

A Study on the Construction of Smart Class Ecosphere

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ABSTRACT. *As a result of informatization teaching, Smart Class is another epoch-making technological innovation in the IT field. The advent of the big data era has provided a new way for the use of informatized campus data that has been bottlenecked. This article explores the current state of smart class construction. It puts forward a smart campus support platform based on big data, analyzes the teaching results and teaching rules hidden in the big data, and predicts the future so that teachers, students and educational decision-makers can master the individualized teaching state in time, improve the education strategy, and finally realize the intelligent ecological campus.*

KEYWORDS: *Smart class; Big data; Ecosphere*

1. Introduction

Smart Class is a hot issue in the current educational informationization research, and it is also an advanced stage of the informationization classroom. With the coming of intelligent era, the development of smart class has been upgraded to the construction of a smart educational information ecosystem. From the perspective of informatization, the essence of the “smart class“ is to realize the intelligence of educational methods by the advanced information technology. The classroom teaching environment is intelligent and thus realizes the wisdom education.

The key is to use the information technology of new generation such as big data, cloud computing, Internet of Things and mobile Internet for an information-based and intelligent platform, and to form a new learning environment that supports smart teaching, so as to achieve pre-, in- and after-class activities. Intelligent and efficient

classroom teaching applied throughout the process.

2. Difficulties in college English graded teaching

Due to the less class hours, teachers have not enough time to communicate with students after class. From the perspective of emotional teaching, this is a shortcoming.

Some of the teachers reflect that the lower graded students are lack of learning motivation and enthusiasm. And some students who have passed the CET-4 exam think that English study should be over. Actually, they are obstacles in the learning process.

The purpose of graded teaching is to personalize teaching. However, the current situation of college English teaching is too high teacher-student ratio (more than 10,000 students and 61 college English teachers in the first and second grades) and compressed class hours (12 credits/192 class hours)). It is difficult to meet the teachers' sense of achievement and the students' emotional needs.

3. The application of the smart class App

By taking the X app as an example, the application proves the effectiveness of smart class. The X app is a kind of mobile platform. It is specialized in online English speaking&listening and exam exercises for students.

The learning procedure of X app is as following: 1) pre-listening (Autonomously understand the teaching objectives, self-training listening and speaking output, and complete the pre-listening of the course content). 2)evaluation and feedback (For the speaking and listening content that has been completed in the online learning of students, the training of listening and speaking is targeted again.) 3)intensive test (Review the difficulties in face-to-face courses and conduct selective training for students at different levels in the class.)

In daily classroom teaching, teachers can cater for learner differences by providing students with different assignments or activities graded according to levels of difficulty by the X app. So that the students can work on exercises that match their progress in learning.

4. Constructing a benign ecosystem of college English graded teaching

4.1 Promoting the evolution of "human" in the ecosystem

“Human“ is a key “species“ in the information ecosystem and the development of educational information ecology. Therefore, the information consciousness, information quality, and information ability status of "human" directly determine the evolution of the information ecosystem.

The "College English" course is a public foundation course offered by almost all college students in Chinese universities. There are major differences in economic and social development and educational conditions in different regions of China. Different types of colleges have different orientations and characteristics. Promoting personalized college English teaching is one of the core concepts of the Teaching Guide. This requires the role of “human“ to play an important role in the development of smart class, and the promotion of professional development and evolution of teachers through information technology.

4.2 Strengthening the role coordination of the ecosystem

The smart class ecosystem is not limited to the college English teaching class. it is composed of diverse roles. This ecosystem emphasizes “diversity“ and “coordination“. The system includes many roles such as teachers, students, and education administrators. It also includes various physical environments such as network environment, classroom environment, and campus culture environment, as well as various practical activities such as research, teaching, and management. From platform bidding to teaching reform, from textbook selection to teaching and research practice activities, from PPT courseware to micro-course video, these different elements and roles are independent and influential. This coordination guarantees the healthy ecology of graded teaching in terms of diversity.

4.3 Promoting the normalization application of information technology platforms

The key to the development of the smart class is the application of the normalization, rather than the occasional "viewing class" or "open class". The

important prerequisite for achieving normalization is the advancement and convenience of technical means. In the smart class service group, the technical staffs sum up the feedbacks from the relevant teachers during the use process, track the effect of the whole process and provide the school with “concomitant data collection“ by the stable platform service. It can promote the ecological and benign development of smart class in normalized applications.

4.4 Deep integration of information technology platforms s with school education and teaching activities

To build a smart class ecosystem, we must adhere to the people-oriented principle, fully consider the needs of every role. Information technology should be integrated into the school's education and teaching activities. School-based educational resources and subject content should be integrated. The whole process of learning evaluation and real-time feedback should be implemented through the dynamic learning data. Through the network teaching, electronic preparation and other teaching and research activities and teacher work are in integration. The smart class should be integrated intelligent decision analysis with big data with school management. It also should be integrated with campus culture through the social media such as the school website, class space, and student personal space.

5. Conclusion

The smart class ecosphere mode of the intelligent era is constructed to promote innovation in the wisdom teaching of discipline, to truly achieve personalized learning and adaptive teaching, and to promote the transformation of knowledge into wisdom and the development of wisdom of learners. It laid the foundation for the practical application of wisdom teaching in the future.

6. Acknowledgement

Supported by Jiangsu Research Topics on Higher Education Reform of 2017(2017JSJG526) and Jiangsu Philosophy and Social Science Research Project (2017SJA053).

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