Academic Education Publishing House

Occupation and Professional Education Vol. 3 No. 9, 2026

Research on the Construction of an AI-Integrated Curriculum System for the Human Resource Management Major

Sufang Xiao

School of Business, Guilin University of Electronic Technology, Guilin, Guangxi, China

Abstract: The rapid development of artificial intelligence technology is profoundly reshaping the logic of talent cultivation for the Human Resource Management major. In the current cultivation process, there are some problems such as an insufficient grasp of the competency requirements for interdisciplinary talents, a lack of disciplinary integration, an absence of graded curriculum design, students' inadequate understanding of the digital and intelligent transformation of the major, and structural shortcomings in the digital and intelligent capabilities of the teaching staff. Against this backdrop, it is proposed to construct a hierarchical competency map for professional talents by accurately identifying industry-side competency requirements, and thereby build an AI-integrated theoretical and practical curriculum system. Furthermore, the digital and intelligent structure upgrade of the teaching staff provides support for the construction of the curriculum system.

Keywords: AI Integration; Digital and Intelligent Human Resource Management; Curriculum System Construction

1. Introduction

With the rapid development of artificial intelligence technology, AI tools such as generative large models, intelligent decision systems and robotic process automation are profoundly changing corporate management. Human resource management (HRM), as the core function through which corporate strategy is implemented, has also reached a critical turning point in its digital and intelligent transformation. The development and application of AI technology have fundamentally changed the functions of HRM: scenarios such as talent profiling, intelligent person-job matching, AI interviews, intelligent training analysis, dynamic performance monitoring and employee sentiment analysis have become reality, greatly improving the efficiency and effectiveness of HRM in enterprises. Against this background, the competencies that enterprises require of HRM practitioners are no longer limited to traditional transactional processing and basic data analysis; practitioners are instead expected to "understand the business, know the technology and make good use of AI". This shift towards interdisciplinary literacy [1] poses new requirements and challenges for talent cultivation in colleges and universities. Universities must adapt to the social context and to the needs of the digital and intelligent transformation, and must revise and reposition the objectives and programmes of talent cultivation for the Human Resource Management major. At present, the Human Resource Management major in many Chinese universities is actively promoting digital and intelligent reform, yet the deep integration of AI technology and professional teaching remains at an exploratory stage, and many problems persist in the construction of professional curricula. How to construct an AI-integrated curriculum system for the Human Resource Management major in terms of curriculum structure and content, how to develop a distinctive Human Resource Management major, and how to cultivate talents who meet the needs of social development are therefore urgent questions to be answered.

2. Problems in the Teaching of Human Resource Management

2.1 Insufficient Grasp of Competency Requirements for Interdisciplinary Talents

The rapid development and deep penetration of AI technology are fundamentally reshaping the competency requirements that enterprises place on HRM practitioners. On the one hand, enterprises need to recruit interdisciplinary talents with AI application capabilities; on the other hand, they need to update the knowledge and competency systems of their existing

employees [2]. Although practitioners have responded quickly to technological advances and have articulated new competency requirements for enterprise human resources, the educational community faces objective constraints such as the time required for talent cultivation and the lag in knowledge renewal [3], as well as subjective problems such as cognitive bias regarding the demand for interdisciplinary talents [4]. Universities have to varying degrees implemented digital and intelligent reform of professional curricula and have established courses intended to develop students' digital and intelligent capabilities, yet the underlying logic of these courses and the progression of the competencies they cultivate remain unclear. It is therefore urgent to start from the industry side and systematically identify the competency requirements for Human Resource Management talents in the AI era, so that graduates can genuinely meet the needs of society.

