# Construction and Practice of Ideological and Political Education in the Course Waterfront Landscape Design and Its Evaluation Index System

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**Abstract** In order to implement the fundamental task of cultivating morality and talents, and to solve the problem of the "two skins" of professional education and ideological and political education in the course waterfront landscape design, guided by the concept of ideological and political education in the curriculum, combined with the disciplinary characteristics and industry needs of waterfront landscape design, the integration path of ideological and political education in the curriculum is explored, and a scientific and operable evaluation index system is constructed. By using research methods such as literature review, Delphi method, and Analytic Hierarchy Process, the core educational objectives of ideological and political education in the curriculum are clarified. The integration strategy of ideological and political education is designed from three dimensions: teaching content, teaching methods, and practical links. Finally, an evaluation system is formed, which includes four primary indicators of "educational goal fit", "content integration depth", "teaching implementation effect", and "student development effect", 12 secondary indicators, and 36 tertiary indicators. Through teaching practice verification, this system can effectively measure the quality of ideological and political education in the curriculum, help cultivate talents in waterfront landscape design who possess both professional competence, social responsibility, and ecological awareness, and provide a reference paradigm for ideological and political construction in landscape architecture courses.

**Keywords** Waterfront landscape design, Ideological and political education in curriculum, Evaluation index system

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In recent years, policy documents such as the *Opinions on Accelerating the Construction of the Ideological and Political Work System in Colleges and Universities* and the *Guiding Opinions on the Construction of Ideological and Political Education in Higher Education Curriculum* have been successively issued, which clearly require that ideological and political education should be integrated into the entire process of curriculum teaching, and achieve the trinity educational goal of "knowledge imparting, ability cultivation, and value guidance". As a core discipline in human settlement environment construction, talent cultivation in the landscape architecture has a direct impact on urban ecological protection, cultural inheritance, and people's well-being. It is urgent to strengthen the responsibility and value recognition of talents through ideological and political education in the curriculum[1].

Waterfront landscape design is a core course in the landscape architecture, focusing on ecological restoration, functional optimization, and cultural expression of waterfront spaces such as rivers, lakes, and coasts. It naturally contains ideological and political elements such as "ecological priority," "cultural inheritance," and "peopleoriented". For example, the ecological resilience design of waterfront spaces can incorporate the concept of "lucid waters and lush mountains are invaluable assets", the restoration of historical waterfront corridors can permeate excellent traditional Chinese culture, and flood prevention and disaster reduction waterfront projects can convey the sense of responsibility of "putting people first and life first"[2]. However, most courses currently focus on imparting professional skills, and the inte-gration of ideological and political elements lacks systematic design, resulting in insufficient effectiveness in educating students.

The existing research on ideological and political education in curriculum mainly focuses on the interpretation of concepts and the exploration of integration paths, with relatively few specialized studies on landscape architecture majors, and a lack of quantifiable and operable evaluation index systems. The evaluation criteria for ideological and political education in the course waterfront landscape design are vague, including "what to teach", "how to teach", and "how well to teach", which makes it difficult to measure teaching quality and improve teaching effectiveness. It is urgent to construct a targeted evaluation framework[3].

# 1 Current status of research on ideological and political educa-tion in curriculum

## 1.1 Current status of research on ideo-logical and political education in cur-riculum

Domestic research on ideological and political education in curriculum began in 2016, initially focusing on interpretation of macro policy and exploration of educational concepts. For example, Gao Deyi et al.[4] proposed that the core of ideological and political education in curriculum is to explore the ideological and political elements of various courses, and achieve the organic unity of ideological and political education and professional education. In recent years, it has gradually penetrated into disciplinary fields, such as emphasizing the integration of "craftsmanship spirit" and "engineering ethics" in the engineering field, and focusing on "cultural confidence" and "value shaping" in

the humanities field. However, the research on ideological and political education in landscape architecture courses is still in its infancy[5].

