On the Construction and Innovation of “Smart Classroom”

Maohua SUN

Foreign Language Department, Dalian Jiao Tong University, Liaoning Province, China
summer_817@163.com

ABSTRACT
College English Teaching in the era of Internet plus will inevitably break the tradition to meet the diverse and individualized learning needs of students. The College English hybrid teaching mode based on "smart classroom" can meet this demand. It makes full use of modern mobile Internet and other technical means to combine the advantages of traditional classroom teaching with the advantages of network teaching, provides a smart learning environment for college students with different English levels and learning needs, and can realize the teaching thinking of students as the main body and teachers as the leading role. Finally, we will achieve the goal of cultivating top innovative talents with innovative spirit, practical ability and international vision. This paper aims to create conditions for colleges and universities to cultivate high-level talents through the research on the intelligent teaching mode of College English based on the construction of network platform.

Keywords: smart classroom, College English, mixed teaching mode

1. INTRODUCTION
Intelligent education refers to the construction of "Internet +", big data, artificial intelligence, virtual simulation and other information technology, so that students can learn actively, learn according to their needs, learn according to their own way, find their own learning environment, learn the most suitable partners, learn the most suitable teachers, and help them learn. Step to form systematic thinking ability and innovative thinking ability. With the continuous development of Internet of things, education informatization and artificial intelligence, as well as the in-depth study of MOOC, micro class and flipped class, intelligent education has become a new form of education informatization development in China. The report of the 19th National Congress proposes to build "Digital China and smart society", and smart education is an important part of the whole smart society. The 13th five year plan for the development of national education clearly states that "support all kinds of schools at all levels to build smart campuses, and comprehensively use the Internet, big data, artificial intelligence and virtual reality technology to explore new models of education and teaching in the future". It can be seen that smart education has been written into the national and provincial policy documents, which affects and promotes the implementation of all kinds of education at all levels from top to bottom. College English is an important compulsory basic course for college students, but the traditional teaching mode has not enough attraction for the students who grow up in front of computers and smart phones. It is of great significance to explore the integration of intelligent education and College English Teaching in the information age.

2. How to realize intelligent teaching and learning

2.1. What is intelligent teaching
Intelligent teaching means that teachers can dynamically monitor each student's learning status, and guide, organize and guide students to locate the appropriate learning level according to the students' situation, choose the right learning mode, find the right learning environment, provide effective learning guidance, and establish suitable learning groups, such as "Internet +", big data, virtual simulation and artificial intelligence. Technology, for each student to provide personalized learning network and control system, help students to carry out personalized learning anytime and anywhere.

2.2. What is intelligent learning
Intelligent learning means that students can dynamically master their own academic level and learning ability with the support of intelligent learning system, locate the appropriate learning level in the learning of different course contents, select the appropriate learning method, get the most suitable learning environment and conditions, find the best partner, get the most effective teacher guidance and help to complete learning activities. In a limited time, we should do the most effective learning activities, so as to help students establish correct outlook on life and values, improve their life character, build a complete system of subject knowledge and ability, and
form a systematic thinking ability, especially the ability to think creatively and distinguish between good and evil, so that the multiple intelligences can be greatly developed.

3. THE WAY TO REALIZE INTELLIGENT TEACHING AND LEARNING

Aiming at such problems as low recognition, lack of individuation, lack of monitoring and control, lack of innovation and systematic thinking, difficulty in getting the most suitable teachers' teaching help and best learning partners' experience sharing, we explore a new educational body to solve the essence of teaching and learning under the support of "Internet +", big data, virtual simulation and artificial intelligence. Department. On this basis, in accordance with the "Internet +" thinking mode, we can build a smart education system that can effectively support new ideas and new methods. We will promote the new education system in an all-round way.

