



Practical Paths for College English Teaching in the Context of Digital Transformation

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Abstract. With the rapid development of digital technology and artificial intelligence technology, digital transformation of college English teaching has become a core issue. This paper summarizes the path of digital transformation in college English and explores the practical model of teaching reform. With the help of modern educational technologies, the three-stage online and offline blended teaching process based on the "Production-Oriented Approach" (POA) is continuously improved. This study emphasizes the integration of digital and intelligent educational resources and education, highlighting the training talents with high English proficiency, autonomous learning abilities, critical thinking abilities and information literacy.

Keywords: College English; teaching reform; digital platform; AI

1 Introduction

In recent years, artificial intelligence technology has achieved significant breakthroughs. We witness the rapid development of image recognition, voice recognition, language translation, which are closely related to language services. Digital technology has brought profound changes to higher education and reshaped the traditional educational system. Digital transformation has become a core topic in the reform, development and practice of contemporary higher education worldwide (Wu Yan, 2023)^[1].

The "College English Teaching Guidelines" (2020 Edition)^[2] emphasizes that "in the era of information and intelligence, multimedia technology, as well as modern information technologies such as big data, virtual reality technology and artificial intelligence technology, have become important means of foreign language teaching." It encourages teachers to "fully utilize online teaching platforms to provide students with a combination of online and offline teaching and diversified self-learning resources, prompting students to transform from passive learning to active learning." However, the current application of digital technology in college English teaching is still in the basic stage, with insufficient abilities of digital technology application among teachers and students. This paper is based on the actual situation of college English teaching in China and focuses on exploring practical paths for the digital transformation of college

English teaching. It aims to provide a reference for further improving the quality and efficiency of college English teaching.

2 Digital Transformation of College English Teaching

The goal of the digital transformation of college English teaching is to provide personalized education for each learner, enhance the learning experience, improve the quality and efficiency of English teaching and ultimately cultivate talents that meet the needs of global industries. Its essence is human-centered development, with its success marked by "human-machine integration, where both students and teachers achieve development" (Yuan Zhenguo, 2023) [3]. Therefore, the digital transformation of college English teaching must adapt to the learning styles of college students in the digital age, always uphold position of students-centered and implement the task of moral education. The teaching design, teaching process, teaching evaluation and teaching management are the core elements of college English teaching. To promote the digital transformation of college English teaching, we should put emphasis on the transformation of teaching concept, the enhancement of digital literacy among teachers and students, the provision of digital resources, the transformation of teaching methods and the reconstruction of teaching evaluation (Zhang Jingyuan 2024) [4].

3 Teaching Design and Practice

In the context of digital transformation, the blended teaching model has become a routine mode for college English teaching. Blended teaching should have the following characteristics: it must involve at least one new element that reflects the unique advantages of digital teaching (such as digital resources, data analysis and diagnosis, and accompanying evaluation); evaluation should be continuous and accompanied by diagnosis; (Wang Yuefen, 2021) [5]. Only by effectively integrating the advantages of online and offline teaching, making them complementary, can blended teaching achieve a greater effect. The symbiotic human-machine relationship is a development trend in education (Qin Ying, 2023) [6]. Teachers should fully utilize digital technology equipment such as smart classrooms, virtual simulation classrooms, and digital experimental training rooms to conduct integrated human-machine teaching. They should build three-dimensional intelligent teaching scenarios that span in-class, extracurricular and online virtual spaces (Zhang Jinliang et al., 2022) [7]. Three-dimensional teaching spaces transcend time and space, providing students with more flexible and diverse learning spaces and experiences, enhancing the sense of participation and immersion for both teachers and students in the teaching process. Meanwhile, the foreign scholars focus on the study that Advanced AI technologies have been identified as potential ways for learners and teachers (Hong 2023^[8]; Kohnke et al. 2023^[9]) and the ethical norms for applying GAI (Nguyen et al. 2023) ^[10].

3.1 Teaching Content

We selected "New Horizon College English" as our textbook, which integrates critical thinking skills and morality education into Language learning. In this paper, we take unit 4-A strategic scientist, Huang Danian, as an example. The author introduces Huang Dalian's life story, whose expertise has helped China take lead in a number of technical fields. His patriotic deeds and deep affection for motherland have made him a role model for everyone, especially for the young generation.

3.2 Teaching Procedures

This paper adopts a project-oriented approach (POA) to facilitate effective classroom interaction. The teaching procedures can be divided into three teaching stages: Enabling, Motivating and Assessing. During the entire teaching process, teachers act as scaffolds, guiding students to complete the tasks and produce outputs. At the same time, the morality education has been integrated into the teaching process. The teaching concept of this class is shown in Figure 1. The teaching procedures based on POA is as shown in Table 1.

