

Research on the Application and Innovation of Environmental Design in Ideological and Political Work in Universities

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Abstract: As higher education continues to evolve, the effective integration of environmental design and ideological and political work has become a key issue for enhancing educational outcomes. This paper delves into the theoretical foundations, current status, and applications of environmental design in conjunction with ideological and political work, proposing innovative models and strategies. First, the article analyzes the core theories of environmental design, including environmental psychology, spatial cognition, and environmental behavior theory, and explores their intersection with ideological and political education theory, educational psychology, and socio-cultural theory. Second, the paper evaluates the current state of environmental design in universities, identifying the effectiveness and challenges, such as insufficient alignment with objectives, technical and financial limitations, and imperfect evaluation mechanisms. Lastly, the article introduces innovative models like thematic design, functional zoning, and immersive experience design, suggesting interdisciplinary integration, intelligent design, and community feedback mechanisms as strategies for innovation. Practical guidance and policy recommendations are provided to promote the deeper application of environmental design in ideological and political education.

Keywords: university environmental design; ideological and political work; environmental psychology; application model; innovative strategies

Introduction

In modern higher education, ideological and political work is not only a crucial component in cultivating students' comprehensive qualities but also a core task for improving educational quality. Environmental design, as a key method of shaping educational atmospheres, has a significant impact on the effective implementation of ideological and political education. However, traditional environmental design primarily focuses on functionality and aesthetics, often neglecting how design optimization can support the achievement of ideological and political education goals. Therefore, exploring innovative applications of environmental design in ideological and political work is urgently needed. The significance of this study lies in revealing how environmental design can more effectively serve ideological and political education through theoretical research and practical analysis, promoting a deeper integration of the two to enhance educational quality and students' moral development. Currently, many universities have yet to fully tap into the potential of environmental design to strengthen the practical effects of ideological and political education, necessitating scientific theoretical support and innovative strategies to optimize design plans and maximize educational outcomes.

1. The Theoretical Foundation of Environmental Design and Ideological and Political Work

1.1 Core Theories of Environmental Design

The core theories of environmental design encompass multiple dimensions, including environmental psychology, spatial cognition, and environmental behavior. These theories provide a solid foundation for the application of environmental design in ideological and political education.

Environmental psychology theory reveals the significant impact of physical environmental attributes—such as color, lighting, and layout—on individual emotions and behavior. Researchers like Robert Gifford have pointed out that environmental design not only shapes perceptual experiences but

also improves psychological states by optimizing spatial layouts and visual effects. Specifically, warm tones and reasonable lighting design can create a comfortable learning atmosphere, enhancing students' emotional engagement and motivation. This theory offers psychological support for applying environmental design to ideological and political education, demonstrating how environmental optimization can strengthen educational outcomes, thereby increasing students' recognition and participation in the educational content.^[1]

Spatial cognition theory focuses on how individuals understand and navigate space. Richard Smith's research suggests that spatial layout and functional organization directly affect behavior patterns and social interactions. For example, in the ideological and political work of universities, a reasonable spatial layout can guide student behavior and promote interaction, thereby improving participation and the effectiveness of educational activities. Space design should consider students' behavioral habits and interaction needs to create functional, well-flowing educational environments. Environmental behavior theory further complements this by emphasizing the role of environmental factors in shaping and guiding behavior. Under the combined influence of these theories, environmental design is no longer just decoration but becomes a functional educational tool that effectively supports the realization of ideological and political education goals. Through scientific environmental design, the learning experience can be optimized, promoting positive thought exchanges and behavior changes.

1.2 Theoretical Foundation of Ideological and Political Work

The theoretical foundation of ideological and political work includes ideological and political education theory, educational psychology theory, and sociocultural theory. Ideological and political education theory primarily focuses on cultivating students' ideological and moral qualities and sense of social responsibility through systematic education and practical activities. Zhixiang Zhang believes that the core of ideological and political education lies in enhancing students' intellectual depth and moral standards through targeted educational methods. This theory provides direction on how environmental design can facilitate ideological and political education.

