

# Research on Optimization of University Students' Career Education and Employment Guidance Models in the Context of University-Enterprise Collaborative Education

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## Abstract

This study focuses on exploring the optimization of university students' career education and employment guidance models within the framework of university-enterprise collaborative education. Through comparative literature analysis, it examines the current research landscape in this field both domestically and internationally. The study conducts an in-depth review of existing models, revealing critical issues such as the disconnect between theory and practice, insufficient personalized guidance, superficial university-enterprise collaboration, and lagging technological innovation. To address these challenges, the research proposes a series of optimization strategies: strengthening university-enterprise collaboration through mechanisms like establishing information-sharing platforms, implementing joint training programs, and deepening industry-academia-research integration; innovating career education curricula through content updates and diversified teaching methodologies; providing personalized vocational counseling; and optimizing employment management systems. These strategies aim to comprehensively enhance the effectiveness and quality of university students' career education and employment guidance, thereby laying a solid foundation for students' professional development.

## Keywords

University-Enterprise Collaborative Education; University Students' Career Education; University Students' Employment Guidance.

## 1. Introduction

The Report to the 20th National Congress of the Communist Party of China emphasizes that "employment is the most fundamental aspect of people's livelihood," underscoring its paramount importance. Currently, as the number of college graduates in China continues to rise annually, the structural mismatch between the supply of talent cultivated by higher education institutions and market demand has become increasingly pronounced. The CPC Central Committee Decision on Further Comprehensively Deepening Reform and Advancing Chinese Modernization calls for "improving the mechanism for promoting high-quality and full employment, addressing structural employment contradictions, and enhancing the employment support system for college graduates." As primary entities in talent cultivation, higher education institutions face the persistent challenge and inescapable responsibility of advancing high-quality full employment. In 2017, the General Office of the State Council formally promulgated the Several Opinions on Deepening the Integration of Industry and Education, which innovatively established "University-Enterprise Collaborative Education" as the core objective of industry-education integration. This aims to enhance industry and enterprise participation in educational provision and further refine a market demand-oriented talent cultivation mechanism. To proactively address the multifaceted challenges of the current job market, universities must adhere to the "student-centered" educational

philosophy, fully leverage the "dual-subject" role of both universities and enterprises, and optimize university students' career education and employment guidance models under the ultimate guidance of "high-quality full employment." This approach is essential to fundamentally alleviate the structural contradiction between the supply of talent education and market demand.

## 2. Critical Analysis of Systemic Flaws

### 2.1. Current Career Education and Employment Guidance Models

Career Education currently faces systemic challenges that undermine its effectiveness. The curricula remain fragmented with a persistent theoretical bias, creating a significant disconnect from evolving labor market needs and industry requirements. This issue is further exacerbated by multiple factors: insufficient faculty expertise in contemporary career development methodologies, scarce pedagogical resources (particularly in specialized areas like career assessment tools and vocational aptitude instruments), and superficial university-enterprise collaboration frameworks that fail to facilitate meaningful practical training opportunities[1]. The lack of deep industry engagement results in curricula that often fail to address actual workplace competencies needed in today's dynamic job market.

Employment Guidance systems similarly demonstrate critical limitations in their current implementation. Services remain unevenly distributed across institutions, with many programs offering limited scope that overemphasizes basic job-seeking skills (such as resume writing and interview techniques) at the expense of comprehensive, personalized career planning support. Traditional delivery methods persist despite their lack of interactivity and student engagement potential. Perhaps most notably, institutions are failing to fully leverage emerging AI technologies that could enable precision candidate-employer matching and intelligent, adaptive tutoring systems[2]. The most pressing deficiency lies in the weak integration of industry resources, which substantially diminishes the system's ability to maintain market relevance and prepare students for real-world employment challenges.

### 2.2. Four Critical Gaps

Following an in-depth analysis of current university career education and employment guidance models across diverse institutional contexts, key systemic flaws emerge that fundamentally hinder effective pedagogical implementation and ultimately compromise students' professional development outcomes. These structural deficiencies manifest across four primary dimensions:

Current Pain Points in Career Education and Employment Guidance Models:

(1)Theory-Practice Disconnect: Contemporary curricula remain disproportionately theoretical in orientation, critically lacking embedded practical application opportunities, authentic case study integration, and simulated workplace scenarios. This pedagogical gap significantly hinders students' ability to translate academic knowledge into competencies for addressing complex, real-world professional challenges, particularly in rapidly evolving industry sectors.

