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A Study on the Integration of Historicity and Modernity in the Landscape Design of University Buildings Influenced by Red Culture

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Abstract This study explores strategies for integrating historical and modern elements of red culture in the landscape design of university buildings. By extracting red cultural elements and combining them with modern design concepts and techniques, the study aims to create a campus environment that harmoniously blends the atmosphere of red culture with contemporary characteristics. Relevant literature on red cultural landscape research was reviewed to identify evaluation criteria representing the historical and modern aspects of red cultural landscapes in campus settings. Through a questionnaire survey using the Likert scale method, the satisfaction levels of students, teachers, and other respondents toward the implementation of the strategies proposed in this study regarding the representation of the historical and modern aspects of red culture were statistically analyzed. The results indicate that the red landscapes designed using the strategies proposed in this study performed well in terms of aesthetic quality evaluation indicators, with an overall aesthetic quality score of 4.39. The satisfaction score for red landscapes among students and teachers was 4.16, and the comprehensive score for the dissemination of red culture was 77, placing it in the "good" category. The evaluation results for the historical and modern aspects of the red landscape were "excellent" and "good," respectively, with maximum membership degrees of 0.450 and 0.359. The fuzzy comprehensive evaluation results for historical and modern aspects were "excellent," with a maximum membership degree of 0.401. This indicates that the proposed design strategy for red landscapes integrating historical and modern elements can strengthen campus red cultural identity.

Index Terms Likert scale method, fuzzy comprehensive evaluation, landscape design, red culture

I. Introduction

With the rapid advancement of knowledge and science and technology, and the constant evolution of society, people's values have also undergone significant changes. Contemporary scholars and educators are increasingly focusing on the impact of the environment on education [1], [2]. A well-designed architectural landscape can provide students with a comfortable and convenient learning environment, thereby stimulating their enthusiasm and imagination [3], [4]. How, then, can we find an appropriate approach in architectural landscape design to adapt to the development needs of the present and future? Red culture has emerged like spring bamboo shoots in the contemporary context. Designers should strengthen their understanding of historical development and explore the integration of historical and modern elements in architectural landscape design [5]-[7].

Red culture, created during the revolutionary war era by the Communist Party of China, progressive individuals, and the general public, is a uniquely Chinese advanced culture rich in revolutionary spirit and profound historical and cultural significance [8]-[10]. In campus architectural landscape design, integrating red culture with modern design concepts not only endows university architectural landscape design with unique personality and identity but also represents the inheritance and development of excellent culture, helping to enhance students' patriotic sentiments under the influence of red culture [11]-[14]. This requires designers to draw inspiration from the forms, figures, emotions, and color schemes of red culture, and skillfully apply them to university architectural landscape design through modern methods, creating architectural designs that are both modern and imbued with the essence of red culture [15]-[18].

Based on research into the influence of red culture on university architectural landscape design, this paper conducts an in-depth analysis of the key elements, shaping techniques, and expression methods of red cultural landscape creation. Based on this, a design strategy is proposed to synergistically present the historical and modern aspects of red culture landscapes in universities. This strategy focuses on three aspects: extracting red culture elements, creating red landscapes, and applying red landscape construction. It aims to uncover the core essence



of red culture. Additionally, an evaluation system for the historical and modern aspects of red culture landscapes is constructed, using the Likert scale method to quantitatively analyze the effectiveness of this strategy in reflecting the value of red culture.

II. Research on the Influence of Red Culture on Architectural Landscape Design in Universities

II. A.Key Factors in Shaping Red Tourism Landscapes

University campus landscape planning and design must take into account and prioritize the following five aspects:

- (1) The essence of campus landscape design lies in considering the integration of humans and nature, as well as the combination of humans and nature. When conceptualizing and designing the plan, it is essential to consider natural environmental conditions such as soil, hydrology, geology, climate, vegetation, and their ecological interactions and adaptive relationships.
- (2) The manifestation of social effects and cultural influences. People's aspirations for open spaces, cultural differences in space usage and appreciation, and age-related constraints can all reflect campus recreational and aesthetic decisions from different perspectives.
- (3) Methodology and the application of design principles. Methodology can identify conflicts in the design process and provide a systematic theoretical framework for resolving landscape issues. Innovation should be boldly conceived within the framework of established principles.
- (4) Implementation of modern technology. Technology is the tool that enables design implementation or policy execution. Conventional design techniques cannot achieve the desired spatial experience effects. Modern computer graphics, data analysis, symbolic measurement, and rationality analysis can provide direct reference for campus landscape planning.
- (5) Campus value orientation. This aspect is difficult to standardize, as value judgments rely on accumulated life experience and relative perceptions, as well as leadership decisions.

