

Deep Dilemmas and Governance Paths of Industry-Education Integration in Preschool Education Practice Bases: A Practical Exploration Based on G University

Shiping Li*

School of Teacher Education, Guangzhou Huashang College, Guangzhou 510000, Guangdong, China

*Author to whom correspondence should be addressed.

Copyright: © 2025 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: The phenomenon of “superficial integration despite formal cooperation” in industry-education integration of preschool education practice bases in colleges and universities is a bottleneck restricting the quality of future preschool teacher training. Its deep-seated dilemmas can be attributed to the unbalanced structure of “rights, responsibilities, and interests” in the collaborative governance between “colleges and kindergartens”. Taking G University as a case, this study explores and practices a tripartite linkage governance path involving “colleges, kindergartens, and governments.” It clarifies rights and responsibilities through checklist management, balances interests with diversified incentives, and reconstructs the teaching core through competency-based phased practice and evaluation. This model effectively promotes the transformation of cooperation from formal coordination to substantive symbiosis, and the transformation of dual-mentor guidance from administrative supervision to professional leadership. It enhances students’ practical competence and professional identity, providing a reference practical paradigm for achieving in-depth industry-education integration that advances from resource exchange to value co-creation.

Keywords: Preschool education; Industry-education integration; Practice bases; Collaborative governance; Balance of rights, responsibilities, and interests; Dual-mentor system

Online publication: December 31, 2025

1. Introduction

Since the release of the “Guiding Opinions of the General Office of the State Council on Deepening Industry-Education Integration”, deepening industry-education integration has become a national strategic measure to promote the organic connection between the education chain, talent chain, industrial chain, and innovation chain^[1]. The “Opinions of the CPC Central Committee and the State Council on Comprehensively Deepening the Reform of the Construction of Teachers’ Teams in the New Era” also clearly proposes encouraging normal colleges and

universities to jointly establish kindergarten teacher training bases with kindergartens^[2]. Evidently, building high-level preschool education practice bases and advancing industry-education integration is an indispensable path to improving the quality of future preschool teacher training.

However, the current industry-education integration in preschool education practice bases generally suffers from “superficial integration”. Although colleges and universities have established formal cooperative relationships with kindergartens by signing cooperation agreements, they fail to achieve genuine industry-education integration in the core links of talent training, resulting in disconnection between curriculum content and frontline needs^[3]; practical teaching links are mostly fragmented, failing to form a systematic and progressive talent training system; there is also an imbalance in cooperative relationships, partly due to insufficient resource feedback from colleges to kindergartens, making it difficult to build a long-term mutually beneficial mechanism^[4]. This superficial cooperation restricts the cultivation of normal students’ practical abilities and the cognitive development of kindergartens, ultimately affecting the supply quality of preschool education teachers.

So, how to promote in-depth industry-education integration in preschool education practice bases? In fact, “inadequate collaboration and weak governance” are common dilemmas faced by application-oriented undergraduate colleges in advancing industry-education integration and professional cluster construction on a broader scale^[5]. Based on the practice of G University in the Guangdong-Hong Kong-Macao Greater Bay Area, this study, from the perspective of collaborative governance, attempts to reveal the deep-seated roots of the imbalance in “rights, responsibilities, and interests,” and further explore the construction of a sustainable and co-developing cooperation mechanism.

2. Dilemma manifestations and root cause analysis of industry-education integration in practice-based

Currently, driven by national and local government policies, the construction of preschool education practice bases has gradually advanced industry-education integration reforms. However, widespread practical dilemmas of “superficial integration” persist in institutional construction, teacher guidance, evaluation systems, and incentive mechanisms.

2.1. Multi-dimensional manifestations of dilemmas

2.1.1. Institutional void of collaborative organizations

Establishing a sound collaborative mechanism is the basic institutional guarantee for promoting industry-education integration in practice bases. For example, although G University has jointly established collaborative organizations such as a “Practice Base Management Committee” with cooperative kindergartens, these organizations often suffer from an institutional void in actual operation, lacking standardized and institutionalized workflows and responsibility implementation mechanisms. This reduces collaborative relationships to formalities, making it difficult to form a stable and effective institutionalized operation paradigm, which is not conducive to deepening industry-education integration in practice bases. An empirical study on industry-education integration in the Guangdong-Hong Kong-Macao Greater Bay Area by Shen et al. also indicates the weakness of guarantee mechanisms in current industry-education integration^[6].

