

## Research on the Design and Application of Intelligent Classroom Teaching Mode under the Background of “Internet+Education”

Yue Liu<sup>1</sup>, Fangqin Ma<sup>2</sup>, Lu Zhao<sup>3</sup>

Xi'an Eurasia University, Xi'an, Shaanxi, China

**Keywords:** Internet +, Education, Wisdom Class, Teaching Mode

**Abstract:** under the background of “internet+”, the mode of economic development has changed, and the education industry is also transforming towards the direction of “internet+”. Under the background of “internet+”era, many industries have begun to gradually transform to the internet industry. In the process of transformation, internet informatization and platform operation are combined with each other, forming a unique intelligent development trend. “internet+”wisdom education is a modern form of information-based education and teaching. The emergence of wisdom education has changed students' learning concepts and also made teachers' teaching methods innovative. “internet + education” is not just the application of internet in education, but the deep integration of internet, mobile internet and education. Starting from the concept of smart classroom, this paper analyzes the significance and value of smart classroom, aiming to change the existing classroom teaching dilemma and improve the teaching effect through the new teaching mode of smart classroom.

### 1. Introduction

Under the Guidance of Constructivist Learning Theory, Intelligent Classroom is an All-Round Application in the Classroom Using Various Emerging Technologies Such as Big Data, Cloud Computing and “Internet+”in the Current Era to Realize Intelligent Classroom and Efficient Classroom [1]. under the Background of “Internet+”,Many Industries Have Begun to Gradually Transform to the Internet Industry. in the Process of Transformation, Internet Informatization and Platform Operation Are Combined with Each Other, Forming a Unique Intelligent Development Trend [2]. “Internet+Education” is a Highly Developed Application of Information Technology, But Also a Deep Combination of Internet and Education. Relying on the Integration of Internet and Traditional Teaching Modes, a New Interactive Mode of Teaching and Learning is Proposed. with the Development of Educational Technology, the Teaching Mode is Constantly Changing, Gradually Changing from Simple Knowledge Transfer to Quality Training, from Teachers' Knowledge Transfer to the Interaction between Teaching and Learning [3]. the Biggest Problem Facing Education At Present is That Teachers and Students, Parents and Children Do Not Understand Each Other, Thus It is Difficult to Realize the Optimization of Educational Effect. It is Urgent to Study the Core Contents of Intelligent Classroom, Such as Terminal Platform, Intelligent Data Analysis, Intelligent Learning Resources and Environment, and Integrate Them into Traditional Curriculum Teaching to Mobilize Students' Learning Enthusiasm and Initiative [4].

“Internet+Education” is Not Only the Application of Internet in Education, But Also the Deep Integration of Internet, Mobile Internet and Education. “+”is Not a Simple Physical Addition, But a Chemical Change. in the Era of “Internet+”,the Traditional Teaching Mode Will Inevitably Be Impacted by the New Teaching Mode. in the New Teaching, It Has Become More and More Common to Turn over the Classroom, Group Learning, Network Teaching, Etc. the Emergence of a New Generation of Emerging Technologies Such as Big Data and Learning Analysis Makes Students' Learning More Personalized, Adaptive and Intelligent. Internet+Education Mode Has Greatly Impacted the Traditional Teaching Mode. in School Education, the New Elements and Modes of Intelligent Classroom Are Used, and the Idea of “Internet+”is Added to Make the Curriculum Arrangement, Curriculum Content and Curriculum System of Intelligent Classroom More Attractive [6]. How to Integrate the Emerging Information Technology with Education is an

Urgent Problem to Be Solved in the Current Education Informatization. Starting from the Concept of Intelligent Classroom, This Paper Analyzes the Significance and Value of Intelligent Classroom, Aiming At Changing the Existing Classroom Teaching Dilemma and Improving the Teaching Effect through This New Teaching Mode of Intelligent Classroom.

