

Innovative Development of University-Enterprise Cooperative Practice Bases in Media Colleges under the Integration of Industry and Education with Digital Technology

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Abstract: Digital technology is profoundly reshaping the media industry, while policies promoting industry-education integration continue to deepen. However, university-enterprise cooperative practice bases in media colleges face systemic challenges such as inadequate technological adaptation and rigid collaboration mechanisms. Drawing on samples including cooperation agreements, recruitment data, white papers, and fieldwork, this study analyzes the construction logic and operational paradigms of digitally integrated bases. It synthesizes practical experience from exemplary cases like the "Tencent Cloud – Digital Content Creation Training Base" and develops a four-dimensional pathway of "positioning reconstruction – architectural upgrading – mechanism innovation – support and guarantee," proposing a collaborative model of "joint research, resource sharing, co-cultivation, and achievement transformation." Findings indicate that digital integration practices combining practical tools with industry project demands enhance media talent adaptability, providing a replicable model for other institutions.

Keywords: Industry-Education Integration; Digital Technology; Media Colleges; University-Enterprise Cooperative Practice Bases; Collaborative Talent Cultivation

1. Introduction

Digital technology, through cloud production, intelligent interaction, and virtual simulation, has transformed media content creation into a collaborative, intelligent model [1]. This shift demands new technical application skills from media professionals, encompassing not only traditional creativity but also digital tool

operation and innovation within technological contexts. According to the 2024 Report on the Development of Media Education in China, 62% of practice bases in media colleges still face issues like slow equipment renewal, while university-enterprise collaboration often remains limited to internship arrangements, resulting in a disconnect between practical teaching and industry needs.

National and local policies provide direction for base innovation. The Action Plan for Empowering University Programs with Artificial Intelligence emphasizes "joint construction of digital technology practice platforms" [2]. The Ministry of Education's opinions highlight "strengthening university-enterprise collaborative talent cultivation" [3]. Initiatives like the Nanjing Communication University-Tencent Cloud base reflect this policy orientation, offering practical references for addressing common challenges.

This study employs case study and field research methods, focusing on officially recognized bases from three universities. It aims to clarify two core questions: How can digital technology be systematically applied to practice base construction? And how can mechanism design achieve dynamic alignment with industry needs? By examining practical experiences, this paper outlines a general construction pathway, enriching research on "technology-enabled education" and "industry-education integration," while providing media colleges with an operational guide from technology selection to outcome evaluation.

2. Theoretical Foundations and Literature Review

2.1 Definition of Core Concepts

In media college practice bases, digital

technology involves integrating mainstream industry technologies—such as cloud collaborative production systems, AI-assisted creative tools, and virtual human engines—into teaching configurations, project design, and evaluation frameworks. This enables deep coupling between base functions and industry technical standards.

University-enterprise cooperative practice bases are expected to fulfill teaching, R&D, and social service functions, requiring official recognition. They differ fundamentally from traditional internship sites, serving as core platforms linking media education with industry practice.

2.2 Theoretical Support

Collaborative innovation theory, originating from the "Triple Helix" model, emphasizes that universities and enterprises must establish a collaborative closed loop through institutional design. Competency-based education theory focuses on aligning training modules precisely with professional competency requirements. Technology adaptation theory underscores that educational technology configurations must dynamically align with industry development, explaining why traditional bases often face immediate obsolescence and highlighting the need for synchronization mechanisms.

2.3 Literature Review

Current research acknowledges technological suitability issues in media practice bases but exhibits limitations: singular technology focus, lack of empirical support, and insufficient exploration of mechanism innovation. Practical cases from various universities provide a crucial foundation, underscoring the necessity of systematically reviewing practices and summarizing generalizable methods.

3. Foundations and Policy Environment

3.1 Policy Framework

National policies like China Education Modernization 2035 identify "industry-education integration" as a key task [4]. Local policies, such as Jiangsu's AI empowerment plan, specifically support media colleges, with bases receiving significant funding. University-level institutional design ensures effective policy implementation, incorporating digital technology indicators into

base assessments and establishing special funds for technological updates. This three-tiered policy system provides strong institutional support.

3.2 Practical Foundations

Media colleges have developed differentiated base construction pathways, categorized into three functional types:

Production-oriented bases focus on short video and live streaming, incorporating cloud editing and AI tools.

Technology R&D-oriented bases leverage technologies like large language models for AI news production and public opinion analysis.

Scenario-application bases span virtual anchors and cultural tourism interactions, integrating motion capture and real-time rendering.

A preliminary "dual-mentor system" has been established across bases, laying a foundation for digital technology integration, though a standardized operational model remains underdeveloped.

4. General Innovative Construction Pathway

Based on practical experience, digitally integrated practice base construction should proceed orderly across four dimensions—positioning, architecture, mechanism, and support—forming an interconnected innovation framework.

4.1 Positioning Reconstruction: From "Single Training" to "Multi-Dimensional Collaboration"

Traditional "internship placement" centers no longer suffice. Bases must transform into a "three-platform, one-hub" model:

Digital Technology Training Platform: Equipped with continuously updated industry-standard tools.

University-Enterprise Collaborative R&D Platform: For joint technological development, enhancing student innovation.

Talent Quality Evaluation Platform: Incorporating digital skill indicators and project achievements.

Industry-Education Resource Integration Hub: Consolidating teaching and industry resources for direct demand alignment.

This reconstruction ensures base functions closely align with specialized professional clusters.