2.1.2. Suspended guidance of the dual-mentor system

The dual-mentor system (on-campus and off-campus mentors) serves as a bridge connecting theory and practice,

but in practice, it generally faces the problem of “formal existence without substantive function”^[7]. On-campus mentors, despite having solid theoretical knowledge and literacy, often lack frontline practical experience, leading to guidance that is divorced from real-world scenarios. In contrast, kindergarten-based mentors, while possessing rich practical experience, are burdened with heavy daily responsibilities and cannot incorporate intern guidance into their core duties, resulting in random and fragmented guidance. More critically, there is a lack of effective regular communication and collaboration mechanisms between the two types of mentors, making it difficult to form a joint effort in talent cultivation. This leads to the “suspension” of dual-mentor guidance in practice, failing to fulfill its intended role throughout the talent training process.

2.1.3. Disconnection of competency-oriented evaluation

In the evaluation of practical teaching, G University’s current assessment methods significantly focus on the completeness of textual materials such as internship reports and logbooks, failing to effectively conduct on-site assessments of students’ key practical abilities, such as organizing game activities, observing and interpreting children’s behaviors, and communicating with parents. Process-oriented evaluation is relatively weak. Chen points out that teachers’ practical knowledge is actionable, embodied, and tacit, and can only be “demonstrated through actions” when solving specific problems^[8]. Therefore, this evaluation orientation, prioritizing reports over practical performance, leads students to focus on written summaries rather than ability development and reflection during practice. It fails to give full play to the guiding role of evaluation in practical teaching, resulting in disconnection from the goal of cultivating high-quality application-oriented talents.

2.1.4. Diminished incentives for deepening cooperation

Building a talent training model with in-depth industry-education integration requires systematic collaboration between colleges and enterprises in training programs, curriculum systems, practice platforms, and faculty teams^[9]. However, for kindergartens, the increased management costs and safety pressures of accepting interns are often unbalanced with the rewards they receive, such as academic resources, support, and teacher professional development opportunities. This inevitably weakens kindergartens’ enthusiasm for deepening cooperation, making it difficult for collaboration to evolve from initial administrative promotion to a sustainable development stage driven by intrinsic interests.

2.2. Deep-seated roots of dilemmas

The causes of the aforementioned practical dilemmas are complex, but the systemic imbalance of “rights, responsibilities, and interests” in the collaborative governance structure between “colleges and kindergartens” is likely the deep-seated root. This institutional obstacle is also reflected in the “U-G-S” (University-Government-School) collaborative training of normal students, manifested as “unclear responsibilities and obligations among subjects”, leading to insufficient motivation of internship bases and random guidance^[10].

2.2.1. Unclear rights and responsibilities

During cooperation, the decision-making authority and responsibility attribution of colleges and kindergartens in key matters have long been ambiguous. For example, issues such as the distribution of discourse power in kindergarten-based curriculum development, the formulation of evaluation standards for students’ practical abilities, and the assessment weight of dual mentors lack clear definitions. This state of intertwined rights and responsibilities easily leads to mutual evasion or one-sided dominance in cooperation, hindering the advancement

of deep integration.

2.2.2. Void responsibilities

Accompanying ambiguous rights is the difficulty in implementing responsibilities. There is a lack of clear and operable division of responsibilities between the two parties in areas such as the content of mentor guidance, safety management during practice, and the ownership and subsequent development of cooperative achievements. The absence or overlap of responsible entities makes it difficult to effectively implement the dual-mentor system and affects the teaching efficiency and quality during cooperation.

2.2.3. Unbalanced interests

As a key subject in practical teaching, kindergartens often face a significant imbalance between the management costs and childcare pressures incurred by accepting interns, and the rewards they receive, such as academic resources, support from colleges, and teacher development opportunities. The lag and uncertainty of interest returns severely weaken kindergartens' intrinsic motivation for sustained deep participation in cooperation, making it difficult for industry-education integration and cooperative relationships to transform from external promotion to internal drive.