## 1.2 Research progress on ideological and political education in landscape architecture courses

Existing research has mostly focused on courses such as "landscape plants" and "urban planning". For example, Wang Xiangrong[6] proposed integrating "ecological ethics" and "patriotism" into the course landscape planning, but there is a lack of specialized research on the course "waterfront landscape design". The existing limited research only focuses on listing ideological and political elements (such as ecological protection and cultural inheritance), lacking a systematic design of "goals-content-methods-evaluation", especially without forming an evaluation system that is suitable for the practical characteristics of waterfront landscape design[7].

## 1.3 Research status of evaluation system for ideological and political education in curriculum

The current evaluation of ideological and political education in curriculum mostly adopts the approach of "qualitative first, quantitative second", such as measuring effectiveness through "student satisfaction survey" and "teaching supervision and evaluation", lacking a scientific indicator system and weight design. Some studies have attempted to construct an indicator system[8], but they mostly focus on "classroom teaching" and ignore the "practice oriented" characteristics of waterfront landscape design. They have not included "ideological and political expression of design schemes" and "social effectiveness of practical projects" in the evaluation scope, and the evaluation dimension is single[9].

## 2 Research objectives, content, and methods
### 2.1 Research objectives

It aims to clarify the core educational objectives and key integration paths of ideological and political education in the course waterfront landscape design, and construct a scientific and operable evaluation index system for ideological and political education in the course waterfront landscape design. By verifying the effectiveness of the evaluation system through teaching practice, it could provide reference for the ideological and political construction of landscape architecture courses.

### 2.2 Research content

The main research content includes the design of education objectives and integration strategy of ideological and political education in the waterfront landscape design, as well as the construction of evaluation index system for ideological and political education in the course, such as index screening, weight determination, etc. Finally, the scientificity and applicability of the evaluation system are verified through empirical research.

### 2.3 Research methods

**2.3.1** Literature research method. Through databases such as China National Knowledge Infrastructure (CNKI) and Wanfang, keywords such as "ideological and political education in curriculum", "waterfront landscape design", and "evaluation of ideological and political in curriculum" are searched, relevant research results at home and abroad are sorted out, and the core concepts of ideological and political education in curriculum, the characteristics of ideological and political elements in landscape architecture major, and the requirements for the discipline of waterfront landscape design are clarified. It could provide theoretical basis for setting educational goals and screening indicators[10].

**2.3.2** Delphi method.

(1) Expert selection. 15 experts are selected to form a consulting group, covering three groups: teaching experts in landscape architecture (5 people, professors/associate professors, engaged in waterfront landscape design teaching for more than 10 years); research experts on ideological and political in curriculum (3 people, professors of Marxist theory, focusing on the research of ideological and political education in higher education); experts in the waterfront landscape design industry (7 people, senior designers/engineers with over 10 years of practical experience in waterfront projects), ensuring the representativeness and authority of the expert group[11-12].

(2) Indicator screening process. The first round of consultation: based on literature research, 4 primary indicators, 15 secondary indicators, and 42 tertiary indicators are initially proposed. A questionnaire is distributed to experts to rate the "necessity" of the indicators (1–5 points, 5 points being extremely necessary), and indicators with an average score <3.5 points and a coefficient of variation >0.25 are deleted[12-13]. The second round of consultation: the indicator system is adjusted based on the results of the first round,

and the indicators suggested by experts such as "social effectiveness of practical projects" and "logical expression of ideological and political ideas in design schemes" are supplemented. The questionnaires are distributed again for experts to rate until the coordination degree of indicator opinions (coefficient of variation <0.2) meets the standard, and the final indicator framework is determined[6-7].

**2.3.3** Analytic Hierarchy Process.

(1) Build a hierarchical structure model. The evaluation system is divided into four levels: target layer (quality of ideological and political education in the course waterfront landscape design), criterion layer (primary indicators), sub criterion layer (secondary indicators), and indicator layer (tertiary indicators), and the subordinate relationships between each level is clarified[7,14].

(2) Weight determination process. Design judgment matrix: experts are requested to score the relative importance of indicators at the same level using the "1-9 scale method" and construct a judgment matrix. Consistency check: by calculating the consistency index (CI) and consistency ratio (CR), the logical consistency of the judgment matrix (CR<0.1 indicates passing the test) is ensured. Weight calculation: the "sum product method" is used to calculate the weight of each indicator, ultimately forming a complete evaluation system that includes indicator names and weight values[11,14].

