

# “Personnel Recruitment and Assessment” Case Teaching with Artificial Intelligence

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**Abstract:** With the rapid development of technology, the application of artificial intelligence in the field of education is becoming increasingly widespread. As a core course of the human resource management major, “Personnel Recruitment and Evaluation” has a strong practical characteristic, making case teaching a key link. In this context, the importance of artificial intelligence to the case teaching of this course has become more prominent. This paper uses the literature research method and case analysis method to deeply explore the effective mode of artificial intelligence, enabling the case teaching of “Personnel Recruitment and Evaluation.” The research finds that artificial intelligence plays an important role in case screening and updating, in-depth analysis, and the construction of virtual simulation scenarios. However, its application also faces problems such as high technical costs, insufficient technical abilities of teachers, and data security and privacy. In response to these challenges, this paper proposes countermeasures such as reasonable planning of technology investment, strengthening teacher training, and improving the data security management mechanism.

**Keywords:** Artificial Intelligence; Personnel recruitment and evaluation; Case-based teaching; Teaching reform

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## 1. Introduction

With the rapid development of artificial intelligence technology, its application in education has become increasingly widespread, bringing profound changes to traditional teaching models. Through intelligent algorithms, natural language processing, and data analysis, artificial intelligence not only optimizes teaching resource allocation but also improves teaching efficiency and quality<sup>[1]</sup>. In the course of “Personnel Recruitment and Evaluation,” the cultivation of students’ practical abilities is particularly important. This course aims to help students master core skills such as recruitment process design, talent evaluation methods, and organizational management strategies. However, traditional classroom teaching often fails to meet students’ demands for practical operations, while case teaching, as a teaching method oriented towards practical problems, can effectively make up for this deficiency. Case teaching introduces real recruitment and assessment scenarios,

enabling students to apply theoretical knowledge in a simulated environment and thereby enhancing their ability to analyze and solve problems<sup>[2]</sup>. Against this backdrop, the introduction of artificial intelligence technology has provided new possibilities for the case teaching of “Personnel Recruitment and Evaluation”, becoming an important driving force for promoting teaching reform.

## **2. Analysis of traditional case teaching in “Personnel Recruitment and Evaluation”**

### **2.1. Traditional case teaching methods and characteristics**

Traditional case teaching serves as an important teaching method for “Personnel Recruitment and Evaluation.” Its core lies in helping students apply theoretical knowledge to practice through actual or simulated recruitment and evaluation scenarios. The selection of cases usually relies on the experience and resources of teachers, mainly derived from enterprise recruitment practices, classic textbooks, and academic research literature<sup>[3]</sup>. These cases are mainly presented in the form of textual descriptions, supplemented by tables, charts, and other forms to provide more intuitive information support. The forms of classroom organization mainly include group discussions, writing case analysis reports, and classroom presentations etc.

Traditional case teaching has significant advantages in the course “Personnel Recruitment and Evaluation,” especially in cultivating students’ practical abilities and the application of theoretical knowledge. Firstly, through real or practical cases, students can better understand the core concepts of recruitment and assessment and their application scenarios in actual work, thereby enhancing their ability to master and apply theoretical knowledge<sup>[1]</sup>. Secondly, case teaching emphasizes students’ active participation, requiring them to form their insights and solutions through analysis, discussion, and summary. This not only helps to enhance students’ critical thinking ability, but also exercises their communication and expression skills<sup>[4]</sup>. In addition, traditional case teaching also focuses on cultivating students’ comprehensive qualities, such as fostering leadership and coordination skills in teamwork, and developing data organization and logical reasoning abilities in case analysis. The cultivation of these abilities lays a solid foundation for students’ future career development, enabling them to respond flexibly in the complex and ever-changing recruitment and assessment environment.

