Innovative Practices of College English Curriculum with Digital Intelligence under the Concept of OBE

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Abstract: The era of digital intelligence is facilitating the innovative practices of the college English curriculum. Therefore, this study utilizes digital intelligence and the concept of OBE (Outcomes-based Education) to enhance teaching practices, integrate digital teaching resources, and create a student-centered interactive learning environment. Teachers play crucial roles in modeling and guiding students to acquire knowledge and utilize technology so as to exploit their talents to design personalized learning, and teachers adopt diversified ways of assessment. The curriculum utilizes blended online and offline teaching method of students’ self-learning before class, teachers’ and students’ interactive exploration in class, and students’ optional and challenging assignments after class. At the same time, teachers incorporate a backward design to meet students’ needs in technology college to develop their high level capabilities and promote interdisciplinary integration of science, technology and humanities. Moreover, our curriculum is continuously optimized and dedicated to solving teaching problems and disseminating teaching resources.

1. Introduction

The digital age is developing rapidly, College English should vigorously promote the integration of the latest information technology and curriculum teaching[1] to promote the strategy of national education digitization. As a compulsory public course, College English is offered based on cultivating students’ comprehensive application of English, contributing to their professional learning and personalized development, and enhancing their humanistic qualities, creativity and independent learning ability. This is in line with the OBE concept of “outcome-oriented, student-centered and continuous improvement”[2]. Meanwhile, digital teaching tools can provide students with a more personalized and efficient learning experience. However, there are difficulties in teaching, so this paper will focus on these teaching problems and combine the OBE concept with digital intelligence to innovate the college English curriculum.

2. Analysis of Teaching Problems in College English

According to the analysis of students, it is found that there is heterogeneity in their individual English proficiency and personality, so their learning needs and classroom performance are diversified. Influenced by exam-oriented education, students are accustomed to input training and afraid of writing and oral expression. In the digital age, most students rely on technology, resulting
in weak independent thinking and learning ability.

3. Innovative Practices in College English Curriculum

In response to the teaching problems, teachers flexibly incorporate content that meets the needs of students. The teaching process is student-centered and problem-solving oriented, and teachers use advanced technology to integrate teaching resources digitally and flexibly use online communication communities, learning platforms and smart classrooms to build interactive learning environments. Teachers optimize the teaching effect and digitalize the education process to foster independent thinking, self-learning, cooperation, innovation, and digital intelligence, and shape their higher-order thinking ability develop their professional learning and humanistic qualities, so as to promote the integration of polytechnics and humanities.

3.1. Presenting Teaching Objectives and Knowing Students’ Needs

3.1.1. Introduction of College English Curriculum

In the first lesson, teachers present the teaching objectives of college English curriculum, and introduce independent learning platforms such as WE Learn, Online communication communities, Rain Classroom and Pigai.org, as well as the digital teaching resources. It is expected that students can improve their subjective initiative, deepen their understanding and mastery of English language knowledge, pass relevant examinations and participate in competitions, with a view to achieving effective output of English, promoting cultural interoperability, and cultivating high level capacities such as cooperation, innovation and problem solving.

3.1.2. Personalized Learning Plan

Questionnaires are used to gain a deeper understanding of students’ diversified needs, including their interests, motivation, strategies and styles of English learning, with the aim of designing personalized learning plans and adjusting course content according to their needs. The results show that students have a strong need to pass CET-4 and CET-6, actively participate in the activities of remembering vocabulary. Meanwhile, they are interested in learning about Chinese and Western cultures and English for computer science. Teachers reasonably integrate their demands in the teaching design to ensure the relevance and effectiveness of the teaching content, require students to set up semester English learning goals and plans, and encourage them to join the online activities of English learning. Finally, teachers get to know students through their self-introductions, classroom interactions, and learning expectations and outcomes to make personalized learning paths related to their majors, and set up self-directed learning tasks, personalized resources, feedback and guidance to ensure that each student gets the best learning experience.