**2.3.4** Teaching practice method. Taking the undergraduate course of "Waterfront Landscape Design" in the landscape architecture major of Chongqing College of Humanities, Science & Technology in 2021 as the practical object (consisting of 4 classes and 120 students), the constructed integrating strategies of ideological and political education in curriculum and evaluation system are applied to the entire teaching process. It is implemented through three stages: "classroom teaching+design practice+off campus projects". At the end of the semester, the teaching effect is quantified and scored through the evaluation system, and the effectiveness of the system is verified through student interviews and design scheme analysis[8,15].

## 3 Core design of ideological and political education in the course waterfront landscape design
### 3.1 Target system of ideological and political education in the curriculum

Based on the concept of "knowledge-

ability–value" trinity, combined with the characteristics of waterfront landscape design discipline, the three-level education objectives are set (Table 1).

## 3.2 Strategies for integrating ideological and political education in the curriculum

**3.2.1** Teaching content: exploring "three-dimensional ideological and political elements" to construct a "modular" content system. Combining the three stages of "theoretical teaching–scheme design–practical implementation" in the course waterfront landscape design, corresponding ideological and political elements are excavated, and modular content is formed:

(1) Theoretical teaching module. Ideological and political elements such as "ecological ethics" and "cultural confidence" are incorporated. Case study: explain the "'Two Rivers and Four Banks' waterfront corridor restoration" project, analyze how to embody the concept of "lucid waters and lush mountains" through the "ecological transformation of embankments", and convey red culture through the restoration case of Liziba historical scenic spot. Special seminar: organize a seminar on "Cultural Inheritance in Waterfront Landscapes" to guide students in sorting out local waterfront cultures (such as the Yangtze River basin culture, the Jialing River basin culture, Red Rock revolution culture, etc.) and enhance cultural confidence[16].

(2) Scheme design module. "Engineering ethics" and "responsibility and accountability" are integrated. Design task book: set the task of "Urban Inland River Ecological Restoration and Livelihood Space Design", require the plan to simultaneously meet the three major goals of "ecological flood control", "resident leisure", and "cultural display", and strengthen the concept of "people-oriented". Design review: incorporate "expression of ideological and political elements" into the review criteria, such as whether the plan reflects "low impact development", "human

care", "scientific ethics", etc., to guide students to transform their value concepts into design language[11,17].

(3) Practice implementation module. Ideological and political elements such as "social service" and "patriotism" are incorporated. School-enterprise cooperation project: cooperate with Taihe Town Government in Hechuan District to carry out the practice of "community waterfront micro space renovation", organize students to investigate residents' needs, design "elderly friendly waterfront trails" and "children's waterfront spaces", and practice the development concept of "people-oriented". Achievement display: report the results of the practical project to the local government and community residents, collect feedback, let students feel the social value of the design, and enhance patriotism[9,18].

**3.2.2** Teaching method: innovating the "double helix" teaching mode to achieve deep integration of ideological and political education with the profession. A dual spiral teaching model of "professional kn owledge imparting" and "ideological and political value guidance" is constructed, and organic integration is achieved through four methods:

(1) Case study teaching method. Selecting typical projects such as "Landscape Enhancement of Zhuxihe Park in Liangjiang New Area" and "Ecological Restoration and Landscape Renovation of Mayuanxi in Chongqing", the combination of ideological and political elements (such as ecological priority and innovation driven) and professional technologies (such as ecological embankment design and water purification technology) in the projects is analyzed[19].

(2) Situational teaching method. Using GIS to construct a scenario for "simulating waterfront spatial disasters", it could enable students to understand the sense of responsibility of "putting life first" in "flood control design optimization". Project driven approach: with

"Local Waterfront Space Design" as the project theme, students are required to investigate local ecological issues and cultural characteristics, and integrate "hometown sentiment" into the design scheme[20].