2.2 Insufficient Disciplinary Integration and Disconnected Course Content

Digitally empowered human resource management is a highly cross-disciplinary and comprehensive field that integrates management, psychology, economics, law, electronic information, data science and other disciplines. Although many schools have introduced basic big data courses such as Python programming, business intelligence and data mining on top of their digital infrastructure, the construction of the professional curriculum system still lacks a disciplinary integration perspective [5]. Several problems persist: courses are duplicated, big data courses and professional courses remain independent of each other, and their content is disconnected, so that professional knowledge of human resource management and digital technology cannot be organically integrated. First, professional core courses and digital technology courses are taught in isolation: core courses cover only basic professional knowledge and skills, technology courses cover only general technology, and digital technologies such as big data and AI are not embedded in the teaching of professional modules, so students cannot apply digital skills to real HRM scenarios. Second, duplication and gaps coexist in course content: some traditional content is redundant across courses, whereas frontier content related to digitalisation is missing. Because course content is not coherently linked across courses, students cannot build a complete body of professional knowledge or form a knowledge framework for digital human resource management.

2.3 Lack of Graded Curriculum Design and Limited Student Understanding

The AI era imposes new competency requirements on HRM practitioners. Although the existing curriculum system is being continually adjusted, the adjustments are largely passive responses to contemporary demands; the resulting competency structure is fragmented and flat, and the curriculum is still dominated by the traditional six HRM modules [6], lacking any analysis of curriculum progression in the AI context. As emerging teaching approaches such as project-based teaching, interdisciplinary project teaching and challenge-based learning become widespread, it is essential to clarify the competencies that each course develops and to build a graded, AI-integrated curriculum system that develops students' competencies in stages.

Moreover, the digital and intelligent era creates a pressing demand for new capabilities such as AI literacy and the ability to apply AI in human resource management. However, because the discipline has traditionally been oriented towards the humanities, most students come from a liberal arts background and commonly have a weak mathematical foundation and a fear of technical concepts such as algorithms, models and data training. Many students remain at the cognitive stage of traditional human resource management and know little about the intelligent functions that AI can deliver, such as talent recommendation, performance prediction and organisational network analysis. At the same time, students' understanding of AI is seriously distorted: they lack a dialectical understanding of AI and rely mechanically on AI tools in their studies, which weakens their capacity for independent thought. On the one hand, these perceptions seriously hinder students' active learning of AI applications in the field of human resource management; on the other hand, students rely heavily on AI tools to complete assignments and other tasks. The current curriculum, course content and teaching methods have not yet systematically introduced real cases and interactive experiences of AI in the human resource field, and therefore cannot effectively break down students' cognitive barriers.

2.4 Structural Shortcomings in the Teaching

Staff

First, the AI era requires teachers to transform their roles [7]. Traditional teaching methods can hardly stimulate students' interest in learning, while rapid technological iteration creates anxiety and difficulties in adaptation for teachers, and the reconstruction of teaching scenarios poses fundamental challenges as well. Second, interdisciplinary teaching staff is weak and teachers with interdisciplinary capabilities are scarce, so that technology and its application scenarios remain two separate worlds [8] : teachers of technical courses do not understand the business logic and typical scenarios of human resource management, while teachers of human resource management do not understand how AI technology is implemented, and the lack of effective collaboration between technical and professional teaching staff makes interdisciplinary collaborative teaching difficult. Third, teachers' digital and intelligent capability and literacy need to be improved. Most teachers of the major have traditional humanities backgrounds in psychology or management and lack systematic training in AI-related theoretical knowledge and practical skills [9,10], so they have limited ability to apply AI and find it difficult to construct an AI-integrated professional curriculum system.

3. Construction of an AI-Integrated Curriculum System

3.1 Constructing a Hierarchical AI-Integrated Competency Map

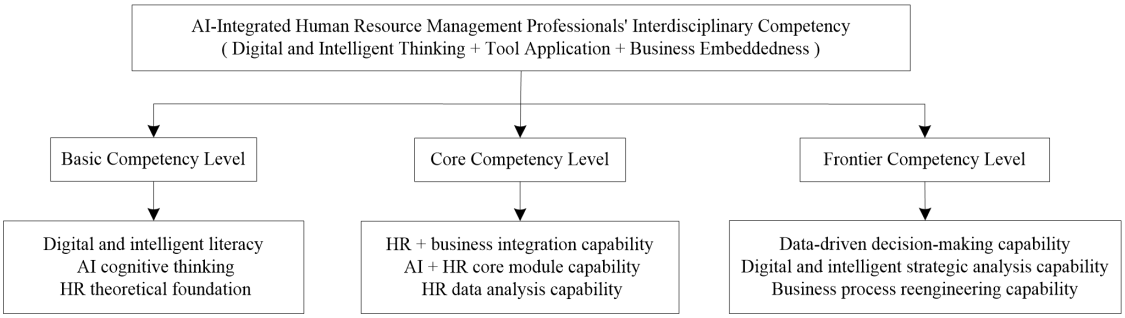


Figure 1. AI-Integrated Competency Map for Talent Cultivation in the Human Resource Management Major