Educational psychology theory further explains the impact of the environment on students' psychological development. Jerome Bruner proposed that optimizing the educational environment can support students' cognitive and emotional development. Ideological and political education should integrate these psychological principles by creating supportive environments that enhance students' learning experiences and educational outcomes. Additionally, sociocultural theory emphasizes the role of cultural background and social interaction in shaping individual behavior and thought. Lev Vygotsky pointed out that sociocultural factors within the educational environment can significantly influence students' learning and development, providing cultural support for the application of environmental design in ideological and political work.

1.3 The Integrated Theory of Environmental Design and Ideological and Political Work

The integrated theory of environmental design and ideological and political work explores how the theories of environmental design can be combined with the practice of ideological and political education. Environmental design, by creating spaces with cultural symbolism and educational value, can enhance the emotional resonance of ideological and political education. For example, designing spaces with historical and cultural backgrounds can increase students' recognition and engagement with ideological and political education content, thereby subtly promoting the achievement of educational goals.^[2]

At the same time, spatial design should align with the practical needs of ideological and political education activities to optimize the functionality of educational environments. Setting up discussion areas, display zones, and activity spaces can effectively support educational activities and encourage student interaction and communication. This design strategy not only improves the practicality of educational environments but also enhances the effectiveness and participation in educational activities.

Moreover, innovative strategies in environmental design, such as intelligent design and the application of interactive technologies, further promote the enhancement of ideological and political education outcomes. For instance, using virtual reality to create immersive learning experiences or employing intelligent environmental management systems to optimize space usage are innovative measures that increase the attractiveness and functionality of educational environments. Through a cross-disciplinary theoretical framework, the organic combination of environmental design and

ideological and political education promotes innovative developments in the field of education .

2. Current Situation of Campus Environment Design and Its Application in Ideological and Political Work

2.1 Analysis of the Current Situation of Campus Environment Design

At present, campus environment design is undergoing a transformation from traditional functional layouts to diversified and comprehensive environmental creation. With the increasing demand for students' holistic development in higher education, environment design not only focuses on basic campus infrastructure but also actively incorporates cultural, educational, and psychological needs. Modern campus environment design emphasizes flexibility and adaptability of spaces, aiming to create environments that support various academic and social activities. The functional division of spaces has become more refined, with learning areas, leisure areas, and interactive zones designed to meet the diverse needs of students effectively.

Moreover, green design and sustainable development have become important directions in current environment design. Universities are increasingly paying attention to the use of eco-friendly materials and energy-saving technologies in their designs, striving to create healthy, environmentally friendly learning environments. Many universities have begun to introduce design elements such as green roofs, water-saving facilities, and natural lighting to reduce environmental impact and improve the quality of students' lives and learning experiences. This eco-oriented design approach not only aligns with modern education's requirements for sustainable development but also provides students with a more comfortable and supportive learning environment .^[3]

2.2 Application of Environment Design in Ideological and Political Work

The application of environment design in ideological and political work has already demonstrated its unique role and effectiveness. Many universities have started to integrate ideological and political education into campus environment design, enhancing the implementation of such education through spatial layout, decoration, and functional configuration. For example, some universities have established dedicated ideological and political education display areas, showcasing the history of the Party, cultural activities, and the core values of socialism, thereby creating a strong educational atmosphere. These spaces not only provide students with places for learning and reflection but also inspire their ideological awareness and sense of social responsibility.

Additionally, the application of environment design in ideological and political work can be seen in its ability to influence student behavior and interaction. By designing open communication areas and interactive spaces, universities can encourage student discussions and collaboration, thereby increasing the engagement and practical aspects of ideological and political education. The reasonable layout of functional zones and the design of themed walls allow students to encounter ideological and political education content in their daily studies and lives, achieving an imperceptible educational effect. This design strategy effectively integrates ideological and political education into students' everyday lives, making the content not confined to the classroom but permeating every corner of the campus.