II. B.Red Landscape Shaping Facilities

University campus landscapes are composed of artificial landscapes, natural landscapes, and cultural landscapes. In the actual design of landscapes, various artistic forms are employed, such as plazas, green spaces, sculptures, decorations, murals, signage, horticulture, advertising, and landforms. Additionally, landscape features such as pavilions, corridors, terraces, towers, pavilions, pavilions, pavilions, pavilions, pavilions, and bridges are also incorporated.

Now, let us focus on landscape ornaments. These are highly favored due to their innovative designs, high technical content, and dual functionality as both artistic and practical elements. However, the primary function of landscape ornaments can be summarized as fulfilling spiritual needs. First, well-chosen landscape ornaments can effectively showcase red culture, creative expression, and symbolic meanings, thereby shaping the unique characteristics of a university. Additionally, although landscape ornaments are small in scale and volume, they can significantly enrich campus landscapes, enhance the quality of life, enrich the spiritual lives of students and faculty, and create a favorable learning, working, and living environment.

II. C.Red Landscape Shaping Techniques

Overcoming the inappropriate choices made by designers in the landscape design process and avoiding the current planning situation where "specialties are not specialized and characteristics are not distinctive." The key issues addressed in this research project are:

- (1) Respect regional characteristics and use a specific medium to convey a sense of regional identity and shape local characteristics. What others don't have, we have; what others have, we specialize in; what others specialize in, we are even more unique.
- (2) Prioritize people-centric design, emphasizing not only aesthetics but also fulfilling people's physiological and psychological needs, to create a campus that facilitates feasible and commendable interaction and communication.
- (3) Campus cultural landscape planning and design should grasp the interactive dynamics between planning, culture, and landscape, establishing a positive interactive design mechanism.
- (4) The creation of red cultural landscapes on campus will significantly enrich the spiritual and cultural needs of various students and trainees, injecting strong momentum into cultural development.
- (5) The principle of appropriateness in environmental design requires identifying the school's unique cultural characteristics, disciplines, and professional background. This is particularly important for schools with distinct disciplinary and professional characteristics.



II. D. Methods of Shaping Red Landscapes

Definition of presentation methods: The methods and techniques used by designers to visualize their plans, discussions, and other conceptual intentions and development processes through media. Creative ideas should be developed based on the requirements for campus landscape design, through on-site investigations and consideration of spiritual and cultural needs, combining visual thinking, creativity, and language expression, followed by divergent thinking to propose appropriate planning solutions. The presentation process should begin with hand-drawn two-dimensional conceptual sketches, followed by the use of software such as SketchUp, 3dsMAX, Photoshop, and Lumion to construct three-dimensional model effects.

Cutting-edge technologies in design visualization, such as Multigen and Vega software, enable the creation of real-time modeling techniques that reflect the current state of landscape architecture planning for the public. These technologies not only provide designers with new design presentation tools but also allow for quick adjustments without fixed angles to showcase the differences between pre- and post-adjustment design outcomes. This enables rapid modifications, precise evaluations, and the final determination of the optimal solution.

III. Strategies for constructing red landscapes on college campuses that blend history and modernity

III. A. Extraction of red cultural elements

(1) Red Scene Reconstruction

Recreating authentic scenes from the revolutionary era is the most direct and intuitive way to embody red culture. Using concrete, realistic methods to depict stories and characters from the revolutionary war era, this approach is objective, authentic, and narrative. During the design process, it is necessary to conduct field research at revolutionary sites, gain a deep understanding of the local red culture, and focus on recording symbolic locations and events. Appropriate red cultural elements are then selected, reorganized, and transformed, and certain design techniques are used to recreate red scenes.

(2) Symbols of Red Spirit

Red landscapes embody the red spirit, whose nature remains unchanged despite societal development. By exploring the spiritual essence and elements of red culture, we awaken students' subconscious recognition of red culture. In design, the campus space should exude the red spirit and red ideology, inspiring students' sense of identity and mission toward red culture. By artistically transforming red revolutionary history and simple life, we can awaken students' deep-seated memories of the revolution.

(3) Red Theme Depiction

Extract and summarize red culture, distill red themes, and present them through various landscape forms in school public spaces to express the distinct spirit of the red era.

