Exploration of the Teaching Path of Landscape Architecture in the Context of New Media Environment

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Abstract　The rapid advancement of network information technology has established new media technology as a significant tool for instruction in higher education both domestically and internationally. Its impact has increasingly extended into the realm of landscape architecture education, resulting in unprecedented transformations and innovative potential within traditional teaching methodologies. This study initially delineates the conceptual framework of new media technologies and subsequently conducts a comprehensive analysis of the novel opportunities and challenges that advancements in these technologies present for landscape architecture education. This study examines the effective integration of new media technology into the teaching of landscape architecture within the context of the new media environment. The objective is to innovate and modernize teaching methodologies, thereby enhancing students' academic interest and fostering their capacity for innovation. Finally, several strategic recommendations for reforming teaching practices within the context of the new media environment in landscape architecture are presented, aiming to serve as a valuable reference for educators in the field.

Key words　New media, Landscape architecture, Teaching reform

1　Introduction

New media encompasses the utilization of digital technology, network technology, and mobile communication technology. It operates through the Internet, wireless communication networks, and various other channels, employing major output devices such as mobile phones, computers, and televisions. This framework enables the provision of real-time, interactive, extensive, and personalized audio, video, and other forms of information and services to users[1]. President Xi Jinping emphasized that to realize the objectives associated with "two centenary goals" and to establish a socialist modern power, it is essential to secure a leading position in the advancement of informatization. This entails the construction of a robust networked nation, the development of a digital China, and the creation of an intelligent society, all of which should facilitate modernization through informatization[2]. In contemporary society, the rapid advancement of scientific and technological innovations is continuously evolving. Modern information technologies, including the Internet, cloud computing, and big data, have significantly transformed human cognition, production methods, daily life, and educational practices. These developments have also provided a compelling illustration of the potential trajectories for global development[3].

The profound integration of new media within educational practices has the potential to facilitate comprehensive transformations in the field of education. The advancement of the integration and development of information technology in education has emerged as a critical strategic pivot for educational reform and innovation globally[4]. The frequency and scope of new media utilization in educational curricula are on the rise. Particularly in specific contexts, this trend has the potential to enhance the continuity of education by facilitating remote, efficient, and contactless learning experiences.

The integration of new media in education presents several challenges. On the one hand, the rapid advancement of technology necessitates that both educators and learners engage in ongoing learning and adaptation to emerging tools and platforms. On the other hand, issues such as information overload and cybersecurity concerns introduce significant challenges that may impact the quality of education as well as the physical and mental well-being of students. Consequently, the challenge of maximizing the benefits of new media technology while ensuring the quality of education is a matter that contemporary educators must contemplate thoroughly.

2　Positive impacts of new media on the teaching of landscape architecture

2.1　Playing a constructive role in advancing ideological and political education　General Secretary Xi Jinping emphasized the importance of utilizing new media and emerging technologies to invigorate the work of ideological and political engagement. He advocated for a high level of integration between the traditional strengths of ideological and political work and information technology, with the aim of enhancing its contemporary relevance and appeal. The integration of new media with curriculum ideology and

politics is utilized in the development of curriculum ideology and politics within higher education institutions. This process involves a thorough exploration and organization of professional knowledge, as well as a critical reassessment of its cultural heritage and value systems. Subsequently, the cultural essence and value orientation inherent in professional courses are distilled and transformed into effective teaching modalities. This approach reflects the intrinsic value of nurturing, thereby facilitating the establishment of moral education and character development in a subtle and unobtrusive manner. New media technology significantly enhances the effectiveness of ideological and political education by broadening the available resources and facilitating cross-border communication and exchange among students[5].

2. 2 Changing the traditional mode of education and broadening the channels of interaction between teachers and students In traditional curriculum models, classroom instruction serves as the primary mode of teaching and learning for both educators and students. In this context, the teacher's instructional methods and the students' acquisition of knowledge are characterized by a top-down, unidirectional approach to indoctrination. This framework is further constrained by the limitations imposed by classroom time settings and curriculum arrangements, which restrict the students' learning experiences and communication opportunities due to spatial and temporal limitations. In the contemporary media landscape, online communication, facilitated by instant messaging and various digital tools, has emerged as a supplementary platform for interaction between educators and students. This development offers an expanded space and enhanced opportunities for emotional communication and the exchange of academic perspectives between teachers and learners.

