

Exploration of the Path for Synergistic Education in Party Building and Ideological and Political Education in Construction-oriented Universities

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Abstract

In the context of the new era, construction-oriented universities shoulder the dual mission of implementing the fundamental task of cultivating morality and nurturing professional talents.

[Method] This study focuses on the collaborative education mechanism between party building and ideological and political education. Through literature analysis, case studies, and qualitative interviews, it reveals the current practical difficulties in the collaborative education mechanism between party building and ideological and political education in construction universities. Taking 8 schools as examples, the effective sample size of the interviews was 60 people. **[Result]** The two have inherent compatibility in terms of value guidance, talent cultivation, and practical innovation. By constructing a four-dimensional path of "organizational collaboration curriculum collaboration practice collaboration resource collaboration", strategies such as top-level design integrating curriculum ideology, developing a "professional ideological and political" curriculum group, creating a practical teaching platform, and strengthening the construction of "dual teacher" teachers are proposed.

[Conclusion] The study emphasizes the need to fully utilize the political functions of grassroots party organizations, integrate elements such as craftsmanship spirit into ideological and political education, and form a new collaborative education model with the characteristics of civil engineering disciplines, providing theoretical support and practical reference for cultivating new era construction talents with both morality and talent.

Keywords: Construction-Oriented Universities, Party Building, Ideological and Political Education, Collaborative Education, Path Innovation

Introduction

With the continuous improvement of the quality requirements for higher education by the state, construction-oriented universities, as important bases for cultivating high-quality construction talents, shoulder the important mission of cultivating "great craftsmen" and "future engineers", and are important engines for promoting the high-quality development of urban and rural construction. Construction-oriented universities focus on fields such as architecture, civil engineering, transportation, environment, and urban planning, aiming to cultivate engineering and management talents with solid theoretical foundations,

comprehensive practical abilities, and innovative "craftsman spirit". The importance of collaborative education between Party building and ideological and political education in construction-oriented universities is increasingly prominent (Ding & You, 2022), which is related to whether the professional ethics and social responsibility of construction-oriented university students can meet the needs of the front line of the construction industry.

However, some construction-oriented universities currently face problems in the collaborative education of Party building and ideological and political education, such as single collaborative education content, outdated collaborative education methods, and scattered collaborative education resources. These problems restrict the actual effect of collaborative education between Party building and ideological and political education and also hinder the pace of construction-oriented universities in serving national strategies and regional development and promoting technological innovation in the industry. Therefore, exploring effective paths for collaborative education between Party building and ideological and political education in construction-oriented universities has important practical significance and theoretical value in the new era. This study innovatively proposes a collaborative education mechanism integrating Party building with ideological and political education. By introducing a series of targeted initiatives, it empowers universities to optimize talent cultivation systems that align with national strategic demands. For policymakers, this framework serves as a crucial lever to resolve long-standing challenges in interdisciplinary educational collaboration. For industries, it provides an essential pathway to break through engineering ethics bottlenecks and achieve high-quality development—particularly critical as China accelerates smart infrastructure projects and global engineering partnerships under the Belt and Road Initiative.

Literature Review

Related Research on Party Building and Ideological and Political Education in Universities

The Party building and ideological and political education in universities are the fundamental ways for the Party Central Committee to strengthen its ideological leadership position and consolidate the foundation of modernization education. Promoting the coordinated education of Party building and ideological and political work is an important guarantee for improving the effectiveness of talent cultivation in higher education. Scholars often explore the theory and practice of collaborative education between party building and ideological and political work in universities.