III. B. Creating a red landscape atmosphere

(1) Application of Red Culture on Roads

The layout of public spaces and living areas should fully consider students' travel patterns and meet the functional requirements of various activities. A reasonable road plan can alleviate traffic pressure and protect the school environment. In the design of red roads, elements of the revolution should be integrated. For road paving, local materials or decorative techniques such as painted patterns can be used to distinguish and beautify roads with different functions. Supporting facilities around the roads can incorporate red characteristics through materials, forms, and colors.

(2) The Red Symbolism of Plants

Campuses have a high coverage of plants, which should align with the core principles of "ecology, greenery, and health." The colors and forms of plants can be utilized to embody the red spirit, creating aesthetically pleasing plant combinations. In areas of university red public activity spaces with high foot traffic, choose thornless and non-toxic plants. Utilize the characteristics of plants to achieve functions such as enclosure and separation, combining trees, shrubs, and grasses of varying heights to enrich the landscape space layers and guide spatial development. Integrate plants with red landscape installations, surrounded by low-growing shrubs and greenery.

(3) Red Landscape Installations in Public Spaces

Landscape installations are the most direct expression of red culture. They have multiple functions and types, which can be categorized by functional attributes into living facilities, road facilities, and landscape facilities. Living facilities include signage, benches, trash bins, etc. Design should prioritize student needs, ensuring comfort, convenience, and ecological sustainability. Road facilities include streetlights, guardrails, bus stops, etc. Landscape facilities include sculptures, pergolas, pavilions, etc. By integrating landscape installations with red culture and incorporating modern technology, a distinctive area that aligns with contemporary aesthetic standards is created.



III. C. Landscape Construction Applications

Incorporating red elements into public spaces to embody the spirit of red culture and create narrative elements. Employing landscape design strategies and techniques to create layered spaces that allow visitors to experience the spirit of red culture while also considering local cultural characteristics, thereby constructing public space landscapes tailored to the specific location.

(1) The Construction of Red Elements in Public Spaces

Public spaces serve as "cultural living rooms" to showcase the distinctive features of red culture. By exploring red culture and showcasing it in public spaces, we aim to introduce innovation, endowing the space with red cultural significance. This approach balances practical considerations with an emphasis on humanization, scientific rigor, local context, and ecological sustainability, thereby inspiring students to engage in deeper reflection, contemplation, and intellectual stimulation.

(2) The Construction of Red Spirit in Spatial Atmosphere

Focusing on public spaces relevant to students' daily lives, we integrate red spirit by delving into its core values to create a red-themed ambiance.

(3) Construction of Red Themes in Landscape Installations

The construction of red-themed landscape installations must firmly adhere to the central theme of red culture in terms of concept, layout, form evolution, and material selection, expressing the twists and turns of the revolutionary path and the smoothness of the road ahead, thereby highlighting the red theme.

In summary, the construction of public space landscapes in higher education institutions must grasp mainstream red culture, integrate regional environments, and reasonably utilize public spaces to construct an innovative red landscape construction model.

IV. Design and analysis of results of red landscape evaluation questionnaire

IV. A. Questionnaire Design

IV. A. 1) Types of survey questionnaires

This paper designs a comprehensive evaluation survey questionnaire for the use of campus central landscapes, tailored to the needs of different research topics. When targeting users, the questionnaire is divided into two sections: basic information and satisfaction. The basic information questionnaire focuses on the characteristics of the user population, considering various demographic factors such as identity and gender. It consists of 15 questions, including both single-choice and multiple-choice formats, covering topics such as user background, usage patterns, and impressions of the site.

For the evaluation of red cultural landscapes in higher education institutions, which includes assessments of aesthetic quality, cultural dissemination, and the balance between historical and modern elements, a satisfaction questionnaire is employed. This satisfaction questionnaire is a scale-based questionnaire designed to measure the satisfaction levels of students and faculty members toward various red cultural landscapes designed by higher education institutions. The available response options are: very satisfied, fairly satisfied, neutral, fairly dissatisfied, and very dissatisfied.

IV. A. 2) Evaluation Indicator Measurement Methods

Based on the satisfaction structure questionnaire, collect information on respondents' satisfaction with the surveyed landscape. Distribute structured questionnaires to analyze visitors' evaluation orientations toward red landscapes on university campuses.