## **2. Teaching Characteristics of “Internet+” Smart Classroom**

### **2.1 Characteristics of Teacher-Student Interaction**

As a teaching mode that includes quite a lot of subject knowledge, intelligent classroom has formed the motive force of interaction between teachers and students, and the characteristics of interaction between teachers and students have been shown. The emergence of intelligent classroom provides a practical way for the construction of educational informatization. Intelligent classroom is an intelligent classroom teaching mode based on knowledge construction theory, dynamic learning data analysis and “cloud+terminal” information application. It is the latest achievement in the development of education in the era of big data [7]. The construction of “Internet+” intelligent classroom is mainly carried out along the Internet operation of intelligent classroom, which is characterized by sharing and integrating information resources based on the specific dimension platform of Internet application. The basic goal of the wisdom classroom is to be flexible, active, relaxed and happy, high-quality and efficient, and to promote wisdom throughout the whole teaching and training. Compared with the traditional classroom, the intelligent classroom teaching process takes learning situation analysis as the core in the pre-class stage, teacher-student interaction as the focus in the in-class stage and personalized guidance as the key in the after-class stage.

### **2.2 Humanized Teaching Characteristics**

Intelligent classroom is to transform traditional classroom into intelligent teaching environment by using “Internet+” thinking mode and big data. From a theoretical point of view, intelligent classroom is to use the “Internet+” thinking mode and the latest information technology means to reform and improve classroom teaching. In the new intelligent classroom, more attention is paid to the change of teaching concept and the understanding and mastery of knowledge by students. It is not a single irrigation and pressure, but gradually deepening. “Internet+” smart classroom, teachers and students can interact at any time to form a dynamic teaching effect of mutual communication and exchange, so that students can be satisfied with the process of learning knowledge at any time and understand all kinds of knowledge [8]. From a practical point of view, intelligent classroom teaching mode is based on Internet of Things technology, e-book package, cloud computing, big data analysis and other technical means to enable students to use fragmented time for targeted autonomous learning. In the traditional teaching mode, teaching materials are limited and only textbooks are used as teaching materials. However, under the new intelligent classroom teaching mode, multimedia, Internet and various information materials can be used to meet students' various needs. In the course of class, students find problems that they cannot solve, and can use the internet to search for the corresponding keywords, find the problems and give a reply, which is helpful to improve students' infinite reverie in learning.

## **3. “Internet+” Smart Classroom Teaching Scheme**

Under the background of “Internet+ education”, with the development of the times, education is becoming more and more important in people's life, and the development of “Internet+ is also constantly sublimating. The duty of the “Internet+” wisdom class is to control the students' self-growth path, enrich their inner world and make students stronger. With the development of mobile Internet technology, it is changing people's traditional living habits, as well as university campuses and students' learning patterns, so that students' learning is not limited by time and place. To a certain extent, the students' intelligence class explores the direction of students' growth, classifies the population, controls the classification according to different preferences, and conducts classified

teaching and guidance to students. The teaching process is not just classroom teaching. Teachers should pay attention to it before, during and after class. Smart classroom teaching mode is a mode to promote students' smart development and innovation. The self-upgrading of the “Internet+” smart classroom is a combination of the classroom teaching atmosphere of the “Internet+” smart classroom and students' autonomous knowledge learning and exercise. With the help of this platform teaching method, students are provided with a reasonable teaching platform and opportunities.

Intelligent learning resources are the information resources and material resources needed in the process of teaching activities. They are the main basis for communication and learning between teachers and students and the main combination of information technology and activities. Teachers need to be trained in modern educational technology before making online curriculum resources. To enable them to understand the modern teaching design concept, the characteristics and methods of network teaching, and be able to skillfully use computers and network-assisted teaching. The situation of college students' computer ownership and distance learning through computers are shown in Table 1.

Table 1 Statistics on Personal Computers Owned by College Students

Education	Specialist	Undergraduate	Master	Doctor
Number of participants	20	20	20	20
Number of owners	9	11	15	18

In the teaching mode of intelligent classroom, the teacher's emphasis is no longer on rigid knowledge explanation, but on guiding students to carry out interactive discussions and troubleshooting, so as to enable students to digest the knowledge points that should be mastered in this class. Due to the particularity of the network as a media, education in massive open online course has outstanding characteristics and advantages. A preliminary comparison is made between the basic elements of Internet education and traditional education and teaching process.