Taking the AI era as the background and starting from the industry side, it is first necessary to identify which new competencies are required for Human Resource Management positions in the AI era. Through an analysis of the qualification requirements in recruitment advertisements posted on recruitment websites over the past year, online interviews with graduates, discussions with employers, discussions with peer institutions, the competency documents of related majors, and seminars with full-time teachers of the major, we gathered information on society's current demand for talent in this field and on how related majors are approaching talent cultivation in the AI era, and then summarised this information. Fragmented competencies were grouped into several dimensions and stratified to form an interdisciplinary competency map of "digital and intelligent thinking + tool application + business embeddedness", as shown in Figure 1. Specifically, the competencies of AI-integrated human resource management talents are divided into three levels: the basic competency level, the core competency level and the frontier competency level. These three levels of competency are progressive and together develop students' interdisciplinary capabilities. The basic competency level is the foundation: it mainly targets students' cognitive level, cultivates basic digital literacy and AI thinking, and helps students build a solid foundation through the full range of traditional human resource management module theory. The core competency level is the professional function integration level, which effectively delivers the value of a business partner through the integration of AI and human resource scenarios and the embeddedness of human resource work in the business. The frontier competency level is the strategic decision-making and innovation level, which cultivates students' AI strategic thinking, innovation capability and ability to solve complex problems, laying a foundation for students' career development in the three to five years after graduation.

3.2 Constructing an AI-Integrated Theoretical Curriculum System

The AI-integrated competency map for talent

cultivation in the Human Resource Management major described above provides the basis and support for constructing the professional theoretical curriculum system. Integrated courses are built for each competency level, as shown in Figure 2. Specifically, for the basic competency level, a "1 + 2 + M" integrated curriculum is constructed, in which "1" denotes one introductory course on artificial intelligence, "2" denotes two basic digital professional courses, namely digital human resource management and digital organisational behaviour, and "M" denotes several courses that develop the basic skills of HRM practitioners, such as management communication, human resource laws and regulations, leadership and team management, and workplace business etiquette. These courses improve students' digital and intelligent literacy, strengthen their understanding of and thinking about AI, help them establish a basic understanding of the digital and intelligent transformation of human resource management, build a basic theoretical framework of the field and master basic professional skills. For the core competency level, a "2 + M + N" integrated curriculum is constructed, in which "2" denotes two basic data analysis courses, namely statistics and Python programming, "M" denotes several business-related courses such as big data marketing, financial statement analysis, accounting and e-commerce, and "N" denotes several AI + human resource core module courses such as intelligent recruitment, digital and intelligent compensation design and incentives, human resource big data analysis, and AI-based training and talent development. These courses help students develop the mindset of an HR business partner, improve their human resource data analysis capability and enhance their ability to apply AI in HRM scenarios. For the frontier competency level, a "1 + M" integrated curriculum is constructed, in which "1" denotes one basic strategic management course, namely corporate strategic management, and "M" denotes several AI + strategy integration courses such as human intelligence analysis and digital and intelligent workflow and analysis.