3. Practical exploration of constructing a collaborative governance mechanism

The construction of a collaborative governance mechanism must adhere to the methodologies of “systematic thinking” and “problem-oriented”^[11]. Studies have pointed out that constructing a “trinity” cooperation mechanism, building a “dual-qualified” teaching team, and developing high-quality practical teaching resources are key to deepening industry-education integration^[12]. To address the core contradiction of unbalanced “rights, responsibilities, and interests,” the key lies in promoting “institutional mechanism integration” and building a governance structure that responds to the core demands of all parties. G University’s practice not only standardizes cooperation models but also stimulates the intrinsic motivation of all participating entities, aligning with the requirement to “deepen educational reform from the perspective of modernizing governance systems and governance capabilities to stimulate the vitality of educational development”^[13].

3.1. Constructing a tripartite linkage governance structure involving colleges, kindergartens, and governments

To resolve the dilemma of institutional void in collaborative organizations, G University strives to transform collaboration from looseness to substantiveness. Drawing on the path of “strengthening government governance responsibilities and establishing a tripartite collaborative leadership body” in the “U-G-S” collaboration model, with the active support and coordination of local education administrative departments, G University has jointly established a substantive “Industry-Education Integration Base for Teacher Education” with high-quality local kindergartens and education guidance centers. It has also formulated clear articles of association, a regular joint meeting system, and a special working group mechanism. This governance structure elevates cooperation to the level of formal governance based on rules and systems, providing solid organizational guarantees for in-depth cooperation.

3.2. Establishing checklist-based management systems to clarify rights and responsibilities

To address the common problems of random guidance and lax evaluation in the dual-mentor system, G University and cooperative kindergartens have jointly developed the “Detailed Standards for Practical Teaching of Preschool Education Majors” and the “Dual-Mentor Responsibility Manual.” The former clarifies the competency goals, content requirements, and process norms for each practical link (observation internships, teaching internships, and field visits), providing a unified quality standard for practical teaching; the latter defines the specific responsibilities and collaboration processes of on-campus and kindergarten-based mentors in terms of guidance frequency, content focus, reflection guidance, safety responsibilities, and assessment evaluation. In addition, the two parties have jointly established a “Kindergarten-College Curriculum Resource Development Group” and a “Joint Teaching and Research System” to conduct regular thematic discussions on common practical dilemmas and cutting-edge issues. By clearly defining and institutionalizing the rights and responsibilities of both parties, the collaborative guidance of dual mentors is supported by rules and evidence, improving the quality of industry-education integration in practice bases.

3.3. Building a diversified interest balance mechanism to stimulate motivation

To ensure the effectiveness of collaborative governance and respond to the core interest demands of all parties, G University has focused on building a balance mechanism aimed at achieving win-win outcomes for multiple parties. This mechanism aims to resolve the dilemma of “separation between industry and education, and alienation between colleges and enterprises” by establishing “flexible institutional mechanisms” to ensure the healthy development and sustainability of industry-education integration. For kindergartens, G University has provided professional development pathways, including “special educational research project cooperation” and “key teacher visiting and training”, and awarded the title of “Industry-Education Integration Practice Base for Teacher Education of G University” to deeply cooperative kindergartens, enhancing their sense of gain and honor. For college teachers, the university incorporates achievements from participating in base construction, industry-education integration, joint teaching and research, and cooperative development of teaching cases into the evaluation indicators for professional title promotion, position appointment, and annual assessment, opening up effective paths for their industry-academia-research transformation and professional development. For students, a process-oriented evaluation and incentive system centered on professional competency portfolios has been established. The portfolio, which records typical practical works, activity design plans, and child observation records, not only serves as an important basis for awards and evaluations but also becomes a strong credential for their employment competitiveness.

3.4. Reforming phased practical teaching and evaluation focused on competencies

The reform of industry-education integration evaluation oriented by competencies aims to foster students’ wisdom and high-level abilities^[14]. Drawing on the core concept of the workshop model in industry-education integration, G University has reconstructed its practical teaching system with a competency-oriented approach, organizing practical content and evaluation around key skills required in real industry scenarios (such as child behavior observation, parent-kindergarten communication, and safety emergency response)^[15]. In terms of practical content, a phased practical system of “observation and perception - assisted participation - partial leadership - independent post assumption” has been constructed to ensure that students’ practical experience matches their professional cognition and ability development. In terms of practical models, multi-course linked projects have been innovatively implemented. For example, courses such as “Kindergarten Environment Creation,” “Preschool

Children's Science Education," and "Preschool Education Brand Management" are integrated, and students are organized to go to base kindergartens to complete tasks such as thematic environment creation and science activity guidance over several weeks, enabling them to comprehensively apply their knowledge in real and complex educational scenarios. In terms of evaluation reform, the weight of practical ability evaluation in the total score has been significantly increased, with the proportion of evaluation by kindergarten-based mentors based on students' on-site performance significantly raised. Supplementary multi-dimensional assessment methods, such as competency portfolio review, simulated teaching, and case analysis defense, have been adopted, shifting the evaluation focus from "what students know" to "what students can do", and guiding teaching and learning toward the cultivation of application-oriented, competency-based talents.

