

From Classroom To Campus: Strategic Models For Enhancing School University Collaboration In Teacher Education

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Abstract.

As teacher education evolves to meet the demands of diverse, dynamic classrooms, the need for meaningful collaboration between universities and schools has become more urgent than ever. This study investigates the structural, functional, and relational components that underpin effective school–university partnerships in the preparation of pre-service teachers. Employing a convergent mixed-methods design, the research draws on survey data from 104 participants—including university educators, school mentors, and student teachers—alongside in-depth interviews and document analysis across multiple institutions. Findings reveal that while foundational elements such as strategic alignment and institutional support are necessary, the long-term success of partnerships hinges on enabling conditions like relational trust, informal communication, and leadership continuity. Based on these insights, the study proposes a three-layer strategic framework that integrates policy, practice, and interpersonal dynamics. This model not only illustrates the complexity of collaborative teacher education but also offers a practical guide for institutions seeking to build more sustainable and reciprocal partnerships. The study concludes by discussing implications for practice, equity in recognition, and directions for future research.

Keywords: School–university collaboration; teacher education; strategic framework; Mentorship and mixed-methods research.

I. INTRODUCTION

The preparation of future teachers has long stood at the intersection of two distinct but interconnected worlds: the university, where theory is constructed and refined, and the school, where practice unfolds in all its complexity. Yet, despite decades of reform and rhetoric about bridging this divide, the collaboration between these two spheres often remains more symbolic than structural. What is needed is not merely coordination but strategic, mutually beneficial partnerships that reimagine the very architecture of teacher education. This article responds to that need. In many countries—including the one where this study is situated—teacher education still tends to operate in silos. Universities design syllabi, schools accept student teachers, and the two institutions meet only at brief handover points during practicum supervision. These transactional interactions rarely evolve into sustained dialogue, shared inquiry, or co-constructed learning environments. At the same time, the demands placed on new teachers are rising: they are expected to be reflective, technologically literate, adaptable, and capable of working in culturally and linguistically diverse classrooms (Darling-Hammond & Oakes, 2021). Meeting these expectations requires more than individual effort; it calls for systemic collaboration. Scholars have repeatedly pointed to the potential of school–university partnerships in reshaping teacher education. Goodlad's (1994) concept of Professional Development Schools (PDS), for instance, laid early foundations for the idea of shared responsibility.

More recent work has extended this into models of clinical practice, co-teaching, and joint research projects, positioning schools not merely as practicum sites but as co-equal sites of teacher learning (Zeichner, 2018; Cochran-Smith et al., 2020). Despite this, the implementation of such models remains uneven, with many partnerships hampered by power imbalances, misaligned goals, or lack of institutional commitment (Tack & Vanderlinde, 2019). Interestingly, while much of the existing literature discusses what should happen, fewer studies closely examine what actually works on the ground. Which collaborative models have taken root? How are they sustained? And what strategic principles underlie their success? In other words, there is a gap between aspirational frameworks and on-the-ground realities—a gap this research seeks to

explore and help bridge. This article draws on a mixed-methods study designed to uncover and analyze existing strategic models of school–university collaboration in teacher education. Combining a broad-based survey with in-depth interviews and document analysis, the study investigates both the visible structures and the often-overlooked relational dynamics that sustain (or undermine) effective partnerships.

Unlike studies that rely solely on institutional data or anecdotal impressions, this research aims to triangulate multiple perspectives—student teachers, mentors, university faculty—to develop a nuanced, contextually grounded model of collaboration. What makes this research timely is not only the ongoing push for teacher education reform, but also the broader shift in how we understand knowledge production in education. Increasingly, expertise is no longer seen as the sole province of academia. Classrooms are rich, living laboratories of pedagogical insight. Teachers are researchers, mentors are reflective practitioners, and students are active participants in their own professional growth. By placing these voices at the center of the analysis, this article hopes to offer more than just a theoretical contribution; it seeks to articulate practical, scalable strategies that institutions—large or small, well-funded or resource-constrained—can realistically adopt. Ultimately, the question this research poses is deceptively simple: What would it look like if schools and universities stopped collaborating out of necessity and started collaborating out of shared vision? The answers, it turns out, may already exist—we just need to listen more carefully, connect the dots, and reframe our expectations.

