Business English Teaching with Intelligent Assistance—Research on Case-driven and Artificial Intelligence Application Improvement

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Abstract: *This paper explores a new model of business English teaching in an intelligent-assisted environment. Through the application of case-driven and artificial intelligence technology, it aims to improve teaching effectiveness and learning efficiency. The article first analyzes the current status and problems of business English teaching, and then introduces in detail the specific application of case-driven teaching method and artificial intelligence technology in business English teaching. Finally, the effectiveness of this teaching model is verified through empirical research, and the prospects for future research are proposed. Resources.*

Keywords: Intelligent Assistance, Business English, Case-Driven, Artificial Intelligence, Teaching Model.

1. Research Background

With the continuous advancement of globalization, business English has become increasingly important in international trade, cross-border cooperation and international communication. However, the traditional business English teaching model is often teacher-centered, with students passively accepting knowledge and lacking practicality and interactivity. This teaching model is difficult to meet the complex requirements of the modern business environment for talents. Therefore, exploring new teaching models to improve the effectiveness of business English teaching has become an urgent problem to be solved.

In recent years, intelligent-assisted teaching technology has developed rapidly, especially the application of artificial intelligence (AI) and big data technology in the field of education has gradually matured. By introducing case-driven teaching methods and artificial intelligence technology, students' participation and learning interest can be effectively improved, while enhancing the practicality and interactivity of teaching. This innovative model can not only provide students with a personalized learning experience, but also improve teaching quality and efficiency through an instant feedback mechanism.

2. Analysis of Current Research Status at Home and Abroad

In my country, with the advancement of the "Internet +" strategy, intelligent assisted teaching has gradually become a hot topic in the field of education. Many universities and research institutions have begun to explore the application of artificial intelligence technology in business English teaching. For example, some universities have developed AI-based business English learning platforms, which use natural language processing (NLP) technology to achieve automatic homework grading and real-time feedback. In addition, case-driven teaching methods have also been widely used in China, and many courses help students understand and apply theoretical knowledge through practical case analysis. Guan Haihan, Huang Jie, Gao Jing, et al. (2024), in "Analysis of

Artificial Intelligence Assisted Learning Based on User Comments", evaluated the application effect of artificial intelligence in learning assistance through the analysis of user comments. The study found that users generally believe that AI-assisted learning tools can improve learning efficiency and interest, but also pointed out its shortcomings in personalized teaching.

Gao Bo, Sun Hongyuan, Sun Chengmeng, et al. (2024): In "Research and Practice on Classroom Teaching Reform of Integrating Ideological and Political Education into Case-Driven Teaching to Enhance Application Ability", they proposed a method of integrating ideological and political education into case-driven teaching to enhance students' application ability and comprehensive quality. This study emphasizes the role of education reform in cultivating well-rounded talents.

However, current research mainly focuses on the initial exploration stage of technology application, and there is little literature on how to systematically combine case-driven and artificial intelligence technology for in-depth research. In addition, the technical ability of teachers and the resource support provided by the school are also important factors restricting the promotion of this teaching model.

Internationally, intelligent-assisted teaching has become relatively mature, especially in developed countries such as Europe and the United States. Many educational institutions and enterprises have begun to widely apply AI technology in the field of education. For example, some universities in the United States use big data to analyze students' learning behaviors and provide personalized learning plans; some business schools in the United Kingdom use virtual reality (VR) technology to simulate real business scenarios to improve students' practical ability.

Case-driven teaching methods are also valued abroad. Many courses help students understand complex business concepts and operational processes through actual case analysis. Foreign research focuses more on how to improve teaching effectiveness through technical means, and how to evaluate

and optimize the actual application effect of teaching models.

Ting D & Mengqi Z (2024): In Business English Teaching Reform Under the Background of Artificial Intelligence + Big Data, Ting D and Mengqi Z emphasized the important role of AI and big data technology in the reform of business English teaching. They believe that by using AI and big data technology to collect and analyze students' learning data, teachers can better understand students' learning needs and problems, and thus develop more targeted teaching strategies and methods. At the same time, they also pointed out the importance of case teaching method in business English teaching, believing that introducing real business cases can help students better understand and apply business English knowledge.

