The Digital Transformation Path of UI Design Course in Private Colleges and Universities Under The Perspective of Blended Teaching

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Abstract

In the context of educational digital transformation, UI design courses in private universities face dual challenges of innovating teaching models and enhancing talent cultivation quality. Blended learning, as a new teaching model integrating online and offline approaches, provides a viable pathway for the digital transformation of UI design courses. This paper analyzes the current status and challenges of digital transformation in UI design courses at private universities. By integrating the core characteristics of blended learning, it explores specific pathways for the digital transformation of UI design courses from five dimensions: curriculum system restructuring, teaching model innovation, practical platform development, faculty team building, and evaluation mechanism reform. The aim is to provide references for improving the quality of talent cultivation in UI design programs at private universities.

Keywords

Blended Teaching; Private Universities; UI Design Courses; Digital Transformation; Teaching Reform.

1. Introduction

With the rapid development of the digital economy, UI design – serving as a vital bridge connecting users with digital products – has seen explosive growth in talent demand. As key institutions for cultivating applied professionals, private universities 'teaching quality in UI design courses directly determines students' employability and industry adaptability. Driven by the wave of educational digital transformation, traditional classroom-centered UI design education models can no longer meet the industry's growing need for high-caliber, versatile design talents.

Blended learning integrates online digital instruction with offline physical teaching, preserving the advantages of traditional face-to-face interaction while leveraging the sharing, flexibility, and personalization of digital educational resources. This approach provides innovative solutions for reforming UI design courses. Private universities, characterized by flexible operational mechanisms and strong market responsiveness, possess inherent advantages in digital curriculum transformation. However, they also face practical challenges such as insufficient resource investment and faculty members' inadequate digital competencies. Therefore, exploring digital transformation pathways for UI design courses within private universities through blended learning perspectives holds significant theoretical value and practical implications. [1]

2. Theoretical Basis of Blended Teaching and Curriculum Digital Transformation

2.1. The connotation and characteristics of blended teaching

Blended Learning is an instructional strategy that optimizes teaching effectiveness by integrating traditional face-to-face instruction with online education, leveraging the strengths of both approaches. Its core characteristics include: integration of learning spaces (combining virtual and physical environments), consolidation of educational resources (integrating digital materials with traditional textbooks), interaction in teaching activities (combining asynchronous online discussions with real-time classroom engagement), and personalization of learning processes (blending self-directed study with teacher-guided instruction).

For the "UI Design" course, blended learning addresses issues in traditional teaching such as insufficient practical opportunities, outdated industry case studies, and difficulties in meeting students' personalized learning needs. For example, students can learn basic design software operations through online platforms in advance, while offline classes focus on design thinking training and project-based practical guidance, forming a closed-loop teaching model of "online foundation building + offline deepening."

2.2. Core elements of curriculum digital transformation

The digital transformation of curriculum is not simply to move teaching content online, but to reconstruct the teaching system through digital technology. The core elements are:

Digital teaching resources: including micro-lecture videos, interactive courseware, virtual simulation projects, industry case library, etc.;

Intelligent teaching platform: a technical platform that supports online learning, assignment submission, teacher-student interaction and learning data analysis;

Digital teaching mode: innovation of teaching methods based on digital technology, such as flipped classroom, project-based learning, collaborative design, etc.;

Digital evaluation system: use data analysis technology to achieve comprehensive tracking and multi-dimensional evaluation of the learning process.

The digital transformation of UI design courses should pay special attention to the combination of practice and innovation, shorten the distance between classroom teaching and industry practice by simulating real design scenarios through digital technology. [2]

3. The Current Situation and Difficulties of Digital Transformation of UI Design Courses in Private Colleges and Universities

3.1. Current situation analysis

In recent years, private colleges and universities have generally realized the importance of digital reform of UI design courses, and some colleges and universities have carried out preliminary exploration:

Introduce online teaching platforms, such as Chaoxing Learning Hub and Zhihuishu, to upload teaching videos and courseware, so as to realize online teaching of some content;

Try the blended teaching mode: arrange basic content such as software operation online, and focus on case analysis and practical guidance in offline classes;

Construction of digital training base: cooperate with enterprises to build virtual design studio and introduce real projects in the industry for teaching.