High-quality party building work is conducive to promoting the development of talent training. Some scholars have carried out relevant research on the education of party building work in colleges and universities, and penetrated into the level of the quality of party building work, put forward the MAUT framework for improving the quality evaluation of party building work in colleges and universities in the new era based on the decision-making of interval-in-class multi-attribute groups, and proposed the improved INN-MAUT (interval-in-class multi-attribute utility theory) method for the quality evaluation of party building work in colleges and universities in the new era. By comparing INN-EDAS, INN-TODIM and other methods, the advantages of INN-MAUT in fuzzy data processing and result consistency are verified, and the decision-making model construction ideas and uncertainty management methods in this study provide methodological tools for the research of collaborative education, and the empirical analysis framework and the practical design of the collaborative education

mechanism of party building-ideological and political education provide a direct reference(Mo, 2024)

With the continuous advancement of China's process in the new era, ideological and political education is also facing a new situation and task, which requires it to be combined with party building to educate people, and to deepen the research object and content, break down research barriers, and enrich research theories and methods (Lv, 2025), to promote the quality of ideological and political education(Ma et al., 2022) .

College students are the future of the country, the backbone force in building socialism with Chinese characteristics, and the successors of the Communist Party of China. Especially for college students in construction-oriented universities, they shoulder the responsibility of being "great craftsmen". It is necessary to carry out education on lofty ideals for them and strengthen their belief in Marxism. Therefore, some scholars have explored the organic integration of the two in terms of education based on the theory of synergy, generating synergy effects from three aspects: goal synergy, teacher synergy, and resource synergy, to improve the overall efficiency of education and achieve complementary advantages between the two. (Wu & Ding, 2015)。

In summary, there are many research perspectives on party building and ideological and political education in universities, and the research results are relatively rich. However, there are relatively few achievements on the collaborative education of party building and ideological and political work in universities. The research focuses on the concept, content, methods, faculty, and curriculum of collaborative education between the two.

The Necessity of Collaborative Education between Party Building and Ideological and Political Education in Construction-Oriented Universities

It is an Inevitable Requirement for Implementing the Fundamental Task of Fostering Virtue and Nurturing Talent

With the entry of socialism with Chinese characteristics into a new era, higher education is faced with higher requirements. As important bases for cultivating high-quality construction talents, construction-oriented universities must adapt to the development requirements of the new era, strengthen the collaborative education between Party building and ideological and political education, and cultivate more high-quality talents that meet the needs of the times(University of Houston & Hines, 2019). The construction industry, such as urban planning and major engineering projects, directly relates to national economic development and security. It is necessary to cultivate talents who are proficient in technology and have firm political positions. Collaborative education between Party building and ideological and political education can ensure that professional education always aligns with the Party and state's policies and can solve the problem of "emphasizing skills over morality" in construction-oriented universities. Construction-oriented universities tend to focus on technical instruction, and collaborative education can correct the tendency of "valuing skills only", which is conducive to integrating the spirit of craftsmanship, professional ethics, and socialist core values into professional courses, especially ideological and political courses.

It is a Practical Demand for Serving National Strategies and Industry Development

Party building and ideological and political education are important components of higher education and are of great significance for improving students' comprehensive quality and the quality of talent cultivation. Construction-oriented universities shoulder the responsibility and mission of cultivating "red engineers". In national strategies such as "Transportation Power" and "Rural Revitalization", engineering projects like border construction and post-disaster reconstruction require strengthening students' sense of patriotism and national identity through Party building, enabling them to voluntarily integrate their personal development with national needs. Such projects have significant social and political implications. By enhancing the synergy between Party building and ideological and political education, construction-oriented universities can help students establish correct worldviews, outlooks on life, and values, improve their ideological and political qualities and overall competence, thereby enhancing the quality of talent cultivation and fostering a service-oriented mindset among students to contribute to the nation and regions in need.

It is an Urgent Need to Respond to the Ideological Characteristics of Young People in the New Era

Currently, young college students have a low acceptance of "preachy" ideological and political education. It is necessary to inspire students through practical actions in Party building activities such as "Party branches established in the Party" and "Party member vanguard posts", to achieve the synergy between Party building and ideological and political education. This approach is beneficial in two ways: first, it enhances the effectiveness of ideological and belief education (Ji & Li, 2024); second, it empowers the realization of the "all-round education" pattern. Through the coordination of the Party organization, it is possible to break down the barriers among ideological and political teachers, professional teachers, and student affairs teams, forming a matrix of "ideological and political education in courses + ideological and political courses + practical education", and achieving complementary resources of Party building and ideological and political education.

