# Research on the Role Transformation and Teaching Strategies of College English Teachers under the Background of Artificial Intelligence

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*Abstract: With the rapid development of artificial intelligence technology, the field of education has also undergone profound changes. As an important component of higher education, college English teaching faces unprecedented challenges and opportunities. In this educational context, teachers should transform their role from a single knowledge transmitter to a knowledge guide and innovator. At the same time, one should also transform into an integrator of artificial intelligence technology, proficiently master and apply artificial intelligence technology to assist teaching, and improve teaching efficiency and quality. However, there are still many college English teachers who have a unclear understanding of the necessity and direction of their role transformation. Therefore, this article explores the necessity and direction of the role transformation of college English teachers under the background of artificial intelligence, and proposes corresponding teaching strategies, in order to provide reference for the teaching practice of college English teachers.*

*Keywords: Artificial Intelligence; College English Teacher; Role Transformation; Teaching Strategy*

## 1. Introduction

The 21st century is the information age, and the technological revolution characterized by digitization and networking is profoundly changing global society, with artificial intelligence technology playing a core role. In the field of education, the application of artificial intelligence has gradually penetrated into multiple aspects such as teaching, evaluation, and management, and has had a profound impact on college English teaching. As the core and subject of teaching, college English teachers face the necessity and urgency of role transformation. This article will discuss the necessity, direction, and corresponding teaching strategies of the role transformation of college English teachers under the background of artificial intelligence.

## 2. The necessity of role transformation for college English teachers under the background of artificial intelligence

### 2.1 Impact of Artificial Intelligence Technology on College English Teaching

With the rapid advancement of artificial intelligence technology, the field of college English teaching has been unprecedentedly impacted. The following are some specific impacts: (1) The popularity of intelligent translation tools, online translation tools such as Google Translate, Baidu Translate, etc., can provide real-time translation services for multiple languages, which allows students to assist language learning through these tools, thereby reducing their dependence on teachers [1]. (2) With the emergence of personalized learning tutoring systems, AI driven personalized learning platforms can provide customized tutoring based on students' learning progress and style. This system can replace teachers in imparting basic knowledge in some aspects. (3) The increasing trend of self-directed learning encourages students to engage in self-directed learning through artificial intelligence technology. Students can use online resources and tools for self-learning without relying solely on classroom teaching. (4) The change in teaching mode challenges the traditional teacher centered teaching model and requires a shift towards a more student-centered approach, emphasizing student active participation and interaction. (5) The transformation of evaluation methods, artificial intelligence technology provides new evaluation methods, such as automatic scoring systems, data analysis, etc., which may change the traditional approach of teachers' evaluation of students and teaching feedback. These changes require college English teachers to recognize that their role needs to

shift from knowledge transmitters to learning guides and facilitators, and they need to pay more attention to cultivating students' critical thinking, problem-solving, and self-directed learning abilities. Therefore, role transformation is necessary for college English teachers to ensure that they can adapt to the new teaching environment and meet the needs of students.

### 2.2 Adjustment of Teacher Role Positioning

In the traditional teaching mode, teachers are the disseminators of knowledge, but in the era of artificial intelligence, the role positioning of university English teachers has undergone significant changes, requiring them to shift from knowledge transmitters to learning guides. This means that teachers are no longer the sole source of information, but rather the drivers that inspire students to explore, discover, and learn for themselves. Because with the assistance of artificial intelligence, students can access a vast amount of learning resources, teachers need to teach students how to effectively utilize these resources and cultivate their ability to self manage learning. Moreover, the era of artificial intelligence has put forward higher requirements for students' innovation ability. Teachers should encourage students to try new learning methods and ways of thinking, and cultivate their ability to solve complex problems. This adjustment of role positioning requires college English teachers to constantly update their knowledge structure and improve their teaching skills in order to better adapt to the teaching requirements of the artificial intelligence era, while also helping students adapt to the development needs of future society.[2]

## 3. The direction of role transformation for college English teachers under the background of artificial intelligence

### 3.1 Transitioning from a knowledge transmitter to a learning guide

In the context of artificial intelligence, teachers are no longer mere transmitters of knowledge, but have transformed into guides for students' learning. Teachers should encourage students to actively explore knowledge instead of passively accepting it, including designing problem driven learning activities to stimulate students' curiosity and thirst for knowledge. Provide students with tools and resources for self-directed learning, and these include online courses, learning platforms, and multimedia materials, which help them develop skills in self-assessment, self-monitoring, and self-regulated learning.At the same time, more attention should be paid to students' learning process, including their learning motivation, learning strategies, learning progress, and difficulties encountered, and then appropriate guidance should be provided to them. In guiding students' learning process, teachers should cultivate their critical thinking ability, encourage them to ask questions, analyze problems, and solve problems. This transformation can not only rapidly enhance students' self-learning ability, but also improve their critical thinking and problem-solving skills