Table 2 Comparison of The Basic Elements of the Teaching Process between Internet Education and Traditional Education

	traditional education	Internet education
Teacher	One course, one teacher	A course has one master teacher and many tutors
Students	Most of them are children and teenagers with similar age and learning basis	Most of them are adults, which are quite different from each other
Teaching content	Present teaching content with textbooks	Present the teaching content with learning materials
Teaching environment	Class based collective teaching environment	Learners' personal space is the main factor

With the support of big Internet data and the back-end statistical function of intelligent mobile terminals, the data in the teaching process can be recorded in detail, which can be used by teachers to analyze students' learning situation and change the teaching content at any time. “Internet+” wisdom classroom to join the teaching program of autonomous learning, so that students can participate in the learning process [9]. Students are able to independently explore the knowledge they learn. They can learn and grow independently by independently exploring the corresponding knowledge points. They can really face the learning demand points and learning direction according to their own development path. Intelligent learning resources are valuable spiritual food for learners, which can deepen students' self-learning and cognitive level to a certain extent and is a cornerstone for realizing their own level of development [10]. In the classroom where teachers teach, the new curriculum reform requires teachers to be the promoters and boosters of students' learning and development, as well as the developers and builders of the curriculum, and quality education requires teachers to change their original teaching concepts when teaching. The most important state of “Internet+” intelligent classroom response is to cultivate autonomous thinking as its main characteristic. Autonomous thinking cultivation is a manifestation of active response. Active

response should be oriented in detail by combining practical teaching experience.

#### 4. Conclusion

Under the background of the Internet era, the human-oriented “Internet+” intelligent classroom education has been widely promoted in schools and supported by many schools and teachers. The intelligent classroom teaching mode under the “Internet+Education” is based on the concept of mixed learning, and adopts “cloud+end” equipment to deeply integrate Internet technology and education. The teaching mode of intelligent classroom is mainly based on the background of “Internet+education”. Teachers can use more information technology software to teach students. “Internet+” smart classroom education not only makes up for the lack of students' learning, but also improves the motivation of the school to carry out teaching and innovates teaching strategies. Smart classroom pursues the true quality of teaching and the true benefit of classroom. Smart classroom will lead the overall reform of classroom teaching and have a “revolutionary” influence on the traditional teaching structure. Smart classroom teaching mode can solve some problems existing between mobile phone and college classroom, improve the learning effect and learning satisfaction of college students, and meet the learning needs of contemporary college students.

#### Acknowledgement

1) This article is about the design and application of the wisdom classroom teaching mode “under the background of “Internet + education” --taking the course of Insurance as an example “ in Shaanxi Education Science 13th Five-Year plan 2018. project results, project number:SGH18H481

2) This paper is the research result of the key course construction of Commercial Law Application in Xi'an Eurasian College.

3) This paper is the research result of the key course construction of “Financial Institution Management” in Xi'an Eurasian College.

4) This paper is funded by Xi'an Eurasia University Research Group Foundation.

#### References

[1] Zhao Ming. Design and research of intelligent classroom teaching mode under the background of “Internet +” [J]. good parents, 2017 (65): 17-18.

[2] Wei Jianguo, song Liping. A preliminary study of smart classroom teaching mode based on Vocational Education cloud platform [J]. Computer knowledge and technology: Academic Edition, 2019 (5): 128-129

[3] Wang Baiping. A new form of education in the “Internet +” environment [J]. education practice and research: theoretical Version (C), 2019 (3): 11-16.

[4] Xue Heng. Practical exploration of smart classroom teaching mode -- Taking the smart classroom teaching mode of Yudong No.2 primary school as an example [J]. China information technology education, 2015 (2): 89-92

[5] Liu Cong, teaching mode reform of flipped classroom under “Internet + education” [J], foreign trade and economic cooperation, 2017 (12): 152-153

[6] Jiang Fei. The construction of digital intelligence classroom in secondary schools under the background of “Internet +” analysis of [J]. new curriculum (middle), 2018 (9).

[7] Wang Yanfei. Research on the factors of smart classroom construction under the background of “Internet + education” [J]. Journal of Jiujiang Vocational and technical college, 2017 (3): 1-3

[8] Wang Chunyu. Exploring the teaching mode of smart classroom [J]. Teaching of Ideological and political courses, 2018 (12): 26-29

[9] Li Chao. On the generation of English intelligence classroom in junior middle school under the

background of “Internet + education” [J]. campus English, 2019 (27): 145-146.

[10] Cui Xiaohui, Zhu Xuan. Construction of “smart classroom” teaching mode in Higher Vocational Education under the information technology environment [J]. Vocational education communication, 2016 (27): 39-42