

University–Kindergarten Collaboration in Preparing Dual-Qualified Preschool Teachers: A Review of Policy, Practice, and Training Models in China

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Abstract : Early childhood education (ECE) plays a foundational role in shaping children’s cognitive, social, and emotional development, making the preparation of high-quality preschool teachers a global educational priority (UNESCO, 2024; OECD, 2020). In response to increasing demands for educators who can effectively integrate pedagogical theory with classroom practice, the concept of dual-qualified preschool teachers has emerged as a central objective of teacher-education reform in many countries, particularly in China. University–kindergarten collaboration has been widely promoted as a key mechanism for strengthening theory–practice integration in teacher preparation through structured partnerships that combine academic coursework with experiential learning opportunities. This review synthesizes international and Chinese literature on collaborative preschool teacher-training models, with particular attention to policy frameworks, institutional practices, and theoretical foundations supporting university–kindergarten partnerships. The paper examines major collaboration models such as clinical practice approaches, mentorship-based training, professional learning communities, and research-based partnerships, alongside China’s “3 + 1” training structure. It also explores the roles of universities and kindergartens as complementary training environments and analyses policy initiatives shaping early childhood teacher-education reform. Despite substantial progress in collaborative training strategies, the literature reveals persistent gaps relating to curriculum alignment, mentorship capacity, institutional coordination, and evaluation

mechanisms, particularly in regionally diverse contexts such as Hebei Province. By identifying these gaps and synthesizing existing research trends, this review establishes a conceptual framework for strengthening university–kindergarten partnerships and provides a foundation for improving the preparation of dual-qualified preschool teachers in China and comparable educational systems.

Keywords: Early childhood education; dual-qualified teachers; university–kindergarten collaboration; teacher education reform; China; experiential learning; preschool teacher training

1. Introductions

Early childhood education (ECE) represents one of the most influential stages in human development, shaping children’s cognitive, emotional, and social competencies that extend throughout their educational trajectories (UNESCO, 2024). The quality of early childhood learning environments depends heavily on the professional competence of teachers, whose pedagogical knowledge, classroom practices, and reflective capabilities directly affect children’s developmental outcomes (OECD, 2020; Pianta et al., 2017). Consequently, strengthening preschool teacher preparation has become a strategic priority for education systems worldwide. One of the most significant challenges in preschool teacher education concerns the integration of theoretical knowledge with practical teaching competence. Traditional teacher-education programs have often emphasized academic coursework while providing limited opportunities for sustained classroom-based training, resulting in gaps between pedagogical theory and instructional practice (Darling-Hammond, 2017). In response to this imbalance, the concept of dual-qualified preschool teachers has gained increasing prominence. These educators combine strong academic preparation with extensive practical teaching experience, enabling them to translate theoretical knowledge into effective classroom practice (Zhu & Zhang, 2022). University–kindergarten collaboration has emerged as a central strategy for achieving this integration. Through structured partnerships between higher-education institutions and early childhood education settings, teacher-training programs can provide student

teachers with opportunities to observe, practice, and refine teaching strategies in authentic classroom environments while maintaining strong theoretical foundations (Wang & Li, 2021; Gao & Xu, 2021). Such collaborative approaches contribute not only to teacher competence but also to institutional knowledge exchange and innovation in early childhood education practice (Li & Feng, 2026). Globally, collaborative teacher-training models have been implemented in various forms. In Nordic countries such as Finland and Sweden, teacher-education systems integrate research-based academic preparation with extended practicum experiences in early childhood settings (OECD, 2020; Sahlberg, 2018). Similarly, accreditation frameworks developed by organizations such as the National Association for the Education of Young Children (NAEYC) in the United States emphasize the importance of aligning theoretical coursework with classroom-based teaching competencies (Barnett & Frede, 2017). These international developments highlight a growing recognition that high-quality teacher preparation requires sustained partnerships between universities and practice-based learning environments.

In China, early childhood education reform has accelerated significantly over the past decade as the government has prioritized improvements in preschool access and quality. National policy initiatives, including the National Medium- and Long-Term Education Reform and Development Plan (2010–2020) and subsequent preschool education action plans, emphasize the importance of strengthening teacher-training systems and promoting collaboration between universities and kindergartens (Ministry of Education of China, 2020; Xie & Hu, 2025). Within this policy framework, university-affiliated training kindergartens and structured internship programs have become key components of teacher preparation. Despite these developments, challenges remain in implementing collaborative training models effectively across different regions. Variations in institutional resources, mentorship availability, curriculum alignment, and administrative coordination continue to influence the quality of collaborative partnerships (Zhang & Liu, 2020; Wang et al., 2023). These challenges are particularly

visible in provinces characterized by diverse urban and rural educational contexts, such as Hebei Province. Hebei represents an important regional context for examining university–kindergarten collaboration because of its rapidly expanding preschool education sector and its diverse institutional landscape. While some universities and kindergartens have established strong partnership models supporting experiential learning and mentorship-based training, other institutions continue to face barriers related to infrastructure limitations, funding constraints, and uneven policy implementation (Chen et al., 2023). Understanding how collaborative teacher-training models operate within such contexts is essential for developing effective strategies to strengthen preschool teacher preparation nationwide. This review synthesizes international and national literature on university–kindergarten collaboration in preschool teacher training, focusing on conceptual foundations, collaboration models, policy frameworks, theoretical perspectives, and implementation challenges. By examining these dimensions, the paper identifies key research gaps and proposes a conceptual framework for strengthening collaborative teacher-training systems in China.

