Research on Innovative Models of Photography Education in Higher Education under the Context of Integrated Media

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Abstract: The innovation in the era of integrated media directly impacts the photography industry, prompting reforms in higher education photography curriculum and teaching methods. Reforms are centered around demonstrations through short videos, integrating industry with courses, using competitions to stimulate teaching, and interactive assessments. Leveraging the internet as a platform for display, the study emphasizes the application of the era of universal photography in the teaching of photography in art majors and general photography courses in universities. This approach harnesses tools such as big data, cloud computing, cloud storage, and artificial intelligence to effectively enhance the learning efficiency of contemporary university students in acquiring theoretical knowledge and practical skills in photography.

Keywords: integrated media; photography education; competition-driven teaching

1. Introduction

The development and widespread adoption of information technology have blurred the boundaries between media, gradually influencing the photography industry in the era of integrated media. An era of photography for the masses is gradually emerging. Art programs in universities universally offer photography courses, with many organizing clusters of photography courses within disciplines such as digital media, new media, film, television, and broadcasting. Even non-art majors at universities are now offering photography as a general elective or public art course, reflecting the prevalent image-driven culture and the internet era in which contemporary university students have grown up. These students exhibit stronger tendencies towards individuality and novelty-seeking.

In the age of image consumption and prevalent internet use, continuing to employ teaching theories and classroom methods from the early era of film photography may fail to ignite students' interest in today's rapidly advancing photography education. While such approaches may lead to passing grades, they often result in limited practical skills acquisition and hinder the development of innovative abilities.

In the age of image consumption, photography education in higher education plays a pivotal role in nurturing comprehensive talents, particularly in fostering artistic talents. Fields like visual communication, new media, environmental art, industrial design, fashion design, and fine arts all rely on photography skills. Concurrently, the thriving photography industry heavily relies on the support and promotion of photography education in universities.

To meet the market demand for skilled photographers, higher education institutions must enhance students' photography skills through diversified course offerings and practical activities. This necessitates universities to actively pursue educational reforms, increase investment in digital infrastructure for photography courses, fully utilize integrated media technology, and update instructors' teaching philosophies and methods in photography. Through these measures, we can steer photography education in universities towards a more harmonious and robust direction, cultivating a greater number of professional talents proficient in high-level photography skills to meet societal needs.

[1]
2. The Teaching Mode Problems In Photography Courses

2.1. Lack Of Practical Innovation And Skill Development In Photography Education In The Era Of Integrated Media

Photography education in higher education institutions, whether as a foundational course in photography or within arts disciplines, has undergone many years of development. However, deeply influenced by traditional teaching methods, its educational philosophies and methods appear outdated. Despite some improvements under the influence of multimedia educational reforms, digital photography education closely linked with technological innovation and integrated media still lacks profound reform.

Currently, many university instructors predominantly focus on theoretical teachings of photography history, basic principles, and methods, supplemented by limited practical activities, with assessment primarily through theoretical exams. This teaching approach often falls short in fostering a comprehensive understanding of photography. In today's era of widespread photography and internet image consumption, photography has evolved from being primarily an art form to a means of life documentation. Yet, existing education often overlooks cultivating students' comprehensive abilities in photography and lacks guidance on appreciating and evaluating excellent photographic art.

As a result, students often understand photography works only at the level of composition and lighting, rather than integrating life experiences with humanistic, artistic, and technical aspects to deeply grasp the artistic and humanistic connotations of photography works. This situation hinders the cultivation of students' autonomy, innovation awareness, and capabilities. Additionally, photography instructors overly emphasize students' mastery of photography techniques. While this enables most students to produce technically adequate works using various photographic skills and methods, these works often lack artistic sensibility and fail to showcase individual styles.[2]

2.2. Lack of Utilization of Online Teaching Resources in Photography Education in the Era of Integrated Media

In today's era where "Internet+" profoundly impacts all industries, higher education has actively embraced this transformation. However, it is noteworthy that some universities have not timely adjusted their photography teaching methods and content, nor effectively optimized or diversified their teaching resources. Consequently, their photography education appears monotonous, with instructors relying mainly on textbooks for theoretical teaching and minimal practical activities to enhance students' photography skills. This traditional teaching approach not only fails to stimulate students' interests but also hinders the development of their innovative thinking and comprehensive literacy, thus failing to meet the higher demands of integrated media era on photography technology, art, and creation. Therefore, innovation in teaching methods in higher education photography is urgently needed, with full utilization of online resources to adapt to the needs of the new era.

