Research on the Construction of Evaluation System of Intelligent Classroom Teaching Quality in Colleges and Universities under the Information Technology Environment

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Abstract. Under the deep integration of modern information technology and university education, a new intelligent classroom teaching mode has been produced. As a new teaching mode, its concrete implementation and teaching quality must be paid great attention to. In this paper, the characteristics, advantages, process and teaching effect of wisdom classroom teaching are studied as an important reference for the construction of wisdom classroom teaching quality evaluation system.

Keywords: Information Technology, Universities, Wisdom Classroom, Teaching

1. Introduction

Modern information technology has brought great changes to traditional teaching. The integration of information technology in college education has been widely concerned by social related groups. The national medium and long term educational development outline also emphasizes the revolutionary influence of modern information technology on the educational development of colleges and universities, and highlights the important position of educational information in the process of educational development. In recent years, relevant persons in higher education have focused on the wisdom classroom under modern information technology. They have carried on the thorough research and discussion to the wisdom teaching, the wisdom teaching environment construction, the student individualized study, the digital study, the classroom interactive teaching system and so on[1]. But on the basis of analyzing the characteristics of wisdom classroom, this paper discusses the construction of wisdom classroom environment and the design of wisdom classroom teaching process, in order to study the construction of wisdom classroom teaching quality evaluation system.

2. Characteristics of wisdom classroom in information technology environment

The wisdom classroom is developed by the wisdom education, that is, the modern information technology is integrated into the classroom teaching, the intelligent, individualized and digital learning environment is constructed, the dissemination and development of wisdom is promoted, and the classroom reform and innovation are promoted. Compared with the traditional classroom, the wisdom classroom has many characteristics[5].
2.1. Diversified teaching resources
Teaching resources in wisdom classroom are no longer limited to traditional blackboard writing and PPT, but have a variety of rich media resources, such as micro-class, admiration class, web page, image, video, voice and so on, and can push different learning resources according to students' individualized differences, improve learning quality and learning efficiency. Figure 1 shows the relationship between diversified teaching resources.

![Figure 1](image_url)

**Figure 1.** Intrinsic connection between the various forms of instruction in wisdom classroom.

2.2. Personal synergy
The wisdom classroom in the information technology environment can fully take care of every student's cognitive development and promote the collaborative development of personality and educational content. In teaching, the communication efficiency of information technology is much higher than that of traditional knowledge transmission method.

2.3. Three-dimensional interaction
In addition to the traditional classroom questioning, it can also log on to the cloud platform through intelligent terminals such as intelligent devices, and interact with teachers and students anytime and anywhere[3].

2.4. Intelligent tracking
At present, big data technology has developed unprecedentedly, so it has also been very strong support for teaching in intelligent classroom teaching, big data can track students' learning progress. Evaluate and feedback students' knowledge mastery at any time, provide understand the effect of classroom teaching.

2.5. Tools enrichment
In addition to the traditional multimedia function, information teaching pays more attention to interaction, realizes point-to-point transmission of knowledge points. With the help of Internet and other technologies, teachers can introduce visual content at any time when necessary to deepen students' understanding and understanding of knowledge.

2.6. Data quality evaluation system
In the traditional classroom mode, teachers' teaching decision-making and evaluation of students mainly depend on teachers' teaching experience, while the wisdom classroom in the background of big data and cloud computing can dynamically collect students' learning status in the whole process, including pre-class preview, discussion in class, homework after class and so on[4].
3. Using information technology to construct new mode of intelligent classroom teaching

3.1. Teachers' construction of wisdom classroom "network curriculum"
Teachers can create intelligent classroom network courses through information technology, analyze these factors synthetically according to students' learning level differences and interests, hobbies and so on, combine with the training goal of syllabus, create relatively novel network courses, optimize the existing classroom teaching, and then send them to students according to the actual progress of teaching and students' actual needs, so that students can learn independently through the Internet or smartphone anytime and anywhere[5]. At the same time, teachers are able to innovate out the teaching mode of online courses, such as designing a network course teaching mode similar to games. The advantage of this teaching mode is to stimulate students' enthusiasm and improve their learning efficiency and quality. When constructing the "network curriculum" of wisdom classroom, teachers also need to pay attention to the full research and analysis of all the data information produced by students' learning. Only in this way can we master real teaching situation and discover the problems of network courses.

3.2. Extension of college Teachers' expansion of learning in wisdom class after class
During classroom teaching, teachers can introduce and try out the more popular and practical learning APP or network platform. Students then download or learn online via smartphones, computers, tablets or other modern information technology terminals. In this process, students need to pay attention to their own classroom teaching knowledge, combined with their actual situation for targeted download learning or online learning, only in this way to improve their learning ability. Fully understand and master the knowledge learned to achieve the teaching goal of modern teaching in colleges and universities. At the same time, it can effectively promote the interest and enthusiasm of wisdom classroom learning and promote the all-round development of students.

