

Research on Project-Based Instructional Design Based on the Improvement of College Students' Learning Motivation in Smart Classroom Environment

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ABSTRACT

The rapid development of information technology and the application of big data have spawned smart education and provided the possibility for the transformation of traditional teaching to smart teaching. Among them, the indispensable is the teaching environment-wisdom classroom. As a high-end form of information technology in the application of smart education, smart classrooms have brought many benefits to the reform of foreign language teaching in the new situation, and have become one of the hot spots in the teaching world. However, the independent smart classroom environment can not directly and effectively change the teaching effect. Based on the technical support provided by the smart classroom and the practical and effective teaching model, the motivation of students can be truly improved. Project teaching mode is an effective teaching mode verified by many teaching reforms, and it can play a greater role in promoting students' learning motivation. This article takes the project-based instructional design model as an example to explore how to carry out university classroom teaching in a smart classroom environment to improve students' motivation for learning.

Keywords: smart classroom, learning motivation, project-based teaching

I. INTRODUCTION

The traditional teaching mode of college students is mostly duck-feeding teaching. In terms of the right to speak, teachers usually master the hegemony of discourse. The classroom is less interesting and interactive, to a certain extent, it stifles the students' inherent enthusiasm and motivation for learning. In general, the traditional university teaching model is not effective in promoting the improvement of students' learning motivation. Therefore, in the new era of education informatization, university teaching reform is also imperative. At present, smart classrooms have entered many colleges and universities, providing a favorable teaching environment and technical support for the realization of educational modernization. However, to achieve good teaching results, not only must there be strong teaching equipment and technical support, but also a practical teaching model.

II. THE FEASIBILITY OF PROJECT-BASED INSTRUCTIONAL DESIGN IN A SMART CLASSROOM ENVIRONMENT

The project-based teaching method means that under the guidance of teachers, a relatively independent project is handed over to the students themselves. The collection of information, design of the plan, project implementation and final evaluation are all the responsibility of the students themselves. They need to understand and grasp the basic requirements of the entire process and each link. The teaching method originated from the famous American educator Dewey's "doing high school" concept, also known as the theory of experience. The most prominent feature of the project-based teaching method is "project-oriented, teacher-led, and student-led", which has changed the traditional teaching method in which teachers dominate, students are in a passive learning state, and students become the main body of learning. Teachers act as guides, mentors, and supervisors in the student learning process. The core of the pedagogy is not to take the one-way knowledge and skills transfer from teachers to students as teaching goals, but under the guidance of teachers, students actively explore the answers to and solutions to problems, and finally display and self-evaluate. The focus of learning is not only on learning

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results, but also on the learning process. Beckett sees Kert to define a project as a long-term (weeks) activity, which involves various tasks completed by individuals or in cooperation, such as carrying out research plans or problem research programs, and projects implemented through empirical research, or Literature research projects through data collection, analysis, and data reports in written or oral form [5]. The implementation plan includes not only information collection, but also information discussion, problem solving, oral or written reports, and presentations. The project can be completed outside of class time. In the practical application process, the project-based teaching method not only improves the teaching effect, but also promotes the improvement of the motivation of foreign language learning for students. At present, some colleges and universities are practicing this teaching method. Smart classrooms can create more and more favorable conditions for the practice of project-based teaching methods, so it is practical to use them in university teaching.

III. PROBLEMS IN PROJECT-BASED INSTRUCTIONAL DESIGN IN A SMART CLASSROOM ENVIRONMENT

Although the reform of university teaching has gone through the youth, there are still many problems in university teaching. Many teachers still follow the traditional teaching model. Teachers are still the masters of the classroom, mastering the "discourse hegemony". Teachers display courseware, conduct simple interactive questions and answers, and explain; most of the interactions are limited to the classroom. For example, because most colleges have a large number of students in the class, less hours, and heavy tasks, this leads to teachers' inadequate feedback on student work. In addition, teachers teach students in accordance with textbooks, and input text to students in a relatively simple type. Taking English reading as an example, the mainstream texts in college English classrooms focus on communication and culture, and the number of academic and popular texts is relatively small. The single text type is easy to cause the students' knowledge structure to be "uneven nutrition", which is also not conducive to maintaining the students' interest in learning [1].

In project-based teaching, teachers should design a diversified project that is in line with the actual level of the students and can arouse the students' interest in the project design based on the actual learning of the target students. It is also necessary to design specific projects based on the resources and technical support provided by the smart classroom, the evaluation of learning effectiveness, and the roles of teachers and students. Secondly, in the specific implementation process of the project, teachers should play the role of guide,

organizer and supervisor, guide students to implement the project, and record the classroom performance of learners with the help of smart classroom technology as a basis for after-class teaching reflection. The situation setting of the introduction of the new lesson in the lesson should focus on inspiring students' interest and keeping the theme close. Before entering the new class, let students clarify their learning goals, emphasize "learning" in the learning process, and emphasize "learning" in the learning results. Finally, in the acceptance of project results, the project results can be displayed in a variety of ways. The project evaluation method uses a combination of student self-assessment, student mutual evaluation, and teacher comments. At the same time, we must also pay attention to it. The overall evaluation is combined with the evaluation of everyone in the group, and the evaluation criteria should be specific and operable. Appropriate rewards can be given to groups and individuals with excellent performance, so that students can feel the sense of accomplishment and pride in learning.

In the new era of wisdom education, these problems can be effectively solved to a certain extent. The powerful and intelligent functions of the smart classroom provide powerful support for teachers and learners.