### **2.2. Limitations of traditional case teaching**

Although traditional case teaching has played a significant role in the “Personnel Recruitment and Evaluation” course, its limitations cannot be ignored. Firstly, the update speed of case materials often lags behind the development of the industry, resulting in cases that students contact with failing to reflect the latest trends and practices in the current recruitment and assessment fields<sup>[5]</sup>. For instance, with the wide application of artificial intelligence technology, significant changes have occurred in the resume screening, interview evaluation, and other links in the recruitment process. However, traditional cases may not have covered the application scenarios of these emerging technologies and tools in a timely manner. Secondly, the interactivity of traditional case teaching is insufficient. In classroom discussions, students often limit themselves to internal group communication and lack in-depth interaction with teachers and other groups. To some extent, this restricts the sharing and collision of knowledge<sup>[6]</sup>. Finally, traditional case teaching is difficult to meet the personalized learning needs. As the selection of cases and teaching design is usually based on the overall level of the class, some students may feel insufficient participation due to weak foundations or different interest points, which in turn affects the learning effect. The existence of these problems provides entry points and improvement space for the application of artificial intelligence technology in case teaching.

### **3. The performance of Artificial Intelligence empowering case teaching in “Personnel Recruitment and Evaluation”**

#### **3.1. Case screening and update**

The application of artificial intelligence algorithms in the case teaching of “Personnel Recruitment and Evaluation” provides brand-new technical support for case screening and updating. Through machine learning models and natural language processing technology, the system can automatically filter out the latest and most relevant recruitment and assessment cases from massive data based on course outlines, teaching objectives, and real-time hot topics. For instance, technical means based on keyword extraction and semantic analysis can precisely match case content that meets specific teaching needs, thereby ensuring the timeliness and pertinence of the cases <sup>[7]</sup>. In addition, artificial intelligence can further optimize the construction and update strategies of the case library by conducting data analysis on the usage frequency and teaching effectiveness of historical cases. This dynamic case screening mechanism not only enhances the quality of cases but also significantly reduces the time cost for teachers to manually search for and organize cases, enabling teaching resources to serve teaching objectives more efficiently.

#### **3.2. In-depth case analysis**

The application of intelligent analysis tools provides deeper support for the case teaching of “Personnel Recruitment and Evaluation.” With the help of data analysis software and text mining tools, students can comprehensively analyze the key data, character behavior patterns, and decision-making processes in the cases. For instance, in recruitment cases, text mining tools can identify the core skills and experience requirements in resumes and visually present their distribution characteristics, helping students understand the essence of job demands <sup>[5]</sup>. Meanwhile, data analysis software can conduct quantitative analysis on interview evaluation data, revealing the interviewers’ decision-making preferences and the logic behind them, thereby enhancing students’ depth of understanding of the recruitment process <sup>[8]</sup>. In addition, artificial intelligence can also help students explore the possibilities of multiple solutions by simulating the results of different decision-making paths, and cultivate their critical thinking and problem-solving abilities. These intelligent analysis tools not only enhance the technical content of case teaching but also provide students with a more scientific and systematic learning experience.

#### **3.3. Virtual simulation scenarios**

The introduction of virtual simulation technology has brought an immersive practical operation experience to the case teaching of “Personnel Recruitment and Evaluation.” By building highly realistic virtual scenarios for recruitment interviews and talent assessment, students can conduct practical exercises in a simulated environment, thereby effectively enhancing their practical operation skills and on-the-spot adaptability <sup>[9]</sup>. For instance, by leveraging virtual reality (VR) and augmented reality (AR) technologies, students can immerse themselves in the interview process, experience the real interview atmosphere, and interact with virtual interviewers. During this process, the system can also conduct real-time evaluations of students’ performance through facial expression recognition and voice analysis technologies, and provide improvement suggestions <sup>[10]</sup>. In addition, virtual simulation scenarios can also simulate complex talent assessment situations, such as team collaboration tasks or stress tests, helping students accumulate practical experience in a safe environment. This teaching method, based on virtual simulation, not only breaks through the limitations of traditional classroom teaching but also lays a solid foundation for students’ future career development.

## **4. Challenges in empowering case teaching of “Personnel Recruitment and Evaluation” with Artificial Intelligence**

### **4.1. Technical cost issues**

The application of artificial intelligence technology in case teaching of “Personnel Recruitment and Evaluation” relies on high-performance hardware devices and complex software systems. The introduction of these technical infrastructures undoubtedly increases teaching costs. For instance, the operation of intelligent analysis tools, virtual simulation platforms, and data mining software requires powerful computing capabilities and storage resources, and the purchase and maintenance costs of these hardware devices are relatively high <sup>[11]</sup>. In addition, the development and optimization of artificial intelligence algorithms also require the support of professional teams. This not only involves software development costs but also includes subsequent technical updates and upgrade expenses. For many universities, especially when the budget is limited, the high technical cost may become the main obstacle hindering the application of artificial intelligence technology. This economic pressure not only restricts the popularization of artificial intelligence technology in case teaching, but also may lead to an uneven distribution of teaching resources, further exacerbating educational inequality <sup>[12]</sup>.