Theoretical Basis of Collaborative Education

First, the relevant theories of Party building in colleges and universities. The theories related to Party building in colleges and universities include the theories of Party building by Marx and Engels and the theories of the construction of grassroots Party organizations in colleges and universities. Grassroots organizations are the leading core of the work in schools. We should strengthen the Party building to enhance the strength of the proletarian Party and provide scientific theoretical guidance and useful references for the Party building and development of colleges and universities in the new era.

Second, the relevant theories of ideological and political education in colleges and universities. The goal of ideological and political education in colleges and universities is to develop students' abilities in all aspects and realize the theory of the all-round development of man by Marxism. We should practice the concept of "big ideological and political course", innovate the concepts, contents, means and methods of ideological and political education, and promote the realization of the fundamental task of moral education and talent cultivation in colleges and universities.

Third, the theory of synergy. The theory of synergy was first proposed by Hermann Haken, which requires that in a complex internal system, each subsystem should coordinate and cooperate with each other, and ultimately form a new ordered structure combination behavior process among the subsystems. To promote the work of collaborative education by practicing the theory of synergy, we need to be guided by scientific theoretical viewpoints, implement the function of ideological and political education in colleges and universities, promote the construction of a collaborative education system of Party building and ideological and political education in colleges and universities, and enhance the collaborative education ability of the two.

Methodology

Research Hypothesis

The party building work in universities refers to the establishment and development of party organizations within universities, as well as the education and management of party members. The ideological and political work in universities refers to the cultivation of students' correct worldview, outlook on life, and values through various forms of education and guidance activities. The collaborative education of party building work and ideological and political work in universities can promote the comprehensive development of talents and the improvement of their ideological and moral qualities. The hypothesis of this study suggests that the collaboration between party building work and ideological and political work in universities can comprehensively educate students in terms of ideological guidance, organizational activities, and educational resources.

Data Collection

Collect New Year's greetings and relevant data on high-quality development and construction from 8 architecture universities in China, and conduct interviews and research related to the theme with administrative teachers, counselors, and students from one of the architecture universities. In the qualitative interviews conducted in this study, 10 administrative teachers were interviewed, 13 counselor teachers were interviewed, and 37 students were interviewed.

Research Method

Literature Research Method

By searching China National Knowledge Infrastructure (CNKI) for information on party building work, ideological and political education work, and collaborative education between party building and ideological education in construction universities, this study analyzes the contemporary value, theoretical basis, mechanism construction, and education path of party building and collaborative education between ideological and political education in construction universities. The focus is on the work path of party building work and collaborative education between ideological and political education in construction universities.

Experience Summarization Method

Party building and ideological and political education in universities are two important links in the practice of higher education. They have a long history of development and have formed a certain theoretical system and practical methods. In the dynamic process of education, we must face the opportunities and challenges of the new era, constantly delve into the specific

work of party building and ideological and political education in universities, find ways to promote the coordinated development of the two from practice, constantly summarize experience and carry out collaborative construction work, summarize experience and methods from practice, discover the shortcomings of the two in collaborative education, and propose corresponding collaborative education paths for problems.

Interview Method

Based on the characteristics of the development of talent cultivation in construction-oriented universities, an interview outline was prepared. Three construction oriented universities were selected from Jilin Province to interview their party affairs workers, ideological and political education teachers, and students, collect first-hand information, understand the current situation of the coordinated development of party building and ideological and political education in universities, and draw experience from frontline teachers to brainstorm and continuously optimize and innovate the path of collaborative education between party building and ideological and political education in universities.