These explorations have improved the teaching efficiency to some extent, but the overall teaching is still in the initial stage and a systematic digital teaching system has not yet been formed. [3]

3.2. Main dilemmas

Fragmentation of teaching resources and lack of systematic integration

Digital resources for UI design courses in private universities are predominantly fragmented courseware and videos, lacking structured repositories that deeply align with curriculum objectives and instructional processes. The update pace of these resources lags behind industry developments, failing to reflect the latest trends and technologies in UI design (such as the application of AIGC in UI design).

Online and offline teaching "two separate skins", the integration is insufficient

Most institutions' blended learning models remain at the basic level of "online self-study + offline lectures", failing to achieve deep integration of educational objectives, teaching activities, and assessment methods. Online learning lacks effective supervision and guidance, while offline classrooms fail to fully utilize online data feedback to optimize teaching strategies.

The degree of digitalization of practical teaching is low and it is out of touch with the industry

UI design emphasizes cultivating practical skills, but private universities face limitations in funding and technology, leading to delayed development of digital practice platforms. Students struggle to access authentic design processes and collaborative tools, resulting in a noticeable gap between "what is taught in class" and "what job requirements demand."

Teachers lack digital competence and limited motivation to transform

While UI design instructors at private universities demonstrate strong professional expertise, they often lack proficiency in digital technology applications and blended learning design. Moreover, the digital transformation of academic curricula requires significant time and effort investment, yet the absence of effective incentive mechanisms has resulted in low teacher engagement.

The evaluation system is single and fails to reflect the effectiveness of digital learning

The existing evaluation still focuses on the final work and examination, and lacks a comprehensive evaluation of students' online learning process, collaborative ability, innovative thinking and other aspects, which is difficult to reflect the quality of talent training under digital transformation.

4. The Digital Transformation Path of UI Design Course from The Perspective of Blended Learning

4.1. Refactoring the integrated curriculum system of "online+offline"

Guided by the concept of blended learning, breaking the linear structure of traditional courses, and constructing a digital curriculum system that is modular, tiered, and emphasizes practice:

Digital splitting of course modules

Decompose the UI design course into four modules: "Design Fundamentals," "Software Skills," "Design Thinking," and "Project Practice. Among them, the "Design Fundamentals" (such as color theory, layout design) and "Software Skills" (such as Figma, Sketch operation) modules mainly focus on online teaching, developing micro course videos, interactive exercises, and instant feedback systems; The "Design Thinking" and "Project Practice" modules mainly focus on offline teaching, deepening learning effects through case studies, group collaboration, and teacher feedback.

Build a dynamically updated digital resource library

Jointly build a UI design resource library with industry enterprises, including:

Real time updated industry case library (covering mobile applications, web design, smart device interfaces, etc.);

Reusable design component library (icons, controls, templates, etc.);

Virtual simulation project library (simulating real scenarios such as e-commerce app redesign and smart watch interface design);

Expert interview video library (inviting corporate designers to share practical experience).

The resource library is shared between teachers and students through a cloud platform, and is regularly updated based on industry development and teaching feedback to ensure the cutting-edge and practical nature of teaching content. [4]

4.2. Innovative blended learning mode and teaching activities

Implement the teaching model of "flipped classroom+project driven"

Before class: Students learn theoretical knowledge and software operations through online platforms, and complete basic exercises; Teachers use platform data analysis to grasp students' learning difficulties.

In class: Conduct specialized lectures on problems encountered in online learning and organize students to design projects in groups (such as designing a mobile interface for a certain brand); Teachers play the role of guides, guiding students to use design thinking to solve practical problems.

After class: Students submit their design works through online platforms and receive peer feedback from teachers and classmates; Utilize collaborative tools such as Tencent Docs and Figma collaboration mode to complete project iteration optimization.

