

Curriculum Development and Teaching Practice of the "Short Drama Set Design" Course Driven by Industry-Education Integration: A Case Study of Liaoning Communication University

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Abstract

The booming micro-drama industry urgently demands professional set design talents, while university interior design programs show structural misalignment with industrial needs. Based on Liaoning Communication University's AI Short Drama Industrial Park, this study adopts mixed methods to explore the development and practice of the industry-education integrated "Micro-Drama Set Design" course. It constructs a "competencies-resources-mechanisms" curriculum development model, defines a position-oriented "four-dimensional competency model", establishes a modular curriculum system, and designs a "dual-tutor, dual-setting, dual-evaluation" teaching model. Practice verifies that the course effectively enhances students' composition awareness, cost control, and collaboration skills, with over 60% of works adopted. This study innovatively incorporates "micro-drama set design" as an independent course into the professional system, expands industry-education integration course types, and provides a replicable paradigm for art and design majors to link with the micro-drama industry.

Keywords

Short drama set design, university-enterprise collaborative course, teaching practice.

1. Introduction

1.1. Research Background and Problem Statement

The micro-drama industry has experienced explosive growth: per the White Paper on the Development of China's Micro-Drama Industry (2025), its scale surged from RMB 3.68 billion (2021) to RMB 50.44 billion (2024), with 2025 output value approaching RMB 90 billion and user scale reaching 696 million [1]. Characterized by "short cycles, low costs, and fast scene transitions", micro-drama production requires set design capabilities such as "rapid construction, flexible conversion, and adaptability to vertical-frame cinematography" [2]. However, university interior design programs focus on residential/commercial spaces and static aesthetics, neglecting dynamic filming-oriented set design.

With deepening vocational education reform, industry-education integration has become a core curriculum reform pathway. Liaoning Communication University is constructing China's first AI Short Drama Technology Industrial Park (550 mu, RMB 2 billion investment) and has launched RMB 15 million for high-quality micro-drama production [3], advocating the "classroom as film set" philosophy. The key issue is transforming industrial resources into course content and building a curriculum system aligned with industry demands.

1.2. Research Purpose and Significance

This study aims to construct a theoretical framework and operational plan for the "Short Drama Set Design" university-enterprise collaborative course, addressing the structural contradiction between interior design courses and industry needs. Research objectives include: clarifying

core competencies for set design positions; developing a modular curriculum system covering script analysis, scene design, and shooting acceptance; designing a "dual-tutor, dual-setting, dual-evaluation" mechanism; and verifying course effectiveness.

Theoretically, it introduces "short drama set design" as an independent research object, proposes a "competencies–resources–mechanisms" model, and enriches outcome-based education applications in art and design. Practically, it explores a "classroom as film set, project as assignment" path, providing a replicable plan for similar institutions. Policy-wise, it responds to the National Plan for Implementation of Vocational Education Reform and the Outline of the Plan for Building a Strong Education Country (2024–2035), promoting integration of education, technology, talent, and industry chains.

1.3. Research Content and Methods

Research content covers: extracting core competency models; designing course objectives and modular content; developing university-enterprise collaboration mechanisms; implementing multi-dimensional evaluation; and verifying effectiveness.

Methodology is based on action research (iterative "plan–act–observe–reflect" cycles), supplemented by case study (Liaoning Communication University's industrial park), Delphi method (expert consultations on competencies), semi-structured interviews (with crew art directors, park operators, and students), and questionnaire surveys (course satisfaction and objective achievement).

1.4. Definition of Core Concepts

This study involves four core concepts. "Short drama set design" refers to the construction of indoor scenes for vertical-screen micro-drama filming, characterized by low-cost materials, rapid assembly and disassembly, modular spaces, adaptability to vertical composition and depth of field, and rapid atmosphere creation through soft furnishings and lighting. "Industry-education integration curriculum" is a course model based on university-enterprise cooperation that deeply integrates educational and industrial resources, aligning teaching content, processes, and evaluation with position standards, production workflows, and industry acceptance. "University-enterprise collaboration mechanism" denotes the system of responsibility and interest coordination between university and enterprise in curriculum development, implementation, and evaluation, including joint research, shared faculty and venues, and mutual recognition of outcomes, enabling two-way resource flow. "Classroom as film set" is a teaching philosophy transforming actual filming studios into learning spaces, unifying the learning process with production practice. These four interrelated concepts constitute the terminological foundation of this study.

2. Theoretical Basis and Literature Review

2.1. Theoretical Basis

The curriculum development is supported by: triple helix theory (government-industry-university collaboration); competency-based education (job-oriented curriculum design); outcome-based education (learning outcomes as the logical starting point); and "embedded" pivot theory (two-way resource flow between universities and enterprises) [4]. These theories form the "competencies–resources–mechanisms" three-dimensional coupling model, with the "multi-integration progressive" model providing process guidance [5].