2.3 Challenges and Problems

Despite the achievements in the application of campus environment design in ideological and political work, there are still many challenges and problems. First, the alignment between environment design and the goals of ideological and political education is insufficient. Many universities fail to fully consider the specific needs and objectives of ideological and political education during the design process, leading to some designs being disconnected from actual educational outcomes. For instance, while some designs may be aesthetically pleasing and functional, they fail to effectively reflect the core content and values of ideological and political education.^[4]

Second, technical and financial challenges in the design process are also significant obstacles. High-quality environment design requires substantial resources and technical support. However, many universities, constrained by limited budgets, find it difficult to achieve their ideal design outcomes. This not only limits the innovation and practicality of the design but also affects the actual impact of ideological and political education.

Additionally, the evaluation and feedback mechanisms for environment design are not well established. Universities often lack systematic evaluation standards and feedback mechanisms for assessing the impact of environment design on ideological and political education. This makes it difficult to effectively verify and optimize the outcomes of certain design schemes, ultimately affecting the overall educational effect. To address these issues, future design processes need to strengthen the analysis of ideological and political education needs, enhance the scientific and targeted nature of the designs, and establish effective evaluation and feedback mechanisms to continuously improve and optimize environment design schemes.

3. Application Models and Innovative Strategies of Environmental Design in Ideological and Political Work

3.1 Exploration of Environmental Design Application Models

In ideological and political work, the application of environmental design is transitioning from traditional functional configurations to more interactive and participatory models. This shift not only enhances the educational function of environmental design but also strengthens the effectiveness of ideological and political education. The current main application models include thematic design, functional zoning design, and immersive experience design. Each model supports ideological and political education in different ways, which will be discussed in detail below.

3.1.1 Thematic Design

Thematic design refers to a model where specific educational themes are embodied through spatial design. This approach creates areas with distinct educational purposes, such as historical and cultural exhibition halls or corridors displaying the core values of socialism, integrating the core content of ideological and political education into the campus environment. This model uses visual, auditory, and tactile stimuli within the space to reinforce students' recognition and emotional identification with ideological and political education themes. For example, by designing a historical and cultural exhibition area that showcases the Party's history and revolutionary culture, students can deeply understand and experience the core concepts of ideological and political education through real-life exhibitions. Thematic design not only enhances the cultural depth of the educational environment but also increases students' engagement and immersion in educational content.

3.1.2 Functional Zoning Design

Functional zoning design is a method that divides campus spaces into different functional areas to support various forms of ideological and political education activities. This model establishes designated discussion zones, exhibition areas, and interactive zones to promote student dialogue and interaction, thereby improving the participation and effectiveness of ideological and political education. For example, discussion zones provide open spaces to encourage students to exchange ideas and engage in debates; exhibition areas are used to display content related to ideological and political education, such as biographies of important figures or reviews of significant events; interactive zones include installations or activity platforms that stimulate student participation and interaction. This model emphasizes the multifunctionality and flexibility of space, allowing educational activities to be adjusted and optimized based on actual needs, thus enhancing their effectiveness.^[5]

3.1.3 Immersive Experience Design

Immersive experience design leverages modern technologies such as virtual reality (VR) and augmented reality (AR) to create immersive learning environments. This design model uses high-tech methods to provide vivid and immersive ideological and political education experiences. For instance, VR technology can simulate historical events or major social scenarios, allowing students to experience and understand the core content of ideological and political education in a virtual setting. Immersive experiences not only deepen students' perception of educational content but also offer more vivid and realistic learning scenarios, thereby improving learning outcomes and engagement. The application of immersive experience design represents a cutting-edge innovation in environmental design for ideological and political education, effectively enhancing interaction and educational effectiveness.