IV. THE PROMOTION OF SMART CLASSROOMS TO ENHANCE STUDENTS' MOTIVATION TO LEARN

Learning motivation is mainly the dynamic role played by non-intelligent factors in the learning process. These non-intelligent factors mainly include motivation, interest, emotion, will, temperament, personality, etc. [2]. Practice has proved that the motivation of foreign language learning is one of the key factors for students to learn foreign languages well. In a smart classroom environment, the project-based teaching model can play a greater role in promoting students' foreign language learning motivation.

A. Being able to stimulate students' interest in learning foreign languages

Project-style teaching breaks through the traditional teacher-centered teaching model. Students become the protagonists of the classroom. The specific implementation of the project, the display of the project results, and the self-evaluation and mutual evaluation of the project are all under the responsibility of students under the organization and guidance of teachers. The sense of ownership of the students in the classroom and the sense of accomplishment after the project is completed make the students more active and interested in participating in the classroom. The diversification of project forms can be realized in the strong technical support of the smart classroom and the ideal physical

environment. This has solved the problem of single and tedious classroom activities in traditional foreign language classrooms to a certain extent. New, rich and diverse projects can stimulate students' interest in learning foreign languages. According to the empirical research conclusion of most college teachers' project-based teaching practice in college English, most college students think that the project-based teaching model is more interesting. For example, in the empirical study of Zhang Qing and Yang Caifei's statistical analysis of students' interest in learning, the following conclusions are drawn: students' interest in learning English is significantly increased, and their satisfaction with project-based teaching is higher. Project-based learning can provide students with an environment for constructing knowledge together and a platform for meaningful learning, which can help maintain students' interest in learning and increase students' satisfaction with learning achievements [3]. In addition, foreign language learning requires real scenes and contexts. The combination of project-based teaching and smart classrooms can provide students with simulated learning situations, so that real "immersive" learning can be realized, for example, in learning Chinese and American. In a project with the theme of cultural differences, students can simulate the scene of Chinese international students serving as guests in the home of American to American students in a smart classroom environment. Students can maintain a high and lasting interest in such "immersive" foreign language learning.

B. Improving students' ability to learn foreign languages autonomously

The implementation subject of the project-based teaching method is students. During the project implementation process, students need to independently collect data related to the project, analyze, screen, and reasonably use the data. In such a process, students need to think and analyze independently, learn to integrate and extract useful resources, and of course their ability to learn foreign languages autonomously has also been cultivated and improved to a certain degree. Smart classrooms provide many convenient conditions for students to learn foreign languages autonomously. Under the circumstances of good self-learning environment and conditions, students will continue to improve their self-learning ability through their own efforts. In addition, project-based teaching is student-centered, and students are fully involved in every aspect of the project. Due to the variety of project forms, students must constantly respond to new challenges, conduct inquiry-based learning, and aim at project tasks to achieve project goals. During the process, problems are continuously discovered and explored, and problems are considered from multiple angles and in depth, and solutions are sought. Moreover, the project-based learning model not only

occurs in the classroom, but also extends to before and after class. Due to the many preparations before class and the consolidation and improvement of learning after class, students can internalize and transfer a lot of knowledge. This is also in fact cultivating students' awareness of autonomous learning.

C. Improving students' awareness of cooperation

The improvement of cooperative learning awareness, in turn, promotes the improvement of students' motivation for foreign language learning. In the project-based teaching model, students further optimize their ability to participate actively through cooperative learning and take on more responsibilities. The cooperative learning situation and the college students' individual cause and effect cycle in the form of a circular interaction [4]. In order to complete the project tasks of the learning community, each member of the learning group needs to cooperate and communicate with other members. When an individual encounters a problem, they can seek help from other members of the learning community to discuss solutions together. Moreover, both the classroom environment of the smart classroom system and the platform provided to facilitate the communication between teachers, students, and students also create good conditions for students' group cooperation and communication. For example, take "Heroes of Our Time, Text A Heroes among Us" in Unit 4 of "New Horizon College English" (Third Edition) Literacy 1 (Comprehensive Edition) as an example, assuming that the project is based on the theme of "hero" Micro magazine. In the project division of labor, the students responsible for the hero character column can discuss the character selection and text-related issues with the students responsible for proofreading and editing the text. In this process, students gradually cultivate a sense of cooperation. The cooperation project display will also bring students a sense of learning achievement and collective honor. Such cooperation consciousness and philosophy and the benefits brought by the project results to the individual will drive the individual to better complete the common learning project and complete their own responsibilities in the project division of labor, and the learning motivation will naturally be greatly improved.

V. CONCLUSION

The combination of information technology and foreign language teaching reform makes it possible for foreign language teaching reform to take a big step forward. Smart classrooms are powerful, more user-friendly in classroom layout, more intelligent in the presentation of teaching content, more diverse in the learning resources they can provide, classroom teaching interactions are timely and recordable, and flexible in testing. In addition, the platform's big data function

records and analyzes the learning data, and provides objective data support for teachers to teach according to their aptitude and determine the teaching difficulties. The project-based teaching model is centered on the learner and the teacher as the guide, organizing and guiding students to complete the project tasks, so that students can cultivate self-learning awareness, teamwork awareness and critical thinking in the process of inquiry learning, and become the "master" of the classroom in terms of learning results, truly "learn knowledge" and "knowledge". In the context of smart classrooms, applying the project-based teaching model to university classrooms can and will undoubtedly improve teaching effectiveness to a certain extent.

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