Problems and Countermeasures of Using AI Technology in Undergraduate Business English Education

Yulu Chen[a], Junfeng Xin[*]

College ofHumanities, Ningbo University ofFinance and Economics, Ningbo, China

[a]yuluyesss@163.com; *xjfnbufe@163.com

Abstract. With the continuous development of artificial intelligence (AI) technology, its application in undergraduate business English education is becoming more and more extensive. However, with this comes a series of problems and challenges. This paper will discuss the problems faced by the use of AI technology in undergraduate business English education and propose corresponding countermeasures.

Keywords: Business English, undergraduate education, artificial intelligence, problems, countermeasures

1   Introduction

In recent years, artificial intelligence (AI) technology has made great strides in various fields, including education. Such topics have been explored in previous studies: student model and pedagogical module[1], the application and effects of AI in administration, instruction, and learning[2], challenges confronting AI and education[3], two parallel strands of research have been suggested: an evolutionary process and a revolutionary process[4], basic elements of ethical digital transformation[5], development of AI education in China[6], the transformation of foreign language majors towards AI model[7]. In undergraduate business English education, the use of AI technology for teaching has become a trend. However, in the course of practical application, artificial intelligence (AI) technology has also gradually penetrated various fields with its powerful computing and analytical capabilities, and has begun to play a role in higher education. However, there are still some problems and challenges in the process of introducing AI technology into undergraduate business English education. Therefore, it is necessary to study these problems deeply and put forward effective countermeasures.

2   Problems in the Use of AI Technology in Undergraduate Business English Education

(1) Lack of personalized customization

Although AI technology has made some progress in the field of education, in the undergraduate education of business English, students often face the challenge of a lack of personalization.

First, AI technologies often rely on big data and algorithms for learning and prediction. However, in undergraduate business English education, each student's learning needs and levels are different, so a single algorithm is difficult to meet the individual needs of all students. Secondly, business English involves a wealth of professional knowledge and practical skills, which should be taught more closely to the actual situation and guided by personal interests and hobbies. However, most AI technologies are not yet able to provide accurate and personalized guidance to each student. Finally, communication and communication is one of the most important skills in undergraduate business English education. However, many AI technologies are still unable to truly simulate the complex and subtle ways of communication between humans, and cannot provide effective help.

(2) The degree of dependence is too high

With the continuous development of artificial intelligence technology, AI technology has been widely used in undergraduate business English education. However, some people worry that this practice may lead students to rely too much on their studies.

First of all, AI technology provides more personalized and accurate learning methods in business English education, so that students can customize learning according to their own level and needs. However, over-reliance on such personalized assistance for a long time may make students lose their ability to think independently and solve problems. Secondly, with the widespread application of AI technology in business English education, some traditional teaching methods may be gradually eliminated or reduced in use. Students who rely entirely on AI technology for their learning may face difficulties if one day an AI system fails to function properly or in some other unexpected situation. Therefore, the use of AI technology in undergraduate business English education needs to be treated with caution. We need to ensure that AI technologies are used as an adjunct, not a substitute, and that important foundational knowledge, thinking skills, and problem-solving skills are fostered and emphasized. There is also a need to encourage diversity and flexibility in the use of different types of resources and tools to help improve overall quality.

(3) Data security risks

In today's information age, artificial intelligence (AI) technology has been widely used in various fields, including business English undergraduate education. However, while AI technology has brought a lot of convenience and innovation to business English education, its use also has certain data security risks.

First, as a large number of students' and teachers' personal information is incorporated into AI systems for analysis and processing, the risk of data breaches increases accordingly. If this data falls into the wrong hands, it may lead to serious privacy issues. Secondly, when using AI technology for online learning and exams, personal information such as students' answering behavior and learning trajectory will be recorded and stored in a database. If these databases are hacked or abused by internal employees, it can be detrimental to students. In addition, the use of AI technology in undergraduate business English education still has the problem of algorithm bias and discrimination. Because the algorithm model is often trained based on historical data, in some cases it may produce gender, race and other aspects of bias, which will affect the fairness and justice.

(4) Lack of supporting teachers

In today's information age, artificial intelligence (AI) technology has been widely used in various fields, including education. The use of AI technology in undergraduate business English education can improve the teaching efficiency and quality, but it also faces the problem of insufficient supporting teachers.