3.1.3. Multiple and Graded Assessment

Following the OBE concept, teachers build a multiple assessment system and design corresponding scales in authentic, formative and summative assessment. By combining students’ weekly self-assessment, monthly peer assessment, irregular mutual assessment between teachers and students, and the final examination, a comprehensive evaluation is formed. Teachers define the learning plan clearly, design activity tasks and assessment requirements, and incorporate incentive mechanisms to effectively stimulate students’ initiative. Besides, teachers regularly check students’ self-learning outcomes before class, online and offline assignments and activities, and arrange
group seminar presentations, tests in rain classroom and WE Learn from time to time to test the students’ learning achievements at stages. At the same time, we track the learning progress and performance according to the online learning platform data such as learning progress, check-in rate, class participation, correct rate of answering questions and completion of assignments, etc., create personalized learning profiles and set up displays of outcomes to form a multidimensional, multilevel, graded learning achievement evaluation system, and motivate each student to make progress.

3.2. Modeling and Guidance for Effective Learning

3.2.1. Self-learning Before Class

Teachers set up relevant learning assignments on WE Learn and ask students to complete them independently. The platform is compatible with the textbook and has learning tracking and evaluation functions. Through self-learning, students may face some difficulties of reading and teachers will help them to solve these problems in class with interaction and knowledge reproduction. What’s more, teachers can accurately know students’ learning performance to customize personalized learning for them and provide timely evaluation and feedback.

3.2.2. Effective Input and Output in Class

AI and VR technologies help the effective input and output of English courses. In language learning, teachers utilize VR, AI technology for immersive vocabulary learning, providing context and application demonstrations. AI tools aid in vocabulary assessment through dictation, puzzles, and tests with real-time teacher feedback. Reading activities involve quick Q&A, group tasks, listening exercises, and culture exploration via VR to deepen understanding. Personalized recommendations through AI support independent study. Translation skills are integrated into sentence analysis, with in-class translation exercises for practice and post-class AI evaluations for improvement. For writing, after topic discussions, students do timed writing exercises, followed by self-assessment, peer feedback, and AI evaluations. Teachers provide guidance for essay refinement. Speaking and listening practice leverage digital simulations, culture videos, and role-playing for intonation and fluency improvements. Following input, students showcase skills through presentations for effective output assessment.

3.2.3. Effective Output after Class

After the demonstration and guidance during the lesson, students will be assigned optional and challenging tasks after class, and then they will work in groups and present their personalized outcomes with the help of digital technology. In this way, their motivation and initiative to explore knowledge will stimulated to improve their all-round abilities of using English skills and strengthen their team spirit. Furthermore, English-related competitions will be organized and students will be guided to actively participate in the competitions, so that they can apply what they have learned into practice to improve capacity and produce creative works through competitions. Students’ performance is also integrated into the formative assessment.

3.3. Exploiting Students’ Talents and Integrating Digital Resources

3.3.1. Exploiting Students’ Talents

In the digital era, teachers utilize platforms for assigning tasks, monitoring student progress, and
demonstrating English resource access and AI tool usage. They tap into students’ video-making skills, tasking them with English interviews, vlogs, cultural presentations, dubbing, and performances on various topics like environmental protection. These tasks, including mini movie competitions, channel students’ tech proficiency into learning advantages, fostering personalized achievements and proper tech utilization.

Online learning communities aid teachers in posting topics and materials, while students freely share learning experiences and challenges. In-class, Rain Classroom features like roll call, interactions, photo sharing, and tests enhance real-time engagement, making discussions lively. Post-class quizzes and assignments help consolidate learning. Technology boosts classroom activity, enabling teachers to track student progress for formative assessment.

3.3.2. Integrating Digital Resources

Digital college English has new characteristics of knowledge networking and content aggregation[3]. Teachers integrate a series of high-quality teaching resources, such as digital textbooks, video courses, database of tests, teaching cases and courseware. At the same time, teachers lead students in creating digital learning assistants to help them enhance their English skills in an immersive manner, and establish student-centered interactive communities as a platform for communication and interaction between teachers and students. Finally, students share their individual and group outcomes, while teachers provide teaching resources and utilize intelligent tools to assess and provide feedback on students’ works.