2.3. Lack of Teaching on the Dissemination Value of Works in Photography Education in the Era of Integrated Media

Traditional photography education often overly focuses on the technical aspects such as the use of light, composition techniques, and color coordination, aimed at helping students "capture a good photo." However, this teaching approach neglects the importance of interpreting photos from the perspective of integrated media, i.e., how to effectively disseminate high-quality photographic works to a wider audience and realize their higher social value. In the era of integrated media, transforming photographic works from mere artistic creations into media images with broad dissemination power is crucial for innovative development.

2.4. Lack of Innovative Classrooms and Evaluation Methods in Photography Education in the Era of Integrated Media

In the era of integrated media, due to institutional constraints or instructors' adherence to traditional teaching methods, photography education continues to adhere to old classroom teaching models. In this model, instructors typically deliver theoretical lectures using multimedia on the podium, complemented by physical demonstrations of shooting equipment, followed by students' learning and shooting practices. However, this teaching method has become outdated, failing to inspire enthusiasm and
initiative among students in the era of integrated media and struggling to create attractive highlights in the classroom.

3. The Ideas And Innovation Of Photography Teaching Reform

With the continuous innovation and progress of Internet technology, digital media has exhibited a diversified development trend and has been widely applied across various industries. Against the backdrop of a new era in education, higher education institutions emphasize nurturing highly qualified and capable professionals who meet the developmental demands of the integrated media era through photography education. This requires photography professionals to not only master various cutting-edge photographic technologies and methods but also possess a solid foundation in professional theory and good professional ethics.

Under the context of integrated media, reforms in photography education models emphasize integrating Internet technology with photography theory teaching to fully stimulate students' interest in learning and enhance the effectiveness of photography classroom teaching (Figure 1). Through reforms in photography curriculum content, teaching methods, and evaluation mechanisms, the aim is to improve teaching quality significantly. Based on online micro-video teaching, which can better change the current classroom teaching methods, and integrating industry market demands with curriculum reform, students can better engage with real social needs. Using competitions to promote learning allows students to experience the trends of the times and understand the evolving requirements of academic disciplines for skills.[2]

![Figure 1: Photography Teaching Models in the Context of Integrated Media](image)

4. Strategies And Methods Of Photography Teaching Reform

4.1. Reform of curriculum standard teaching content under the background of financial media

4.1.1. Transforming Photography Teaching Philosophy: Scientifically Formulating Photography Course Standards Based on the Era of Integrated Media

In the era of flourishing integrated media, higher education institutions urgently need to deepen innovation and reform in the construction of photography courses. Photography educators must profoundly understand the crucial role of digital technology, multimedia, network technology, and online communication in both photography theory and practical teaching. This understanding should drive proactive adjustments in teaching philosophies. Teachers need to comprehensively consider students' actual photography learning levels and personalized learning needs to design targeted standards for photography courses. This ensures that teaching quality aligns with the development of the times, better cultivating outstanding photography talents adapted to the era of integrated media.[3]

In practical teaching processes, photography instructors should integrate modern technological means, such as using virtual reality to simulate shooting environments or providing remote practical guidance through online platforms, to enhance students' practical capabilities and innovative thinking. Simultaneously, instructors should encourage students to participate in various photography projects.
and competitions to improve their professional skills and teamwork abilities through real-world practice. Through these innovative teaching methods, higher education photography education will better meet the demands of the integrated media era, nurturing more photography professionals with solid theoretical foundations and outstanding practical abilities.

4.1.2. Enhancing Photography Theory Content: Innovating Theoretical Teaching Models

In higher education photography theory teaching, we should fully explore and utilize the potential of online photography teaching resources to maximize teaching efficiency. To achieve this goal, universities should actively introduce and apply diversified photography teaching network resources. Additionally, photography instructors need to flexibly integrate multimedia and network technologies to create vivid and effective theoretical teaching environments.

During actual teaching, teachers can use multimedia devices such as projectors to showcase classic photography works. Based on this, teachers can guide students in group-based exploration and in-depth analysis of these works. By appreciating and analyzing the highlights of different photography works, instructors should encourage students to actively express their own ideas and viewpoints. This approach not only enhances students' aesthetic abilities but also cultivates their critical thinking.

This photography theory teaching method, integrating multimedia and network technologies, will significantly stimulate students' enthusiasm for learning while notably improving their levels of photography theory knowledge and practical operational skills.

4.1.3. Improving Teaching Methods: Enriching Interactive Forms

In higher education photography theory teaching, to break away from traditional single teaching modes and ignite students' enthusiasm for learning, we should fully leverage the convenience of mobile internet to create extracurricular network sharing and communication platforms such as Weibo, WeChat, Xiaohongshu, and Douyin. Through these platforms, each student's outstanding works can gain broader and more influential dissemination, directly connecting with high-quality resources within the industry.[3]

Furthermore, establishing these emerging network platforms facilitates teachers in answering students' questions and sharing learning experiences anytime and anywhere, thereby expanding the temporal and spatial scope of learning beyond the confines of the classroom. This approach not only broadens the scope of teaching but also greatly promotes efficient interaction between teachers and students, fostering a closer linkage between teaching and learning mechanisms.

