

Research on the Practical Dilemmas and Optimization Paths of the "Dual-Supervisor System" for Normal Undergraduate Thesis

Zhangling Wu

Sichuan Minzu College, Luding, Sichuan, China

Abstract: Against the backdrop of deepening education reform and high-quality development of basic education in China, improving the quality of normal university students' cultivation is a core task for normal majors in colleges and universities, and the "Dual-Supervisor System" for undergraduate graduation theses of normal majors is a key measure. This paper focuses on this system, explains its connotation, clarifies the collaborative responsibilities of on-campus and off-campus supervisors, and expounds their roles in consolidating normal students' academic foundation, strengthening practical application and facilitating their career development. The research finds that in practice, there are problems such as unclear supervisor responsibilities, inefficient communication, insufficient enthusiasm of off-campus supervisors, imperfect evaluation mechanisms and inadequate student awareness. In response to these problems, this paper puts forward optimization strategies from the dimensions of system design and subject guidance: clarifying supervisor responsibilities and collaboration processes, optimizing evaluation mechanisms and improving the incentive system for off-campus supervisors, strengthening guidance and education for students and enhancing their initiative in participation. The purpose is to provide references for the improvement and promotion of this system, promote the quality of collaborative education in normal education, and contribute to the cultivation of high-quality teachers for basic education.

Keywords: Dual-Supervisor System; Normal Undergraduate Majors; Graduation Thesis; Collaborative Education

1. Introduction

China's higher education has entered a stage of connotative development. As the core base for

cultivating teachers in basic education, normal education has become a key issue in education reform with regard to improving its quality. The graduation thesis (design) aims to cultivate and test students' ability to comprehensively apply the theoretical knowledge they have learned to conduct research, solve problems, and develop their innovative capabilities.[1] The undergraduate graduation thesis is a crucial link in the talent cultivation of normal majors. It not only examines the results of students' four-year professional studies but also serves as an important way to cultivate their scientific research literacy, practical ability, and innovative spirit. At present, the guidance for undergraduate graduation theses of normal majors mostly adopts the traditional single-supervisor system, and long-term practice has exposed many problems. In terms of educational resource allocation, some normal colleges and universities face a shortage of supervisors and an uneven disciplinary distribution of supervisors. In popular majors, one supervisor often guides multiple students, resulting in insufficient guidance time and energy, making it difficult to provide personalized guidance. In terms of guidance content, although on-campus supervisors have a solid academic theoretical foundation, they lack real teaching practice experience. Therefore, they often feel inadequate when guiding students to select topics based on educational practice and solve practical problems in the thesis. If the graduation theses of normal students are divorced from the practice of basic education, it will reduce the application value of the theses and make it difficult to achieve the goal of cultivating practical teachers. Against this background, the "Dual-Supervisor System", a new guidance model, has been introduced. It integrates academic and practical resources through the collaboration of on-campus and off-campus supervisors, making up for the shortcomings of the single-supervisor system. In recent years, many normal colleges and

universities in various regions have launched pilot projects. However, due to the lack of systematic theoretical support and standardized implementation procedures, problems such as unclear supervisor responsibilities and poor coordination mechanisms exist, failing to give full play to the educational effect. Therefore, in-depth research on its practical paths and optimization strategies is of great practical necessity.

2. Connotation and Importance of the "Dual-Supervisor System" for Undergraduate Graduation Theses of Normal Majors

The traditional single-supervisor system has limitations such as an imbalance between academic and practical guidance, and insufficient resource coverage, making it difficult to meet the development needs of normal university students in the new era. The "Dual-Supervisor system" provides a solution to the above dilemmas by integrating the academic resources of colleges and universities with the practical resources of basic education. In-depth analysis of its connotation and importance is of great significance for improving the talent cultivation system of normal majors.

