Research on the Implementation Route of College English Project-style Teaching Based on Artificial Intelligence

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Abstract: The development of computer technology provides convenient conditions for modern teaching, and artificial intelligence is the product of the development of computer technology to a certain stage. In recent years, artificial intelligence technology has swept the country, and various fields are developing in the direction of intelligence at an amazing speed. College English is a window for students in higher education to understand foreign culture. However, in the traditional teaching mode, students lack practice. Therefore, in order to break the shackles of traditional teaching, many teachers try to apply project-based teaching. The combination of artificial intelligence and project-based teaching is a new attempt for teachers. This paper explores the implementation of college English project-based teaching, and strives to find an effective implementation path.

Keywords: Artificial intelligence; College English; Project-based teaching; Implementation path

1. Introduction

In 2020, the College English Teaching Guide was officially released, which mentioned that English teaching in universities should try to apply artificial intelligence technology, give full play to the role of computer technology, and improve the efficiency of college English teaching. In 2021, the International AI and Education Conference will be held smoothly. The conference also mentioned emphasizing the importance of AI technology and further accelerating the integration of AI and education. In practice, artificial intelligence technology makes modern teaching more personalized and efficient, and students' learning experience is stronger. Project-based teaching is one of the common teaching modes in universities to improve students' practical skills. It often takes specific projects as the theme and is completed by students participating and cooperated in groups, which plays a significant role in cultivating students' practical application ability. Because the traditional project-based teaching is constrained by technical means, part of the activities cannot be presented, and the teaching effect is difficult to fully meet the expectations. The integration of artificial intelligence and project-based teaching is a new attempt,

which is more helpful to provide students with real situations, enhance their immersive experience, and then meet the actual teaching needs.

2. The significance of college English project-based teaching under artificial intelligence

2.1. Improve students' comprehensive language use ability

College English project teaching with the support of artificial intelligence breaks out of the limitations of the real environment. Under the application of high technology, students seem to be in a real situation, with a stronger sense of experience, and their thoughts are closer to the real situation. In this situation, students should have a certain reserve of English to participate in activities. In the early stage, they need to recite English words and short sentences in advance, and understand the occasions and skills of application, to ensure that students get exercise in the activities. It can be seen that the application of artificial intelligence technology in college English project teaching can effectively improve students' language application ability and improve their comprehensive ability [1].

2.2. Cultivate students' key abilities and qualities

Under the project-type teaching mode, it is difficult for students to achieve only by "fighting alone." In order to achieve the expected goal, students should conduct independent research, cooperate, and work together to solve problems. In the traditional project teaching, students are limited by the actual teaching conditions, and some problems are difficult to solve on the spot [2–4]. However, teachers can use artificial intelligence technology to quickly search for activity materials and deal with problems in a more flexible way. Students' ability to deal with key problems will also be improved, which will contribute to their future career development.

2.3. Promote the reform and innovation of college English teaching

Artificial intelligence now covers almost every field, and its continuous development also makes college English more possible. Teachers can break through the traditional teaching mode and use advanced technology to create personalized and diversified classrooms. In addition, teachers can also use artificial intelligence technology to pay attention to and track the learning situation of students at any time, and can also use this technology to analyze students' dynamics, to lay a foundation for the subsequent teaching adjustment [5]. To some extent, it can effectively promote the reform of college English teaching and make the road of future reform smoother.

3. Current status of college English project-based teaching under artificial intelligence

3.1. The transformation dilemma of teachers' role and ability

In traditional teaching, although many teachers recognize the dominant position of students, they "dominate the host" in teaching, resulting in the dominant position of students not being fully reflected. With the addition of artificial intelligence, teachers need to change their teaching ideas in time and put themselves in the position of the dominant one. From the perspective of practical teaching, it is difficult for teachers to change their roles in a short time. In addition, the limited mastery of artificial intelligence technology cannot operate intelligent platforms skillfully, so it is difficult to give full play to the advantages of ARTIFICIAL intelligence technology,

and project teaching cannot get rid of the disadvantages of the past [6].