First of all, undergraduate business English education needs teachers with professional knowledge and practical experience to provide guidance and guidance. However, at present, many schools have neglected to train and support teachers when introducing AI technology. This has led to some teachers not being able to reach their full potential and having a certain degree of difficulty in using AI technology. Secondly, the use of AI technology in undergraduate business English education requires a dedicated team to maintain and update it. However, not all schools are able to provide a sufficient number and level of high-quality IT staff to support this work. Therefore, in the actual operation process, there may be problems such as system crash and data loss, which will affect the normal teaching order.

In view of the above problems, we suggest that schools should strengthen training and support for teachers on AI technology, and encourage them to participate in the application of new technologies; At the same time, IT is necessary to increase investment, make plans in IT team construction and provide necessary resources.

(5) Moral and ethical dilemmas

The use of artificial intelligence (AI) technology in undergraduate business English education may raise some ethical dilemmas.

First, the application of AI technology may lead students to over-rely on machine translation and automatic proofreading tools, thereby reducing their own language expression and writing skills. In this case, students may have a slack attitude towards language learning. Secondly, the use of AI technology in business English education may also involve intellectual property rights and plagiarism issues. If students use AI translation software to translate foreign materials directly into their native language and submit them as original work, they risk touching the bottom line of plagiarism. This not only violates the academic norms, but also damages the efforts of other students. In addition, in terms of personalized education, although AI can provide customized tutoring services according to the characteristics of each student, it is difficult to guarantee that it truly meets the

needs of each student. At the same time, there are risks such as personal privacy disclosure and data security.

Therefore, ethical issues need to be carefully considered when using AI technology in undergraduate business English education. We need to strike a balance, seeking best practices between efficiency and knowledge transfer, and enhancing awareness of ethics and laws and regulations. At the same time, it is also necessary to establish a sound regulatory mechanism to prevent the abuse and misuse of artificial intelligence technology to bring negative effects.

3   Countermeasures and Suggestions on the Use of AI Technology in Undergraduate Business English Education

(1) Countermeasures for Lack of personalized customization

In undergraduate business English education, the application of AI technology can improve the teaching efficiency and quality, but there is also a lack of personalized customization. To solve this problem, we can take the following countermeasures:

First of all, establish a perfect student information database. Through the collection of students' learning situation, interests, career planning and other information, and combined with AI technology for analysis and mining, to achieve personalized customized teaching. Secondly, develop intelligent course design tools. AI technology is used to develop intelligent course design tools to automatically generate corresponding course content and teaching plans according to different students' needs and characteristics. In addition, online interactive tutoring system. With the help of artificial intelligence technology, an online interactive tutoring system is built to provide personalized guidance and help for each student, and it is more close to the actual needs when solving problems. In addition, the implementation of multiple evaluation system. In addition to the traditional test results, the introduction of multiple evaluation methods, such as homework performance, project results, etc., to comprehensively evaluate each student's performance and potential from multiple perspectives, and based on these data for accurate guidance. Finally, it is the continuous optimization and improvement mechanism. Continue to collect feedback and data, and combined with emerging scientific and technological means for continuous optimization and improvement, to ensure that AI technology is truly personalized in business English undergraduate education.

In short, when the use of AI technology in undergraduate business English education lacks personalized customization, we can solve this problem through the above countermeasures, and with the continuous development and improvement of the field of artificial intelligence, I believe that there will be more effective ways to achieve personalized customized education in the future.

(2) Countermeasures for excessive dependence

With the continuous development of artificial intelligence (AI) technology, undergraduate business English education has also begun to use AI technology to improve teaching effect and student experience. However, a high degree of dependence may bring some negative effects, so it is necessary to take corresponding countermeasures.

First, the problem that the use of AI technology may lead to students' thinking becoming single and dependent can be solved by designing diversified course content and teaching methods. Practical case studies and team work projects are introduced to cultivate students' ability to think independently and solve problems. Secondly, when using AI-assisted teaching, we should pay attention to protecting personal privacy information and avoid excessive data collection. Establishing a strict data management system and privacy protection policy is one of the necessary measures. In addition, in order to prevent AI technology from becoming the only dominant factor and ignoring the interaction and emotional communication between teachers and students, it is still necessary to pay attention to the face-to-face interaction between teachers and students in the classroom. The teacher should play the role of a leader, passing on knowledge while paying attention to the support each student needs in addition to their professional knowledge. Finally, the promotion of the use of AI technology in undergraduate business English education needs to be comprehensively evaluated, and relevant policies and regulations should be adjusted and optimized in a timely manner. Ensure that AI technology truly serves to improve the quality and level of education.