3.1. Establish self-learning organization

A study group of 3-5 students will be formed in the dormitory or in the form of voluntary combination. The study group will participate in the preview before class, the discussion in class and the review after class, and learn, discuss, design and practice the teaching content together. When encountering problems that are difficult to solve, the members will cooperate with each other in division of labor, search information in modules, organize discussion, brainstorm, inspire each other, seek solutions to problems. At the same time, through the form of learning group, it can also achieve the advanced and backward progress of group members.

3.2. Teachers guide autonomous learning

It is necessary for teachers to provide training and guidance to students on how to find information and collect appropriate teaching resources before the course starts. At the same time, let students summarize experience and show results, so as to improve students' ability to obtain effective information. In the aspect of classroom discussion and after class review, teachers should be familiar with the whole process of group discussion, have doubts or incomprehensible problems for students, strengthen guidance and demonstration, understand the learning situation of each member of the group, and timely adjust the teaching methods and processes according to the results of in class test and evaluation; through the statistics of real-time results of students' homework, analyze the causes of errors, and give personalized instructions Guide.

3.3. Enhance the motivation of autonomous learning

Pay attention to observe, summarize and find out students' learning interest points, form new learning topics according to the interest points of each group, and strengthen students' sense of participation in teaching. In group discussion and team work, we can use the method of randomly selecting points, so that each student must actively participate in it. The scoring link should include not only the overall score of the group, but also the individual members of the group Scores: questions in class should cover as many students as possible, and students can ask questions and comment on each other to establish their sense of classroom ownership and realize participation and motivation.

4. CHARACTERISTICS AND INNOVATION OF “SMART CLASSROOM”

Intelligent classroom has two main characteristics: intelligent teaching methods and intelligent teaching mode. Intelligent technology and intelligent teaching are integrated, promoted and accompanied with each other. Intellectualization promotes the development of intellectualization and leads the progress of intellectualization. The intelligent classroom teaching method can be realized through the system architecture composed of "cloud platform end" service platform. Wu Xiaoru and others pointed out that "cloud", that is, intelligent cloud service, provides basic service support based on education cloud, such as resource reading and downloading, online course learning, synchronous homework, personalized homework, intelligent marking, learning feedback, etc. "Platform", namely classroom intelligent platform, is a comprehensive classroom intelligent platform with intelligent software and hardware as the carrier. "End", i.e. intelligent application tools, mainly includes teacher end, student end and management end. The teacher side realizes micro course production, teaching exchange, evaluation and intelligence Real recording function; the student end can receive and manage tasks, complete assignments, exchange and interact, and carry out personalized learning; the management end realizes the functions of student behavior control, classroom teaching quality control, and class management. The essence of intelligent teaching lies in giving full play to the wisdom of teachers and students, optimizing the teaching process, constructing knowledge, enlightening thinking and developing wisdom. Chen Lin's "long chain intelligent learning theory" points out that people can only learn through a series of Only closely linked learning, practice, coordination and research activities can effectively cultivate the ability of advanced thinking and innovation and creativity.
Otherwise, it is easy to make learning stay at the shallow level of a little knowledge and a little taste, and it is difficult to reach the other side of wisdom. The intelligent teaching mode adheres to this idea and adheres to the intelligent formation system of "learning, research and creation", that is, learners learn and analyze through digital resources such as network micro class, and then through brainstorming discussion organized by teachers, inspire thinking, inspire inspiration, deepen the understanding of learning content, and generate new ideological sparks. On this basis, they carry out personal learning and collective innovation.

4.1. Characteristics

1) Advanced Nature: using advanced computer information technology, network technology and wireless communication technology, satellite positioning technology, map recognition, two-dimensional code technology, SCM and optical, electrical, radio generator technology to overcome obstacles in space and time and achieve seamless work.
2) Mobility: Download and install the app on the mobile phone, and you can view and understand the real-time location information of people or objects anytime and anywhere.
3) Efficiency: tracking people or objects at any time.
4) Experience: the intelligent tracking and positioning system of everything is a new tracking and positioning tool, which provides a new experience platform for tracking large and small objects and people.
5) Controllability: the intelligent tracking and positioning system of everything can adjust the accuracy and has strong controllability

4.2. Innovation

1) Easy to use: mobile app operation, convenient and fast.
2) But it has a wide range of applications: most people or goods can be used.
3) Fill the market gap: there are basically no similar products in the current market.