3.2. Students' adaptability problem

For students, they are used to the traditional project-type teaching mode. The integration of artificial intelligence technology brings them more sense of novelty, but they also inevitably have a sense of inadaptability. The main reason is that the students have long accepted the traditional teaching, where receiving knowledge is more passive, and self-study ability is limited [7,8]. In the process of project-based teaching, students should not only complete the tasks by themselves, but also master the operation skills of artificial intelligence, which will make them uncomfortable.

3.3. Insufficient teaching resources and technical support

Although artificial intelligence technology is now widely used in education, few teachers integrate it with college English project-style teaching, and there are obvious deficiencies in teaching resources and technology. Compared with ordinary teaching, project-based teaching requires teachers to screen the existing resources and find teaching resources in line with this mode. At present, some intelligent platforms have provided support to teachers and students, but the number of teaching resources or case databases is limited, and even some teaching resources are intermingled, which makes it difficult to meet the needs of college English project teaching in different majors [9]. In addition, the application of artificial intelligence needs the support of advanced technology from schools, and most of the schools have an unstable network, which will affect the use of the intelligent platform [10].

4. Implementation path of college English project-based teaching under artificial intelligence

4.1. Improve teachers' ability and strengthen regular training

4.1.1. Improve the technology application ability

Through the continuous development and improvement of artificial intelligence technology, speech recognition, natural language processing and machine learning are becoming more mature, and gradually penetrating the field of education, which provides a good opportunity for college English teaching. Teachers should actively cater to changes and participate in training. The addition of artificial intelligence to college English project teaching has a lot to do with the application skills mastered by teachers. Schools can regularly train teachers in their technical application ability, so that they can know how to operate skillfully. For example, teachers can use intelligent speech systems to practice English or use natural language processing technology to analyze students' compositions. The improvement of teachers 'application ability can not only save classroom time, reduce unnecessary operation time, but also enhance students' experience [11].

4.1.2. Improve the ability of interdisciplinary integration

From the perspective of traditional project-based teaching, students usually rely not only on a single subject's knowledge, but also on other subject knowledge. The level of students' interdisciplinary ability is closely related to that of teachers. In the training, schools should focus on cultivating teachers' interdisciplinary ability and integrating the knowledge of various majors and disciplines. The school can regularly organize interdisciplinary seminars and invite experts from various industries to discuss together, which not only helps teachers enrich

the teaching content but also makes them aware of the practice of different majors and disciplines. In addition to participating in the training, teachers should also take the initiative to learn the latest teaching results in their spare time, update their teaching theories, learn other subjects, and improve their interdisciplinary integration ability [12].

4.1.3. Improve interpersonal communication skills

The application of artificial intelligence technology in college English project-based teaching does not mean that interpersonal communication becomes unimportant. On the contrary, teachers should use artificial intelligence technology to interact closely with students, enhance their relationship, and lay the foundation for the smooth progress of teaching. In this regard, the training should also strengthen the teacher's emotional intelligence and interpersonal skills [13]. For example, share classic cases with teachers who participate in the training, or actively state the confusion encountered in this aspect. In the process of common communication, improve their interpersonal skills and emotional intelligence, learn to gain insight into students' psychological skills, and create a good classroom teaching atmosphere.

4.2. Give scientific guidance and provide learning support

To achieve the best results, the college English project teaching with the support of artificial intelligence cannot be separated from teachers' scientific guidance to students. In the course of the project, although teachers are not the main participants, they should not be "left behind." They should still give guidance from the side or design the learning project according to the students, which can be divided into three stages.

4.2.1. Basic stage

For freshmen, they do not have the level of CET 4 and CET 6. At this time, teachers can take college English and CET 46 as guidance. Online teaching can apply intelligent learning platforms, such as the common correction network. Students need to complete the daily exercises according to the teacher's regulations, correct them on the platform, and provide feedback on the results to the teacher in time. In offline teaching, the main task of teachers is to explain the difficulties encountered in online practice. For some difficult words, the teacher can guide the students to use a hundred words to complete the recitation task of new words every day, to strengthen the memory [14]. For students with a weak writing foundation, teachers can also open the project of "Improving Basic English Writing." Students are divided into several groups to complete various types of composition writing. Teachers give students suggestions with the help of the correction function of intelligent writing software.