2. 3 Providing convenient and lively teaching materials New media resources offer a plethora of materials for educational purposes, characterized by their engaging formats, accessibility, and real-time updates. Educators can effectively gather and curate appropriate supplementary materials to enhance teaching resources by utilizing platforms such as Tik Tok (Douyin), Bilibili, Kuaishou, MOOCs, and SPOCs. This approach ensures that instructional activities remain contemporary, align with societal trends, and are closely connected to real-world contexts, thereby increasing the appeal of the educational content for students.

2. 4 Providing assistance and reference for practice teaching of landscape architecture New media serves as both a bridge and an accelerator in the teaching of landscape architecture practice. It enriches pedagogical approaches, enhances teaching efficiency, and broadens students' perspectives by offering a variety of resources, including virtual reality, online resource libraries, digital design tools, and social media communication platforms. Furthermore, new media facilitates students' understanding of industry dynamics and improves their practical operational skills as well as their innovative design capabilities.

3 Challenges confronting the educational development of landscape architecture in the context of the new media environment

3. 1 Teaching models tend to overemphasize the dominance of the teacher but fail to adequately embody the principles of a student-centered educational philosophy In the traditional educational model, instructors frequently assume a dominant role within the classroom, while students are relegated to a passive position in the acquisition of knowledge. This approach stands in contrast to the student-centered paradigm promoted by contemporary educational practices[6]. The traditional teaching approach characterized by a combination of textbooks and lectures often fails to engage students effectively, resulting in a detrimental effect on the development of their critical thinking skills and intrinsic motivation for independent learning. Consequently, this method leads to low classroom efficiency. It is evident that the conventional one-way instructional model is inadequate in addressing the learning requirements of contemporary students.

3. 2 Some of the courses present significant challenges in terms of study The conventional pedagogical approach, which predominantly depends on instructors' verbal presentations and textual explanations of educational materials, poses challenges in the concretization and visualization of abstract concepts and processes. This limitation often leads to difficulties for students in achieving a profound comprehension of the subject matter[7]. Particularly, certain courses focused on landscape plants, including floriculture, landscape plant cultivation, and plant landscaping, necessitate practical training across various seasons to accommodate the distinct requirements of the plant growth cycle. However, in practical teaching contexts, students often struggle to fully comprehend the skills and techniques associated with landscape plants across various seasons and time periods. This limitation is primarily due to the constraints imposed by the academic calendar and the timing of seasonal changes.

3. 3 Traditional teaching evaluations exhibit a lack of diversity The assessment methods employed by certain colleges and universities in the field of landscape architecture remain rooted in traditional pedagogical approaches, indicating a lack of timely reform. Currently, China is actively advocating for a comprehensive quality education framework, with the objective of fostering moral awareness among college students and enhancing their learning and practical skills. In the realm of traditional education, assessment methods tend to be inflexible, placing excessive emphasis on students' final grades while overlooking their daily learning efforts and overall development. This approach can significantly undermine students' self-confidence. As the reform of landscape architecture education progresses, it is imperative that the assessment and evaluation system undergoes transformation. Furthermore, it is essential to establish a teaching evaluation framework that embraces the concept of diversified development[8].

4 Application of new media technology in landscape architecture education and innovative paths

4.1 In-depth development of virtual teaching resources Virtual Reality (VR) immersive experience: the utilization of VR technology to develop an immersive landscape experience involves the deployment of advanced virtual environment equipment. This approach enables the provision of a comprehensive 360-degree landscape simulation space for students within a brief timeframe. Consequently, it significantly enhances students' spatial perception abilities, allowing them to engage in landscape exploration and tours within a virtual environment.

4.2 Building an intelligent learning interactive platform Mobile learning platform: the course modules have been meticulously designed to incorporate various digital teaching resources, including courseware, microclasses, test banks, and industry standards, into the learning platform. This integration facilitates the efficient assignment of homework and promotes knowledge exchange, thereby enabling students to engage in learning at any time and from any location.

Social collaboration tools: applets, WeChat groups, QQ groups, and other digital tools can be utilized to create interactive learning communities that enhance communication between educators and students, as well as foster collaboration among students.