4. Practical effects and reflections

Based on the systematic construction of a collaborative governance mechanism, the industry-education integration model of G University's preschool education practice bases has achieved the transformation from formal coordination to substantive symbiosis.

4.1. Analysis of governance effects

4.1.1. Enhanced collaboration between colleges and kindergartens

The optimization of the governance structure and the implementation of the interest balance mechanism have effectively stimulated the intrinsic motivation for cooperation between the two parties. Kindergartens have transformed from passive providers of practice venues for interns to co-designers and collaborative researchers in talent cultivation. They proactively take real problems encountered in frontline childcare and education, such as "optimization of children's emotional management strategies" and "in-depth guidance of outdoor free play," as core topics for joint teaching and research and as research topics for normal students' practical research or graduation theses. This in-depth interaction, based on shared goals and professional aspirations, enables "college-kindergarten" collaboration to transcend simple resource exchange and evolve into an academic community that jointly explores solutions to specific educational problems, achieving mutual empowerment between college talent cultivation and frontline education quality improvement.

4.1.2. Strengthened guidance capability of dual mentors

By clarifying the responsibilities of both parties through checklist-based management and adopting diversified incentives, the guidance effectiveness and professional investment of the dual-mentor team have been effectively enhanced. Through regular participation in joint teaching and research and activity observation in kindergartens, on-campus mentors' guidance is no longer limited to the elaboration of theoretical principles but can combine vivid educational scenarios to provide students with more contextual and operational reflection frameworks. Kindergarten-based mentors, whose guidance work has received institutional recognition and rewards, have transformed their role from administrative supervisors focused on discipline and safety management to developmental mentors concerned with students' practical reflection, teaching method experimentation, and professional identity formation. Based on the norms of the "Dual-Mentor Responsibility Manual", the two types of mentors have formed a relatively stable collaborative guidance model, jointly observing and evaluating students' practice, and enhancing the systematicness and professionalism of guidance.

4.1.3. Improved comprehensive practical abilities and professional identity of students

Although practical knowledge originates from experience, it can be refined into beliefs that guide future actions. The competency-oriented phased practice and evaluation reform have promoted the substantive development of students' professional literacy. Process-oriented competency portfolios show significant progress in students' core practical abilities, such as activity design, child behavior observation and analysis, and parent-kindergarten communication. For example, in the "Spring Arrives" thematic environment creation project jointly carried out by G University and the First Kindergarten of the local street, the student team's abilities in environment planning, material application, and guidance for children's interaction were highly praised by the kindergarten. The interview pass rate and overall evaluation ranking of the past two batches of graduates in regional teacher recruitment exams have steadily improved. Feedback from employers also indicates that their post adaptation period has been significantly shortened, demonstrating good professional competence. More importantly, the experience of successfully solving problems in real projects is crucial for the emergence and consolidation of such beliefs and professional identity.

4.2. Reflections and ongoing challenges in practice

First, the long-term mechanism needs further consolidation. The smooth operation of the current collaborative governance model still relies to a certain extent on the promotion of core members and support from phased projects. Its institutionalized and normalized operational resilience needs further testing through time and practice. How to fully integrate it into the core teaching systems of both parties is a key issue to be addressed in the future. Second, the depth and breadth of interest sharing need to be expanded. Although the existing interest balance mechanism has achieved initial results, exploration in deeper interest linkages—such as co-creation and sharing of research achievements, joint development of brand courses, and order-based talent cultivation—remains insufficient, failing to fully unleash the innovative value of industry-education integration. Third, the integration and application of new technologies need to be strengthened. Facing the disruptive impact of information technologies such as artificial intelligence and big data on the educational ecosystem, how to effectively integrate them into practical teaching environment creation, student ability diagnosis, and personalized guidance, and build a new form of industry-education integration in the context of smart education, is the direction for future practice base construction.