Introduce immersive digital teaching scenarios

Build a virtual design studio using VR/AR technology to simulate the real design process (requirement analysis, user research, prototype design, testing iteration); By using digital twin technology to restore the working environment of enterprise design teams, students can experience the collaborative work process with product managers and development engineers, and enhance their job adaptability.

4.3. Building a digital practice platform that combines virtual and real elements

Build a digital training center on campus

Configure high-performance computers, graphics workstations, and motion capture devices, and establish a dedicated laboratory for UI design; Introduce enterprise level design tools and collaboration platforms (such as Figma, Axure, Blue Lake, etc.) to ensure that the tools used by students are synchronized with the industry.

Develop an online practice platform for school enterprise collaboration

Jointly build a "cloud design workshop" with Internet enterprises to disassemble the real projects of enterprises into practical tasks suitable for teaching; Students receive tasks, submit proposals, and receive feedback through the platform, achieving a seamless connection between "in school learning" and "enterprise practice". The platform can also record students' practical processes and achievements, form a digital portfolio, and provide strong support for employment.

Introduce AI assisted design tools

Integrating AI design tools (such as Midjourney and MasterGo AI) into teaching, guiding students to use AI for inspiration generation, material processing, and solution optimization, and cultivating their design competitiveness in the era of intelligence; At the same time, guide

students to have a correct understanding of the relationship between AI and human creativity, and avoid excessive reliance on technology.

4.4. Enhance the digital teaching capability of the teaching staff

Build a "trinity" training system

Technical ability training: Conduct skills training on digital teaching platform operation, micro course production, live streaming teaching, etc;

Teaching design training: Invite educational technology experts to guide the design of blended learning programs and enhance the integration of teaching activities;

Industry technical training: Cooperate with enterprises to organize teacher participation in UI design new technology (such as AIGC, full chain design) training to ensure that the teaching content is in line with the industry. [5]

Establish a digital teaching incentive mechanism for teachers

Incorporate digital teaching achievements into the teacher assessment and evaluation system, and reward excellent digital courses and teaching cases; Support teachers to apply for digital teaching reform projects and encourage them to conduct teaching research and innovation.

3. Establish interdisciplinary teaching teams

Integrating design teachers, educational technology personnel, and enterprise designers to form a teaching team, dividing labor and collaborating to complete digital resource development, teaching mode design, and practical guidance, forming a teaching synergy with complementary advantages.

4.5. Building a diversified digital evaluation system

Implement a comprehensive evaluation of "process+results"

Using learning analytics techniques to track process data such as students' online learning duration, resource access records, and homework completion quality; Conduct a comprehensive evaluation based on offline project performance, team collaboration ability, and final design work to comprehensively reflect students' learning outcomes.

Introduce a multi-party evaluation mechanism

Establish a diversified evaluation system that combines teacher evaluation, student peer evaluation, and enterprise evaluation: teachers focus on professional ability evaluation, student peer evaluation focuses on collaboration and communication ability evaluation, and enterprise designers evaluate student works from the perspective of industry standards to enhance the objectivity and practicality of evaluation.

Adopt digital evaluation tools

Using online assessment systems to automatically correct basic knowledge; By designing a collaborative platform to record the contribution of team projects, precise evaluation of individual performance within the team can be achieved; Introduce digital scoring standards for design works to improve the standardization and transparency of evaluation.

Conclusion and Prospect

Blended learning provides a systematic solution for the digital transformation of UI design courses in private universities. Its core lies in the deep integration of online and offline, reconstructing the teaching system, innovating teaching models, and enhancing practical abilities. Private universities should combine their own characteristics and promote transformation from five dimensions: curriculum system, teaching mode, practical platform, faculty team, and evaluation mechanism, in order to effectively improve the quality of UI design talent cultivation.

In the future, with the development of technologies such as artificial intelligence and metaverse, the digital transformation of UI design courses will face new opportunities and challenges.

Private universities need to maintain sensitivity to technology and industry trends, continuously optimize their digital teaching system, and cultivate high-quality talents who not only master solid design skills but also possess digital literacy and innovation capabilities, providing strong support for the development of the digital economy.

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