5. CONCLUSION

Intelligent education requires real-time monitoring and regulation of the whole process of education and teaching, and reasonable and balanced allocation of education resources such as teachers, facilities, equipment and venues to the greatest extent; it also requires a new education system that can provide each student and teacher with the teaching wisdom of excellent teachers and learning experience of typical students in real time, and change the supply pattern of high-quality education wisdom. The core characteristics of smart education are students' smart growth, teachers' smart teaching, students' smart learning, managers' smart management, teachers' smart growth, school and family smart communication, etc. College English Teaching in the "Internet +" era will break down stereotypes to meet the diverse and personalized learning needs of students. The College English hybrid teaching mode based on "smart classroom" just caters to this demand. It combines the advantages of traditional classroom teaching with the advantages of network teaching, makes full use of modern mobile Internet and other technical means, creates a new environment and atmosphere for college students with different English levels and different English learning needs, and can realize student-centered. The teaching idea of "teacher as the conductor" will eventually achieve the goal of College English teaching. The "smart classroom" based on intelligent information technology is the "revolution" of traditional classroom teaching. It has important application value and significance for promoting the reform of talent training mode and teaching method, and reconstructing the teaching system under the information background. In the era of "Internet +", adapting to the trend of Internet is an inevitable choice for talents cultivation.

REFERENCES

[1] Bian Jinjin, Xu Fuyin. Study on learning model design and effect based on smart classroom [J]. China audio visual education, 2016, (2): 64-68
[2] Cai Jigang. The challenge and subversion of college foreign language teaching concept: Taking College English teaching guide as an example [J]. Foreign language teaching, 2017 (1): 6-10
[3] Chen Lin. value research on innovative practice of intelligent education [J]. China audio visual education, 2015 (4): 15-20
[4] Cui Xiaohui. Characteristics and practice of smart classroom teaching mode [J]. Vocational education communication, 2017 (21): 22-26
[5] Deng Guangqiang. Personalized learning of students in "smart classroom" [J]. Educational information technology, 2013, (12): 11-13
[6] Jiang Qiang, Zhao Wei, Li Song, Wang pengjiao. Personalized adaptive learning research - the new normal of digital learning in the era of big data [J]. China audio visual education, 2016, (2): 25-32
[7] Liu Bangqi. Research on the design and implementation strategy of wisdom classroom teaching in the era of "Internet +" [J]. Audio-visual education in China, 2016, (10): 51-56.
[8] Liu Jun. Wisdom classroom. New direction of school classroom development in the era of "Internet +" [J]. Audio-visual education in China, 2017 (7): 14
[9] Liu Tao, Li Xiang, Tian Weihui. Construction methods and case analysis of it environmental intelligence classroom [J]. Communication world. 2016 (8): 8-9

[10] Liu Xiaolin, Huang Ronghuai. From knowledge to wisdom: Wisdom Education in the perspective of real learning [J]. China audio visual education, 2016, (3): 14-20

[11] Sun Shuhui, Liu Bangqi, Li Xinya. Construction and application of smart classroom in the era of big data [J]. China information technology education, 2015, (7): 112-114

[12] Tang Yiwei, Pang Jingwen, Zhong Shaochun, Wang Wei. Construction methods and case study of smart classroom in information technology environment [J]. China audio visual education, 2014, (11): 23-29

[13] Yang Xianmin, Liu Yongqian, Zhong Xiaoliu, et al. China's smart education development strategy and path selection [J]. Modern education technology, 2014, (1): 12-19

[14] Zhu zhiting. New development of Smart Education: from flipped classroom to smart classroom and smart learning space [J]. Open education research, 2016, (2): 18-26, 49