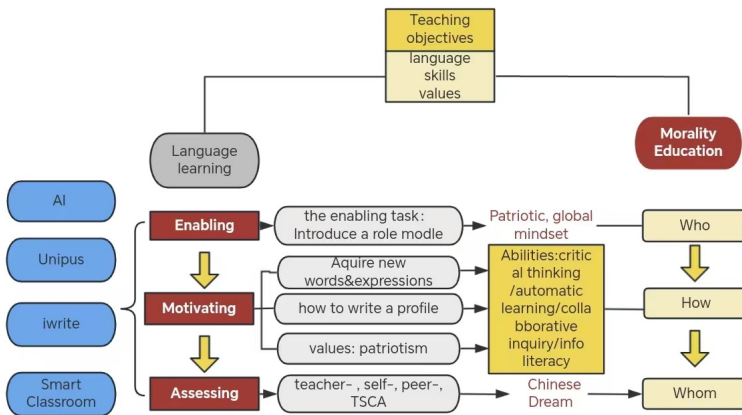


Fig. 1. Teaching concept of “A strategic scientist-Huang Danian”

Table 1. The teaching procedures of “A strategic scientist-Huang Danian”

Activities and Tasks		platforms
Motivating		
Pre-class	Scenario: Make a 5-minute short video to introduce a Chinese role model.	Online platform: iWrite Unipus
	Trial Output: Write an essay-the scripts for the short video (online platform)	
Enabling		

Pre-class	Preview : ①watch the video;② learn the new words and expressions. (online platform)	
In-class	<ul style="list-style-type: none"> • Accessing the first draft with the students. • Text A: A strategic scientist-Huang Danian <i>How to write a profile to introduce a person?</i> • <i>Preparation stages</i> • Establish a theme • Gather information • Identify milestones (Principles: theme-oriented; impact-focused) Activity: vote <ul style="list-style-type: none"> • Organize a timeline Time+Milestones+Qualities (TMQ structure) Activity: complete the table <ul style="list-style-type: none"> • <i>Writing:</i> • Structure: lead-body-closure • Language-polishing: Figurative language-metaphor, simile, personification. Collocations activity: quiz News; quotes; anecdotes <ul style="list-style-type: none"> • Moral education Personal dream vs. Chinese Dream	iWrite Smart class-room Seewo board Unipus
After-class	Assignments: <ul style="list-style-type: none"> • Revise the first draft and make the video • Draw a mind-map of the structure of the text. • Complete peer-assessment. 	Unipus AI iWrite

Before Class: Students learn the new words, expressions and other online re-sources to complete the learning tasks and finish the quiz on the UCampus platform. They also engage in warm-up activities based on the discussion topics and materials provided by the teacher, preparing for offline classroom activities. Teachers provide learning guidance based on platform questions and comments, analyzing the learning situation and adjusting the focus of face-to-face teaching. The students are also assigned a writing task introducing a patriot on iWrite.

In-Class: The teaching process revolves about the needs of students, focusing on the improvement of students' critical thinking abilities. At the very beginning of the class, the teacher and students collaboratively accessing the writing sample from the students. By discussion and the teacher's guide, the students find out the issues in the writing. Then, there lies a question for students-what type of writing is appropriate? With teacher's help, the students notice that the profile is the most suitable writing style for this piece of writing. We further introduce the five steps of writing a profile story-established a theme, gather information, identify milestones, organize a timeline and write. The initial four steps are preparation stages. By dissecting the text, we analyze the qualities of the role model and understand the author's writing technique-TMQ

structure, by which, the author display Huang's qualities subtly and help these qualities leave deeper impressions on readers. Furthermore, through analyzing Huang's life journey, students gain a deeper understanding of the relationship between personal dream and Chinese dream. When it comes to writing, it will be introduced in terms of two aspects-structure and language. The structure can be divided into three parts-the lead, body and closure. Language serves as the flesh to the skeleton. We can apply figurative languages such as simile, metaphor and personification to polish the writing and we also encourage students to correctly use collocations as well as incorporating news, quotes and anecdotes to flesh out the writing. In the classroom, students are guided to participate in teaching activities such as vote, matching game, answering leveled questions, simulated scenarios, expressing view-points and groups discussions with the help of digital platforms. This approach stimulates students' thinking, allows them to present productions and achieves synchronous output of language, skills and ideology.

After Class: We also require students to finish the assignments and assessment online, and make a 5-minute short video with the help of AI. The discussions can be conducted outside of the classroom. Students are organized to conduct group cooperative learning, extensive reading and review the acquired knowledge. Through online communication within or between the groups, the students broaden their perspectives on problem-solving and knowledge-sharing.

3.3 Assessment

Under a diversified evaluation system, the evaluation of college English teaching shifts from traditional subjective judgment to the one that objective data support, from the evaluation standard based only on scores to a diversified evaluation standard based on morality, culture and ability, and from summative evaluation to a combination of formative and summative evaluation (Yan Ming, 2023)^[11]. By using big data tracking technology, the multi-dimensional aspects of students' learning processes can be tracked. This includes collecting reliable data to objectively record and analyze students' learning behavior (Zhang Jinliang et al., 2022), such as online classroom activities (online learning time, online interactions and discussions), classroom learning (attendance, tests, assignments and class participation) and extracurricular activities (projects, competitions and extracurricular practices). Using big data and artificial intelligence technologies, visualized and dynamic analysis reports can be generated to uncover hidden patterns and trends within the data. Combined with human analysis and capability assessments, learning outcomes can be verified. Finally, timely feedback is provided to promote learning through evaluation. This evaluation method not only encourages students to reflect on themselves and identify problems but also helps teachers to reflect on their teaching objectives, content and design. It maximizes the functions of evaluation, achieving a positive cycle of promoting learning, teaching and research through evaluation.

4 Conclusion

Digitalization will have a profound impact on various aspects of foreign language education. In the era of information and intelligence, teachers need not only to impart knowledge but also to master how to interact with digital and intelligent tools, consider how to integrate them into teaching, and develop corresponding teaching strategies. Teachers also need to use digital technology to transform student learning and build a learning ecosystem that adapts to the digital age (Wu Yan, 2023). In this context, foreign language teaching methods, content, and evaluation systems need to be restructured within an educational framework supported by various intelligent technologies.

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