2.1 Connotation of the "Dual-Supervisor System"

The "Dual-Supervisor system" for undergraduate graduation theses of normal majors is a guidance model that integrates the academic resources of colleges/universities and the teaching practice resources of primary and secondary schools. Its core lies in assigning each normal university student two supervisors: an on-campus academic supervisor and an off-campus practical supervisor, who divide responsibilities, collaborate with each other, and complement each other's strengths. In the process of implementing the "Dual-Supervisor system", an approach has been explored to promote the development of primary and secondary schools and achieve the coordinated development of urban and rural basic education; a path has been found to effectively guide normal student interns; and a platform has been built to integrate the theories from colleges/universities with the practices of primary and secondary schools.[2] On-campus academic supervisors usually possess solid disciplinary theoretical foundations and academic research experience. Their

responsibilities include: guiding students to sort out the context of disciplinary research and accurately identify the academic value of thesis topics; imparting scientific research methods, such as literature retrieval, empirical research design, and data analysis; controlling the academic logic of the thesis—from structural framework and demonstration process to academic language expression—to ensure it complies with academic norms; and guiding students to deepen their theoretical understanding and integrate educational theories with research questions in a profound way. Off-campus practical supervisors are mainly outstanding real teachers in basic education, with rich teaching practice experience and keen insight into the needs of basic education. Their primary responsibilities are: excavating topic inspiration from teaching practice scenarios and guiding students to focus on real educational issues; providing vivid teaching cases and practical data to help students anchor theoretical research in practical contexts; verifying the practical feasibility of the thesis's research conclusions and putting forward revision suggestions from the perspective of real teaching to ensure that the research results can be applied to the improvement of basic education teaching. Meanwhile, the "Dual-Supervisor system" also features an operational logic of collaborative education. The long-standing drawback left over from the educational process of traditional normal majors in colleges and universities, overemphasizing the teaching of theoretical knowledge while neglecting the improvement of practical skills, still persists. [3] It is not a simple superposition of "academic + practical" guidance, but rather constructs a closed loop of collaborative education featuring "theory - practice - reflection - improvement". The academic guidance provided by on-campus supervisors offers a theoretical framework for empowering the experience of practical supervisors, while the practical feedback from off-campus practical supervisors calibrates the direction of theoretical output by academic supervisors. For instance, in the thesis topic selection stage, academic supervisors provide research methods and theoretical perspectives, while practical supervisors incorporate important teaching points and actual needs. During the writing process, academic supervisors standardize the demonstration logic, while practical supervisors supplement practical details.

After the thesis is finalized, both parties jointly evaluate the academic value and practical application potential of the research results, promoting normal university students to achieve two-way growth in "academic research and practical application".

2.2 Importance of the "Dual-Supervisor System"

First, it consolidates the academic foundation and improves research literacy. Although normal undergraduate students have completed professional courses, their academic research experience remains relatively insufficient. Relying on their profound academic accumulation, on-campus academic supervisors systematically impart research methods and thinking. From the writing of literature reviews, to the proposal of research hypotheses, and the collection and analysis of data, academic supervisors provide full-process guidance, helping students master standardized research procedures and develop a rigorous academic attitude. Second, it promotes the in-depth integration of educational theories and practice. For a long time, normal education has faced the phenomenon of "the disconnection between theories and practice", and the "Dual-Supervisor system" has built a bridge for integration. The collision between the theoretical research of academic supervisors and the teaching experience of practical supervisors promotes the renewal of educational theories and practical innovation, and enables the talent cultivation of normal education to develop in synergy with the reform of basic education. Normal major certification takes "student-centered, outcome-oriented, and continuous improvement" as its core philosophy. It aims to align with the core competency requirements for normal students, build a mechanism for continuous improvement of professional quality, and promote the improvement of the talent cultivation quality of normal majors through a systematic standard system.[4] Third, it enhances the quality of graduation theses. The strict control of academic norms by on-campus supervisors ensures the academic nature and rigor of graduation theses. The practical guidance from off-campus supervisors makes graduation theses more in line with teaching reality and endowed with higher practical value. The combination of the two supervisors can effectively improve the overall quality of

undergraduate graduation theses of normal majors. Fourth, it promotes cooperation between colleges/universities and primary/secondary schools. The "Dual-Supervisor system" has built a cooperation bridge between colleges/universities and primary/secondary schools, facilitating resource sharing, exchange, and cooperation between the two parties. Colleges/universities can learn about the teaching needs and actual situations of primary/secondary schools through off-campus supervisors, providing a basis for teaching reform and talent cultivation. Primary/secondary schools can leverage the academic resources of colleges/universities to improve teachers' professional literacy and teaching standards. "Further standardizing and improving the 'Dual-Supervisor system' for normal majors, focusing on cultivating the 'application-oriented' abilities of professional students, and enhancing their practical capabilities will enable them to stand firm on the podium and achieve seamless connection between normal education in colleges/universities and education in primary and secondary schools".[5]