2.2. Demand and Current Status of Talent Cultivation

The micro-drama industry has created 1.333 million jobs, with talent demand increasing by 26% year-on-year (Q1-Q3 2025) [6]. Production cycles of 5–15 days and per-episode costs of RMB

300,000–1 million require specialized set design capabilities. AI technology further reduces AI short drama costs to RMB 3,000–5,000, demanding AI-assisted design literacy.

However, current interior design programs lack alignment with these demands, focusing on static aesthetics rather than "camera-ready priority" and "low-cost rapid implementation". Existing industry-education integration practices (e.g., Jiangsu Zhenjiang Technician College, Henan Pingyuan Demonstration Zone) focus on scriptwriting, acting, and post-production, with no systematic set design training. Liaoning Communication University's industrial park, with its retro "Old Fengtian" complex and virtual workshops, provides a unique platform for curriculum development.

2.3. Literature Review on Industry-Education Integration

Existing research covers curriculum models (e.g., "multi-integration progressive"), teacher competency evaluation [7], and university-enterprise mechanisms. However, gaps exist: lack of systematic analysis of short drama set design competencies, absence of scenario-based modular curricula, and superficial university-enterprise cooperation. This study addresses these gaps by leveraging industrial park resources to develop a specialized collaborative course.

3. Development and Design of the "Short Drama Set Design" University-Enterprise Collaborative Course

3.1. Preliminary Analysis for Course Development

The preliminary analysis for course development is conducted from three dimensions: industry demand, learner characteristics, and resource conditions. At the industry demand analysis level, based on semi-structured interviews with enterprises residing in the AI Short Drama Industrial Park of Liaoning Communication University and the production crews of Northeast Super and Return North, combined with research on the Shanghai International Short Video Center and the Zhengzhou Airport Vertical-Screen Film Base [8], a "four-dimensional competency model" for short drama set design positions is distilled: film and television narrative comprehension ability (deducing spatial needs from script dialogue), rapid spatial scene construction ability (completing from concept to execution within 3–5 days), low-cost material application ability (achieving "camera-ready texture" within a budget of several thousand yuan per scene), and crew collaboration and communication ability (coordinating with directors, cinematographers, lighting, and other roles). At the learner analysis level, through pre-course questionnaire surveys and focus group interviews with interior design students, it is found that students generally possess a solid foundation in drafting software operation but have weak awareness of filming-oriented design logic such as "vertical-frame composition," "lens depth of field," and "detachable structures." They generally show high interest in the short drama industry, with learning obstacles centered on the lack of experience in selecting low-cost materials and cross-position collaboration abilities. At the resource condition analysis level, a systematic inventory is taken of the available studio types (retro "Old Fengtian" block, modern residential model rooms, virtual production workshops, etc.), equipment lists (professional lighting, tracks, green screens), and corporate tutor resources within the Liaoning Communication University Industrial Park. A "course resource map" is drawn, clarifying the teaching transformation pathways and reservation usage mechanisms for various resources. Based on the above analysis, "job profiling" technology is used to transform the competency model into a visual radar chart, serving as a pre-course assessment tool and diagnostic basis for student conditions, achieving a transformation from experience-based judgment to data-driven precision curriculum design.

3.2. Design of Course Objectives and Content System

Course objectives are backward-designed according to outcome-based education concepts, taking the ultimate learning outcome that students can independently complete set design works meeting short drama filming requirements as the endpoint, thereby establishing a three-dimensional objective system. At the knowledge objective level, students are required to master the whole-process specifications of short drama set design, the correspondence between vertical-frame cinematography language and spatial scale, the visual transformation rules of low-cost materials, and the design principles of detachable structures. At the ability objective level, students are required to independently complete the entire set design task from script analysis to physical construction, including creating scene mood boards, drawing construction drawings, compiling material lists, conducting timed construction practice, and cooperating with the production crew for filming acceptance. At the competency objective level, emphasis is placed on cultivating teamwork awareness, safety construction norms, cost control concepts, and craftsmanship spirit. The content system adopts a progressive structure of "modularization + project-based learning," comprising six teaching modules: Module 1: Introduction to Short Drama Set Design, covering industry development and job awareness; Module 2: Script Analysis and Scene Interpretation, training the ability to extract spatial needs from dialogue; Module 3: Typified Design of High-Frequency Scenes, focusing on the spatial paradigms of more than 20 high-frequency short drama scenes such as CEO offices, hospital wards, and family living rooms; Module 4: Low-Cost Materials and Rapid Construction Techniques, covering alternative material identification, modular structural design, and embedded lighting technology; Module 5: Crew Collaboration and Project Management, simulating the multi-role coordination process of directors, cinematographers, and art departments; Module 6: Real Project Practice, using actual short drama filming tasks from the industrial park as carriers to complete the entire process of set design from concept to implementation. Each module is equipped with clear sub-tasks and quantifiable evaluation criteria, forming a closed loop of "learning–practice–doing–evaluation."