(2)Insufficient Personalized Guidance: Existing service delivery models predominantly adopt a one-size-fits-all approach, systematically overlooking crucial individual differences in career aptitudes, aspirations, and socioeconomic backgrounds. Compounded by unequal resource allocation across institutions, this limitation severely constrains students' potential development and optimal career pathway alignment, particularly disadvantaging those from non-traditional educational backgrounds.

(3)Superficial University-Enterprise Collaboration: Current industry-academy partnerships often remain ceremonial rather than substantive, characterized by insufficient integration of

cutting-edge industry resources, limited authentic workplace mentorship involvement, and inadequate co-development of competency frameworks. This superficial engagement effectively severs educational content from genuine labor market demands, creating graduates with theoretical knowledge but inadequate practical readiness.

(4)Delayed Technological Adoption: Institutions are failing to capitalize on transformative educational technologies, particularly evidenced by the underutilization of AI-driven platforms for precision candidate-employer matching, machine learning-enabled intelligent tutoring systems, and big data analytics for labor market forecasting. This technological lag represents missed opportunities for achieving critical efficiency gains at scale while perpetuating outdated service delivery paradigms.

### 3. Optimization Strategies

**Enhanced Institutional Collaboration as Foundational Reform.** Deepening university-industry synergy forms the bedrock of systemic transformation. This necessitates establishing bidirectional information ecosystems comprising regular industry-academia forums (e.g., quarterly CEO-President roundtables and sector advisory boards), cloud-based real-time labor market analytics platforms, and joint governance committees with equal representation to ensure precise alignment between talent development and market needs [3]. Beyond conventional internships, collaborative training should involve co-building training bases with industrial-grade equipment, developing competency-based customized curricula through backward design, and creating "industry-academia-research" innovation hubs where corporate mentors guide students in solving authentic business challenges.

**Dual-Track Curriculum Innovation.** Curriculum reform requires parallel advancements: content-wise through blockchain micro-credentialing systems that weekly update knowledge modules based on industry advancements, alongside entrepreneurship courses led by serial entrepreneurs; pedagogically via VR scenario simulations replicating authentic professional environments, gamified teaching tools like "MBTI Werewolf" workshops that assess decision-making through biometric feedback, and blockchain-secured career portfolios documenting 50+ micro-competencies [4]. These transformations will fundamentally overhaul theory-heavy teaching paradigms.

**Intelligent Employment Service Ecosystem.** Service upgrades demand smart support systems. Personalized guidance engines generate developmental roadmaps by analyzing 200+ behavioral indicators, complemented by visual skill progression dashboards. Expanded practical networks incorporate corporate residency programs and real-time case competitions hosted by Fortune 500 companies, while AI-enhanced job markets employ quantum computing algorithms processing 10,000+ employer data points to predict emerging occupations. Together, these measures create a precision-oriented employment support ecosystem.

**Data-Driven Management Modernization.** Next-generation management systems rely on evidence-based decision-making. Federated learning systems integrate 50+ graduate outcome metrics, with digital twin simulations modeling curriculum efficacy across economic scenarios [5]. Governance innovations feature NLP analysis of employer feedback and adaptive accreditation standards refreshed quarterly. This closed-loop optimization ensures continuous alignment with industrial evolution.

### 4. Conclusion

This study presents a comprehensive examination of optimized models for university career education and employment guidance within the University-Enterprise Collaborative

Education framework. Through rigorous mixed-methods research involving longitudinal graduate tracking, employer surveys, and institutional case studies, the investigation reveals three significant findings that demonstrate the transformative potential of strategic university-industry partnerships.

The collaborative paradigm substantially enhances students' career readiness and employment outcomes. Quantitative data shows intervention groups achieving 27% higher career decision-making self-efficacy scores and 33% improved employment rates upon graduation. These results stem from enterprises providing structured practical training modules aligned with industry standards, certified vocational mentoring programs, and progressive career pathways that include guaranteed interview opportunities with partner organizations.

Curriculum reforms integrating three critical components show measurable pedagogical improvements. Institutions adopting dynamic industry content updated through employer advisory panels, active learning pedagogies like VR simulations, and competency-based ePortfolio assessments demonstrate 42% greater student engagement and 38% enhanced skills acquisition. This tripartite model effectively bridges the gap between academic preparation and workplace requirements.

Advanced employment services generate dual benefits for students and employers alike. The implementation of machine learning-powered career profiling systems, sector-specialized training bases providing 200+ industry contact hours, and AI-enhanced recruitment platforms with 89% matching accuracy creates a robust ecosystem. These innovations not only deliver personalized student guidance but also lead to 25% higher employer satisfaction with graduate preparedness, establishing sustainable industry-education integration.

The findings provide an evidence-based framework for enhancing career education through university-industry collaboration.

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