3. Problems Existing in the Practice of the "Dual-Supervisor System" for Undergraduate Graduation Theses of Normal Majors

Teachers in colleges and universities generally hold multiple academic degrees, yet they lack work experience in basic education and the reserve of professional teachers specialized in practical training. Even experienced professors only focus on imparting theoretical knowledge to students and fail to provide effective practical application training. As a result, graduates of normal majors are often relatively proficient in theoretical knowledge, while their practical teaching skills are far from meeting the requirements of current primary and secondary education.[6] In the practice of the "Dual-Supervisor system" for undergraduate graduation theses of normal majors, although this model has shown positive effects in improving thesis quality and promoting university-primary/secondary schools cooperation, it still faces a series of problems that need to be solved urgently due to the influence of factors such as system design, resource allocation, and subject cognition. The specific problems are as follows.

3.1 Unclear Responsibilities of Supervisors and Ineffective Communication and Collaboration

Some normal colleges and universities have not clearly and detailedly defined the responsibilities of on-campus supervisors and off-campus supervisors, and lack operational responsibility lists or implementation rules. This ambiguity in responsibilities leads to two extreme situations in practice. On one hand, out of concern about the lack of practical guidance, some on-campus supervisors excessively intervene in the core guidance areas of off-campus supervisors, such as directly interfering with students' selection of teaching cases and methods of collecting practical data—resulting in "overstepping guidance". On the other hand, some off-campus supervisors have an unclear understanding of the boundaries of academic norm guidance and arbitrarily guide students on academic content, such as the structural framework of the thesis and the format of literature citations, which overlaps with the guidance provided by on-campus supervisors. More seriously, in key links such as the mid-term thesis review and revision improvement, a "guidance vacuum" may occur where neither supervisor clearly takes responsibility. This leaves students in a dilemma of having no effective guidance during the critical stage of thesis writing, which not only affects the progress of the thesis but may also trigger work conflicts between the two supervisors and weaken the effectiveness of collaborative guidance.

On-campus supervisors and off-campus supervisors belong to two different educational systems--colleges/universities and primary/secondary schools respectively. There are significant differences between them in terms of work schedule arrangement, work priorities, and value orientation, which set inherent obstacles to communication and collaboration. Most colleges/universities have not established a regular communication mechanism, so the communication between the two supervisors often relies on students as intermediate transmitters. This leads to delayed, inaccurate, or even distorted information transmission. For example, the suggestions put forward by on-campus supervisors for deepening theoretical understanding may not be fully conveyed to off-campus supervisors, and the practical revision opinions emphasized by off-campus supervisors may also be simplified

and relayed by students. As a result, it is difficult for the guidance directions of the two parties to form a cohesive force. Some supervisors only conduct temporary and fragmented communication when students encounter obvious problems, lacking regular and systematic work exchanges. This makes it hard for them to reach a consensus on key aspects of students' theses, such as overall planning, phased goals, and key difficulties. This inefficient communication and collaboration model prevents the advantages of the "Dual-Supervisor system" from being fully realized. It may even cause confusion for students due to conflicts in guidance concepts, thereby affecting the coherence and overall quality of thesis writing.