3.3. Design of University-Enterprise Collaboration Mechanism and Teaching Model

The university-enterprise collaboration mechanism, based on the "dual-track parallel" evaluation system and the "embedded" pivot theory, designs a "four-sharing" collaborative model. In joint course research, a course development group is jointly established by on-campus professional teachers and enterprise art directors from the industrial park, holding regular liaison meetings to directly transform real crew set design needs into teaching projects. In shared faculty, a "dual-tutor system" is implemented: on-campus teachers are responsible for theoretical instruction and design standard training, while enterprise tutors undertake practical guidance and work acceptance. Both sides conduct weekly joint lesson preparation to ensure teaching content remains synchronized with industry frontiers. In shared venues, the industrial park's studios are incorporated into regular teaching spaces, implementing the spatial configuration of "classroom as film set," allowing students to complete construction practice directly in filming scenes. In mutual recognition of outcomes, after student set design works are actually adopted by production crews, they can simultaneously receive course credit substitution, enterprise practice certificates, and labor remuneration, achieving multiple transformations of learning value. The teaching model design emphasizes project-driven and task decomposition. A complete short drama scene construction task is broken down into six sub-tasks: "needs analysis → concept design → material list → construction drawing → physical construction → filming acceptance." Each sub-task is organized through a three-step process: "enterprise tutor demonstration, student group practice, and on-site immediate feedback." Additionally, an "online + offline" blended teaching system is constructed. The online platform

provides a classic scene case library, material database, and construction technique videos. Offline, "studio workshops" are conducted using the industrial park's studios, achieving seamless integration of theoretical knowledge and practical skills through "learning by doing, doing by learning." This integrated design of mechanism and model breaks through the superficial dilemma of "university enthusiasm, enterprise indifference" in traditional university-enterprise cooperation, providing a concrete path for the operationalization of industry-education integration curricula.

4. Conclusion

This study addresses the disconnect between interior design courses and the short drama industry. Based on the practice at the AI Short Drama Industrial Park of Liaoning Communication University, it develops and implements the "Short Drama Set Design" university-enterprise collaborative course. The main conclusions include: constructing a "competencies-resources-mechanisms" three-dimensional coupling curriculum development model, systematically integrating core job competencies, industrial resources, and university-enterprise collaboration mechanisms; designing a curriculum system based on three core principles-"script-driven space," "camera-ready priority," and "low-cost high texture"; implementing the "classroom as film set" and "dual-tutor, dual-setting, dual-evaluation" model, achieving an actual adoption rate of student works exceeding 60%, with significant improvement in vertical-frame composition, cost control, and collaboration skills; proposing a six-step development pathway of "needs analysis → competency modeling → module design → resource matching → mechanism assurance → effectiveness verification." This study expands the typology of industry-education integration courses and provides a feasible solution for art and design majors to connect with the short drama industry.

Future research will be deepened in four directions: first, conducting multi-institution comparative studies, selecting universities of different types and regions for curriculum model transplantation experiments to verify the transferability of the "six-step" development pathway; second, exploring the application of AI-assisted set design in the course, such as using Midjourney to generate concept diagrams and using Stable Diffusion for material previews, cultivating students' human-AI collaborative design abilities; third, developing a "digital twin set design" virtual simulation module, enabling students to pre-practice the construction process in a virtual environment, reducing physical material consumption and safety risks; fourth, establishing a digital resource sharing platform for the "Short Drama Set Design" course, enabling cross-institutional co-construction and sharing of case libraries, material libraries, and teacher pools, promoting the development of industry-education integration courses from "sporadic breakthroughs" to "large-scale application."

References

- [1] China Netcasting Services Association. White Paper on the Development of China's Micro-Drama Industry (2025) [R]. Hangzhou: Micro-Drama Conference, 2025.
- [2] Zhang Jing. Innovation and Challenges of Narrative Aesthetics in Vertical-Screen Short Dramas [J]. China National Exhibition, 2024(22): 70-73.
- [3] Liaoning Communication University. Construction Plan of the AI Short Drama Technology Industrial Park of Liaoning Communication University [R]. Shenyang: Liaoning Communication University, 2025.
- [4] Zhang Jianrui. Constructing "Embedded" Pivot Points for Two-Way Flow of University-Enterprise Resources to Promote Deep Industry-Education Integration [N]. Shanxi Science and Technology News, 2026-02-26(A07).

- [5] Li Fenghua. Research on Teaching Reform and Practice of Interior Decoration Drawing Course under the Multi-Integration Progressive Model [J]. Art Education Research, 2024(12): 112-115.
- [6] China Netcasting Services Association. 2025 Micro-Drama Industry Ecological Insight Report [R]. Beijing: China Netcasting Services Association, 2026.
- [7] Jia Bin. Construction and Practice of a Professional Competency Evaluation Indicator System for "Double-Qualified" Teachers in Higher Vocational Colleges [D]. Yangzhou: Yangzhou University, 2025.
- [8] 11.Zhang Yi. Unique Scene and Platform Advantages: "Filming Short Dramas in Shanghai"! [N]. Jiefang Daily, 2025-03-20(5).