II. LITERATURE REVIEW

2.1. From Theory to Practice: A Longstanding Dilemma

The relationship between theory and practice in teacher education has historically been uneasy. Universities have traditionally been tasked with imparting educational theory, while schools have served as arenas for the application of this knowledge. Yet this binary division has been widely critiqued as artificial and even counterproductive (Feiman-Nemser, 2001). Pre-service teachers often experience a disconnect between what they are taught in lectures and what they encounter in classrooms, leaving them to reconcile conflicting pedagogical messages on their own. This tension has led to increasing calls for integrated models of teacher preparation, where learning is distributed across multiple contexts and supported by diverse stakeholders (Burn & Mutton, 2015).

2.2. Defining Collaboration in Teacher Education

Collaboration between schools and universities has been conceptualized in many ways, from loosely coordinated practicum arrangements to deeply embedded partnerships grounded in co-teaching, joint inquiry, and shared governance (Tillema & van der Westhuizen, 2017). Zeichner (2010) describes a spectrum of partnerships, distinguishing between “weak partnerships” that serve primarily administrative functions and “strong partnerships” that are pedagogically driven and structurally embedded. Importantly, the quality of collaboration does not depend solely on the frequency of interactions but on the degree of reciprocity, shared responsibility, and mutual learning (Goodnough et al., 2022). In strong collaborations, schools are not merely recipients of university-imposed models but are treated as co-constructors of professional knowledge. These models are often built on the principles of communities of practice (Lave & Wenger, 1991), where both experienced teachers and university academics engage in collective sense-making. This view challenges hierarchical assumptions about who holds expertise and opens the door to more equitable and dialogic models of teacher education (Cochran-Smith et al., 2020).

2.3. Models and Frameworks of School–University Partnerships

Globally, a variety of models have been implemented to bridge the classroom-campus divide. The Professional Development Schools (PDS) model, most notably used in the United States, emphasizes collaborative curriculum design, joint research, and ongoing mentor development (Goodlad, 1994; Levine, 2002). In the UK, school-based initial teacher training (SCITT) programs have given schools more autonomy in designing and delivering training, while universities take on a supporting role (Brown et al., 2016). Australia and parts of Europe have similarly experimented with clinical practice models that embed university tutors in schools and encourage co-supervision (Allen et al., 2018). Despite these innovations, implementation has been inconsistent. Many initiatives fail to move beyond symbolic collaboration due to

lack of time, institutional support, or funding. Furthermore, structural power imbalances often remain, with universities setting agendas and schools following suit (Tack & Vanderlinde, 2019). These challenges highlight the need for clearer strategic frameworks that guide partnership development without becoming overly prescriptive or detached from local realities.

2.4. Challenges in Sustaining Meaningful Collaboration

Several recurring barriers have been identified in the literature. One is the lack of role clarity—pre-service teachers often report confusion about who mentors them, and mentors themselves may receive little training or support (Tang, 2003; Ulvik & Sunde, 2013). Another is the issue of fragmented communication, particularly when institutional cultures and expectations differ. Time constraints, bureaucratic pressures, and diverging priorities between schools and universities can also weaken collaboration (Hammerness & Klette, 2019). Additionally, the emphasis on accountability and standards has in some cases led to the narrowing of partnership goals. Rather than fostering innovation and mutual learning, some collaborations focus narrowly on compliance with practicum checklists or standardized assessment tools, leaving little room for reflective dialogue or adaptive problem-solving (Zeichner, 2018).

2.5. Emerging Directions and Research Gaps

More recent work has begun to explore the relational dimensions of collaboration—trust, professional respect, and shared identity—as key determinants of success (Goodnough et al., 2022; Le Cornu, 2016). There is also growing interest in how digital tools and hybrid models (e.g., remote mentoring, asynchronous feedback) can support collaboration in geographically dispersed or resource-constrained contexts (Brennan et al., 2021). However, significant gaps remain. Much of the existing research is either program-specific or context-bound, with limited generalizability. There is a need for studies that analyze multiple models side by side, extract strategic elements, and articulate scalable frameworks for practice. Moreover, few studies incorporate the voices of all stakeholders—especially student teachers, whose insights are often underrepresented despite being central to the process.

2.6. Research Questions

While the introduction has outlined the central aims of the study, the following research questions guide the methodology:

What forms of collaboration currently exist between schools and universities in the context of teacher education?