In short, the problem of "excessive reliance on the use of AI technology in undergraduate business English education" is not unsolvable. Only when various potential risks are fully considered and corresponding countermeasures are taken, can the positive role of AI technology in undergraduate business English education be better played.

(3) Countermeasures for data security risks

With the increasing application of artificial intelligence (AI) technology in the field of business, data security risks are becoming increasingly prominent. In undergraduate business English education, how to effectively deal with the data security challenges brought by AI technology has become an important topic.

First, schools and businesses can strengthen data security awareness training for students and employees. Through relevant courses or training activities, improve their cognition level of personal information protection and network prevention, and enhance their awareness of self-protection. Secondly, in the process of teaching and practice, strict authority management measures can be adopted. Ensure that only authorized personnel have access to certain types of data, and establish a sound regulatory mechanism for real-time monitoring and feedback. In addition, the introduction of advanced encryption technology is also an effective means. Encrypting important data through encryption algorithms improves the difficulty of being attacked or information stolen during data transmission and storage to a certain extent. Finally, there is a need to focus on compliance and standardization when using AI technology. Clarify relevant laws, regulations and policy requirements,

and establish and improve the corresponding system and process to ensure compliance with national standards and avoid violations as far as possible.

To sum up, the use of AI technology in undergraduate business English education requires careful handling of data security issues and appropriate measures to reduce potential risks. This not only helps to protect individual privacy rights, but also promotes good social order and economic development.

(4) Countermeasures for the lack of supporting teachers

With the increasing application of artificial intelligence (AI) technology in the field of business, undergraduate business English education needs to keep up with this trend and provide students with relevant knowledge and skills. However, at present, many universities are insufficient in the provision of AI technology teachers. To solve this problem, the following measures can be taken.

First, universities can increase the recruitment and training of professionals in AI technology. By increasing the number of related positions, improving the salary and optimizing the training plan, we can attract more outstanding talents to join the undergraduate business English education team. At the same time, a complete training system has been established in the school to provide training for existing teachers on relevant AI technology knowledge and application ability. Second, you can cooperate with enterprises to carry out practical projects or internship programs. Through cooperation with enterprises to develop projects or provide internship opportunities, students have access to the latest AI technology applications, and promote the sharing and complementarity of resources between schools and enterprises. In addition, the curriculum should be adjusted and updated in time. The course is designed according to the current market demand and industry development trend, and the latest AI technology knowledge is incorporated into it. At the same time, we should also pay attention to the combination of theory and practice, and introduce case analysis and simulation operations in the teaching process to enhance students' understanding and mastery of the application of AI technology.

To sum up, the problem of "insufficient supporting teachers using AI technology in undergraduate business English education" is not unsolvable. Through the above countermeasures, the current situation can be gradually improved, and ensure that students have AI skills that meet the market demand after graduation.

(5) Solutions to moral and ethical dilemmas

With the increasing application of artificial intelligence (AI) technology in the field of business, undergraduate business English education also needs to pay attention to the moral and ethical dilemmas related to it and put forward corresponding countermeasures.

First, schools can strengthen moral education for students and guide them to properly handle and use AI technology. Secondly, in the curriculum, content involving AI ethics and legal norms can be added to help students establish correct values and rule of law awareness. In addition, thematic discussions or seminars can be organized to invite experts in relevant fields to share experiences and insights. In addition, in the practical part, schools can encourage students to participate in projects or activities related to the ethical aspects of AI technology, and supervise the guidance through the instructor. At the same time, the evaluation system should

take into account students' ability and attitude in dealing with moral and ethical issues. In addition to strengthening the attention to the moral and ethical dilemmas of AI technology in the education process, it is also necessary to establish a set of perfect, strictly observed and continuously updated and iterative rules and regulations within the industry to restrict all types of practitioners to legally and lawfully use these emerging technology products.

To sum up, the solution to the "moral and ethical dilemma of using AI technology in undergraduate business English education" is a systematic project that requires the joint efforts of the whole society to promote good development.

4   Conclusion

Although there are a series of problems and challenges in the use of AI technology in undergraduate business English education, as long as we think carefully and take effective measures, we can gradually solve these problems that have plagued us for a long time and maximize the overall benefits. At the same time, we also expect that AI technology in the future should be continuously improved and perfected in the business English language, and better serve the reform and innovation cause of China's higher education institutions.

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