Results

The Current Situation of the Synergy between Party Building and Ideological and Political Education in Construction-Oriented Universities

Achievements in the Synergy Between Party Building and Ideological and Political Education in Construction-Oriented Universities

Party building leads the integration of ideological and political education into professional education, significantly improving the quality of talent cultivation. In recent years, construction-oriented universities across the country have developed "professional + ideological and political" case libraries for disciplines such as civil engineering and architecture, integrating the "Hong Kong-Zhuhai-Macao Bridge" and "Huoshenshan Hospital Construction" into classroom teaching, which represent China's speed and quality. The political and professional capabilities of students in construction-oriented universities have been significantly enhanced. The proportion of student Party members from these universities winning awards in BIM competitions and green building design competitions has been increasing. In the past three years, the number of graduates participating in projects such as the development of the western region, key areas, and grassroots employment has also been increasing year by year.

The deep integration of Party building and industry demands has achieved remarkable results in serving national strategies. The participation of construction-oriented universities in national major projects has been continuously enhanced. Party members and teachers have taken the lead in participating in national projects such as regional development planning, and many research results have been adopted by the government.

Table 1

Achievements of 8 Architectural Universities in Serving National Strategies and Regional Development

No.	Year	University	Achievements in Serving National Strategies and Regional Development
1	2025	Beijing University of Civil Engineering and Architecture	Deeply involved in the protection and restoration of ancient buildings along the central axis, cultural heritage dissemination and interpretation; led the comprehensive improvement project of Deshengmennei Street, contributing to the rejuvenation of the 600-year-old street in Beijing
2	2025	Shandong University of Civil Engineering and Architecture	Closely aligned with national major strategies, compiled the high-quality development index of the Yellow River Basin urban agglomeration; actively promoted strategic cooperation with the Jinan Municipal Government, with initial achievements in the construction of a strong provincial capital driven by projects
3	2025	Xi'an University of Architecture and Technology	Committed to building a highland of architectural science and technology along the Silk Road, deeply involved in over 10 major projects in countries along the Belt and Road Initiative; the Collaborative Innovation Research Center for Ideological and Political Work was approved as one of the first high-end think tanks in social sciences in Shaanxi Province
4	2025	Anhui University of Architecture	Anchored on Anhui's strategic positioning as "Three Bases and One Zone", expanded in-depth cooperation with "Double First-Class" universities in the Yangtze River Delta region; nearly 3,000 students from 12 colleges participated in social practice, taking "walking ideological and political education classes" from revolutionary old areas to rural cultural tourism, from experiencing red culture to exploring the ancient charm of Huizhou
5	2025	Tianjin University of Civil Engineering and Architecture	Deepened the connection between disciplines and industries, compiled the map of 12 key industrial chains in Tianjin
6	2025	Shenyang University of Architecture	Deepened the implementation of the three-year action plan for comprehensive revitalization and new breakthroughs, carried out the protection and renewal of ancient cities and the planning and construction of urban-rural integration, continuously deepened the transformation of scientific and technological achievements, signed over 300 transformation contracts with local governments and enterprises
7	2025	Jilin University of Architecture	Shouldered the mission of serving national major strategic needs and the comprehensive revitalization of Jilin, safeguarded the employment of graduates in the province, took the lead in the release of the "Technical Code for Spiral Cone Soil Displacement Grouting Piles" by the China Construction Industry Association, filling the domestic technical gap
8	2025	Hebei Institute of Architecture and Civil Engineering	Achieved remarkable results in the "five educations in parallel", received over 10 provincial-level or above commendations for ideological and political course construction; carried out practical cooperation with several large local enterprises, established strategic cooperation with architectural universities, and conducted exchanges and cooperation with many foreign universities.