3.2 Inadequate Evaluation Mechanism and Low Enthusiasm of Off-Campus Supervisors

At present, the evaluation system for undergraduate graduation theses of normal majors fails to fully reflect the characteristics and requirements of the "Dual-Supervisor system," showing an obvious tendency of "valuing on-campus supervisors over off-campus ones" and "prioritizing results over processes." In the assessment of thesis scores, the evaluation opinions of on-campus supervisors usually occupy a dominant position with excessive weight, while those of off-campus supervisors are often marginalized. Some colleges/universities even fail to incorporate off-campus supervisors' opinions into the final score assessment system. This leads to the practical guidance value of off-campus supervisors not being recognized through the evaluation process, seriously undermining their enthusiasm for guidance. Meanwhile, the setting of evaluation indicators is not scientific enough. It overemphasizes the academic standardization of the thesis, such as structural integrity, accuracy of literature citations, and depth of theoretical analysis, while paying insufficient attention to practical dimensions such as the thesis's practical value, relevance to teaching application, and effectiveness in solving actual educational problems. This runs counter to the core requirement of "integrating theory with practice" for normal undergraduate graduation theses. In addition, the assessment and evaluation mechanism for the guidance work of the two supervisors is also insufficiently sound. There is a lack of comprehensive and objective evaluation of the guidance attitude, workload,

and effectiveness of guidance. As a result, it is difficult to use the evaluation lever to motivate supervisors to perform their guidance duties better.

Most off-campus supervisors are backbone teachers or teaching researchers in primary and secondary schools, who usually bear heavy teaching tasks, class management work, and school-based teaching research responsibilities. Their time and energy are already very limited. However, most current normal colleges and universities lack effective incentive mechanisms for off-campus supervisors, making it difficult to mobilize their initiative and sustainability in participating in graduation thesis guidance. In terms of material incentives, the guidance allowances for off-campus supervisors are generally low, and the payment process is cumbersome. Some colleges/universities even do not set up special allowances, regarding the guidance work as "voluntary dedication" of off-campus supervisors. In terms of career development incentives, the guidance work of off-campus supervisors is not included in the performance appraisal system of their respective schools, and thus provides no substantial help for their core career development needs such as professional title promotion and selection for excellence. Furthermore, some colleges and universities do not show sufficient respect and recognition for off-campus supervisors, and have not established sound training and communication mechanisms. This leads to off-campus supervisors lacking a sense of belonging and value recognition for the guidance work. These factors collectively result in many off-campus supervisors regarding graduation thesis guidance as an additional burden. The guidance process becomes a mere formality, making it difficult for them to devote themselves wholeheartedly. In some cases, even the phenomenon of "nominal guidance" (i.e., being listed as a supervisor in name only without actual participation) occurs.

3.3 Students' Inadequate Understanding of the "Dual-Supervisor System"

Some normal university students lack a correct understanding of the connotation, value, and operation mechanism of the "Dual-Supervisor system", failing to give full play to their role of active participation in collaborative guidance. Influenced by traditional educational concepts, some students believe that the academic

guidance from on-campus supervisors is more important, while the practical guidance from off-campus supervisors is "dispensable." Therefore, during the thesis writing process, they only attach importance to communicating with on-campus supervisors, passively treat the guidance suggestions from off-campus supervisors, and even deliberately avoid communicating with off-campus supervisors. There are also some students who regard the guidance from off-campus supervisors as an additional burden. They think that having to meet the requirements of two supervisors at the same time will increase their workload, so they do not actively cooperate in practical activities arranged by off-campus supervisors, such as teaching observation and case analysis. What is worse, due to their lack of ability to coordinate the opinions of the two supervisors, some students choose an "evasive" approach when facing conflicts in guidance suggestions. They neither take the initiative to explain the practical needs from off-campus to on-campus supervisors nor clarify the requirements of academic norms to off-campus supervisors. This leaves them in a dilemma during thesis writing and seriously affects the implementation effect of the "Dual-Supervisor system."

4. Optimization Strategies for the "Dual-Supervisor System" for Undergraduate Graduation Theses of Normal Majors

The guidance for educational and teaching practice under the "Dual-Supervisor system" serves as an important guarantee for cultivating the educational and teaching practical capabilities of normal university students.[7] In the practice of the "Dual-Supervisor system" for undergraduate graduation theses of normal majors, to address existing problems such as ambiguous division of responsibilities, poor communication and collaboration, and insufficient enthusiasm of off-campus supervisors, it is necessary to formulate optimization strategies from multiple dimensions including system design, mechanism construction, and subject guidance. The specific strategies are as follows.

