

Research on the Application of Task-based Teaching Empowered by Digital Intelligence in College English Teaching

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Abstract: With the rapid development of technology and information technology, it has brought new opportunities and challenges to college English teaching. The task-based teaching method, combined with digitalization tools, provides a more authentic and interactive learning environment for teachers and students. This study aims to facilitate teachers to efficiently implement teaching tasks and improve students' comprehensive English application abilities by utilizing advanced intelligent technology to implement task-based teaching. Research has found that digital technology empowers task-based teaching, effectively promoting students' self-directed and collaborative learning, and increasing their interest and participation in learning. This study provides practical experience and theoretical basis for the reform of college English teaching

Keywords: Digital Intelligence; Task-based Teaching; College English; Teaching Tasks; Design

1. Introduction

With the rapid progress of technology, the wave of digitalization is sweeping the world at an unprecedented speed. It not only reshapes the face of industry, commerce, and life, but also profoundly changes the field of education. In this new era of digitization and intelligence, digital education is gradually becoming a new normal in the field of education, and digital technology has become a key force in promoting teaching reform, forming a unified whole of symbiotic interaction between teaching and digital technology, and thus triggering a comprehensive transformation of the teaching ecosystem [1]. In today's increasingly globalized world, the importance

of foreign language education in universities is self-evident. A foreign language is not only a tool for communication, but also a bridge to connect different cultures and promote international exchange and cooperation. Foreign language education in universities plays an important role in cultivating international talents, promoting cultural diversity, and enhancing national soft power. So in the era of digital intelligence, foreign language teaching in universities needs to constantly update educational concepts and methods in order to adapt to the development of the times. Task-based teaching has always been sought after by foreign language teachers, but traditional task-based teaching methods can no longer meet the development requirements of the intelligent era. Task-based teaching methods also need to keep up with the times, combine new intelligent technologies, and promote the intelligence of college English teaching.

2. Digitalization

As society enters the era of digitization and intelligence, various industries are undergoing profound transformation and reconstruction. Digitalization and intelligence, collectively known as Digital Intelligence, refer to the use of digital technology to achieve intelligent, efficient, and automated lifestyles and work styles. Digitalization covers multiple fields such as artificial intelligence, the Internet of Things, cloud computing, and big data, aiming to improve production efficiency, improve people's lives, and promote social progress. In the era of digital intelligence, the importance of education is becoming increasingly prominent. Education needs to constantly adjust and update teaching methods, cultivate students' innovative practical abilities and teamwork abilities, and help them adapt to future challenges and opportunities. In the

field of education, digital empowerment refers to enhancing the teaching ability and management efficiency of the education system through digital technology, in order to achieve overall improvement of education quality. This includes using technologies such as artificial intelligence, big data, and cloud computing to improve teaching methods, optimize course content, increase the accessibility of educational resources, and strengthen the personalization and interactivity of education [2].

With the help of digital technology, rich resources can be provided for task-based teaching, such as online courses, multimedia materials, interactive platforms, etc., making task design more diverse and interesting. Its online discussion and collaboration tools also enhance the interaction between teachers and students, between students and students, making task-based teaching more active and efficient. Through technologies such as intelligent recommendation and data analysis, task-based teaching in the digital age can better meet the personalized learning needs of students.

3. Task-based Teaching

Task based language teaching (TBLT) emerged in foreign countries in the 1980s. Chinese scholars such as Wu Xudong and Xia Jimei introduced relevant theories to the foreign language education community in China from the mid to late 1990s, and received widespread attention from most foreign language educators and educational researchers [3]. Task Based Language Teaching is a teaching method that emphasizes learning by doing [4]. It encourages students to learn and use language by completing various real or simulated tasks, thereby cultivating their language proficiency and communication skills. The task-based teaching method emphasizes student-centered approach and emphasizes student participation and experience. It designs real-life task activities to enable students to learn and use language while completing tasks, thereby cultivating their language proficiency and communication skills. The task-based teaching method also focuses on the emotional needs of students, satisfying their sense of belonging and influence by completing tasks, and enhancing their learning motivation and interest. With the

advent of the digital age, task-based teaching methods are facing new opportunities and challenges. How to utilize digital technology to enrich the resources and means of task-based teaching, improve teaching effectiveness and efficiency, is a major challenge faced by foreign language teachers today.