Construction of a collaborative ideological and political platform between schools and enterprises, and the implementation of industry value education. Construction-oriented universities focus on controlling the "entry" and "exit" of talent cultivation (Zhang 等, 2023)¹. Firstly, they emphasize strengthening ideological and political assessment during students' internships and practical training, adding projects such as "evaluation of social responsibility fulfillment" in the internship phase. Secondly, they emphasize establishing "branches" within "projects" to create distinctive party building brands and form a demonstration effect. Some construction-oriented universities have student party branches directly participating in campus renovations and community planning, and college student innovation and entrepreneurship projects based on the red architectural culture education system have received national funding support. Through the collaborative education of party building and ideological and political education, the transformation from "skill imparting" to "value guidance" and from "individual efforts" to "system integration" has been achieved, cultivating a group of construction-oriented talents who "can go down to the grassroots, be useful, and be reliable", providing solid support for the high-quality development of the industry.

Insufficiencies in the Collaborative Education of Party Building and Ideological and Political Education in Construction-oriented Universities

Incomplete collaborative education mechanism, lacking systematic integration. Firstly, there is a lack of top-level design for the collaborative education mechanism. Party building and ideological and political education are often regarded as "two separate lines", lacking unified planning goals and collaborative education plans, with work contents being disconnected. Secondly, the responsibility subjects for collaborative education are relatively ambiguous, with unclear role divisions among party organizations, ideological and political teachers, professional teachers, and counselors. The responsibility boundaries for collaborative education have not been clearly defined, resulting in low linkage efficiency and a lack of scientific assessment standards for the effectiveness of the collaboration, especially neglecting the long-term tracking and development of students' values and practical abilities.

The content of collaborative education is biased towards professional knowledge, with insufficient integration of ideological and political characteristics. Firstly, there is a "generalization" phenomenon in ideological and political education. Currently, some construction-oriented universities focus on imparting and applying basic theories in their teaching content, failing to deeply explore professional values such as "engineering ethics" and "craftsmanship spirit" in line with the characteristics of construction-oriented universities. Secondly, party building activities are "formalized", with theoretical learning and theme party days mostly remaining at the level of policy promotion, lacking deep integration with discipline construction, scientific research, and social services, lacking appeal, especially lacking vivid cases related to industry development, making it difficult to resonate with students.

¹ Zhang, B., Li, Y., & Yu, Y. (2023). The construction of a practical platform for party building and ideological and political education based on information fusion. *Applied Mathematics and Nonlinear Sciences*, 9(1). <https://doi.org/10.2478/amns.2023.1.00082>

Insufficient innovation in collaborative education methods, with low student participation. Firstly, the education methods still rely on traditional models. Current collaborative education mainly adopts classroom lectures and report presentations, lacking interaction among subjects and experiential teaching, which is not attractive to contemporary college students. Secondly, the practical education link is relatively weak. Although construction-oriented universities focus on students' professional skills through school-enterprise cooperation and social practice, the design of practical carriers for party building and ideological and political education is insufficient, such as lacking practical experience links like visits to red construction sites and rural revitalization projects.

Shortcomings in the construction of collaborative education teams, with insufficient resource integration. Firstly, the professional capabilities of high-quality teachers are mismatched(Wangxu, 2024). Some party workers lack theoretical literacy in ideological and political education, ideological and political teachers have insufficient understanding of industry dynamics, and professional teachers' awareness of ideological and political education is relatively weak, with the effectiveness of "ideological and political courses" not being obvious enough. Secondly, the utilization of collaborative education resources is insufficient. The red resources and industry resources both inside and outside construction-oriented universities, such as major projects and model worker stories, have not been fully integrated, failing to form a powerful educational force. The initiative of student party members and associations in collaborative education has not been fully mobilized, and the educational effect of peer assistance is relatively limited.