Lijie H, Kun T, Leng HC et al. (2024): In the article The mediating effects of critical thinking on the motivation and creativity of Business English learners in the age of AI: Cognitive flexibility theory, Lijie H et al. Impact on Business English Learners' Motivation and Creativity in the AI Era. They found that critical thinking can significantly improve students' learning motivation and creativity, and AI technology provides strong support for cultivating students' critical thinking. In addition, they also emphasized the role of case teaching method in cultivating critical thinking, believing that analyzing and discussing cases can stimulate students' thinking and innovation abilities.

Zhang Z (2024): In the article An Analysis of Vocational English Mixed Teaching Based on Intelligent Teaching Concept and Artificial Intelligence Technology -- A Case Study of Software Technology, the application of hybrid teaching mode based on intelligent teaching concept and AI technology in vocational English teaching is analyzed. The hybrid teaching mode combines traditional teaching with online teaching, which can make full use of their respective advantages and improve teaching effect. At the same time, she also pointed out the important role of case teaching method in the hybrid teaching mode, and believed that by introducing real business cases, the teaching content can be closer to actual needs and enhance students' interest and motivation in learning.

Kannan S & P. RS (2024): In the article Artificial intelligence and medical education: application in classroom instruction and student assessment using a pharmacology & therapeutics case study, Kannan S et al. discussed the application of artificial intelligence (AI) technology in medical education and its impact on student assessment. Although the article mainly focuses on the field of medical education, its discussion on the application of AI technology in teaching and evaluation methods is also of certain reference significance for business English teaching. They believe that AI technology can achieve objective evaluation of students' learning outcomes through automated evaluation tools, thereby improving the accuracy and fairness of the evaluation. At the same time, they also emphasized the important role of case teaching method in cultivating students' practical operation ability and clinical thinking.

Overall, the research on intelligent-assisted business English teaching at home and abroad is still in the development stage, but it has shown great potential and application prospects. Future research needs to further explore how to systematically combine case-driven and artificial intelligence technology to improve the effectiveness and practicality of the teaching model and solve the technical and resource problems that may be encountered during the implementation process.

3. Construction of a Diversified Academic Assessment System for Business English Courses based on Personalized Training

3.1 Introduction to the Course and Teaching Team

of Liaoning University of International Business and Economics is introduced with actual business cases, covering multiple economic fields, such as international trade, marketing, and corporate management. The team responsible teachers carefully select cases with business elites with many years of experience in enterprises and teaching teams with dual-teacher experience who have been engaged in front-line teaching for many years to ensure their pertinence, representativeness and inspiration. Students first collect personal information to understand the case background, related companies and market environment. Then, through group discussions, they deepen their understanding and explore the problems and challenges in the case. Under the guidance of teachers, students jointly study the case, restore the original scenario from the generation of the case to the actual solution, guide students to propose practical and feasible solutions with specific solution steps and implementation plans through the use of data collection, in-depth theoretical research, case scenario expansion and innovative thinking, and collectively discuss the optimal solution that is unanimously approved, and plan a complete implementation plan, and compare and share the results of practical tests with the final solutions and results of actual cases, and obtain new inspiration, methods and experience summaries in in-depth discussions.

The practical case teaching method is supported by cognitive psychology and social constructivism. Cognitive psychology emphasizes that learners construct knowledge through interaction with real situations, while social constructivism believes that knowledge is negotiated and constructed through social interaction. In the practical case teaching method, students can construct and reconstruct knowledge in the context by dealing with real cases, thereby deepening their understanding and improving their problem-solving skills.

3.2 Successful Practice of Think Tank Formation and External Propaganda Program

In recent years, with the continuous development of artificial intelligence technology, more and more educational institutions have begun to try to apply it in teaching practice. Liaoning University of International Business and Economics has introduced a series of business English learning platforms based on artificial intelligence. The platform analyzes students' learning behavior and performance through big data, and customizes personalized learning plans for each student. At the same time, using natural language processing technology, the platform can also automatically correct students' homework and provide detailed feedback. In

addition, the business practice platform also integrates virtual reality technology, allowing students to conduct role-playing and communication exercises in simulated business scenarios. After a period of implementation, this teaching model has achieved remarkable results, and students' academic performance and oral expression ability have been significantly improved. This case shows that the business English teaching model under intelligent assistance has broad application prospects and development potential.