4.2 Architectural Upgrading: "Three-Layer, Two-Domain" Framework

The technological architecture balances foundational support with application-driven innovation:

Foundation Layer: Hardware and software adhering to industry standards.

Application Layer: Scenario-based training modules covering the entire media industry chain.

Innovation Layer: Joint R&D centers focusing on cutting-edge industry challenges.

Integration across on-campus teaching and enterprise industry domains is key, ensuring practical applicability through bidirectional empowerment.

4.3 Mechanism Innovation: Ensuring Sustainable Operation

Institutional design is central to long-term operation:

Governance Mechanism: Joint Management Committees and "dual-director" systems enable dual-stakeholder governance.

Collaborative Talent Cultivation Mechanism: Comprehensively covers "curriculum → project → evaluation" with deep enterprise involvement.

Dynamic Adjustment Mechanism: Addresses technological iteration through "technology synchronization + content updating," preventing obsolescence.

4.4 Support and Guarantee: Strengthening the Foundation

Faculty: Develop "dual-qualified and dual-capable" faculty through training, recruitment, and joint construction.

Funding: Diversified sources via "government subsidy + enterprise investment + university support" mitigate financial pressure.

Resources: Construct a digital ecosystem, including resource libraries and open API access, facilitating sharing.

5. Case Analysis of Innovative Construction

5.1 Nanjing Communication University "Tencent Cloud – Digital Content Creation Training Base"

Established in March 2024 to address "fragmented equipment and outdated technology," this production-oriented base leverages the Tencent Cloud MediaCube

platform to build a cloud-based, intelligent, practice-oriented training system. Technological integration deeply binds tools, curriculum, and projects. Platform integration introduced a collaborative editing system, AI subtitle generation, and distribution modules. Six jointly developed courses, like Intelligent Analysis of Live Streaming Data, utilize real Tencent Video operational data. Project practice connects with the Campus Creator Support Program; student works achieved significant views and platform recognition. In 2024, 320 students were trained, with 12 receiving Tencent certification and graduates showing 35% higher placement at leading companies. The base was recognized as a Nanjing Industry-Education Integration Demonstration Base.

5.2 Communication University of China "Baidu Intelligent Cloud – AI Media Laboratory"

Established in October 2023 to address gaps in AI news production education, this R&D-oriented laboratory focuses on AI news production, intelligent public opinion analysis, and multimodal content auditing. Its core innovation is an integrated "teaching–R&D–application" model. It incorporates the Baidu Wenxin Yiyan large model tailored for media and a real-time public opinion monitoring system. The AI + News Practice microprogram involves 60% enterprise-based sessions; students participate in tool testing and R&D, such as developing the Multimodal Content Auditing System implemented by multiple media outlets, achieving 30% cost reduction. Outcomes include National Experimental Teaching Demonstration Center status, 98% employment for microprogram graduates, and joint awards.

5.3 Zhejiang University of Media and Communications "NetEase Foxi – Virtual Digital Human Training Base"

Addressing virtual digital human industry talent shortages, this scenario-application base, established in 2023, serves Broadcasting and Hosting Arts and Digital Media Arts. It features precise alignment between technological scenarios and professional requirements, integrating NetEase Foxi's proprietary driving engine with motion capture and real-time rendering. Modules include Virtual Digital

Human Design and Virtual Live Streaming Operations; courses connect with projects like Zhejiang Satellite TV's Cultural Tourism Virtual Anchor, with student works applied in local promotion. The base hosts a national creation competition. In 2024, it served 1,500 student instances, cultivated 32 innovation projects, and delivered 87 talents to enterprises. Recognized as a provincial demonstration base, its joint project won a Zhejiang Science and Technology Progress Award, with outcomes applied in Hangzhou Asian Games cultural tourism promotion.

6. Industry Outcomes and Common Reflections

The three universities' practices yielded significant outcomes:

Enhanced Talent Cultivation Quality: Graduates' digital technology application abilities scored an average of 8.5/10, surpassing the media college average. Deepened University-Enterprise Collaboration: Evolved from "equipment donation + internship placement" to "joint R&D + co-developed courses + shared outcomes." Seventeen courses were jointly developed, patents filed, and outcome conversion efficiency improved by 200%.

Strengthened Social Service Capacity: Bases provided technical consulting, trained over 1,200 participants, and developed systems saving media organizations significant costs.

These outcomes demonstrate that digital integration systematically transforms base functions through redefined positioning, architectural upgrading, and mechanism innovation, addressing the core disconnect between practical training and industry needs.

7. Conclusion

This study analyzed real-world cases to elucidate the fundamental principles of integrating digital technology into media college university-enterprise collaborative practice bases. Integration is achieved through a four-dimensional pathway—positioning reconstruction, architectural upgrading, mechanism innovation, and support guarantee—transforming bases into multi-functional collaborative platforms. This approach emphasizes real industry tools, authentic project demands, and joint management mechanisms, ensuring

teaching-industry alignment.

Looking ahead, media colleges should strengthen technological adaptability, deepen collaboration, and integrate resources. Smaller institutions can consider alliance-based co-construction to reduce costs. Industry associations and government bodies should enhance coordination to promote standardization and resource sharing. The practices demonstrate that digital technology integration can elevate practice-oriented education quality, cultivating composite talents with technological, creative, and communication competencies. This represents both a necessary response to industry transformation and a strategic imperative for media colleges to support national educational and cultural development.

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