3.3. Using information technology to build intelligent classroom communication and intercommunication platform
University teachers can use information technology to establish intelligent classroom communication interactive platform, such as using QQ WeChat and so on to create communication groups APP, and then introduce the role of these APP to parents at parents' meetings, encourage them to use various information technology terminals to download, so that parents can timely understand the actual learning situation of students, but also create a good environment for students to learn intelligent classroom online courses, and promote students to watch micro-classes, video screens and so on through interactive platform[6]. At the same time, teachers can also use the wisdom classroom communication platform to publish students' homework and supervise students to finish their homework effectively. They can also use this platform to publish some important notices of their classes, such as the report form, the curriculum and the school's notice on students' learning. So that students can fully understand their own real-time learning and ideological state and so on[7]. Of course, it can also strengthen the communication and communication between teachers and students in colleges and universities, actively explore the teaching methods of students, and then promote the improvement of students' comprehensive quality and comprehensive ability, and effectively realize the goal of teaching.

4. Process design of intelligent classroom teaching
In the past, teachers followed the old teaching ideas, and teachers and students had extremely precious interaction opportunities only in the classroom. During this period, students can ask questions to the teacher, the teacher can answer in person, until the students' doubts are eliminated. At other times, teachers and students are busy preparing their own work, everyone is busy preparing for the class, but do not understand each other. The passivity and separation of teaching from learning have result in half and unsatisfactory teaching results. Both students and teachers have paid a lot of time and energy, but they have not been rewarded accordingly. The emergence of the wisdom classroom has changed the situation, the interaction between teaching and learning has been greatly improved relying on the technology
platform provided by information technology, not only the teaching process has changed as usual, but also the teaching concept has brought forth new ideas with the emergence of new technologies and methods. The wisdom classroom teaching process is divided into several links, as shown in figure 2.

Figure 2. Intelligent classroom teaching process.

5. Evaluation results of intelligent classroom teaching quality in colleges and universities under information technology environment

5.1. Very good to stimulate the enthusiasm of students to learn
Since China has comprehensively promoted the deepening reform of college education, our university education has made certain achievements, but in the actual classroom teaching, some college teachers still use the traditional teaching mode to carry out teaching activities. This makes our university teaching in a very awkward position, not conducive to the overall and healthy development of students, but also to promote the quality and effect of classroom teaching. Different from the past, the new classroom integrates more elements of information technology, which makes the classroom both interesting and mysterious, and can also achieve a variety of forms of combination to stimulate students' different senses. Make their thinking more active, thus speeding up the sensitivity and absorption of knowledge.

The use of information technology, the classroom into audio, video, color and other multiple stimulation places, play a role in boosting the classroom atmosphere, deepen the impression of students, make the teaching content more vivid and attractive.

5.2. The teaching quality and effect are improved significantly
In recent years, with the continuous development of modern information technology, teachers' use of modern information technology to construct intelligent classroom can not only effectively break the space and time limit between students and classroom teaching, learning materials and teachers, but also create a new "scene" oriented teaching model for students.

6. Conclusion
To sum up, in order to make college education fully conform to the trend of the new era, we should strive to actively carry out innovation, perfect the evaluation system of wisdom classroom teaching quality, and fully promote students to learn better. Based on this, we should popularize this important teaching mode and transform teaching quality and effect into productive force.
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References

[1] Tang Yewei, Pang Jingwen, Zhong Shaochun, et al. Construction method and case study of intelligent classroom in information technology environment [J]. China Audio-visual Education, 2014(11):23-29.

[2] Zhang Liqiang, Cai Caixia, Zhang Zhiyong, et al. A practical exploration of the wisdom classroom teaching mode based on the information technology environment [C]// The national digital teaching seminar for primary and secondary schools. 0.

[3] Yu Yaqi. A Study on the Construction Method of Wisdom Classroom in the Information Technology Environment [J]. Curriculum Education Research, 2016(22).

[4] white plum. Construction and Application of Wisdom Classroom in Information Technology Environment [J]. Electronic Journal of the New Age of Education (Student Edition), 2017, 000(041):205198.

[5] Yu Xiaoman. A Study on the construction of wisdom classroom in the information technology environment [J]. Curriculum Education Research: Study on Teaching Methods of Foreign Language Learning, 2018, 000(005): P.94-95.

[6] Cui Xiaohui, Zhu Xuan. The Construction of higher vocational wisdom classroom teaching mode under the information of technology environment [J]. Vocational Education Newsletter, 2016(27):39-42.

[7] Yang Chen. A study on the effectiveness of information technology teaching in middle school [D]. in the Classroom Environment.