### **4.2. Issues of teachers’ technical competence**

Although artificial intelligence technology has brought many advantages to the case teaching of “Personnel Recruitment and Evaluation,” its actual effect largely depends on the teachers’ mastery of the technology. At present, many teachers have a significant knowledge gap in the application of artificial intelligence technology, which may lead to unsatisfactory teaching results. For instance, teachers need to be familiar with the usage methods of data analysis tools, understand the basic principles of artificial intelligence algorithms, and be able to effectively integrate these technologies into classroom teaching. However, due to the rapid update speed of artificial intelligence technology, teachers often find it difficult to keep up with the pace of technological development, thus facing severe challenges in skill improvement <sup>[8]</sup>. Furthermore, some teachers may hold a conservative attitude towards new technologies and lack the motivation to actively learn and explore, which further exacerbates the imbalance in the application of technologies. Therefore, how to enhance teachers’ technical capabilities through effective training and incentive mechanisms has become a key issue in promoting the empowerment of case teaching by artificial intelligence <sup>[12]</sup>.

### **4.3. Data security and privacy issues**

In the case teaching process of “Personnel Recruitment and Evaluation,” the application of artificial intelligence technology inevitably involves the processing of a large amount of sensitive data, including students’ personal information, enterprise recruitment data, and talent evaluation results etc. The security and privacy protection issues of these data have become important challenges that need to be urgently addressed. For instance, when using artificial intelligence algorithms for case screening and analysis, if data management is improper, it may lead to information leakage or abuse, which in turn can have adverse effects on students and enterprises <sup>[13]</sup>. Furthermore, with the wide application of artificial intelligence technology in the recruitment field, problems such as data bias and algorithmic discrimination have become increasingly prominent. For instance, a recruitment tool developed by a large technology company, due to gender bias in its training data, tends to select male candidates in its decision-making process. This case indicates that the design and application of artificial intelligence systems must fully take into account moral and ethical responsibilities <sup>[13]</sup>. Therefore, in case teaching, how to establish a sound data security management mechanism to ensure the security and privacy of data while avoiding the interference of algorithmic bias on teaching results is an important issue that cannot

be ignored when artificial intelligence empowers case teaching.

## **5. Strategies for addressing the challenges of case teaching in “Personnel Recruitment and Evaluation” empowered by Artificial Intelligence**

### **5.1. Reasonable planning of technical investment**

In the process of case teaching in “Personnel Recruitment and Evaluation” empowered by artificial intelligence, reasonable planning of technical investment is the key to addressing the cost challenge. Schools should, based on their own financial conditions and teaching needs, formulate scientific technological investment plans to ensure the effective utilization of resources. First of all, when choosing artificial intelligence technologies and equipment, it is necessary to comprehensively consider their performance, price, and applicability, and give priority to choosing solutions with high-cost performance. For instance, open-source intelligent analysis tools or cloud service platforms can be utilized to reduce the costs of hardware procurement and maintenance <sup>[11]</sup>. Secondly, attention should be paid to the sustainability and scalability of the technology to avoid additional expenses caused by frequent equipment updates. In addition, schools can also obtain more financial support by cooperating with enterprises or applying for government-funded projects, thereby alleviating the economic pressure brought about by technological investment <sup>[2]</sup>. Through the above measures, not only can costs be effectively controlled, but also a solid foundation can be laid for the long-term application of artificial intelligence technology.