### 3.2 Transitioning from a single language skill trainer to a comprehensive ability trainer

In the era of artificial intelligence, the role of college English teachers has shifted from focusing on the cultivation of single language skills to a key transformation in the comprehensive development of students' language abilities. The following are several key points of this transformation: (1) Comprehensive development of listening, speaking, reading, writing, translation and other skills. Teachers are no longer limited to teaching vocabulary and grammar, but should focus on students' comprehensive language ability development in listening, speaking, reading, writing, translation and other areas. This means that in the teaching process, teachers need to design diverse teaching activities to ensure that students use language in practical communication. (2) Emphasizing listening and speaking skills, in the context of globalization, students' listening and speaking abilities are particularly important. Teachers should enhance students' practical language proficiency by simulating real-life communication scenarios such as role-playing, seminars, debates, etc. (3) Deepen reading and writing skills, which are the foundation of language learning. Teachers should guide students to read extensively, improve their comprehension, and enhance their expression and logical thinking abilities through writing exercises. (4) Developing translation skills has become an important skill in the era of multilingual communication. Teachers can use translation practice activities to familiarize students with the conversion between different languages, improve translation accuracy and cross-cultural adaptability. (5) To enhance cross-cultural communication skills, college English teaching should not only be limited to the language itself, but also include the learning of cultural knowledge. Teachers

should help students better understand cultural differences and enhance their cross-cultural communication skills by introducing cultural customs, values, and communication methods from different countries. (6) By comprehensively utilizing artificial intelligence tools, teachers can use them, such as language learning software, online resources, virtual reality, etc., to provide personalized learning experiences for students and promote the comprehensive development of their language abilities. (7) Encourage innovation and critical thinking. In the teaching process, teachers should encourage students to innovate and think critically, so that students can be flexible and adaptable in language use, and adapt to different communication scenarios. Through this transformation, college English teachers can not only cultivate students' language abilities, but also help them form a global perspective and adapt to the social needs of the 21st century.[3]

### 3.3 Transition from Teaching Managers to Teaching Researchers

In the era of artificial intelligence, the role of university English teachers should also shift from traditional teaching managers to teaching researchers. Teachers should not only be satisfied with teaching management, but also need to regard research as an important component of their work, including conducting in-depth research on problems and challenges in teaching practice, and exploring how to solve these problems through research. This study conducts research to explore new approaches for enhancing teaching effectiveness, employs data analysis to identify students' learning patterns and needs, and thereby optimizes teaching plans and instructional strategies. Through this transformation, college English teachers can not only enhance their teaching skills, but also make positive contributions to the development of the education field, promoting innovation and progress in education. The role of such researchers helps ensure that teaching practices keep pace with the times and better adapt to the educational needs of the artificial intelligence era.

## 4. Role Transformation and Teaching Strategies of College English Teachers under the Background of Artificial Intelligence

### 4.1 Strengthen professional development

Against the backdrop of the increasing penetration of artificial intelligence into the field of education, strengthening the professional development of university English teachers is the foundation and key to promoting their role transformation. Firstly, teachers should recognize that artificial intelligence is not just a technology, it has had a profound impact on teaching methods and strategies. Therefore, it is necessary to actively learn the basic knowledge of artificial intelligence, understand the current application status and development trends of artificial intelligence in education. Secondly, teachers can master the application skills of artificial intelligence in education through professional training, online courses, workshops, and other means, such as using intelligent teaching platforms, data analysis tools, etc. Again, teachers should actively participate in relevant academic seminars, workshops, and online forums, exchange teaching experiences with peers, share best practices, and jointly explore new teaching models in the context of artificial intelligence. Finally, teachers should try to integrate artificial intelligence technology into the classroom in teaching practice, such as using speech recognition technology for oral practice, utilizing virtual reality for role-playing, etc., to test and improve teaching methods through practice. Through these measures, not only can teachers continuously improve their professional competence, but they can also provide important assistance for the reform and progress of English teaching in universities.

### 4.2 Utilizing artificial intelligence technology to optimize teaching resources

With the assistance of artificial intelligence technology, college English teachers can efficiently integrate and optimize teaching resources, thereby improving teaching quality and student learning experience. The following are specific measures: (1) Personalized learning resource recommendation. Through artificial intelligence learning analysis algorithms, teachers can provide students with personalized learning paths and resource recommendations. For example, based on students' learning progress, interests, and weaknesses, intelligent systems can automatically push relevant teaching videos, online exercises, and reading materials to achieve precise teaching. (2) Intelligent online platform applications, developing or utilizing existing intelligent online learning platforms such as MOOCs, learning management systems, etc., to provide students with rich learning resources. These platforms usually have functions such as automatic grading and real-time feedback, which can improve students'

learning efficiency and teachers' work efficiency. (3) Intelligent voice and translation tools utilize artificial intelligence's speech recognition and natural language processing technology to provide auxiliary teaching tools such as intelligent voice assistants and translation tools. These tools can help students with oral and translation exercises, while also reducing the burden of grading for teachers. (4) Intelligent learning assistants and tutoring systems are designed to continuously optimize through machine learning algorithms, enabling them to simulate the behavior of human teachers and provide real-time learning tutoring and problem-solving. (5) Intelligent content generation, utilizing artificial intelligence to generate teaching content, such as automatically creating practice questions, test papers, and personalized feedback information, in order to enrich teaching content and improve teaching diversity. (6) Data analysis and teaching adjustment: By analyzing students' learning data, teachers can understand their learning situation and teaching effectiveness, adjust teaching strategies and methods accordingly, and ensure the pertinence and effectiveness of teaching activities. Through these measures, teachers can more flexibly utilize artificial intelligence technology, optimize teaching resources, improve teaching quality, and enhance students' self-learning abilities. At the same time, this also requires teachers to continuously learn and master relevant technologies in order to better adapt to this transformation process.[4]