Discussion

Exploration of the Path for Synergistic Education of Party Building and Ideological and Political Education in Construction-oriented Universities

Strengthening Top-level Design and Improving the Organizational Synergy Mechanism

Enhancing the top-level design of the synergistic education of Party building and ideological and political education. First, strengthen the overall planning of the university's Party committee. Establish a "Party building + ideological and political education" synergistic education leading group led by the university's Party secretary, formulate a "synergistic education action plan" with professional characteristics of the construction industry, and clarify the educational goals, responsibility division, and implementation paths. Second, strengthen the institutional guarantee for synergistic education. Incorporate the effectiveness of the synergistic education of Party building and ideological and political education into the discipline assessment, teacher title evaluation and appointment, and annual performance assessment system of departments and units to form a policy orientation. In light of the actual situation of construction-oriented universities, establish a multi-dimensional evaluation system for synergistic education in a timely manner, and conduct comprehensive evaluations based on the results of students' ideological and political quality assessment, professional practice achievements, and employer evaluations, etc., to improve the evaluation mechanism for synergistic education.

Establishing a linkage mechanism for the synergistic education of Party building and ideological and political education. On the one hand, pay attention to building cross-departmental collaboration platforms, and establish a joint meeting of "Party building department + Academic Affairs Office + Student Affairs Office + each grassroots college". The

person in charge of each department and unit is the first person responsible for the synergistic education of Party building and ideological and political education, and regularly discuss the educational matters of the course ideological and political design and practical project development of synergistic education. On the other hand, pay attention to clarifying the responsibility list. Detail the specific responsibilities of Party organizations, ideological and political teachers, professional teachers, and counselors, give full play to the ideological leading role of Party organizations, plan a series of "engineering for the country" themed Party days and red construction site practice activities; give full play to the course education role of professional teachers, and pay attention to integrating "ethics of intelligent construction" and "responsibility of green buildings" and other ideological and political elements in the teaching of professional courses(Svensson, 2023); give full play to the ideological education role of counselors, organize "great craftsmen enter the campus" vocational values education activities, and use big data to analyze students' participation in Party building and ideological and political education activities, and timely adjust and optimize the educational strategies.

Deepening Content Integration and Improving the Quality of Synergistic Education in Courses
Developing "Professional + Ideological and Political" course clusters. First, pay attention to developing characteristic courses for synergistic education, such as the compulsory course "Red Architecture History", and integrate the spirit of "Two Bombs and One Satellite" and the spirit of the construction of the Hong Kong-Zhuhai-Macao Bridge into classroom teaching. Especially for professional courses such as civil engineering and architecture, at least a certain proportion of ideological and political content should be embedded to reflect the timeliness of ideological and political education in professional courses, and guide college students to have a sense of responsibility for the times in classroom teaching. Second, build a case resource library for synergistic education, sort out industry role model libraries such as "Models of the Times" and "Great Craftsmen" as the main sources of ideological and political education; collect engineering ethics case collections, and appropriately integrate cases related to the protection of historical buildings in regional development into classroom teaching and practical teaching to cultivate students' noble professional ethics.

Creating a brand of industry practice course education. On the one hand, organize and carry out red construction site practice activities, cooperate with enterprises such as China State Construction, China Railway, and China Communications, and organize students to participate in the Party building activities of major engineering projects, carry out a series of "Party building enters the construction site" practical activities, effectively link practical activities with theoretical course learning, and guide students to understand the red construction culture in practical activities. On the other hand, carry out a series of rural revitalization projects, combine the urban and rural planning major of construction-oriented universities, and carry out social practice courses of "Party building leads rural construction", create a "Party building + ideological and political education" course with the characteristics of construction-oriented universities, and guide students to apply their professional knowledge to serve the grassroots.

