

Artificial Intelligence Technology in the Application of Cross-border E-commerce Education

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Abstract: With the progress of society and the development of science and technology, generative artificial intelligence, represented by Chat GPT, is gradually being used in various fields of social production and life due to its “human-like” functions in copywriting, video generation, and other aspects. Applying artificial intelligence to cross-border e-commerce is not only an important means to better promote economic development but also an effective way to achieve industrial transformation and upgrading. This undoubtedly poses higher new requirements for the abilities and qualities of professionals in cross-border e-commerce. Therefore, this paper elaborates on the significance and paths of the application of artificial intelligence technology in cross-border e-commerce education, and proposes some safeguard measures for the application of artificial intelligence technology in cross-border e-commerce education, aiming to further promote the reform of cross-border e-commerce professional education in universities and colleges, for reference only.

Keywords: Artificial intelligence technology; Universities and colleges; Cross-border e-commerce; Teaching application

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1. Introduction

Both artificial intelligence and cross-border e-commerce are important developments of China's new infrastructure and possess certain cross-disciplinary attributes and digital genes. The combination of the two has brought more dividends to national and regional economic development, and has also changed the employment rules of cross-border e-commerce enterprises to a certain extent^[1]. Therefore, it is necessary for universities and colleges majoring in cross-border e-commerce to strengthen educational reform and actively integrate artificial intelligence technology into teaching to ensure that students can better cope with the challenges existing in the process of industrial upgrading and development in the context of the digital economy era, thereby effectively improving students' employment rates.

2. The significance of the application of artificial intelligence technology in cross-border e-commerce education

2.1. It helps to promote the integration of teaching resources

In cross-border e-commerce education, teachers can utilize artificial intelligence technology to collect more high-quality learning resources for students to study, which helps to further enrich classroom teaching content and thus provides more guarantees for broadening students' knowledge horizons. In addition, in actual teaching, teachers can also use artificial intelligence technology to more comprehensively grasp students' learning performance in the classroom and their autonomous learning situation after class ^[2]. By doing so, teachers can more clearly and accurately understand and grasp students' learning and development needs. Teachers can then take this as the basis and basis to timely adjust teaching plans and talent training programs, and organically integrate the required teaching resources, which is conducive to providing students with more precise professional education and service guidance.

2.2. It helps to enrich students' learning experiences

Applying artificial intelligence technology to cross-border e-commerce education in universities and colleges can bring students rich learning experiences. Taking cross-border e-commerce live streaming teaching as an example, teachers can let students with good English speaking skills but who are unfamiliar with live streaming introduce products in front of the camera and use virtual software to capture their heads ^[3]. By doing so, it can not only effectively reduce students' discomfort when facing the camera but also allow students to refer to English scripts and speak English more fluently. At the same time, teachers can also let students with relatively poor English speaking skills appear live, allowing them to showcase products throughout the process, and then let them swap roles with the product introduction group of students ^[4]. By adopting this method, students can conduct targeted exercises on their lacking abilities and gradually increase their confidence in cross-border e-commerce live streaming.

3. Application paths of artificial intelligence technology in cross-border e-commerce education

3.1. Analyzing market demand with artificial intelligence technology

With the continuous development and widespread application of modern science and technology, China's education is transforming and upgrading towards educational digitization and informatization ^[5]. Under this situation, cross-border e-commerce professional education and talent training in universities and colleges are also experiencing a technology-driven transformation. The core of this educational transformation mainly lies in the utilization of new-generation technological means, including artificial intelligence technology, aiming to help teachers better understand and grasp the current demand for cross-border e-commerce professionals in the social market, thereby enhancing the effectiveness of talent training strategies. In teaching practice, teachers can utilize artificial intelligence technology to conduct precise analysis of social market demand, interpret the deep meanings hidden behind various data, and thus predict market trends and analyze consumer behavior in this way ^[6]. Based on mastering this key information, teachers can then carry out teaching accordingly, guiding students to learn relevant professional knowledge so that they can better perceive market development trends and product services, thereby ensuring that the content learned by students is always consistent with international market demand ^[7].

3.2. Conducting remote teaching with artificial intelligence platforms

To further improve the application effect of artificial intelligence technology in cross-border e-commerce education, universities and colleges need to actively build multi-functional online teaching platforms with the help of artificial intelligence technology, thereby creating an interactive learning environment for students. On the one hand, by leveraging online teaching platforms, students can learn autonomously without restrictions of time and space, flexibly arrange their learning plans according to their needs and schedules, and even engage in real-time communication and discussion with teachers and other students on the platform ^[8]. On the other hand, teachers can provide remote education and guidance to students with the help of these platforms, promptly answer students' questions, and utilize artificial intelligence technology to set up simulated operation and training environments for students to help them further consolidate and deepen their professional knowledge and skills. At the same time, teachers can also use the platform to understand students' learning feedback and adjust and optimize teaching methods and progress to effectively ensure the effectiveness of course teaching. During this process, universities and colleges should attach importance to the improvement and upgrade of teaching platforms, introducing more high-quality teaching resources into these platforms to better adapt to the ever-changing needs of cross-border e-commerce professional education ^[9].