4.2. Reform of blended online and offline teaching methods in the context of integrated media

The rapid development of information technology has brought profound changes to the field of education. Since 2012, the rise of Massive Open Online Courses (MOOCs) has sparked a new wave of educational informatization globally, presenting both new challenges and opportunities while significantly influencing traditional teaching models. Currently, MOOCs have gained strong momentum in Western countries like the United States, giving rise to online education giants such as Coursera, Edx, and Udacity, thereby greatly expanding students' learning pathways. In China, notable online teaching platforms such as Chinese University MOOC (CUMOOC), Smart Learning Tree, and Chaoxing-Erya have also emerged. Recently, the Ministry of Education of China officially announced a recommended list of online courses, further promoting the development of online education.

In this round of educational reform, we utilized micro-video resources to pre-record and produce a comprehensive "Fundamentals of Photography" MOOC course covering entire knowledge modules, and subsequently established the corresponding MOOC platform. According to the teaching plan, instructional videos are released one week prior to or on schedule for student preview. Students watch MOOC videos beforehand to grasp foundational knowledge and skills in photography. During face-to-face classes, students participate in discussions based on the pre-learned content to further deepen and expand on teaching materials. In the practical photography segment, students refer to case studies on the MOOC platform for hands-on shooting exercises and share their own works for feedback and exchange. For students with weaker foundations, if they encounter difficulties during practice, they can access relevant instructional videos from the video library for review at any time. Some students achieve deeper learning by repeatedly watching videos.

After classes, teachers analyze big data such as students' video views and assignment quality to adjust teaching strategies and optimize instructional videos continuously, thereby enhancing teaching
quality and efficiency.

Online video courses primarily use case studies as starting points, presenting a work, providing appropriate explanations for its creation, and then recreating the photography process using real scenarios and actual techniques. Through techniques like animation, the process of creating the work is standardized in the video. Students learn by watching the videos, comparing with them, and imitating the filming process shown in the videos. By reproducing the given case study works, students acquire photography skills effectively.

4.3. Construction Of Industrial Market + Course Teaching Mechanism Under The Background Of Financial Media

In the context of the multimedia era, the industrial characteristics of the photography industry are becoming increasingly significant. The prosperity of a country's photography industry directly reflects its capacity in the information and internet age for creating, disseminating, and consuming visual information. Therefore, the combination of the photography industry market and photography course teaching can provide students with authentic social service needs. The future growth potential will be larger than that of artistic works. In the creative process of photography, it is essential to accurately target specific user groups. For image consumers, photographers act as manufacturers and processors of image consumables. Therefore, optimization and improvement of the photography creation process and business models are necessary(Figure 2). In this process, photography creation no longer remains solely the responsibility of individual photographers but involves meeting the demands and expectations of the entire photography consumer group.[4]

![Figure 2: Mechanisms for Building Industry Markets and Curriculum Teaching in the Context of Integrated Media](image)

4.4. Improving The Artistic Level Of Works Through Competition To Promote Learning In The Context Of Integrated Media

The concept of "learning through competition" in photography education refers to guiding students to participate in various photography competitions, both within and outside the school, to help them deeply understand the specific demands of society and the economy on photographic art. In this process, students apply the theoretical knowledge of photography learned in class to practical creation, thereby enhancing their comprehensive artistic skills in photography.[5]

The teaching model of "learning through competition" sets higher requirements for the professional competence of photography teachers. It necessitates the adoption of advanced teaching methods because photography competitions often require works to meet higher standards in terms of intellectual depth, artistic expression, and innovation.

Combining photography competitions with photography courses demonstrates its unique value. These competitions, characterized by openness, provide students with a broad stage. They offer greater freedom in choosing and creating subjects based on their own interests and understanding.

Taking the Zhejiang Province University Student Photography Competition 2022 as an example, themed "The Road to Common Prosperity," illustrates this. This theme holds significant contemporary relevance and profound implications. When students participate in such photography competitions, they
not only hone their photography skills but also freely explore and express their thoughts and emotions within a vast thematic space.

Therefore, when guiding students to participate in learning and training activities through competition, photography teachers should fully leverage students' initiative. They should encourage students to select competition categories that truly showcase their strengths and interests. Such choices allow students to engage more deeply in competitions and gradually enhance their ability to interpret photographic themes through practical experience.

More importantly, this approach stimulates students to integrate their theoretical knowledge of photography with the actual creative process. Through this integration, students gain a deeper understanding and mastery of photographic theory. They continuously refine their photography skills through practice, thereby comprehensively enhancing their overall proficiency in the field of photography.