(3) Evaluation guidance method. In the design assignment comments, not only professional skills are evaluated, but also the "expression effect of ideological and political elements" is evaluated, such as "the design of the ecological revetment in the plan reflects ecological ethics, and the integration of local cultural elements can further strengthen ideological and political education"[21].

# 4 Construction of evaluation index system for ideological and political education in the course waterfront landscape design

## 4.1 Principles for constructing indicator system

Principle of scientificity: indicators should comply with the laws of ideological and political education in the curriculum and the disciplinary characteristics of waterfront landscape design, avoiding subjective speculation. Principle of systematization: indicators should cover the entire process of "teaching objectives–teaching content–teaching implementation-teaching effectiveness", taking into account both "classroom teaching" and "practical aspects". Principle of operability: indicators should be quantified or observable, avoiding abstract expressions (such as "students' ecological awareness improvement" should be transformed into "the rationality of ecological measures in the design plan"). Guiding principle: indicators should highlight the core of "value shaping" and guide teachers to pay attention to the entry point and fit of ideological and political integration, rather than being formalized and piled up.

## 4.2 Indicator screening and system framework

After two rounds of Delphi method

## Table 1  Three–level education objectives

| Objective level | Core objective | Specific content |
| --- | --- | --- |
| Value guidance | Cultivate correct design values | 1. Establishing the concept of "ecological priority" and understanding the importance of ecological restoration in waterfront spaces; 2. enhancing cultural confidence and inheriting excellent traditional Chinese culture in waterfront spaces; 3. strengthening social responsibility and paying attention to the livelihood needs of waterfront spaces, such as barrier free design and flood safety |
| Ability development | Enhance the design expression ability of ideological and political elements | 1. Can integrate ideological and political elements such as ecological ethics and cultural heritage into waterfront design schemes; 2. being able to clearly express the ideological and political connotations of design through drawings, models, and other carriers; 3. being able to resolve the contradiction between "ecological protection and functional utilization" in practical projects, demonstrating responsibility and accountability |
| Knowledge transmission | Master the professional knowledge of integrating ideological and political education | 1. Mastering the professional knowledge of waterfront ecological restoration and cultural landscape design; 2. understanding the intrinsic relationship between ideological and political elements and waterfront design knowledge (such as the concept of "sponge city" and ecological design knowledge) |