As an advanced teaching concept and operating mode, task-based teaching method has many advantages in stimulating students' learning interest, cultivating their language skills, and improving their overall quality. In the era of digital intelligence, traditional task-based teaching can no longer keep up with the requirements of the times and faces many problems and challenges: firstly, the selection and design of tasks require a lot of time, and some teachers have heavy teaching tasks in their daily lives. The designed tasks may not keep up with the times, or the design of tasks lacks personality, which cannot achieve the expected teaching effect; Secondly, the arrangement and implementation of tasks are constrained by time and space, and teachers can only assign and carry out task-based teaching in the classroom. Often, due to time and space reasons, students cannot fully achieve or complete tasks. Furthermore, task-based teaching emphasizes students' participation and autonomy, but in actual teaching, due to the lack of initiative and enthusiasm among some students, tasks are like a facade. Finally, due to the fact that most college English classes are taught in large classes, and there are differences in the language proficiency and abilities of students, it is difficult for teachers to balance each student's learning. There are cases where some students have not done or completed tasks, making it difficult to evaluate the teaching and learning outcomes.

4. Application of Task-based Teaching in College English in the Era of Digital Intelligence

Teaching tasks play a crucial role in teaching activities. Teaching tasks are a key factor driving the learning process of students. By completing specific tasks, students can enhance their interest and motivation by learning and applying knowledge in practice. At the same time, tasks can also stimulate students' initiative and creativity, cultivate

their problem-solving and self-learning abilities. Traditional teaching task design is based on the teacher's personal knowledge and ability, and the task design is relatively simple and boring, lacking personality, and has shortcomings in stimulating students' interest and motivation. This study takes the fourth unit of the new version of the Comprehensive College English Course 1, American Dream, as an example, and takes the Chaoxing learning platform as a main tool, using various intelligent technologies to construct, implement, and evaluate college English teaching tasks. The total designed class hours for this unit are 8 class hours, with 2 class hours per week. When preparing lessons, teachers use GAI to generate a personalized teaching outline, and then generate specific content based on the outline. Finally, teachers artificially optimize it.

4.1 Intelligent Design of Teaching Tasks

Task-based teaching design needs to keep up with the times and achieve high level, innovation, and challenge through rich task forms [5]. In the era of artificial intelligence, teachers can use GAI to quickly retrieve teaching resources related to knowledge points or topics. This not only improves the efficiency of resource development, but also enriches the form and depth of teaching content.

Before the first week of this unit, the teacher can use GAI to design different listening exercises to understand the material from different perspectives. They can design fill in the blank, multiple-choice questions, and answer questions to meet the needs of different students. In addition, teachers can also help AI identify famous quotes about "dreams". Teachers can also use editing software to clip the movies of *The Pursuit of Happiness* and the video of *Chinese Dreams*, and then integrate them into a video to help students understand the differences between Chinese and American dreams. Before the second week of class, teachers can use Chaoxing Smart Classroom to construct relevant exercises for understanding article content, share courseware on key and difficult words, and push relevant MOOCs for students to learn in advance. Before the third week of class, teachers can use AI technology to design the summary of this article into three different

difficulty fill ins, which students can choose to complete independently. Teachers can search and select good videos on Bilibili to explain how to write narrative articles and post them to students for viewing through Chaoxing. In the fourth week, Teachers can use Chaoxing to build all exercises with textbooks into online exercises.

4.2 Intelligent Implementation of Teaching Tasks

The implementation of task-based teaching mode requires adhering to "clear objectives", allowing students to understand the objectives of the task in advance, including language objectives and task content. Clear goals provide students with direction, and only with direction can students see hope for success [6]. Teachers can release learning objectives and tasks in advance through Chaoxing Smart Classroom before each class starts. For example, the knowledge objective of this unit is to understand the central idea of this unit, master the key vocabulary of this unit and be able to proficiently apply it, and understand the content of the American Dream; Ability objective is to be able to express the content of one's dreams in English, and to understand the characteristics of spoken English by analyzing narrative genres and styles. And be able to master the writing skills of narrative writing; The last goal is to deeply understand the importance of dreams, and through understanding the differences in dreams between China and the United States, to recognize the greatness of the Chinese Dream and establish cultural confidence.