4.1 Clarify Supervisors' Responsibilities and Strengthen Division of Labor and Collaboration

By exploring in-depth collaboration between

normal universities and middle schools, precise teaching research and precise guidance based on the intelligent collection and analysis of classroom teaching behavior data are realized.[8] All normal colleges and universities should formulate detailed implementation rules for the "Dual-Supervisor system" based on the characteristics of their own normal majors and training objectives, clearly defining the responsibilities and division of labor between on-campus and off-campus supervisors. The core responsibility of on-campus supervisors focuses on academic guidance and standard supervision, which specifically includes academic tasks such as guiding students to determine research directions, conduct literature reviews, design research plans, standardize thesis structures, supervise academic language expression and academic integrity. These efforts ensure that the thesis meets academic standards and professional requirements. Off-campus supervisors, on the other hand, focus on practical guidance and value enhancement. Their main responsibilities include guiding students to identify research topics from basic education practices, providing real teaching cases and practical data, instructing the application of theoretical knowledge in teaching scenarios, verifying the practical feasibility of research conclusions, and improving the teaching application value of the thesis. At the same time, a "Dual-Supervisor communication and coordination mechanism" should be established, requiring the two supervisors to conduct at least one joint discussion at key nodes such as thesis topic selection, proposal defense, mid-term review, and finalization. This can be carried out through online meetings or offline seminars to synchronize the progress of students' theses, timely communicate the progress and existing problems of students' theses, and form a cohesive force for guidance. At the college level, a unified *Dual-Supervisor Collaborative Guidance Record Form* can be developed. Students are required to regularly record the guidance content and collaboration status of the two supervisors, which will serve as a reference for supervisor assessment and ensure that the division of labor and collaboration are effectively implemented.

To promote effective communication and collaboration between the two supervisors, colleges and universities can build dedicated communication platforms to facilitate effective

communication and collaboration. For example, establishing a tripartite communication group consisting of "two supervisors + student" to ensure real-time information sharing; developing an online collaborative guidance platform that integrates functions such as file transmission, progress tracking, and feedback submission, allowing supervisors to access thesis drafts and mark revision suggestions at any time. It is necessary to clearly specify the frequency and content of communication, requiring the two supervisors to conduct at least one thematic communication per month. The focus should be on exchanging students' phased thesis achievements, existing problems, and the next-step guidance plan to avoid fragmented communication. Regular joint guidance activities involving both on-campus and off-campus supervisors should be organized, with collaborative links embedded in the entire thesis guidance process: jointly participating in topic demonstration meetings during the topic selection stage to evaluate topics from both academic and practical value dimensions; jointly attending proposal defenses during the proposal stage to put forward revision suggestions from the perspectives of research design scientificity and practical feasibility respectively; jointly reviewing thesis progress during the mid-term review stage and negotiating to solve prominent problems such as insufficient theoretical depth or disconnection from practice. Through regular collaborative activities, the two supervisors can form educational consensus, realizing the complementary integration of guidance concepts and methods.

4.2 Optimizing the Evaluation Mechanism to Enhance the Enthusiasm of Off-Campus Supervisors

The purpose of implementing the "Dual-Supervisor System" is to achieve effective connection between colleges/universities and primary/secondary schools, and close collaboration between on-campus and off-campus supervisors, thereby forming a joint force in talent cultivation. Its goal is to foster a group of primary/secondary school teachers who not only master basic theoretical literacy, love the education cause and the teaching profession, possess noble ethics and sound personalities, but also have solid teaching and educational capabilities.[9] It is necessary to reconstruct the graduation thesis evaluation system to fully