**Table 2  Evaluation index system for ideological and political education in the course waterfront landscape design**

| Primary indicator (weight) | Secondary indicator (weight) | Tertiary indicator (weight) | Evaluation criteria (1−5 points) |
|---|---|---|---|
| Fit of educational objectives (0.20) | Aligning goals with policy requirements (0.50) | Meet the fundamental task of cultivating virtue and nurturing people (0.30) | 5 points: perfect fit, clear goal; 3 points: basic fit, clearer goal; 1 point: inappropriate fit, vague goal |
| | | Meet the demand for landscape architecture professionals (0.33) | 5 points: full compliance, highly targeted; 3 points: basic compliance, average targeting; 1 point: non compliance, not targeted |
| | | Meet the characteristics of waterfront landscape design discipline (0.37) | 5 points: fully reflecting the ecological and cultural characteristics of the waterfront; 3 points: basic manifestation; 1 point: not reflected |
| | Aligning goals with student development (0.50) | Meet students' cognitive level (0.25) | 5 points: fully adapted, easy for students to understand; 3 points: basic adaptation; 1 point: incompatible, difficult for students to understand |
| | | Meet the career development needs of students (0.35) | 5 points: help students establish correct design ethics; 3 points: some assistance; 1 point: no assistance provided |
| | | Stimulate students' interest in learning (0.40) | 5 points: significantly stimulating interest; 3 points: a certain stimulating effect; 1 point: no stimulating effect |
| Depth of content integration (0.30) | Exploration of ideological and political elements (0.40) | Correlation between elements and professional knowledge (0.34) | 5 points: closely related, without rigid stacking; 3 points: basically related; 1 point: unrelated, rigidly stacked |
| | | Comprehensiveness of element coverage (0.33) | 5 points: covering multiple dimensions such as ecology, culture, and ethics; 3 points: covering 2-3 dimensions; 1 point: only 1 dimension |
| | | Locality of elements (0.33) | 5 points: deeply integrated into local waterfront ecology/culture; 3 points: basically integrated; 1 point: not integrated |
| | Content organization logic (0.30) | Integration of ideological and political content with professional content (0.55) | 5 points: natural connection without any sense of disconnection; 3 points: basic connection; 1 point: separated and disconnected |
| | | Rationality of content gradient (0.45) | 5 points: from basic to advanced, with clear logic; 3 points: clear gradient; 1 point: no gradient |
| | Reflection of ideological and political education in practice content: (0.30) | Clear ideological and political goals for practical projects (0.30) | 5 points: clear and measurable goals; 3 points: clearer goals; 1 point: no goal |
| | | Expression of ideological and political elements in practical plans (0.40) | 5 points: clear and reasonable expression of ideological and political elements; 3 points: basic expression; 1 point: not expressed |
| | | Social value of practical achievements (0.30) | 5 points: achievements solve practical problems and are recognized by society; 3 points: certain value; 1 point: worthless |
| Teaching implementation effect (0.25) | Adaptability of teaching methods (0.30) | Matching methods with ideological and political content (0.20) | 5 points: perfect match, helping to transmit ideological and political education; 3 points: basic match; 1 point: mismatch |
| | | Integration of methods and professional teaching (0.35) | 5 points: natural integration, without formalization; 3 points: basic integration; 1 point: not integrated |
| | | Method to stimulate student participation (0.45) | 5 points: students actively participate and interact frequently; 3 points: participation, average interaction; 1 point: no participation |
| | Teacher guidance ability (0.20) | Interpretation accuracy of ideological and political elements (0.55) | 5 points: accurate interpretation with depth; 3 points: basic accuracy; 1 point: inaccuracy |
| | | Guidance on the integration of ideological and political education with professional skills (0.45) | 5 points: natural guidance, easy for students to understand; 3 points: basic guidance; 1 point: no guidance |
| | Teaching resource support (0.20) | Ideological and political elements of case resources (0.60) | 5 points: typical case with prominent ideological and political elements; 3 points: average case; 1 point: no ideological and political cases |
| | | Adaptability of practical resources (0.40) | 5 points: practical resources (school-enterprise cooperation, base) are fully adapted to ideological and political goals and can deeply support practical teaching; 3 points: basic adaptation of practical resources, partially supported; 1 point: practical resources are unrelated to ideological and political goals and cannot support them |
| | Classroom interaction effect (0.30) | Student participation in ideological and political topics (0.55) | 5 points: students actively participate in discussions on ideological and political topics, speak actively and deeply; 3 points: students passively participate and speak more actively; 1 point: students do not participate, no interaction |
| | | Resonance of ideological and political concepts between teachers and students (0.45) | 5 points: teachers and students highly resonate with ideological and political concepts, forming a good teaching atmosphere; 3 points: there is a certain resonance and a good atmosphere; 1 point: no resonance, dull atmosphere |
| Student development effectiveness (0.25) | Knowledge mastery effectiveness (0.25) | Mastery level of professional knowledge (0.35) | 5 points: proficient in waterfront landscape design knowledge and able to flexibly apply it; 3 points: basic mastery, more flexible application; 1 point: not mastered, unable to apply |
| | | Understanding level of ideological and political knowledge (0.25) | 5 points: have a deep understanding of the knowledge related to ideological and political education in the course, and be able to accurately explain it; 3 points: basic understanding, more accurate explanation; 1 point: not understood, unable to explain |
| | | Ability to integrate and apply knowledge (0.40) | 5 points: able to deeply integrate and apply professional knowledge with ideological and political knowledge; 3 points: basically integrate and apply; 1 point: unable to integrate and apply |
| | Ability improvement effectiveness (0.35) | Ideological and political expression ability of design proposal (0.35) | 5 points: the expression of ideological and political elements in the design scheme is clear, reasonable, and creative; 3 points: basic expression, moderate rationality; 1 point: unable to express |
| | | Practical problem solving ability (0.40) | 5 points: able to efficiently solve complex problems related to ideological and political education in practice; 3 points: can basically solve the problem, with average efficiency; 1 point: unable to solve |
| | | Team collaboration ability (0.25) | 5 points: able to effectively collaborate in team projects and promote the achievement of ideological and political goals; 3 points: able to basically collaborate, with a certain degree of promotion towards ideological and political goals; 1 point: unable to collaborate, hindering the achievement of goals |
| | Value shaping effectiveness (0.50) | Ecological awareness improvement level (0.30) | 5 points: improvement in ecological awareness, prioritizing ecological protection in design and practice; 3 points: there is a certain improvement, and ecological protection can be considered; 1 point: no improvement, not considered |
| | | Cultural confidence enhancement level (0.30) | 5 points: cultural confidence is significantly enhanced, actively inheriting and promoting local waterfront culture; 3 points: there is a certain enhancement, which can inherit culture; 1 point: no enhancement, no inheritance |
| | | Social responsibility formation level (0.40) | 5 points: form a strong sense of social responsibility and actively pay attention to the livelihood needs of waterfront spaces; 3 points: has a certain sense of social responsibility and can pay attention to needs; 1 point: no sense of social responsibility, not paying attention |