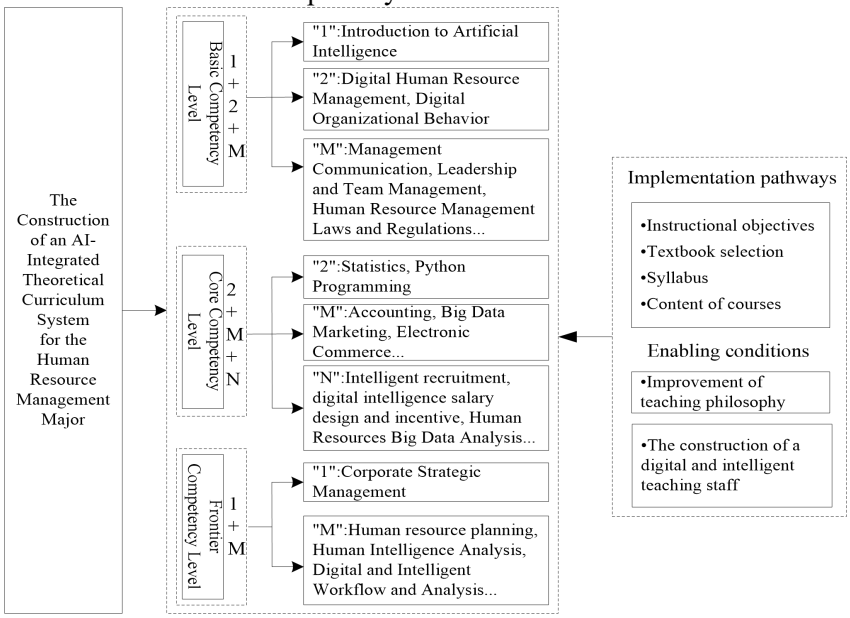


Figure 2. The Construction of an AI-Integrated Theoretical Curriculum System for the Human Resource Management Major

The theoretical curriculum system built on the AI-integrated competency map clarifies the pathway for professional talent cultivation. On the one hand, it resolves the problems of passive curriculum adjustment and of fragmented and superficial AI integration in the AI era; on the other hand, it addresses the systemic lack of AI literacy and application capability among students and their cognitive biases. The mapping between courses and competencies also helps teachers analyse student learning and helps students recognise their own weaknesses, which effectively addresses students' insufficient understanding of AI-enabled professional practice and their insufficient core competitiveness in the workplace.

3.3 Constructing an AI-Integrated Practical

Curriculum System

Experimental teaching is an important component of the teaching process of the Human Resource Management major. The digital and intelligent transformation of human resource management requires not only that the importance of digital and intelligent human resource management be emphasised in theory, but also that students be guided to master digital and intelligent capabilities at the practical level. Experimental teaching in this field in the AI era must therefore also be reformed to meet the needs of students and of the market. The AI-integrated competency map for talent cultivation in the Human Resource Management major provides the basis and support for constructing the practical curriculum system, as shown in Figure 3. Specifically, for the basic and core competency levels, a “1 + M” practical integrated curriculum is constructed, in which “1” denotes one basic AI application practice course, namely the application of AI tools, which guides students to use them correctly, and “M” denotes the practice modules for several AI + human resource core skills together with the development of AI virtual simulation case resources. For the frontier competency level, a “1 + N” practical integrated curriculum is constructed, in which “1” denotes the development of HR agents and “N” denotes school-enterprise cooperative curriculum development and industry-education integration practice activities. The practical curriculum system built on the AI-integrated competency map can effectively break down the barriers between technical courses and professional courses and effectively cultivate students' ability to use AI and big data technology to solve complex human resource management problems.

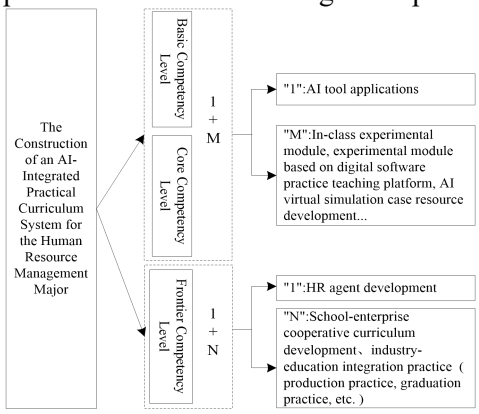


Figure 3. The Construction of an AI-Integrated Practical Curriculum System for the Human Resource Management Major