reflect the practice-oriented nature of the "Dual-Supervisor System". In terms of evaluation subjects, a tripartite evaluation model consisting of "on-campus supervisors + off-campus supervisors + defense committee" should be established, with clear division of focus and weight. On-campus supervisors focus on evaluating the thesis' academic standards, theoretical depth, and research methods (accounting for 40% of the total weight). Off-campus supervisors focus on evaluating the thesis' practical relevance, feasibility of conclusions, and value for teaching guidance (accounting for 30% of the total weight). The defense committee conducts a comprehensive evaluation of the thesis' completeness, innovation ability, and the student's performance in the defense (accounting for 30% of the total weight). The weighted result of the three parties serves as the final score of the thesis. In addition, a quality evaluation mechanism for supervisor guidance should be established, integrating process-oriented evaluation and result-oriented evaluation. Specifically, evaluate supervisors' guidance attitude from dimensions such as the number of guidance sessions, timeliness of feedback, and pertinence of guidance. Assess the effectiveness of guidance from dimensions such as the excellent rate of students' theses and students' satisfaction. Link the evaluation results to on-campus supervisors' performance appraisals and selection for honors, and associate them with off-campus supervisors' re-employment qualifications and recognition for excellence. Through this evaluation leverage, supervisors will be motivated to earnestly fulfill their guidance responsibilities.

Establishing an Incentive System for Off-Campus supervisors Combining Material and Spiritual Incentives In terms of material support. Set up a special guidance allowance with an increased standard, and distribute it in tiers based on the workload of guidance and the quality of theses to ensure the allowance is paid in full and on time. Reimburse off-campus supervisors for necessary expenses such as transportation and catering incurred during participation in guidance activities to reduce their economic burden. In terms of spiritual incentives, issue formal appointment letters to off-campus supervisors to clarify their guiding identity and honor. Select excellent off-campus supervisors every year and commend them on occasions such as graduation ceremonies and

teaching and research meetings of cooperative primary and secondary schools, so as to enhance their sense of professional honor and social recognition. Establish a development support mechanism for off-campus supervisors to integrate guidance work with professional growth. Establish cooperative relationships with the schools where off-campus supervisors are employed, and include their guidance experience in the scope of continuing education credit recognition for teachers, serving as a reference for professional title promotion and selection for honors. Open resources such as university libraries and academic databases to off-campus supervisors, and invite them to participate in activities such as university academic seminars and teaching reform training to support them in conducting educational and teaching research. This will realize a win-win situation of "guiding students" and "self-improvement". The joint efforts of supervisors provide students with a broader research perspective and more abundant research resources, helping them grow into professional talents capable of adapting to future educational challenges. [10]

4.3 Strengthening Guidance and Education for Students

As a crucial teaching component, the undergraduate graduation thesis requires the establishment of a quality monitoring system and the enhancement of quality supervision, which serve as key measures to improve the overall quality of theses. [11] To raise students' awareness of the "Dual-Supervisor System", colleges and universities can organize special lectures, theme-based class meetings, and other activities to introduce to students the significance of the system as well as the responsibilities and roles of the two supervisors. This helps guide students to form a correct understanding of the "Dual-Supervisor System" and proactively communicate with both supervisors, thereby boosting their awareness of and initiative in participating in the system through diverse approaches. In the initial stage of thesis guidance, special training sessions on the "Dual-Supervisor System" should be organized to explain to students the division of responsibilities between the two supervisors, their collaborative mechanism, and communication skills, while clarifying students' rights and obligations in the collaborative guidance process. Additionally, by sharing cases

of excellent theses, the role of off-campus supervisors in enhancing the practical value of theses can be demonstrated, and the cognitive bias of "valuing on-campus supervisors over off-campus ones" can be corrected. A mechanism for students to take the initiative in communication should be established. Students are required to develop a *Thesis Writing and Communication Plan*, which specifies the frequency of communication with each supervisor (e.g., communicating with each supervisor at least once every two weeks), communication content, and expected goals. When encountering discrepancies in guidance opinions, students are encouraged to proactively organize tripartite communication between the two supervisors, clearly convey the views of both parties, and facilitate the resolution of problems. Meanwhile, students are required to formulate detailed thesis writing plans and communication plans with supervisors, and regularly report the progress of their theses to both supervisors. For students who lack enthusiasm in communication or fail to cooperate with supervisors' guidance, the college shall conduct interviews to remind them. Their communication performance will be incorporated into the process-oriented evaluation of the thesis, guiding students to make full use of the resources of the two supervisors to improve the quality of their theses.