What are the perceived benefits and challenges of these collaborative practices from the perspective of key stakeholders?

What strategic models or principles can be identified from existing partnerships that support sustainable, reciprocal collaboration?

III. METHODS

3.1. Research Design

This study adopts a convergent mixed-methods design (Creswell & Plano Clark, 2018), integrating both quantitative and qualitative data to examine the structures, practices, and perceptions underlying school–university collaboration in teacher education. The rationale for this design is twofold: first, to capture the breadth of stakeholder perspectives across a range of institutional contexts; and second, to explore the depth and complexity of collaborative models in practice. The simultaneous collection and analysis of quantitative and qualitative data allows for triangulation and comparison, strengthening the validity and richness of the findings.

3.2. Participants and Sampling

The study involved three key participant groups: university-based teacher educators (e.g., lecturers, practicum coordinators), school-based mentors and administrators, and pre-service teachers currently enrolled in practicum or teaching internships. A purposive sampling strategy was employed to select institutions with active teacher education programs and established school–university collaboration mechanisms. A total of 8 schools and 4 universities were included across two major urban regions. For the quantitative phase, 104 participants responded to the survey: 38 university staff, 42 school mentors, and 24

student teachers. For the qualitative phase, 20 individuals were selected for interviews based on their roles and survey responses, ensuring a mix of institutional perspectives.

3.3. Data Collection Procedures

a) Quantitative Phase: Survey

An online questionnaire was developed and distributed via institutional networks. The survey included:

Likert-scale items measuring perceptions of collaboration quality, role clarity, institutional support, and perceived outcomes;

Multiple-choice items identifying current practices (e.g., joint planning, co-teaching, mentorship training);

Open-ended prompts for additional comments.

The instrument was piloted with a small group of teacher educators ($n = 8$) to refine item clarity and internal consistency (Cronbach's $\alpha = 0.87$).

b) Qualitative Phase: Interviews and Document Analysis

In-depth semi-structured interviews (30–45 minutes each) were conducted with 20 participants.

Interview prompts were organized around:

Personal experiences with collaboration;

Institutional expectations and realities;

Barriers and enablers to effective partnership;

Visions for ideal collaboration models.

Interviews were recorded (with consent), transcribed verbatim, and coded thematically. Additionally, institutional documents such as partnership agreements, practicum handbooks, and mentor guidelines were collected and analyzed to contextualize participants' narratives.

3.4. Data Analysis

a) Quantitative Data

Survey responses were analyzed using descriptive statistics (mean, SD, frequency) and cross-tabulations to identify trends across institutions and roles. Inferential analysis (e.g., ANOVA) was applied to examine statistically significant differences in perceptions across stakeholder groups.

b) Qualitative Data

Interview transcripts and documents were analyzed using thematic analysis (Braun & Clarke, 2006). Coding was both deductive (based on literature-derived themes such as reciprocity, institutional alignment, and mentorship) and inductive (allowing for emergent themes specific to the local context). NVivo software supported the coding process, and cross-case comparison was used to identify consistent patterns and divergent perspectives.

3.5. Integration of Findings

Quantitative and qualitative results were merged during interpretation to develop a strategic model for effective collaboration. Convergence and divergence between data sets were explicitly examined. For example, where survey data indicated high perceived clarity in mentor roles, interview data was used to understand how that clarity was achieved or challenged in practice. The final model synthesizes structural, relational, and procedural components of collaboration.

3.6. Ethical Considerations

Ethical approval was obtained from the lead university's ethics review board. Informed consent was secured from all participants, and all data were anonymized. Participants were assured of confidentiality, and they retained the right to withdraw at any time. All digital data were stored securely and accessible only to the research team.

IV. RESULTS AND DISCUSSION

This section presents the findings from both the quantitative and qualitative phases of the study, followed by an integrative model that visualizes the strategic dimensions of effective school–university collaboration. The results are organized into three parts: (1) survey findings, (2) thematic insights from interviews and documents, and (3) a synthesized strategic framework.

4.1. Quantitative Findings

A total of 104 participants completed the online survey: 38 university-based teacher educators (36.5%), 42 school mentors (40.4%), and 24 pre-service teachers (23.1%). Four composite constructs were assessed using Likert-scale items (1 = strongly disagree to 5 = strongly agree), with internal consistency ranging from .81 to .90.