The study employs the Likert scale method [19] for quantitative analysis of evaluation indicators, using five levels: very satisfied, fairly satisfied, neutral, fairly dissatisfied, and very dissatisfied. Satisfaction data regarding university red cultural landscapes is collected from users, and the five levels are assigned values, with very satisfied, fairly satisfied, neutral, fairly dissatisfied, and very dissatisfied assigned values of 5 to 1, respectively.

IV. A. 3) Distribution and collection of questionnaires

While conducting on-site research, questionnaires were distributed to ensure randomness and broad coverage. They were distributed to students and faculty members during weekdays and holidays, including mornings, afternoons, evenings, and nights, in order to obtain more objective evaluations.

IV. B. Analysis of Red Landscape Evaluation Results

IV. B. 1) Aesthetic Quality Evaluation

This section evaluates the aesthetic quality of the red landscape at a certain university, selecting the faculty and students of the university as the evaluation subjects. The analysis is conducted from six dimensions: the hierarchical



arrangement of facilities along the roads, the vibrancy of plant colors, the aesthetic appeal of paved landscapes, the harmony of landscape features, the suitability of red themes in landscape features, and the extent to which red culture is reflected. A questionnaire was designed using the Likert five-point scale method, with 200 participants. A total of 200 questionnaires were distributed, and 200 valid questionnaires were returned.

The questionnaire evaluation results for the six aesthetic quality dimensions are shown in Figure 1. It can be seen that the evaluators' assessment of the aesthetic quality of the red landscape at the university is at a relatively high level, with scores ranging from 4.0 to 4.7 for hierarchical structure, vibrancy, aesthetic appeal, coordination, compatibility, and the extent to which red culture is reflected. The overall aesthetic quality score reached 4.39. Among these, the score for the extent to which red culture is reflected in the landscape was the highest, reaching 4.66. This indicates that the red landscape design strategies outlined in this paper effectively leverage the local cultural characteristics, optimize the narrative themes, and enable faculty and students to fully understand the red spirit underlying the red cultural events in the landscape, thereby incorporating it into the landscape architecture. The hierarchical structure of roadside facilities received relatively lower scores, which may be attributed to the fact that these facilities may only meet students' basic transportation needs and lack interactive functions. Further optimization could be considered in future developments.

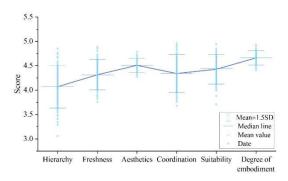


Figure 1: The results of six levels of aesthetic quality

IV. B. 2) Empirical Evidence of Cultural Transmission

Before conducting an evaluation of the historical and modern significance of red landscapes on university campuses, the study assessed faculty and students' perceptions of how red landscapes at a particular university convey red culture, specifically the effectiveness of red culture dissemination. A questionnaire was designed using the Likert five-point scale method, covering eight dimensions: perception of red culture conveyed through modern technology, innovative dissemination methods, increase in red culture knowledge, the immersive quality of the red cultural atmosphere, uniqueness of the experience, satisfaction, likelihood of revisiting, and likelihood of recommending.

A total of 200 questionnaires were distributed, with 200 returned and 200 deemed valid, resulting in a 100% response rate. Statistical analysis of the survey data for the eight elements yielded the questionnaire evaluation scores for each indicator, as shown in Table $\boxed{1}$. The results clearly illustrate the scoring patterns of faculty and students regarding the eight perceptual elements and the overall experience of red culture at the university. Among these, the satisfaction score for red landscapes was the highest, with 79.5% of respondents indicating satisfaction or high satisfaction, while 8.5% expressed dissatisfaction or high dissatisfaction, yielding an average score of 4.16. The overall perception score for faculty and students was 3.85. To further evaluate respondents' perceptions of how red landscapes disseminate red culture, the overall score was converted to a 100-point scale: $3.85/5 \times 100 = 77$ points. The evaluation results were categorized as follows:

If the total score is $20 \le total$ score < 40, the dissemination effect is very poor.

If the total score is $40 \le total$ score < 60, the dissemination effect is poor.

If the total score is $60 \le \text{total score} < 70$, the dissemination effect is average.

If the total score is $70 \le \text{total score} < 80$, the dissemination effect is good.

If the total score is 80 ≤ total score < 90, the dissemination effect is very good.

If 90 ≤ total score < 100, the communication effect is excellent.

The survey's overall perceived score is 77 points, placing it in the "70 ≤ total score < 80" category, which is the "fairly good" level. It is close to the "very good" level but far from the "excellent" level. This indicates that the current communication effect of the school's red landscape culture is fairly good but still has significant room for improvement.