consultation, the evaluation system is finally determined to include 4 primary indicators, 12 secondary indicators, and 36 tertiary indicators (Table 2)[22].

## 4.3 Determination results of indicator weights

The weights of indicators at each level are calculated using the Analytic Hierarchy Process, as shown in Table 2. Among them, the primary indicator "depth of content integration" has the highest weight (0.30), reflecting the core position of the deep integration of ideological and political elements and professional content in ideological and political education in curriculum. The weight distribution of "fit of educational objectives" (0.20), "teaching implementation effect" (0.25), and "student development effect" (0.25) is reasonable, covering all key aspects of ideological and political education in the curriculum, and ensuring that the evaluation system can measure teaching quality from multiple dimensions.

## 5 Teaching practice verification and result analysis

### 5.1 Practical objects and schemes

Taking 120 undergraduate students from four classes of the landscape architecture major at Chongqing College of Humanities, Science & Technology in 2021 as the practical objects, the constructed integration strategy of ideological and political education in curriculum and evaluation index system are applied to the course teaching of waterfront landscape design in the second semester of the 2022–2023 academic year (with a total hours of 64, including 24 hours of theory and 40 hours of practice). The practical plan is as follows:

(1) Preparation before class. Based on the objectives of ideological and political education in the curriculum, the teaching syllabus is revised, the ideological and political case library (such as the Zhuxi River Waterfront Project in Liangjiang New Area and the Mayuanxi Waterfront Project in Chongqing) is supplemented. Moreover, it collaborates with two local landscape design companies to determine two practical projects: "Urban Inland River Ecological Restoration" and "Community Waterfront Micro Space Transformation".

(2) Implemented during class. The "double helix" teaching mode is adopted. In theoretical courses, ideological and political elements are integrated through case teaching and thematic discussions. In practical courses, it guides students to transform ideological and political concepts into design plans through project driven and situational teaching. Simultaneously, the "teaching implementation effect" indicator in the evaluation index system is used for process evaluation.

(3) Feedback after class. At the end of the semester, design plans, course papers, and satisfaction questionnaires of students (a total of 120 questionnaires are distributed and 112 valid questionnaires are collected) are collected, and 10 students are organized for in-depth interviews. Based on the evaluation index system, a final evaluation of the "student development effectiveness" is conducted.

### 5.2 Analysis of practical results

5.2.1 Quantitative evaluation results. According to the evaluation index system, the teaching quality is quantified and scored (out of 5 points), and the scores for each primary indicator are as follows. Fit of educational objectives: 4.23 points, indicating a high degree of fit between the goals of ideological and political education in the curriculum and policy requirements, as well as student development needs, with clear goal orientation. Depth of content integration: 3.98 points, indicating a high degree of integration between ideological and political elements and professional content, but in some cases, the exploration of local cultural elements still needs to be strengthened. Teaching implementation effect: 4.15 points, reflecting good adaptability of teaching methods and active classroom interaction, but the ideological and political support of practical resources can be further improved. Student development effectiveness: 4.02 points, indicating significant progress in knowledge acquisition, ability improvement, and value shaping, with outstanding performance in "ecological awareness enhancement" (4.35 points) and "ideological and political expression ability in design schemes" (3.87 points).

