



Research on College English Teaching and Application Based on the ADDIE Model from the Perspective of Technological Empowerment

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Abstract: This paper employs the ADDIE model in the compulsory college English courses for undergraduates to break through the limitations of traditional textbooks and integrate teaching content. Pre-class activities include student analysis, curriculum design and development, helping teachers clarify objectives and focus on teaching important points of college English course, so as to adjust the teaching direction in a timely manner and lay a foundation for the orderly development of the course. During class, the teaching implementation process is carried out in an interactive way based on the concept of teacher-led and student-centered, cultivating students' abilities to analyze and solve the problems. After class, diversified and dynamic evaluation methods drive the continuous improvement of course design, further promoting the teaching quality of college English courses.

Keywords: college English; the ADDIE Model; technological empowerment

1. Introduction

The ADDIE model consists of five stages: analysis, design, development, implementation, and evaluation. It is a systematic method for developing teaching and one of the most mainstream design methods in the field of curriculum design. Each stage of this model revolves around development and implementation, which are interrelated and inseparable. In the field of disciplinary educational research, Chinese scholars have reached some consensus and actively utilized the ADDIE model for curriculum development and teaching design. Yan Xiaolei introduced the ADDIE teaching model into higher vocational English teaching and conducted a comparative analysis of the teaching effect with traditional teaching[1]. Other scholars have also attempted to employ the ADDIE model to explore the integration of online and offline blended teaching[2]. However, the existing related researches only focused on some specific topic. Problems such as how to scientifically apply the ADDIE model to design large-unit teaching design, establish a systematic and clear design framework and other related issues urgently need to be resolved.

2. Analysis of College English Teaching Situation Based on the ADDIE Model

2.1 Teaching Objects

The target audience for the course is 374 students from the School of Electrical and Information of our university, grade 2024. After analysis, students have the following characteristics: (1) They have already taken the basic course of College English I and possess a certain theoretical foundation; (2) Most of them have a certain degree of self-learning ability and can study independently for more than 2 hours every day; (3) They do not like passive teaching methods and are willing to try new teaching modes.

2.2 Teaching Environment

Our school's teaching departments are well-equipped with complete facilities, and the network coverage is relatively comprehensive, including smart classrooms, multimedia classrooms, and language laboratories, meeting the basic hardware requirements. Our school relies on online teaching platforms and tools to accumulate rich experience in online teaching. The course resources are abundant, which are conducive to students' learning and accumulation. However, the classroom space is limited. Currently, teaching relies on the form of courseware explanation. Also, digital resource sharing and teacher-student interaction need to be strengthened.

3. Course Design and Development Based on the ADDIE Model

3.1 Course Design

(1) Teaching objective design. The college English course adheres to the concept of "student-centered development"

and sets teaching objectives from three dimensions: language knowledge, language skills, and emotional attitudes and values. Under the guidance of teachers, in terms of knowledge, students should systematically master the basic language knowledge of English. In terms of skills, students' cross-cultural awareness is cultivated, and their critical thinking and cross-cultural communication abilities are improved. In terms of emotional attitudes and values, students can firmly strengthen cultural confidence and foster correct outlooks on the world, life and values.

(2) Course content design. The content design of college English courses should not be limited to textbooks. It can "disrupt" the traditional sequence of textbook content, summarize and integrate relevant content, optimize and broaden it, and focus on practical application. The course content design should reflect key knowledge such as high-frequency vocabulary, common phrases, sentence structures, and reading skills in each unit, as well as difficult knowledge in terms of writing types and translation skills.

3.2 Course Development

(1) Teaching mode selection. To better conduct college English teaching under the ADDIE model, this study changes the original teaching method by leveraging online teaching platforms (Chaoxing Learning, U Campus Platform, Iwrite and UMOOCs, etc.) and technical means (AI-assisted tools like Yuewen, Tencent Yuanbao, and Chatbox) to build a blended online and offline teaching mode, aiming to promote students' interactive online learning and autonomous learning.

(2) Production and development of teaching resources. The resources of college English courses mainly include course syllabi, lesson plans, teaching PPTs, online learning videos, discussion questions, and extended resources, etc. The teaching team will publish the course teaching resources on the online teaching platform for teachers and students to use. In the process of creating online teaching resources, special attention should be paid to the full and reasonable utilization of various materials. It is necessary to center on students and take the "learning outcomes" of teaching objects as the orientation, so that the content of teaching resources is useful, informative, interesting and effective.

4. Teaching Implementation and Evaluation Based on the ADDIE Model

4.1 Teaching Implementation

(1) Preparation before class. Before the start of this course, the teacher will release an online survey questionnaire to students, focusing on understanding their expected learning goals, current knowledge reserves and abilities, as well as their level of understanding of the course. Before each unit's class, teachers will release pre-class preview notifications to students online, upload course resources such as course introductions, course PPTs, teaching videos, and reference materials, and require students to complete the preview and self-learning content within the set time frame. Any questions and concerns will be posted on the platform, and both teachers and students will participate in discussions and answers together.

(2) Teaching practice in class. Based on the technological means of the new era, in the classroom, teachers project the knowledge and content they teach onto large screens, conduct smart teaching through mobile devices, log in Chaoxing Learning to post sign-in, online tests and questions, etc. Students' mobile devices log in simultaneously to interact and respond. The online platform is used for statistics and the final results are included in the regular grades, facilitating subsequent modeling evaluation, teaching reflection, and timely improvement.

(3) Summary and reflection after class. After class, teachers release homework, post-class learning tasks and extracurricular resources online through Iwrite, Chaoxing Learning and U Campus Platform. Students complete the relevant tasks on time. After carefully reviewing, teachers summarize students' mastery of knowledge and existing problems, and optimize the teaching design and adjust the teaching methods in a timely manner. Students can also review and consolidate the knowledge they have learned through after-class tasks, reflect on their deficiencies in learning, and improve their learning methods through the feedback from teachers.

4.2 Teaching Evaluation

Teaching evaluation, which is based on the ADDIE model, mainly includes formative evaluation and summative evaluation. Formative evaluation runs through all stages of analysis, design, development, and implementation, focusing on evaluating students' daily performance. The course team will use an online teaching platform to intelligently monitor students' attendance, homework, periodical tests, oral communication in class, listening tests, and online learning situations, and collect students' learning data. Summative evaluation is conducted through the final exam after the completion of teaching implementation, which serves as a direct evaluation of teaching outcomes.

Conducting teaching evaluation with the ADDIE model can enhance the effectiveness of teaching methods and classroom organizational forms. In the process of acquiring knowledge, students can improve the breadth and depth of their learning

knowledge through various teaching methods, multi-dimensional classroom forms, Internet media and different cases. Based on the results of multiple evaluations, if the teaching effect fails to meet the expected goals, continuous improvement will be made to each teaching link in the ADDIE model through the feedback mechanism to form a precisely controlled closed-loop system[3].

5. Conclusion

This research explores the practical process of college English teaching based on the ADDIE model from the perspective of technological empowerment. Starting from students' learning needs and skill objective requirements, it designs and adjusts the teaching content and methods at each stage in a targeted manner, which conforms to the talent cultivation needs of modern college English courses. With the help of diversified resource platforms, students, teachers, and learning resources can be fully integrated to enhance the high-level and challenging nature of course content. It is expected to have a positive role in promoting the cultivation of practical and innovative talents in application-oriented universities.

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