4.3 Innovative practice of teaching mode The blended teaching mode involves the integration of online virtual instruction and traditional face-to-face teaching, creating a mutually reinforcing educational framework. This model provides students with an innovative educational experience by facilitating the organic integration of teaching theories, methodologies, resources, and environments in both online and offline contexts. Furthermore, it empowers educators to implement more targeted instructional activities. Through the integration of online and offline modalities, the instructional methods can be enhanced, leading to a substantial improvement in the quality of education[9-10].

The flipped classroom teaching method involves guiding students to acquire knowledge through online resources, while in-class time is dedicated to discussions, practical applications, and addressing queries. This approach encourages students to engage in independent thinking and exploration, enhances their capacity for self-directed knowledge acquisition, and empowers them to take control of their own learning process.

4.4 Innovative organization of teaching activities Virtual design competitions: landscape architecture design competitions are organized to promote the utilization of virtual tools among students for innovative design practices.

Online seminars: regular online seminars are conducted, featuring industry experts who share their valuable experiences and insights into cutting-edge technologies.

Collaborative design of projects: students are encouraged to collaborate across disciplines and grade levels to successfully complete practical training projects. Students engage in the learning process through collaborative efforts, creative and critical thinking, and teamwork, which serve to deepen their understanding of knowledge and enhance their cognitive abilities, as well as other comprehensive skills.

4.5 Diversified evaluation system A variety of methods, including online assessments and virtual project reviews, are employed to continuously monitor students' learning progress. The development of final evaluation modules and metrics is achieved through diverse evaluation techniques, such as digital documentation, process-based attendance tracking, questioning, and quizzes. These approaches aim to ensure the objectivity, comprehensiveness, integrity, and flexibility of the evaluation system, thereby facilitating a diversification of the criteria used for assessing online learning.

5 Conclusions

In an era characterized by rapid advancements in science and technology, the evolution of new media is occurring at an accelerated pace. We are currently experiencing an information explosion, marked by the emergence of diverse technologies and platforms, including artificial intelligence, virtual reality, and mobile internet. These innovations are significantly transforming individuals' lifestyles and learning processes. China's higher education system, particularly in the domain of landscape architecture, must recognize the significant responsibilities it holds and effectively leverage the development opportunities presented by advancements in new media technology. Landscape architecture education should not only provide professional knowledge but also foster students' capacity to adapt to future societal demands. This necessitates that educators engage in forward-thinking and continuously explore and implement innovative educational models. It is imperative to revise the conventional paradigm of education, optimize pedagogical approaches, emphasize the diversification of educational methodologies, and continually expand students' perspectives. The traditional educational model is predominantly teacher-centered, resulting in students passively receiving knowledge. This approach has become overly simplistic and outdated in the context of the information age. Contemporary educational paradigms prioritize a student-centered approach, resulting in a transformation of the teacher's role to a guide and facilitator. This shift enables students to engage in self-directed exploration and learning. For instance, innovative instructional methods such as the flipped classroom model and project-based learning are employed to enhance students' interest in learning and to foster their innovative thinking.

Simultaneously, it is essential to integrate and enhance educational resources, improve the efficiency of classroom instruction, and ensure that the teaching content is adaptable to the learning needs of the contemporary era. This approach aims to promote the

comprehensive advancement and development of landscape architecture in the modern context. The integration of educational resources encompasses not only physical facilities, such as library materials and laboratories located on campus, but also collaboration with external organizations, including enterprises and research institutes. This collaboration aims to offer students a more extensive practical platform through the sharing of resources. Furthermore, it is essential to update educational content. The curriculum of landscape architecture must remain current and incorporate contemporary concepts related to ecological conservation and sustainable development. This approach will better equip students to address the diverse challenges they may encounter in their future careers. In conclusion, in response to the challenges and opportunities presented by the new media era, it is imperative for China's landscape architecture education to proactively adapt to contemporary changes. This necessitates continuous innovation and enhancement of educational practices, aiming at cultivating a greater number of landscape architecture professionals equipped with an international perspective, innovative capabilities, and practical skills. Such efforts are essential for contributing to the advancement of China's ecological civilization and promoting sustainable development.

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