In the further advancement of course teaching, teachers and students formed a think tank, combining practical problems in social and economic fields to provide planning and publicity plans for international forums and conferences. This process not only exercises students' practical ability, but also provides them with opportunities to communicate with industry experts. The establishment of the think tank enables students to closely combine the knowledge learned in class with actual work, improving the practicality and effectiveness of learning.

The innovation and effectiveness of the course model have been recognized, and it has been successfully approved by the Liaoning Provincial Department of Education for the 2024 Higher Education New Think Tank Alliance Project. At the same time, the suggestions put forward by the students have also been adopted by the relevant departments, which is not only an affirmation of their efforts, but also lays a solid foundation for their future careers. This achievement is due to the forward-looking, practical and innovative course design, as well as the active participation and efforts of the students.

In class, students used artificial intelligence, Internet materials and related literature to conduct in-depth research and conduct a more comprehensive analysis of the case. Through professional practical activities, they combine theoretical knowledge with practical operations and share their learning and practical experiences. This teaching model not only improves students' international business communication skills in business English listening and speaking, but also cultivates their practical operational abilities and problem-solving abilities.

3.3 Teaching Results and Reflections

After a period of practice, this curriculum model has achieved remarkable results. Students have significantly improved their business English listening and speaking skills and have a deeper understanding of the business world. They learned how to collect information, analyze problems, propose solutions, and have practical operational and problem-solving abilities. At the same time, teachers also gain valuable experience from teaching and constantly reflect on and improve teaching methods to better meet the needs of students.

The practice of the Business English Listening and Speaking course case proves the effectiveness and practicality of the actual case teaching method in Business English education. It breaks the traditional teaching model, perfectly combines theory with practice, provides students with more practical opportunities, and helps them better adapt to the needs of society. In the future, we will continue to explore and innovate teaching methods and contribute more to the development of

Business English education. The success of the Business English Listening and Speaking course case is also the result of the joint efforts of teachers and students. It demonstrates the charm and value of the actual case teaching method and provides new ideas and methods for Business English education. We believe that in future teaching practice, this teaching model will be more widely used and promoted, and make greater contributions to cultivating more Business English talents with practical operation and problem-solving abilities.

4. Conclusion

In today's education field, the intelligent-assisted business English teaching model is gradually emerging. This model provides students with a more efficient, interactive and personalized learning environment by combining case-driven teaching methods and artificial intelligence technology.

The intelligent-assisted business English teaching model can effectively improve students' interest in learning and participation. The traditional teaching model is often teacher-centered, and students passively accept knowledge, while the intelligent-assisted teaching model pays more attention to students' active participation and practice. By introducing case-driven teaching methods, students can apply theoretical knowledge to actual situations, enhancing the practicality and interactivity of learning. At the same time, the application of artificial intelligence technology also provides students with a more personalized learning experience. For example, the intelligent system can automatically adjust the teaching content and difficulty according to the students' learning progress and performance to meet the learning needs of different students.

The application of artificial intelligence technology also makes personalized learning and instant feedback possible. In traditional teaching, it is often difficult for teachers to pay individual attention to and provide feedback on each student's learning situation. In an intelligent-assisted teaching environment, students can get instant feedback and guidance through the intelligent system to help them better master knowledge and skills. In addition, the intelligent system can also analyze and mine students' learning data to provide teachers with detailed information about students' learning situations, thereby helping teachers better understand students' learning needs and problems.

However, the implementation of this teaching model also requires teachers to have certain technical capabilities and innovative awareness. Teachers need to be familiar with and master relevant technologies and tools so that they can better use these resources to assist teaching. At the same time, schools should also provide necessary technical support and resources to ensure the smooth implementation of the teaching model.

In summary, the business English teaching model assisted by intelligence has many advantages and potentials. It can not only improve students' learning interest and participation, but also enhance the practicality and interactivity of learning, and provide possibilities for personalized learning and instant feedback. However, in order to ensure the successful

implementation of this teaching model, teachers need to have certain technical capabilities and innovative awareness, and schools should also provide necessary support and resources.

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