2. Review Methodology

This study adopts a semi-systematic thematic literature review with policy-context integration to synthesize research on university–kindergarten collaboration in preparing dual-qualified preschool teachers. This approach is appropriate for education-policy and teacher-preparation research where conceptual, theoretical, and institutional perspectives must be integrated across international scholarship and national reform frameworks rather than statistically aggregated. Relevant literature was identified through searches of major academic databases, including Scopus, Web of Science, ERIC, and Google Scholar, together with international policy reports from UNESCO and the OECD and national policy documents issued by the Ministry of Education of China. Search terms included combinations of dual-qualified preschool teachers, university–

kindergarten collaboration, early childhood teacher education, theory–practice integration, and preschool teacher training in China. These searches were complemented by backward reference tracking from key publications to ensure coverage of influential theoretical and empirical contributions. Sources were selected based on their relevance to three analytical domains guiding the review: (1) conceptual understandings of dual-qualified preschool teachers, (2) institutional collaboration models linking universities and kindergartens in teacher preparation, and (3) policy and theoretical frameworks supporting theory–practice integration in early childhood education. Priority was given to peer-reviewed journal articles, international comparative studies, and policy documents addressing preschool teacher-education reform. A thematic synthesis approach was used to organize the literature into major categories reflecting collaboration structures, institutional roles, theoretical foundations, and implementation challenges shaping preschool teacher preparation. While the review incorporates international perspectives, particular attention is given to the Chinese policy environment and to Hebei Province as a representative regional context illustrating variation in collaboration practices and training conditions. This structured synthesis supports identification of research gaps and provides a conceptual foundation for strengthening university–kindergarten collaboration in preparing dual-qualified preschool teachers in China.

3. 3. Dual-Qualified Preschool Teachers: Concepts and Global Trends

Dual-qualified preschool teachers are educators who possess both strong theoretical knowledge of early childhood education and substantial practical teaching competence acquired through classroom experience (Zhu & Zhang, 2022). These teachers are able to translate pedagogical theory into instructional practice, improving classroom effectiveness and responsiveness to children’s developmental needs. Research demonstrates that teachers with integrated theoretical and experiential preparation exhibit stronger classroom-management skills, improved curriculum-implementation

strategies, and greater adaptability in responding to diverse learning environments (Pianta et al., 2017; Sevimli-Celik, 2021). Experiential training enhances teachers' confidence and supports their ability to design child-centred learning experiences aligned with developmental expectations (Ritchie & Jenkins, 2023). Globally, teacher-education systems increasingly emphasize the importance of integrating academic coursework with practical training. Finland's research-based teacher-education model requires preschool teachers to obtain advanced academic qualifications supported by extensive practicum experience (Sahlberg, 2018). Similarly, the NAEYC accreditation framework in the United States promotes balanced training approaches combining pedagogical knowledge with classroom-management competence (Barnett & Frede, 2017). In China, growing attention to preschool education quality has strengthened demand for dual-qualified teachers capable of bridging theoretical instruction and classroom practice. Policy initiatives emphasize experiential learning opportunities and encourage collaboration between universities and kindergartens to support teacher competence development (Zhu & Zhang, 2022; Chen et al., 2023). These developments reflect broader efforts to align teacher-education systems with international standards while addressing national education priorities.

4. 3. University–Kindergarten Collaboration in Preschool Teacher Training

University–kindergarten collaboration represents a central mechanism for strengthening theory–practice integration in preschool teacher preparation. Through structured partnerships between higher-education institutions and early childhood education settings, student teachers gain opportunities to apply academic knowledge within authentic classroom environments (Gao et al., 2022). Several collaboration models support teacher preparation across different education systems. Clinical practice models emphasize extended classroom placements supported by mentorship from experienced educators, enabling student teachers to develop professional competence through guided

observation and participation (Zeichner, 2010). Professional learning communities promote collaborative reflection and knowledge exchange among teachers, mentors, and university faculty members, strengthening institutional partnerships and supporting continuous professional development (Schuster & Kolley, 2021). Co-teaching approaches enable university faculty members and kindergarten teachers to jointly design and implement instructional activities, improving alignment between academic coursework and classroom practice (Roth & Tobin, 2004). Research-based collaboration further enhances teacher preparation by engaging practitioners and researchers in joint inquiry processes aimed at improving instructional strategies and policy implementation (Cochran-Smith & Lytle, 2009). In China, the “3 + 1” training model integrates three years of university-based coursework with one year of supervised kindergarten practice, providing structured opportunities for experiential learning and mentorship support (Ministry of Education of China, 2020). Many universities have established affiliated training kindergartens serving as practice laboratories where student teachers observe classroom instruction and refine teaching strategies under supervision. Such partnerships contribute to curriculum alignment, professional knowledge exchange, and improved teacher readiness while strengthening institutional collaboration between academic and practice-based learning environments.