This teaching model undoubtedly provides students with a comprehensive and multi-faceted platform for learning and training, facilitating greater progress and achievements in the discipline of photography. In practical teaching activities, teachers should integrate competition elements, transforming competition content into specific practical projects to stimulate student participation effectively. Project-based learning not only encourages full student involvement but also helps them accumulate photography experience and hone their photographic skills through practical operations.

Teachers, after grasping the specific content and themes of competitions, should promptly respond by planning detailed project schedules based on competition requirements. This transforms traditional teaching methods into project-driven innovative teaching models. Guided by this teaching model, teachers need to lead students in-depth learning of photography knowledge and conduct practical activities centered around competition themes. Under careful guidance from teachers, students progress through stages of material collection, creative conceptualization, and actual shooting. These processes collectively contribute to a comprehensive enhancement of students' practical photography skills.

4.5. Improving Teaching Evaluation Mechanism And Innovate Evaluation Methods

In the evaluation mechanism of academic performance, we should not confine ourselves to conventional assessments of classroom performance, subjective evaluations by teachers, and written exam scores alone. It is crucial to place greater emphasis on comprehensive assessments of students' aesthetic sensibilities, social observation skills, and communication abilities in photography education. This approach not only reflects the practical nature of photography courses but also promotes the holistic development of students' comprehensive qualities. It ensures that they not only master professional skills but also possess broader capabilities and perspectives.[6]

Given the challenges of accurately quantifying image quality evaluation, unlike the precision seen in STEM subjects, and aiming to effectively prevent plagiarism while enhancing students' own photography skills and cultivating their independent thinking and creativity, we can consider introducing a simulated market-oriented peer review mechanism. Such a mechanism enhances teaching interaction, improves the fairness and objectivity of performance evaluations, and thereby motivates students to create more original and thought-provoking photographic works.

Against the backdrop of the digital media era, our research team proposes a novel assessment organizational approach designed to comprehensively evaluate students' photography skills and creative abilities while enhancing the fairness and interactivity of evaluations.

Firstly, students are divided into different groups and form their own simulated "studios" based on these groups. This organizational structure not only cultivates students' teamwork skills but also provides them with a platform to showcase their talents. At the end of the semester, each "studio" holds a simulated "review and observation session," publicly displaying their photographic works. During this event, each group has the opportunity to introduce their works and explain their creative concepts and photographic processes to other students and teachers. Meanwhile, other students act as clients, rating and evaluating the works of each group. This evaluation method not only increases the interactivity of assessments but also allows students to view their own works from different perspectives, thereby gaining a more comprehensive understanding of their strengths and weaknesses.

Subsequently, teachers will specially establish a photography evaluation column on the school's internal communication network platform, granting each "studio" the privilege to upload their works. Leveraging this platform, each "studio" has the opportunity to showcase their photographic works for
anonymous "likes" evaluations from all students in the department where the teaching class is located. This platform employs strict access controls and is not publicly accessible to ensure fairness and equity in online voting. Each student can only register a single ID with their personal student number, and limits are placed on the number of "likes" per ID to safeguard the fairness of online voting. This mechanism enables students to receive feedback and evaluations from more peers, allowing for a more precise assessment of their photography skills and creative strengths.

By integrating the results of the two aforementioned evaluation steps, we can derive the most transparent and fair assessment scores for each student. The innovative nature of this evaluation mechanism lies in its clever use of the psychological desire of "Post-00s" students to showcase their individuality, effectively stimulating their participation and creative enthusiasm. Furthermore, this approach breaks away from the traditional "one-way street" evaluation model, reducing students' resistance to evaluations. Importantly, students can directly experience the profound impact and allure of the internet in showcasing works and disseminating information throughout this process. This evaluation method is not only fair and effective but also serves as an excellent pathway to integrate implicit education into explicit courses.

5. Conclusion

Starting from the perspective of integrated media, we have initiated reforms in photography curriculum teaching, revising the syllabus, leveraging short videos, and implementing blended online and offline teaching. Additionally, we stimulate learning through competitions, reform evaluation mechanisms, and integrate photography works into industrialized social services. The concept of integrated media is fully reflected in these reforms:

1) Integration of Teaching Methods: We incorporate the concept of integrated media by utilizing short videos for "learn and teach again" purposes.

2) Integration of Teaching Content: Photography students engage in practical case studies derived from real-life scenarios, integrating photography into communicative contexts while ensuring practicality.

3) Integration of Academic Evaluation: We reform previous teacher-centric evaluation mechanisms to include student peer evaluation and mutual commendation, fostering enhanced mutual learning.

4) Integration of Competition to Stimulate Learning: Students are involved in media projects during their learning stages, organizing comprehensive considerations based on project units.

Acknowledgement


References