### **5.2. Strengthen teacher training**

As the core implementers of case teaching, teachers’ mastery of artificial intelligence technology directly affects teaching effectiveness. Therefore, strengthening teacher training is an important measure to improve teaching quality. On the one hand, schools should offer specialized training courses based on the actual needs of teachers, covering basic knowledge of artificial intelligence, operation methods of intelligent analysis tools, and the application of virtual simulation technology, etc. <sup>[8]</sup> On the other hand, teachers are encouraged to participate in relevant academic exchange activities and industry practices to gain a deeper understanding of the latest development trends and successful cases of artificial intelligence in the field of education. For instance, teachers can broaden their horizons and accumulate practical experience by participating in international conferences, visiting scholar programs, or school-enterprise cooperative research <sup>[12]</sup>. In addition, schools can also establish a mechanism for evaluating teachers’ technical capabilities, regularly assessing and providing feedback on teachers’ technical proficiency, and motivating them to continuously enhance their professional qualities. Through these measures, teachers can apply artificial intelligence technology more proficiently and provide students with higher-quality teaching services.

### **5.3. Improve the data security management mechanism**

In the case of teaching “Personnel Recruitment and Evaluation” empowered by artificial intelligence, data security and privacy protection are important issues that cannot be ignored. To this end, schools need to establish and improve a data security management mechanism to ensure the security of sensitive information. First of all, a strict data management system should be established, clearly defining the standardized procedures for data collection, storage, use, and sharing, and regular training and assessment of relevant personnel should be provided <sup>[13]</sup>. Secondly, advanced encryption technology is adopted to protect the data during storage and transmission, preventing unauthorized access or leakage. For instance, the security of students’ personal

information and enterprise recruitment data can be ensured through end-to-end encryption technology. In addition, an access control mechanism is introduced to set different data access levels based on users' roles and permissions, further reducing the risk of data abuse. Finally, it is recommended that schools conduct regular data security audits to promptly identify and fix potential security vulnerabilities. Through the above measures, the challenges of data security and privacy protection can be effectively addressed, providing a strong guarantee for the smooth application of artificial intelligence technology in case teaching.

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## References

- [1] Ouyang Y, 2023, Analysis of the Application of Artificial Intelligence Technology in Enterprise Human Resource Management. *Sichuan Labor Security*, 2023(11): 42–43.
- [2] Fang, 2024, Discussion on the Functions and Methods of Artificial Intelligence-Assisted Enterprise Human Resource Management Evaluation. *Chinese Science and Technology Journal Database (Abstract Edition) Social Sciences*, 2024(7): 30–33.
- [3] Liu C, Li J, 2024, Analysis of the Impact of Artificial Intelligence on Human Resource Recruitment. *Modern Business*, 2024(7): 64–67.
- [4] Luo Y, 2022, Innovation of Human Resource Management Concepts under the Background of Artificial Intelligence. *Management Scientist*, 2022(16): 61–63.
- [5] Guo H, 2024, Analysis of the Application of Artificial Intelligence in Talent Recruitment and Selection. *Science & Technology Economy Market*, 2024(1): 26–28.
- [6] Li M, 2023, Dominance or Domestication: Human-Computer Interaction in Intelligent Recruitment: Taking the Qiangjing Workplace App as an Example. *Science and Technology Communication*, 15(22): 128–131.
- [7] Lou M, 2024, Application of Artificial Intelligence Technology in Human Resource Management Information System. *Science & Technology Innovation*, 2024(15): 194–196.
- [8] Hu W, 2024, Research on the Application of Artificial Intelligence Technology in Human Resource Management. *China Market*, 2024(6): 114–117.
- [9] Kuai Y, 2019, Research on the Impact of Artificial Intelligence Development on Human Resource Management. *Journal of Hubei Open Vocational College*, 32(6): 72–74.
- [10] Liu F, 2021, Research on the Transformation of Enterprise Human Resource Management Driven by Artificial Intelligence. *Information Systems Engineering*, 34(9): 56–58.
- [11] He M, Shen D, Wang T, et al., 2023, Parallel Human Resource Management Framework Based on ACP Method. *Network Security and Data Governance*, 42(S02): 17–25.
- [12] Li W, 2024, Thoughts on the Innovation of Enterprise Human Resource Management in the Era of Artificial Intelligence. *Market Modernization*, 2024(9): 106–108.

- [13] Guo P, 2023, Exploration of the Moral Responsibility Attribution of Artificial Intelligence. *Times Auto*, 2023(24): 61–63.

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