By exploring thematic design, functional zoning design, and immersive experience design, it becomes evident that the application of modern environmental design in ideological and political work is moving towards more interaction and participation. These innovative models not only enhance the educational function of environmental design but also provide new perspectives and methods for the

implementation of ideological and political education. In future applications, combining the latest technologies and design concepts will further promote the effectiveness of ideological and political education and the innovative development of environmental design.

3.2 Innovative Application Strategies

The application of innovative strategies in environmental design is key to enhancing the effectiveness of ideological and political education. First, interdisciplinary integration in design is increasingly becoming a focus of innovation. By combining environmental design with theories from psychology, sociology, and education, it is possible to create more scientifically grounded and effective educational environments. For example, applying environmental psychology theories to optimize spatial layouts, while incorporating educational principles in designing interactive areas, can enhance the support role of the environment in ideological and political education.

Second, intelligent design is an effective way to enhance the functionality and interactivity of environments. By introducing smart technologies such as intelligent lighting, environmental monitoring, and interactive display systems, it is possible to adjust and optimize spatial environments in real-time to meet the varying needs of ideological and political education activities. For instance, intelligent lighting systems can automatically adjust the light intensity based on the time of day and activity content, while smart interactive screens can display educational content and real-time feedback, improving student engagement and learning outcomes.

Additionally, the establishment of community involvement and feedback mechanisms is another important component of innovative strategies. By engaging students, faculty, and other stakeholders within the campus in broad communication, designers can understand their needs and feedback, allowing for continuous optimization and improvement of design schemes. This strategy not only enhances the relevance and practicality of the designs but also increases the effectiveness and sustainability of ideological and political education activities.

3.3 Practical Guidance and Policy Recommendations

To effectively implement environmental design in ideological and political work, scientific practical guidance and policy recommendations are essential. First, universities should establish a comprehensive environmental design planning system that aligns the goals of ideological and political education with those of environmental design. During the design phase, specific educational needs should be clearly identified and incorporated into the design scheme to ensure that the design effectively supports the achievement of educational goals.

Second, it is recommended that universities strengthen the evaluation and feedback mechanisms during the design implementation process. A scientific evaluation system should be established to assess the actual effectiveness of environmental design regularly and adjust and optimize based on feedback. By quantifying evaluation indicators such as student participation, educational effectiveness, and environmental satisfaction, problems can be identified and addressed in a timely manner, improving the overall design effectiveness.^[6]

Finally, from a policy perspective, support for the deep integration of environmental design and ideological and political education should be encouraged. Government and education authorities should develop relevant policies to promote the incorporation of innovative elements in environmental design and provide necessary funding and technical support. Additionally, successful case studies should be shared to spread experience and best practices, promoting the widespread application of environmental design in ideological and political education. Policy guidance and resource support will foster the innovative development of environmental design and improve the overall quality of ideological and political education.

Conclusion

This paper systematically examines the application of environmental design in ideological and political work within universities, proposing various innovative models and strategies, and providing practical guidance and policy recommendations. The research demonstrates that environmental design can not only enhance students' sense of identity and participation in ideological and political education but also improve the interactivity and multifunctionality of the educational environment through

optimized spatial layouts and the introduction of intelligent technologies. However, current practices still face challenges, such as a mismatch between environmental design and ideological education goals, insufficient funding and technical support, and the lack of a comprehensive evaluation mechanism. Future research should focus on two main areas: first, enhancing the long-term tracking and evaluation of the integration of environmental design and ideological education, establishing a scientific evaluation system to better optimize design outcomes; second, exploring more cutting-edge design technologies such as virtual reality (VR) and artificial intelligence (AI) to boost the innovation and interactivity of environmental design. Additionally, policy support should be strengthened to encourage universities to incorporate innovative elements into environmental design and ensure the necessary resources are available to promote its broader application and sustained development in ideological and political education.

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