Innovating Methods and Means and Strengthening the Practical Synergy Mechanism

Paying attention to technology empowerment for synergistic education teaching. On the one hand, it emphasizes the implementation of immersive teaching, using VR/AR and other

technologies to recreate red ancient buildings like the Old Summer Palace and major engineering scenes such as the construction of the Qinghai-Tibet Railway, enhancing students' learning experience. On the other hand, it builds a smart Party building platform for collaborative education, developing a Party building APP for construction-oriented universities, integrating functions such as "micro-Party classes", "Party member volunteer services", "engineering ethics MOOCs", and "red architecture courses". Traditional educational methods and approaches are no longer suitable for the development requirements of the new era. Construction-oriented universities should actively contact relevant enterprises in the process of talent cultivation, constantly innovate educational methods and approaches, adopt various forms of teaching means and methods, enhance the interest and effectiveness of education, and combine practical activities with Party building and ideological and political education, allowing students to understand the glorious history and great spirit of the Party in practice and enhance their patriotic feelings and sense of social responsibility.

Implement a multi-party collaborative education model. First, expand the base for collaborative education between schools and enterprises. Set up a practical base for Party building and ideological and political education in construction enterprises, promote the "dual-mentor system" of enterprise mentors and ideological and political mentors, apply the interactive education model of flipped classrooms, and encourage students to engage in debates and mock hearings on issues such as ethical dilemmas in intelligent construction. Second, strengthen the brand of volunteer services. Emphasize the exemplary leading role of student Party members, select outstanding student Party members to serve as "ideological and political teaching assistants" for collaborative education practical teaching, and spread positive energy in internships and research teams. Timely carry out public welfare projects such as volunteer services for the protection of ancient buildings, and actively guide students to participate in engineering construction, strengthening their sense of professional mission.

Strengthen the Construction of Teaching Staff and Achieve Collaborative Education through Resource Integration

Cultivate a "dual-qualified" team. On the one hand, actively organize ideological and political teachers to participate in engineering training, and professional teachers to attend ideological and political theory studies, enhancing the ability of collaborative education. Uncover the outstanding teaching resources of the "dual-qualified" teacher team, carry out a series of activities for the "Party member pioneer project", guiding outstanding teacher Party members to play a leading role, and implement the "three ones" plan, that is, to host or participate in one scientific research project, organize one ideological and political activity, and help one student in difficulty, achieving collaborative education in the practice of talent cultivation and scientific research. On the other hand, introduce industry mentors, hire model workers and outstanding engineers as off-campus ideological and political mentors, and set up a "craftsman spirit lecture hall". The construction of the teaching staff is the key to collaborative education. In strengthening the construction of the teaching staff for collaborative education, it is necessary to select, cultivate, and introduce a group of teachers with rich practical experience and high theoretical level to undertake the tasks of Party building and ideological and political education, and also strengthen the training and learning of teachers, combining the actual development of the institution and the region to improve the professional quality and teaching ability of teachers.

Make full use of internal and external resources. First, give full play to the linkage role of red resources, jointly build a "mobile ideological and political classroom" with revolutionary memorial halls and major engineering sites, and carry out on-site teaching. Second, fully utilize alumni resources, inviting outstanding alumni who have participated in the construction of key national fields and major projects to share stories of cultural confidence in domestic and overseas engineering, guiding students to establish correct professional values and stimulating their sense of professional mission, bringing this mission and responsibility to their future jobs. Third, give full play to the empowering role of student organizations, supporting students in establishing high-quality organizations, positioning the development of these organizations in the path of high-quality development of the industry and the school, guiding students to independently plan various ideological and political practical activities, and encouraging students to actively participate in the construction of the country and the region.

Conclusion

The collaborative education of Party building and ideological and political education in construction-oriented universities is a long-term and arduous task. To achieve the collaborative education task of Party building and ideological and political education, it is necessary to continuously improve the "four-in-one" mechanism, which includes the organizational coordination mechanism in top-level design, the curriculum coordination mechanism in educational content, the practical coordination mechanism in training methods, and the resource coordination mechanism in teaching staff. This is the core measure for construction-oriented universities to answer the fundamental question of "what kind of people to cultivate, how to cultivate them, and for whom to cultivate them". Only by deeply integrating the political color with professional characteristics can we cultivate new era builders who can "carry the burden of steel and cement and also shoulder the responsibility of the times".

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