5. Conclusion

In summary, the crux of "superficial integration" in preschool education industry-education integration lies mainly in the imbalance of "rights, responsibilities, and interests". G University's practice shows to a certain extent that constructing a governance path centered on collaborative governance—by clarifying the rights and responsibilities of both parties through "college-kindergarten-government" linkage, stimulating the motivation for deepening cooperation with diversified interests, and reconstructing the teaching evaluation system for industry-education integration based on competencies—can effectively promote cooperation from formal coordination to substantive symbiosis, achieving mutual empowerment between college talent cultivation and frontline needs. This experience of resolving industry-education integration dilemmas through governance innovation provides a reference practical plan for "accelerating the implementation of preschool education action plans" and "improving the public service level of preschool education". In the future, efforts should be focused on deeply solidifying long-term mechanisms, expanding in-depth interest linkages such as co-creation of research achievements, and

actively exploring the empowerment of smart education. Only in this way can a new ecosystem for high-quality preschool education normal student training be systematically constructed, laying a solid foundation for the construction of a contingent of preschool teachers in the new era.

Funding

The 2021 “University-Level Quality Engineering” Project of Huashang College, “Teaching Practice Base for Preschool Education Major of Huashang College - Tianyue Tuohui (International) Kindergarten” (Project No.: HS2021ZLGC06)

Disclosure statement

The author declares no conflict of interest.

References

- [1] General Office of the State Council, 2017, Guiding Opinions on Deepening Industry-Education Integration, visited on October 13, 2025, https://www.gov.cn/zhengce/content/2017-12/19/content_5248564.htm.
- [2] CPC Central Committee, State Council, 2018, Opinions on Comprehensively Deepening the Reform of the Construction of Teachers' Teams in the New Era, visited on October 13, 2025, https://www.gov.cn/zhengce/2018-01/31/content_5262659.htm.
- [3] Wu Z, 2020, Research on Curriculum Teaching of Preschool Education Major Under the Background of Industry-Education Integration: A Review of “Principles and Practice of Preschool Education”. Theory and Practice of Education, 40(24): 2.
- [4] Zheng G, 2013, Strategies for the Construction of Off-Campus Practice Bases for Preschool Education Majors. Studies in Preschool Education, (12): 64–66.
- [5] Mou Y, Li K, Li J, 2020, How Application-Oriented Undergraduate Colleges Lead Professional Cluster Construction Through Industry-Education Integration. Journal of Higher Education, 41(03): 42–50.
- [6] Shen Q, Ouyang Y, 2025, Construction of Industry-Education Integration Mechanism: Logical Framework, Analytical Framework and Empirical Research—Taking the Guangdong-Hong Kong-Macao Greater Bay Area as an Example. Research in Higher Education of Engineering, (04): 125–130.
- [7] Li J, Qin Y, 2025, Research on Innovative Teaching Mode of Preschool Education Practice under the Integration of Production and Education. Lecture Notes in Education, Arts, Management and Social Science, 3(7): 30–34.
- [8] Chen X, 2009, Discussion on the Components of Teachers' Practical Knowledge. Educational Research, 30(10): 66–73.
- [9] Li L, Loy L, 2024, Research on The Cultivation of Professional Talents in Preschool Education at Higher Vocational Colleges under The Integration of Production and Education. Education Reform and Development, 6(3): 191–196.
- [10] Wang J, Ren J, Cui Y, et al., 2023, Research on the Optimization of Normal Students' Educational Internship Model from the Perspective of “U-G-S” Collaboration. Journal of Liaoning Normal University (Social Science Edition), 46(03): 69–75.
- [11] Liu F, Dong X, 2025, A Deep Understanding of the Principled Contributions of the “Five Major Relationships” to the Construction of an Educational Power. China Higher Education, (11): 31–37.

- [12] Sun L, Li J, 2018, Promoting In-Depth Industry-Education Integration and Exploring Precise Talent Cultivation Paths. *China Higher Education*, (17): 56–57.
- [13] Ge D, 2022, The Mission, Motivation and Construction Ideas of a High-Quality Education System. *Educational Research*, 43(03): 26–30.
- [14] Wang Y, He Z, 2022, Artificial Intelligence Empowering Vocational Education: Current Situation, Internal Mechanism and Practical Orientation. *China Distance Education*, (05): 1–8 + 76.
- [15] Heng R, Li S, 2024, Research on the Construction of Workshop Teaching Mode for Industry-Education Integration in Open Education. *Adult Education*, 44(05): 58–64.

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.