3.4. Optimizing Teaching Design and Integrating Interdisciplinary

3.4.1. Optimize Teaching Design

In terms of teaching design, teachers closely follow the syllabus and students’ needs to define the core objectives and expected learning outcomes of the course according to the OBE concept, analyze the existing teaching materials in depth, skillfully combine the contents of CET-4 and students’ professional knowledge, and adjust the design according to the actual needs. Teachers utilize blended teaching and project-based learning to assign listening exercises and vocabulary learning tasks on WE Learn before class to cultivate students’ self-learning ability, and conduct vocabulary tests and diversified reading tasks during class. Furthermore, teachers set up different questions, use AI and VR to start heuristic teaching and contextualized teaching, provide substantive input to help students input, and then encourage students to express their views in English to achieve effective output. Diffuse discussions related to the topic of ideology and politics and professional development are provided, and students are invited to evaluate each other and cooperate to complete challenging tasks to establish a cooperative learning environment, which promotes the communication and learning between teachers and students, cultivates a sense of cooperation and shapes correct values.

3.4.2. Integrating Interdisciplinary

Taking into account the background and characteristics of students major in science and technology, teachers provide students with learning paths and resources related to their majors with the help of digital technology, and guide students to explore the new achievements of English learning with AI, so as to promote the cross-fertilization of science and humanities in English. In class, the teachers skillfully explains the comparison between Chinese and Western cultures, aiming at taking Chinese culture as the foundation and guiding students to actively learn the essence of Western culture. By introducing the cultural similarities and differences between Eastern and
Western food and festivals, students are encouraged to tell Chinese stories in English. When dealing with topics such as friendship, love and marriage\[^{4}\], teachers guide students to understand cultural differences in affection expression between East and West, fostering cultural literacy and critical thinking. While analysing the translation of complex sentences, the teachers compare the differences in thinking and expressing habits between China and the West. In the area of in-depth exploration of texts, for example, teachers utilize moon-related poems to guide students to prompt learning on family connection. Moreover, students are encouraged to utilize AI technology to carry out interdisciplinary cooperation, integrate knowledge of science and technology into English learning, and output creative outcomes to further promote the exchange of science, technology and humanities.

3.5. Utilizing School-based Textbook and Thematizing Ideology and Politics

3.5.1. Utilizing School-based Textbook

According to teaching needs, teachers compile and utilize the school-based textbook\[^{5}\], which integrates language and culture in depth, skillfully incorporates the ideology of the curriculum and excellent Chinese and Western cultures. Among the textbook, the exercises and activities are designed flexibly and diversely, focusing on improving the students’ ability to pass CET-4 and CET-6 and meeting the diversified needs of students. At the same time, it incorporates the elements of ideology and politics, professionalism and competitions into the teaching to motivate students to complete tasks and use English to solve practical problems. The teaching design closely follows the syllabus and students’ needs, skillfully combines the elements of CET-4 and students’ professional knowledge and competitions in teaching to motivate them to complete tasks and use English to solve practical problems.

3.5.2. Thematizing Ideology and Politics

Teachers incorporate the elements of ideology and politics with the themes of the course, and establish the connection between the themes of each unit and the core socialist values. For example, teachers encourage students to talk about their dreams, and introduce Chinese and Western dream chasers who are disabled but determined to realize their dreams while talking about “Chasing dreams”. Besides, students are guided to think and share their views on “friendship”, “love”, “war”, “marriage”, and “food and festival culture” and “smartphone addiction” to cultivate students’ critical thinking and intercultural awareness and the ability to tell Chinese stories well in English.

4. Conclusion

This innovative curriculum implements the OBE concept and uses digital technology to solve the teaching problems such as students’ individual differences, weakness of self-learning and fear of output. The curriculum implements self-learning on WE Learn, interactive in-class activities, and optional challenging tasks after class to nurture students’ talents, tailor personalized learning paths, and extend activities beyond the classroom. Teachers refine course content, integrate digital resources, interdisciplinary elements, and components from politics and competitions to enhance comprehensive English proficiency, and use digital technology to offer personalized learning, create interactive environments, and employ innovative assessment systems to enhance the quality of college English education for both students and educators.
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References