Table 1: The results of the questionnaire were evaluated

	Sample number					Mean
	1 point	2 points	3 points	4 points	5 points	iviean
Red culture cognition	11	26	69	43	51	3.49
The way innovation is transmitted	5	12	47	89	47	3.81
Red culture knowledge growth	5	10	44	65	76	3.99
Red atmosphere	5	14	32	70	79	4.02
The uniqueness of feeling	6	21	50	87	36	3.63
Satisfaction	3	14	24	67	92	4.16
Retravel	8	17	29	87	59	3.86
Degree of recommendation	7	14	45	72	62	3.84

IV. B. 3) Ambiguous Evaluation of Historicity and Modernity

The study reviewed a large number of literature on the field of red landscape research, and based on the results of field surveys within the scope of the study, it referenced the national standard "Survey and Evaluation" and relevant regulations and landscape elements to preliminarily establish an evaluation index system for the historical and modern characteristics of red cultural landscapes in higher education institutions. After preliminarily establishing the red landscape value evaluation system, the study compiled suggestions from relevant experts and scholars, and based on these suggestions, the indicators were summarized, organized, and revised. Finally, the red cultural landscape value assessment indicators for this paper were determined as follows.

Historical Significance (A1): This refers to the importance of the historical status reflected by the red cultural landscape on campus, the number of years of history it encompasses, the scope of revolutionary historical events that occurred in the course of history and are known to the public, the number of important revolutionary figures, and their level of prominence. Specific evaluation indicators include historical status (A11), historical longevity (A12), prominence of revolutionary deeds (A13), and number of revolutionary figures (A14).

Modernity (A2): This refers to the extent to which the campus landscape, constructed by integrating modern design concepts and technological means, combines the inheritance of red culture with contemporary characteristics to evoke a modern aesthetic experience. Evaluation indicators include functional adaptability (A21), aesthetic innovation (A22), spatial layout characteristics (A23), architectural ensemble characteristics (A24), and dissemination influence (A25).

After constructing the evaluation model, a series of judgment matrices are formed by comparing evaluation factors at the same level, thereby determining the weight of each factor in the evaluation system. The values in the judgment matrix reflect the relative importance of each factor. The author invited eight experts and scholars specializing in red landscapes and related fields to conduct separate questionnaire surveys. Based on the actual conditions of the research objects, a nine-point proportional scale is typically used to assign values to the importance of each factor. In the evaluation scale, the scale method shown in the table is selected for comparing importance. Finally, the judgment matrix is normalized, weight coefficients are calculated, and consistency tests are conducted.

Ultimately, based on the aforementioned research methods, the weights of each evaluation indicator for red landscapes and the comprehensive weights are obtained, as shown in Table 2. As shown in the table, in the criterion layer, the historical significance of red culture has the highest weight, at 0.638, occupying an important position in the evaluation system. In the standard layer, the comprehensive weight of the fame of revolutionary deeds is the highest, at 0.233, indicating that the historical significance of campus red landscapes is primarily reflected in incorporating more well-known revolutionary deeds, which have a positive influence on students' thoughts and character.

Table 2: The weight of each evaluation index and the comprehensive weight

Primary indicator	Weight	Secondary indicator	Weight	Composite weight
Historicity (A1)		Historical status (A11)	0.158	0.101
	0.020	Long history (A12)	0.173	0.110
	0.638	Revolutionary story publicity (A13)	0.365	0.233
		Number of revolutionaries (A14)	0.304	0.194
Modernity (A2)		Functional adaptability (A21)	0.147	0.053
		Aesthetic innovation (A22)	0.215	0.078
	0.362	Spatial layout characteristics (A23)	0.162	0.059
		Architectural features (A24)	0.181	0.066
		Spread influence (A25)	0.295	0.107