5.2.2 Qualitative result analysis. Design scheme quality: 85% of students' design schemes incorporate ideological and political elements such as "ecological restoration" and "cultural inheritance". For example, water purification is achieved through "ecological revetment+local aquatic plant planting" in the "Chongqing Mayuanxi Design Scheme" by a student team, while setting up a "river chief cultural display wall" to convey ecological protection responsibility awareness. The scheme won the "Excellent Design Award" jointly evaluated by the school and enterprise. Student feedback: according to the satisfaction questionnaire, 92% of students believe that "ideological and political education in curriculum has enhanced the social value cognition of design", and 88% of students express "greater concern for the livelihood needs of waterfront spaces". In the in-depth interview, the student mentioned that "in the past, design only considered aesthetics, but now they prioritize how to protect the ecology and meet the needs of residents, feeling that design is more meaningful". Industry evaluation: according to feedback from cooperative enterprises, 60% of the students in the practical project were able to actively coordinate the contradiction between "ecological protection and engineering progress" during on-site construction, demonstrating strong engineering ethics awareness. The company is willing to give priority to hiring this batch of students.

### 5.3 Reflection on practical issues

The balance of integrating ideological and political elements is insufficient: the proportion of "ecological ethics" element in some teaching content is too high (about 60%), and the proportion of "cultural confidence" and "social responsibility" related content is relatively low. Further optimization of the content structure is needed. The lack of dynamism in the evaluation system: currently, evaluations are mainly based on "summative evaluation at the end of semester", and the frequency of process evaluations is insufficient (only 3 times), making it difficult to track the dynamic changes in students' ideological and political literacy in real time. The ideological and political abilities of teachers need to be improved: two young teachers scored low (3.2 points) in terms of "accuracy in interpreting ideological and political elements" and "guidance on the connection between ideological and political education and professionalism", and it needs to strengthen ideological and political training of teachers.

## 6 Conclusions and prospects

### 6.1 Research conclusions

The core logic of ideological and political education in the course waterfront landscape design has been clarified: with "ecological priority, cultural inheritance, and people-oriented" as the ideological and political core, through the three-level integration path of "theory–design–practice", the collaborative education of "professional education" and "value guidance"

has been achieved. A scientific and operable evaluation index system has been established, which includes 4 primary indicators, 12 secondary indicators, and 36 tertiary indicators. This system not only highlights core dimensions such as "depth of content integration" and "student development effectiveness", but also takes into account the "practice oriented" characteristics of waterfront landscape design, filling the gap in ideological and political evaluation of landscape architecture courses. The effectiveness of ideological and political education in the curriculum has been verified: teaching practice has shown that this system can effectively measure teaching quality, help students form "ecological design concept", "cultural design concept", and "responsible design concept", and provide a feasible path for cultivating high-quality waterfront landscape design talents.

### 6.2 Future prospects

Future research directions can focus on: optimizing content and evaluation systems, further balancing the proportion of ideological and political elements, increasing contemporary ideological and political elements such as "rural revitalization" and "carbon neutrality", improving dynamic evaluation mechanisms, and incorporating "monthly design reflection reports" and "ideological and political records of practice log" into process evaluations; strengthening teacher and resource support, establishing a "teacher training base of ideological and political education in curriculum", enhancing teachers' ideological and political abilities through "expert lectures+school−enterprise joint lesson preparation", expanding "ideological and political practice bases", and cooperating with local governments to develop characteristic practice projects such as "waterfront cultural heritage protection" and "ecological restoration demonstration projects"; promoting and radiating the application of this system, adapting it to other courses in landscape architecture such as "Urban Park Design" and "Rural Landscape Planning", and forming a "cluster effect of ideological and political education in curriculum". At the same time, through academic conferences, teaching case collections, and other forms, it could provide reference for the ideological and political construction of similar colleges and similar professional courses nationwide.

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