation of intelligent teaching, and is also an important condition for the improvement of teachers' students' intelligent teaching ability. Therefore, the

intelligent teaching environment in colleges and universities should first have intelligent teaching functions and support different

And provide qualified teaching resources. Secondly, it should also have the functions of sharing, mutual evaluation and interactive teaching.

(2) Do a good job in the role orientation and ability training of normal school students

While improving the intelligent teaching ability of normal school students, we should fully understand the meaning of the dual identity of normal school students as students and future teachers, and cultivate the intelligent teaching ability of normal school students should meet the dual needs of self-learning and future teaching. To cultivate the wisdom teaching ability of normal school students should meet the requirements of the new era. We should pay attention to training their teaching design ability, organization and management ability and teaching research ability, as well as their problem-solving ability, collaborative inquiry ability and independent learning ability.

(3) Introducing smart teaching courses to promote the teaching reform of information technology courses

In order to cultivate the intelligent teaching ability of normal school students, it is necessary to reform the teaching of modern educational technology, design and plan the basic teaching theory, intelligent teaching methods, acquisition and processing of digital teaching resources, information-based teaching design, intelligent teaching classroom practice and other contents as a whole, so as to cultivate their intelligent teaching ideas and methods, and comprehensively improve their information-based teaching ability and quality.

7. Conclusion

In a word, the innovation of precise and intelligent teaching mode in normal universities is not only an effective way to implement the student-centered education concept, but also a necessary path to promote the modern development of normal

universities. Therefore, based on the perspective of big data and giving full play to information technology and data drive, normal universities should effectively innovate teaching and learning methods and achieve personalized Differentiated teaching can promote normal students to master the mode of smart teaching faster and adapt to the needs of smart teaching in primary and secondary schools in the future.

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