A questionnaire survey was conducted targeting faculty and students at a certain university. A total of 100 questionnaires were distributed, and 100 valid questionnaires were returned. The average scores for each evaluation indicator were calculated, yielding the questionnaire survey results for the historical and modern aspects of red cultural landscapes, as shown in Figure 2. As shown in the figure, the scores for the historical evaluation indicators of red landscapes designed in this study ranged from 4.10 to 4.47, while the scores for modernity were relatively lower, ranging from 3.60 to 4.11. Based on the fuzzy transformation and maximum membership principle in the fuzzy comprehensive evaluation method [20], [21], the selected evaluation indicators were divided into five grades: excellent, good, average, poor, and very poor. Grade voting was conducted for each indicator, and the quantitative results of the grade voting percentages for each indicator are shown in Figure 3. A first-level fuzzy comprehensive evaluation was conducted for each sub-factor set. Let B1 denote the maximum membership degree of historicity, B2 denote the maximum membership degree of modernity, B denote the maximum membership degree of the comprehensive evaluation of campus red landscapes, W1 denote the weights of each indicator under historicity, W2 denote the weights of each indicator under modernity, and W denote the weights of historicity and modernity. The first-level fuzzy comprehensive evaluation results are as follows:

$$B_{1} = W_{1} \times \begin{bmatrix} 0.36 & 0.50 & 0.12 & 0.01 & 0.01 \\ 0.33 & 0.46 & 0.19 & 0.02 & 0.00 \\ 0.57 & 0.33 & 0.10 & 0.00 & 0.00 \\ 0.42 & 0.41 & 0.13 & 0.04 & 0.00 \end{bmatrix} = \begin{bmatrix} 0.450 & 0.404 & 0.128 & 0.017 & 0.002 \end{bmatrix}$$

$$B_{2} = W_{2} \times \begin{bmatrix} 0.24 & 0.37 & 0.21 & 0.11 & 0.07 \\ 0.32 & 0.44 & 0.16 & 0.06 & 0.02 \\ 0.27 & 0.31 & 0.22 & 0.15 & 0.05 \\ 0.22 & 0.36 & 0.26 & 0.13 & 0.03 \\ 0.43 & 0.32 & 0.18 & 0.07 & 0.00 \end{bmatrix} = \begin{bmatrix} 0.314 & 0.359 & 0.201 & 0.098 & 0.028 \end{bmatrix}$$

$$(1)$$

Among them, the maximum membership degree of the historical evaluation of the red landscape was 0.450, with an excellent evaluation result, while the maximum membership degree of the modernity evaluation was 0.359, reaching a good level. Further secondary fuzzy comprehensive evaluation was conducted, and the comprehensive evaluation results of the historical and modern aspects of the red landscape of the school are as follows:

$$B = W \times \begin{bmatrix} 0.450 & 0.404 & 0.128 & 0.017 & 0.002 \\ 0.314 & 0.359 & 0.201 & 0.098 & 0.028 \end{bmatrix} = \begin{bmatrix} 0.401 & 0.388 & 0.154 & 0.046 & 0.011 \end{bmatrix}$$
 (2)

The evaluation results show that the maximum degree of affiliation between the historical and modern aspects of the school's red landscape is 0.401, and the overall evaluation result is excellent.

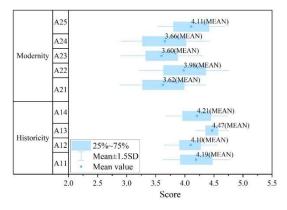


Figure 2: Historical and modernity questionnaire survey results



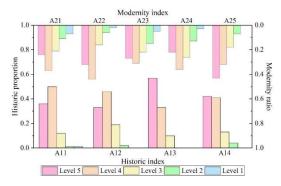


Figure 3: The percentage of each index is quantified

V. Conclusion

The article analyzes the influence of red culture on the landscape design of university buildings and proposes a landscape design method that integrates the historical and modern aspects of red culture in universities. It extracts the core elements of red culture through the recreation of red scenes, the symbolism of red spirit, and the depiction of red themes. Furthermore, red culture is applied to campus roads, accompanied by plant landscapes and public facilities that symbolize red, to create a red cultural atmosphere on campus. Finally, red elements are integrated into campus public spaces to comprehensively reflect the cultural, experiential, and practical aspects of red landscapes. Through methods such as questionnaire surveys, the historical and modern aspects of red landscapes are evaluated. The red landscapes designed in this study scored between 4.0 and 4.7 on aesthetic quality evaluation indicators such as the hierarchical arrangement of roadside facilities and the vibrancy of plant colors, indicating a high level of aesthetic quality. Additionally, this strategy has a good effect on the dissemination of red culture, with a red culture dissemination perception score of 77 points, classified as "good." The evaluation weights for the historical and modern aspects of the red landscape are 0.638 and 0.362, respectively, with evaluation results of 'excellent' and "good," respectively. The comprehensive evaluation result for historical and modern aspects is "excellent."

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