### 4.3 Utilizing artificial intelligence technology to enhance the cultivation of self-directed learning ability

In the era of artificial intelligence, college English teachers need to use technological means to help students develop effective self-learning abilities. In the process of teaching practice, teachers can establish or utilize existing online self-learning platforms to provide rich learning resources and learning path planning tools. These platforms usually have self-assessment and feedback functions, which can automatically adjust learning content and suggestions based on students' learning progress and grades, thereby guiding students to learn independently. Artificial intelligence based adaptive learning systems can also be used to guide students in self-directed learning. The adaptive learning system can automatically adjust the difficulty and pace of learning based on students' learning performance and preferences, ensuring that students' learning remains in an optimal state that is both challenging and effective in absorbing knowledge. During the process of students' self-directed learning, teachers can use artificial intelligence algorithms to tailor learning plans for each student. The system can analyze students' learning habits, abilities, and goals, intelligently recommend learning materials and exercises, and ensure that students learn according to their needs. And achieve personalized coaching and instant feedback through artificial intelligence technology. Students can self check through the intelligent tutoring system, which will provide real-time feedback based on their answers, helping them identify errors and correct them. Through these strategies, not only can students develop their ability for self-directed learning, but they can also alleviate the burden on teachers to a certain extent, achieving an improvement in teaching efficiency and effectiveness.

### 4.4 Creating an Immersive Learning Environment

In the context of artificial intelligence, college English teachers should create immersive learning environments through various means to enhance students' language proficiency and learning experience. Here are some teaching suggestions for creating an immersive learning environment: (1) Virtual reality (VR) and augmented reality (AR) technology use immersive virtual English-speaking environments for role-playing, simulated dialogues, and situational interactions, thereby enhancing the realism and immersion of language learning. By using AR technology to overlay English learning content in the real world, such as connecting English words or phrases with physical objects, students can also learn English in their daily lives. (2) Multi modal learning resources integrate various learning resources such as text, audio, video, and images to provide students with rich sensory experiences. For example, through video teaching, showcasing the culture, customs, and habits of English speaking countries, students can be immersed in both visual and auditory aspects. (3) An online interactive platform establishes learning communities and encourages students to participate in activities such as discussions, Q&A, and role-playing. Through artificial intelligence technology, the platform can provide real-time translation and grammar correction to help students overcome language communication barriers. (4) Language laboratory, utilizing modern language laboratories, provides students with simulated real language environments through computer-assisted language learning and software. Students can practice listening and speaking, correct pronunciation and intonation in the laboratory. (5) Blended learning, combining online and offline teaching resources, provides students with more flexible learning methods. The online part can utilize artificial intelligence technology to

provide personalized learning paths and instant feedback, while the offline part can deepen the learning experience through simulation activities and other methods. By creating an immersive learning environment, students can better integrate into the context of English learning, improve learning efficiency, and enhance the practicality and fun of language learning.

### 4.5 Emphasize the cultivation of cross-cultural communication skills

In the era of artificial intelligence, college English teachers need to integrate the cultivation of cross-cultural communication skills into their teaching strategies. Firstly, teachers should incorporate specialized cultural teaching modules into English curriculum design, allowing students to understand the cultural background, history, customs, and social norms of the target language country, laying a solid foundation for cross-cultural communication. Secondly, the Internet and AI technology can be used to provide students with rich cross-cultural learning resources, such as cultural difference analysis, online video tutorials of cross-cultural communication skills, virtual reality experience, etc. Finally, team projects involving students from different cultural backgrounds should be organized in the classroom or campus to enable students to learn how to respect and understand different cultures through collaboration by completing tasks together. Through the above strategies, not only can it help students recognize the importance of cross-cultural communication and improve their ability to communicate effectively in different cultural backgrounds [5].

## 5. Conclusion

In the context of the era of artificial intelligence, the role transformation of college English teachers has become an inevitable trend. This transformation is not only a positive response to the advancement of educational technology, but also to better adapt to the needs of social development, improve teaching effectiveness, and cultivate high-quality talents that meet the requirements of the times. Therefore, college English teachers should fully recognize the importance of role transformation, clarify the direction of role transformation, and then optimize teaching strategies based on the direction of role transformation. This not only promotes better adaptation to the educational environment of the artificial intelligence era, improves teaching effectiveness, but also helps cultivate future talents with international vision, innovation ability, and practical ability, meeting the society's demand for high-quality talents

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