4.2.2. Improve the stage

Sophomore students have a good foundation, so the school can design college English project courses according to their majors. For the class of students, teachers can organize the "Engineering English Practice" project for one semester. In online teaching, intelligent translation tools can be used to teach students to find engineering materials at home and abroad, organize offline discussions, and analyze professional vocabulary and sentence patterns in the literature. For engineering cases, students can use the Internet platform to collect information, discuss the design scheme together offline, and discuss the feasibility and hidden dangers of the scheme. After that, students should report in English, and teachers should give appropriate supplements to make the teaching of this project more efficient and improve students' English communication ability.

4.2.3. Development stage

When students enter the junior year, they will face the need for a postgraduate entrance examination or graduation. Schools can also open the university according to the different needs of students. For the postgraduate entrance examination of students, teachers to carry out the "special English breakthrough" project. With the help of artificial intelligence technology, students conduct immersive simulation training. Teachers refer to the APP analysis and select the most suitable exercises for students. For students who want to find jobs, teachers can organize the "International Business English Practice" project. Students can act as representatives of enterprises, conduct simulation negotiations with the help of online platforms, and offline teachers can teach communication skills and etiquette in advance to observe whether students achieve the expected goals, to achieve interdisciplinary development.

5. Integrate teaching resources and innovate teaching technology

The application of artificial intelligence technology in college English project teaching still needs to rely on the integration and utilization of educational resources and the innovative development of educational teaching technology, providing support for the enrichment of educational content, improving teaching efficiency, and giving students more personalized and diversified learning experiences [15].

5.1. Build an intelligent teaching resource database

Using AI technology to collect globally excellent English learning materials, such as online courses, electronic books, video, interactive exercises, composed of intelligent teaching resources, to actively push to students, according to the learners' learning information record, interest, and ability level, set a related learning route, and realize personalized teaching. Teachers and learners are encouraged to cooperate in developing and sharing resources to achieve timely updates.

5.2. Innovative application of teaching technology

College teachers should actively explore and use the most cutting-edge educational technologies, such as virtual reality (VR), augmented reality (AR), and mixed reality (MR), so that learners can get immersive feelings. For example, virtual reality technology can be used to recreate international communication scenarios and let students practice their oral English through the virtual world. Teachers should also pay attention to how to use augmented reality to connect the learning content with the 3D models, so that they can get direct and interesting learning. In addition, cloud computing, big data, and other related technologies cannot give enough attention to collecting and analyzing learning information promptly, to provide data support for our accurate education.

5.3. Establish an open and shared learning community

Use social media, forums, cloud collaboration workspaces, and other ways to build open learning communities and encourage students to communicate with teachers and even industry elites. In this learning community, students can share their learning experiences, ask questions, or participate in discussions, thus building a good learning atmosphere. In addition, teachers also play the role of mentors, promoting the flow of knowledge and the collision of ideas in the community, and can collect information from community feedback to improve the content and form of the course. In addition, the community model exercises students 'teamwork ability and lays a solid foundation for students' future work.

6. Conclusion

To sum up, the integration of artificial intelligence technology and college English project-based teaching can promote the close interaction between teachers and students. Artificial intelligence technology can provide teachers with students 'learning data and conduct dynamic analysis, so that teachers can better understand students' learning progress and give necessary guidance to them. This paper first expounds the significance of college English project teaching under artificial intelligence, then points out the existing problems, and finally proposes to improve the ability of teachers, strengthen regular training, give scientific guidance, provide learning support, integrate teaching resources, innovate teaching technology, to promote the deep integration of artificial intelligence and education, strive to cultivate the talents needed for social development.

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