5. 4. Policy Framework Supporting Collaborative Preschool Teacher Education in China

China’s preschool education reform agenda emphasizes collaboration between universities and kindergartens as a key strategy for improving teacher-education quality. National initiatives such as the National Medium- and Long-Term Education Reform and Development Plan (2010–2020) and the National Preschool Education Action Plan highlight the importance of strengthening teacher-training systems through integrated learning experiences combining theoretical coursework with classroom-based training (Ministry of Education of China, 2020). Government policies also support structured

professional-development systems that provide continuous training opportunities for kindergarten teachers through university partnerships and regional training programs (Zhu et al., 2022). These initiatives aim to strengthen institutional cooperation and improve teacher competence across diverse educational contexts. Despite these policy efforts, variations in implementation remain evident across regions. Differences in institutional resources, mentorship capacity, and administrative coordination influence the effectiveness of collaborative teacher-training systems, particularly in rural areas with limited infrastructure support (Zhu & Zhang, 2022; Liu et al., 2020).

6. Theoretical Foundations of Collaborative Teacher Preparation

Collaborative preschool teacher preparation is supported by several theoretical perspectives emphasizing experiential and socially mediated learning processes. Experiential Learning Theory highlights the importance of learning through direct experience and reflection in professional development (Jullien & Kolb, 1984). Classroom-based practicum experiences enable student teachers to test instructional strategies, evaluate outcomes, and refine teaching practices through structured reflection. Sociocultural Theory emphasizes the role of social interaction in knowledge construction and professional learning (Vygotsky, 1978). Mentorship programs, peer observation, and collaborative teaching activities support professional growth by enabling teachers to engage in shared problem-solving and reflective dialogue (Mercer, 2019).

7. Challenges and Barriers to Effective Collaboration

Despite the benefits of collaborative teacher-training systems, several barriers continue to affect implementation effectiveness. Institutional coordination challenges frequently arise due to differences in organizational priorities between universities and kindergartens (Zhang & Liu, 2020). Curriculum-alignment difficulties also limit the effectiveness of collaboration when theoretical coursework does not correspond closely with classroom practice requirements. Resource limitations, particularly in rural

educational settings, restrict access to mentorship opportunities and infrastructure support necessary for experiential learning (Chen et al., 2023). Administrative constraints and policy-implementation inconsistencies further affect collaboration quality across regions. Addressing these barriers requires sustained institutional commitment and improved coordination between education stakeholders.

8. Research Gaps and Conceptual Framework for Advancing University–Kindergarten Collaboration in China

Existing literature highlights several important gaps requiring further investigation. First, limited evaluation frameworks exist for assessing the effectiveness of collaborative teacher-training models across different institutional contexts. Second, regional-level studies examining collaboration mechanisms remain insufficient, particularly in provinces characterized by diverse educational environments such as Hebei. Additional gaps include limited analysis of mentorship capacity, insufficient curriculum-alignment models, and a lack of longitudinal studies tracking teacher-competency development following collaborative training experiences. Addressing these gaps requires integrated research frameworks capable of examining institutional partnerships across multiple levels of teacher-education systems. The conceptual framework proposed in this review integrates three key components: universities, kindergartens, and dual-qualified teachers. Universities provide theoretical knowledge and research-based pedagogical preparation, while kindergartens provide experiential learning environments supporting practical competence development. Dual-qualified teachers function as mediators between these institutional contexts, translating theory into classroom practice and contributing to improved teacher-training outcomes. Together, these components form a dynamic collaborative system supporting professional competence development and strengthening preschool education quality.

9. Conclusion

University–kindergarten collaboration represents a critical mechanism for strengthening preschool teacher preparation through integrated theory–practice training systems. International experience and Chinese policy reforms highlight the importance of partnership-based teacher-education models supporting the development of dual-qualified teachers capable of responding to diverse learning environments. Despite progress in implementing collaborative training systems, challenges related to mentorship availability, curriculum alignment, institutional coordination, and regional disparities continue to influence training effectiveness. Addressing these challenges requires sustained policy support, improved institutional collaboration mechanisms, and regionally informed research examining partnership implementation across diverse educational contexts. By synthesizing existing literature and identifying research gaps, this review provides a foundation for strengthening collaborative teacher-training systems in China and positions Hebei Province as an important context for examining how partnership-based teacher-education models can improve the preparation of dual-qualified preschool teachers.

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Conflicts of Interest

The authors declare that they have no conflicts of interest.

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