3.4 Structured Upgrading of the Teaching Staff

The digital and intelligent reform of the curriculum system must be implemented by teachers, so the digital and intelligent transformation and upgrading of the teaching staff is particularly important. First, existing teachers should be trained: teachers should be organised to participate in thematic training on AI-enabled teaching and on the application of AI in human resource scenarios, so that they can effectively link AI tools with the knowledge and skills of professional courses; a collaborative teaching mechanism between technical-course teachers and professional-course teachers should be established, with regular joint lesson preparation, exchanges and discussions among the teachers concerned, so as to enhance their interdisciplinary capabilities. Second, doctoral graduates with interdisciplinary backgrounds should be recruited as a supplement. On the one hand, new teachers with interdisciplinary backgrounds can better integrate new technologies into professional courses; on the other hand, they can bring new ideas and vitality to the teaching team and promote digital and intelligent transformation. In addition, industry-education integration can be used to deepen cooperation with the industry and to build a team of double-qualified teachers: technical experts and managers from leading enterprises can be appointed as enterprise mentors to jointly develop school-enterprise cooperative courses, while teachers can be selected and sent to enterprises systematically for training or post practice so as to accurately grasp the digital and intelligent needs of the industry. Finally, a scientific and dynamic evaluation system for digital and intelligent teachers should be established to ensure that teachers make their best efforts in digital and intelligent transformation, and making it possible to identify and correct problems in time, so that the teaching staff can successfully achieve structural upgrading.

4. Conclusion

The advent of the AI era presents unprecedented opportunities and challenges for talent cultivation in the Human Resource Management major. The idea of AI empowerment and the integration of AI into professional talent cultivation has been widely recognised by

practitioners and educators: the deep integration of AI technology and the professional curriculum system can cultivate students' digital and intelligent literacy, innovative thinking and ability to solve complex human resource management problems effectively. The reform of the curriculum system must respond to the development needs of the digital and intelligent era, continuously explore the deep integration of AI technology and the professional curriculum system, guide the reconstruction of the curriculum system with a competency map, and cultivate high-quality interdisciplinary talents.

Acknowledgments

This paper is supported by the Key Project of Educational and Teaching Reform of Guilin University of Electronic Technology (No. JGA202405), "Research and Practice on the Construction of a Curriculum System for the Human Resource Management Major Empowered by Digital Intelligence".

References

[1] Qin Zhou, Lan Chen. Application of the three-pillar model in the reconstruction of human resource management courses in the era of digital and intelligent transformation. Business 2.0, 2025(24): 163-165.

[2] Jiajun Zhao. Strategic human resource management in the era of artificial intelligence [N]. Jiangsu Economic Daily, 2025-07-25(T07).

[3] Liqian Liu, Xiaofeng Qiu. Teaching reform of digital human resource management enabled by generative AI. Business Culture, 2026(18): 163-165.

[4] Ali Chen. Advantages, risks and countermeasures of talent cultivation for the human resource management major empowered by digital and intelligent technology. Modern Vocational Education, 2026(12): 52-55.

[5] Yubo Cui, Guofa Zhang. The concept, path and practice of human resource management curriculum reform under the background of new liberal arts construction. Industrial & Science Tribune, 2026, 25(12): 203-205.

[6] Yin Zhang. Research on the innovation of talent cultivation models for the human resource management major under the background of digital and intelligent transformation. Market Modernization, 2026(15): 101-104.

[7] Yourui Zang, Liying Guo. Exploration of applied undergraduate teaching paths from the perspective of generative artificial intelligence: taking the "Human Resource Management" course as an example. Digital Communication, 2026(4): 136-138.

[8] Yilin Wang. Dilemmas and breakthroughs in the cultivation of human resource management professionals in higher vocational colleges in the era of artificial intelligence. IPR Magazine, 2026(8): 173-175.

[9] Lei Wang. Innovation and reform of practical teaching for the human resource management major under the background of digital and intelligent transformation. Heilongjiang Education (Theory & Practice), 2026(3): 96-100.

[10] Sijia Chen, Yu Jiang. Research on the reform of experimental teaching in human resource management under the background of digital and intelligent transformation. University Education, 2026(10): 35-41.