5. Conclusion

As a new guidance model, the "Dual-Supervisor System" for undergraduate graduation theses in normal universities plays a significant role in enhancing students' comprehensive abilities, improving the quality of graduation theses, and promoting cooperation between colleges/universities and primary and secondary schools. At present, the implementation scope of this system in normal colleges and universities has been expanded, the supervisor recruitment mechanism has been gradually improved, and the content and methods of guidance have become more diverse. However, there are still problems in practice: unclear division of supervisors' responsibilities, imperfect communication and collaboration mechanisms, low enthusiasm of off-campus supervisors, incomplete evaluation mechanisms, and insufficient awareness of students. These problems can be effectively solved and the "Dual-Supervisor System" can be improved by

clarifying supervisors' responsibilities, improving communication and collaboration mechanisms, optimizing incentive mechanisms, refining evaluation mechanisms, and strengthening guidance and education for students. With the deepening of education reform and the increasing requirements for the cultivation of normal education talents, this system has broad application prospects. In the future, it can be extended to links such as curriculum learning, internship and practical training to realize full-process guidance. It can also integrate new technologies such as online education and artificial intelligence to innovate its model. At the same time, it is necessary to strengthen theoretical research and practical exploration, improve the system and mechanisms, and contribute to the cultivation of high-quality normal education talents.

Acknowledgments

This article is a phased achievement of the project "Research on the Optimization of Graduation Thesis Management Ecosystem from the Perspective of Digital Intelligence -- A Case Study of Sichuan Minzu College" by the Special Educational and Teaching Reform Project of Practical Teaching Bases of Sichuan Minzu College for 2025-2026 (Project No. GDJG202515).

References

- [1] Guidance Committee for Colleges/Universities of Higher Education under the Ministry of Education. National Standards for Teaching Quality of Undergraduate Programs in Regular Colleges/Universities of Higher Education (Volume 1). Beijing: Higher Education Press, 2018.
- [2] Luo Dan. Implementation strategies of the Dual-Supervisor System under the Background of Integrated Teacher Education: A Case Study of Henan Normal University. *Continuing Education*, 2014(8): 63-64.
- [3] Dong Hongliang, Yang Jingwen. The Training Model of Application-oriented Talents for Normal Majors in Colleges and Universities. *Vocational Ability*, (2023)(5), 64-66.
- [4] Wang Dinghua. Cultivating Good Teachers Starts with the Accreditation of Teacher Education Programs. *Guangming Daily*,

- 2018-01-06(06).
- [5] Wu Di. Exploration on the Implementation Path of the "Dual-Supervisor System" in Teacher Education Programs of Colleges and Universities. *Journal of Higher Education*, 2020(11): 80-83.
- [6] Li Youguo. Problems and Countermeasures in the Development of the "Dual-Supervisor System" Training Model for Education-related Courses in Normal Universities. *Journal of Xinyang Normal University (Philosophy and Social Sciences Edition)*, 2016, 36(02): 65-79.
- [7] Wang hejiang, Zhang, Lulu, Tan Jie, & Ren Ping. Study on the Training Strategies of Dual Supervisors for Improving the Educational and Teaching Practical Abilities of History Majors in Normal Universities. *Journal of Social Sciences of Jiamusi University*, 2023(6): 160-171.
- [8] Gao Yang, Zhao Wei, Guo Shuang, Lü Zhaoxue. Research and Exploration on the "In-depth Collaboration between Dual Teachers" Talent Training Model for Mathematics (normal) Majors in Application-oriented Undergraduate Universities. *Theory and Practice of Talent Training*, (2025)07 (Mid), 153-156.
- [9] Wang Hui & Ni Yuanli. Dual-Supervisor System: Innovation in the Collaborative Training Model for Normal University Students. *Journal of Changsha University of Science and Technology (Social Sciences Edition)*, 2016, 11(6): 99-103.
- [10] Guo Jian. A Study on the Topic Selection of Empirical Undergraduate Graduation Theses in English Education: Taking the School of Foreign Languages in Neijiang Normal University as an Example. *Journal of Neijiang Normal University*, (2025) 40(5):71-76.
- [11] Zhao Hongmei. Study on the Construction of a Quality Monitoring System for Graduation Design (thesis) in Application-oriented Undergraduate Universities. *Journal of Xuzhou Institute of Education*, 2008, 23(2): 105-107.