3.3. Assisting practical teaching with artificial intelligence technology

Practical teaching occupies an important position in cross-border e-commerce education. Through practice, students can gain a deeper understanding of the theoretical knowledge they have learned and continuously improve their professional practical abilities, laying a solid foundation for their career development. In cross-border e-commerce practical teaching, teachers can utilize artificial intelligence technology to transform traditional practical teaching forms. For example, during practical operations, students can use the intelligent question-and-answer system to obtain feedback and answers to questions or doubts encountered in the process of practice anytime and anywhere ^[10]. By doing so, it can not only significantly improve students' learning efficiency and effectiveness but also effectively reduce teachers' workload, allowing teachers to have more time and energy to delve into the innovation of course content and the optimization and improvement of instructional design. As for teachers, they can analyze students' learning behavior and professional grades comprehensively with the help of artificial intelligence technology and provide them with personalized learning resources and suggestions based on the corresponding data results. In addition, teachers can introduce technologies such as VR and AR into practical teaching to create a relatively real cross-border e-commerce operating scenario for students to engage in practical operation training in this virtualized intelligent environment. By doing so, it can not only effectively strengthen students' understanding and memory of professional knowledge but also allow students to truly experience various potential issues they may encounter in the process of cross-border e-commerce operations without any actual risks, which is conducive to effectively exercising their professional practical abilities.

3.4. Optimizing teaching evaluation with artificial intelligence technology

In the context of educational digitization, cross-border e-commerce professional teachers in universities and colleges also need to attach importance to the reform of course teaching evaluation and actively introduce new-generation technological means, including artificial intelligence technology. On the one hand, teachers can use artificial intelligence technology in teaching to achieve comprehensive supervision and evaluation of students' learning processes, including their classroom learning performance, knowledge mastery and application, and thinking development ^[11]. On the other hand, teachers can utilize the tracking and feedback functions of artificial intelligence technology to dynamically present the teaching effects, thereby further clarifying the indicators and

content of teaching evaluation, which can well weaken the subjectivity of teachers' evaluation and is conducive to better ensuring the objectivity of evaluation results.

4. Safeguard measures for the application of artificial intelligence technology in cross-border e-commerce education

4.1. Reshaping teaching methods for core professional courses

To ensure the application of artificial intelligence technology in cross-border e-commerce education, universities and colleges need to pay attention to the reshaping of teaching methods for core professional courses such as cross-border e-commerce marketing and cross-border e-commerce operations. For example, cross-border e-commerce operations encompass multiple aspects such as store establishment, product operation and management, customer management, business data analysis, and international search engine optimization ^[12]. In course teaching, teachers can use artificial intelligence technology to guide students in using machine translation, teaching them to recognize foreign language scripts commonly used by multi-language customer service robots, and guiding them to use intelligent tools to analyze cross-border e-commerce operational data such as exposure, clicks, feedback, and conversions, thereby cultivating students' ability to analyze market demand using artificial intelligence technology ^[13]. Another example is when conducting a cross-border e-commerce marketing course, teachers can ask students to use artificial intelligence technology to generate graphically mixed promotional copywriting or create short videos, making them fully aware of the impact of the application of artificial intelligence technology on the development of the cross-border e-commerce industry.

4.2. Emphasizing cybersecurity education for students

Unlike the operation and development of other industries, cross-border e-commerce usually involves many online transaction processes, which require relevant practitioners to have a high level of cybersecurity awareness. Therefore, teachers need to pay attention to students' cybersecurity education to ensure that every student understands the importance of cybersecurity, thereby further improving the application effect of artificial intelligence technology in cross-border e-commerce education. For instance, apart from infiltrating some cybersecurity knowledge into teaching, teachers can also introduce explanations of advanced cybersecurity technologies and new cyber-attack methods, and use artificial intelligence technology to simulate scenarios of cyber-attacks, allowing students to gradually learn how to identify and defend against various cyber risks in a virtual environment, thereby ensuring that students can maintain high employment competitiveness in the field of cross-border e-commerce in the future ^[14].

4.3. Actively building a “dual-qualified” teacher team

Teachers are the key elements in conducting teaching work, and their quality and ability will directly affect students' learning outcomes. Therefore, to ensure the application of artificial intelligence technology in cross-border e-commerce education, universities and colleges also need to actively build a “dual-qualified” teacher team. Firstly, universities and colleges should attach importance to talent introduction, for example, by introducing talents with both certain artificial intelligence practical experience and rich cross-border e-commerce operation and management experience from enterprises or scientific research institutions to serve as part-time teachers to guide students in utilizing artificial intelligence technology for professional practical operation. However, it should also be noted that during the process of talent introduction, universities and colleges also need

to assess their teaching abilities, personality traits, etc., to better ensure the effectiveness of teaching ^[15].

Secondly, universities and colleges can send teachers for regular secondments to cross-border e-commerce enterprises to allow them to go deep into the frontline of enterprise production, making them fully aware of the impact of artificial intelligence on the development of the cross-border e-commerce industry and the importance of applying artificial intelligence technology to cross-border e-commerce education. Finally, universities and colleges should strengthen the education and training of teachers, actively invite artificial intelligence technology experts, outstanding staff from cross-border e-commerce enterprises, etc., to conduct knowledge lectures and education and training activities for teachers, allowing them to learn more about the latest developments in artificial intelligence technology and new developments in the cross-border e-commerce industry, thereby prompting teachers to gradually develop into “dual-qualified” teachers.

5. Conclusion

In summary, with the support of modern technological means, cross-border e-commerce in China has achieved rapid development, realizing the organic integration of industrial digitization and trade digitization. Under this circumstance, cross-border e-commerce majors in universities and colleges should follow the development trend of the society and era, actively integrate artificial intelligence technology into education, and ensure teaching effectiveness through measures such as reshaping teaching methods for core professional courses, emphasizing cybersecurity education for students, and actively building a “dual-qualified” teacher team. Specifically, cross-border e-commerce teachers in universities and colleges can incorporate artificial intelligence technology into aspects such as market demand analysis, the implementation of remote and practical teaching, and the optimization of teaching evaluation, in order to achieve the purpose of improving teaching effectiveness.

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