In the first week, the teacher will assign students self-learning tasks on the Chaoxing Smart Learning Platform, that is, completing listening exercises online; Watch videos about the differences in dreams between China and the United States; Express your views on the Sino-US Dream in the discussion area of Chaoxing Classroom; Memorize proverbs about dreams. Teachers can also group students online for discussion. This not only allows each student to practice English online, but also allows them to fully utilize themselves in the classroom. In the second week, practice exercises will be released through Chaoxing Classroom, online vocabulary learning and MOOC learning will be conducted, and students will be asked to propose the

difficulties of each person's learning in the Chaoxing discussion area. This makes it convenient for teachers to grasp the completion status of students online, and to collect difficult content for key classroom teaching explanations. In the third week, the teacher will assign students to watch a narrative writing video and ask them to complete a narrative. The teacher can use AI to revise the paper and reduce the burden. In the fourth week, using Chaoxing to release after-school exercises, teachers can analyze the homework situation of students through it, grasp the difficulties for students, and facilitate key analysis and explanation in the classroom. In the process of implementing teaching tasks, English teachers can not only use traditional teaching methods, but also use smart classrooms to make teaching flexible and diverse. They can organize various forms of online classroom teaching, such as creating teaching scenarios, organizing group discussions, and role-playing. The diversification of teaching task execution can effectively stimulate students' learning enthusiasm, promote English classrooms to be interesting and rich.

4.3 Intelligent Evaluation of After-school Teaching Tasks

In the process of college English teaching, to ensure the effectiveness of task-based teaching, it is necessary to timely diagnose and evaluate the execution process and results of teaching tasks. The evaluation results can not only determine the effectiveness of the teaching task, but also provide a basis and reference for the subsequent task design [7]. The evaluation method should follow the principle of flexibility. Teachers should fully consider the learning content and student subjectivity, and evaluate students from multiple perspectives and levels [8].

The evaluation of after-school teaching tasks can come from three aspects - student self-evaluation, student peer evaluation, and teacher evaluation. Teachers can publish self-evaluation forms for learning tasks in this unit through Chaoxing, and students can make an evaluation of their learning process in this unit and submit it to teachers as a reference for evaluation. Student peer evaluation: During the task presentation process, teachers can also use Chaoxing to publish peer evaluation forms

or online peer evaluation to strengthen communication and exchange among students. Teacher evaluation: Teachers can evaluate student participation, task completion, and classroom performance based on the Chaoxing platform, and can also discuss with students online their opinions and suggestions on the teaching tasks of this unit. These evaluations can be obtained through intelligent tools to obtain reliable data, facilitating teachers to grasp student learning situations and adjust teaching tasks.

5. The Advantages of Using Digital Intelligence to Empower Task-based Teaching in College English

5.1 Rich and Personalized Teaching Resources

Digitalization technology provides a massive amount of online language learning resources for task-based teaching of college English. These resources are not only abundant, but also can provide personalized teaching content and learning methods according to the different needs and learning styles of students, better meeting their learning needs. Teachers can use digital technology to combine various media forms such as text, images, audio, and video, enrich teaching content, and enhance students' interest and participation in learning.

5.2 Improving Teaching Efficiency

Empowering college English teaching with digital intelligence can enable teachers to manage and organize teaching resources more efficiently, improving teaching efficiency. For example, teachers can easily publish course materials, assign assignments, conduct tests and discussions through online learning platforms such as MOOC, WE Learn, and Learning Pass, reducing the use of paper materials and saving time and energy. At the same time, students can learn and communicate anytime and anywhere, and can also choose suitable learning content according to their own progress and interests [9]. No longer limited by time and location, it enhances the flexibility and autonomy of learning.

5.3 Promoting Interactive Communication

Digital technology provides various online

communication and collaboration tools, such as online discussions, collaborative editing, video conferences, etc. These tools can help students interact and collaborate, improve learning outcomes. In task-based teaching, students can use these tools to engage in real-time communication and discussion with teachers and classmates, work together to complete tasks, improve collaboration and problem-solving abilities.

5.4 Optimizing the Learning Experience

Using artificial intelligence to analyze students' learning habits, interests, and abilities, providing customized learning resources and plans, and developing suitable learning plans for each student [10]. Students can also choose suitable learning resources and tasks based on their interests and needs, improving their initiative and enthusiasm in learning. At the same time, digital technology can also provide intelligent recommendation and feedback functions, helping students better understand their learning situation and progress, and adjust learning strategies and methods in a timely manner.

5.5 Following Social Development Trends

With the rapid development of economic globalization and information technology, English has become an important tool for international communication. Digitalization empowers task-based teaching of college English, which can help teachers implement task-based teaching, enable students to better master English knowledge and skills, improve international perspectives and comprehensive qualities, and meet the demand for professional talents in society.

6. Conclusion

Empowering task-based teaching of college English with digital intelligence has advantages such as abundant and personalized teaching resources, improving teaching efficiency, promoting interactive communication, optimizing learning experience, and following development trends. These advantages help teachers better carry out task-based college English teaching, as well as enhance students' interest and participation in learning English, and improve teaching quality and effectiveness.

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