Construct	α	M	SD	Highest-Scoring Item
Collaboration Quality	.89	4.02	0.56	"Partnership goals are clearly communicated" (4.18)
Role Clarity	.81	3.87	0.62	"I understand my specific responsibilities" (4.05)
Institutional Support	.85	3.45	0.71	"My institution allocates time for joint planning" (3.72)
Perceived Outcomes	.90	3.94	0.59	"Collaboration improves student-teacher readiness" (4.11)

A one-way ANOVA revealed significant differences in perceptions of Institutional Support among stakeholder groups, $F(2, 101) = 5.13, p = .007$. Post-hoc Tukey tests indicated that pre-service teachers ($M = 3.12$) perceived significantly less support than university faculty ($M = 3.64, p < .05$). Differences in other constructs were not statistically significant.

Regarding the prevalence of collaborative practices:

82% reported regular joint supervision meetings,

71% had participated in mentor training workshops,

54% were involved in co-designed assessment rubrics,

Fewer reported shared research initiatives (28%) or reciprocal staff exchanges (22%).

4.2. Qualitative Findings

Thematic analysis of 20 in-depth interviews and 12 institutional documents revealed five cross-cutting themes across universities and schools:

Theme 1: Strategic Alignment Beyond Placements

Effective partnerships embedded collaboration within institutional policies, linking it to graduate competencies, workload planning, and performance metrics.

"Our memorandum includes partnership indicators in performance reviews. That changed everything." (University Coordinator, U3)

Theme 2: Reciprocal Mentorship and Co-Learning

Several cases highlighted a two-way mentorship model, where school mentors and university lecturers co-planned lessons and shared pedagogical practices.

"She modeled formative feedback for my staff, and I shared my lesson plan with her undergrads." (School Mentor, S4)

Theme 3: Relational Trust and Communication Fluidity

Trust was fostered through informal but frequent communication. Participants valued WhatsApp groups, ad-hoc video calls, and responsiveness as indicators of respect and shared responsibility.

"Trust is built in the little things—how quickly they respond, how often they ask us what we need." (Mentor, S2)

Theme 4: Adaptive Structural Supports

Collaborations were strengthened by flexible scheduling, shared digital platforms, and small-scale funding for pilot activities.

"We use a shared folder to co-create mentor tasks—less email clutter, more continuity." (Practicum Coordinator, U1)

Theme 5: Fragile Continuity

Despite strong structures, collaboration was vulnerable to turnover, time pressure, and inequitable recognition—especially for school mentors who often lacked formal incentives.

"When our lead mentor left, it took months to rebuild the momentum." (Head Teacher, S3)

4.3. Integrated Framework: Strategic Model for Collaboration

To synthesize the findings, a strategic model was developed that integrates the structural, functional, and relational components of sustainable school–university collaboration. This model is grounded in both the empirical data and prior theoretical literature, offering a visual guide for institutions seeking to strengthen their partnerships. Figure 1 presents this framework across three interrelated levels:

Foundational Pillars: Strategic alignment and institutional support create the enabling infrastructure for collaboration.

Functional Practices: These include reciprocal mentorship, flexible co-planning, and shared professional learning opportunities.

Enabling Conditions: Trust, informal communication, and leadership continuity sustain partnerships over time.

Each layer interacts dynamically with the others. Arrows indicate directional influence, while a feedback loop reflects the reciprocal learning between practice and institutional policy.

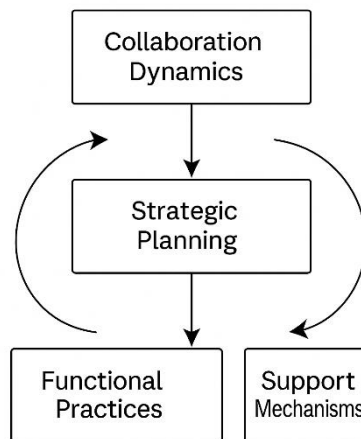


Fig 1. Strategic model for enhancing school-university collaboration

Figure 1 presents a strategic model for enhancing school–university collaboration in teacher education, developed from the integration of quantitative trends and qualitative insights. The model consists of three interconnected layers: Foundational Pillars, Functional Practices, and Enabling Conditions, each of which plays a critical role in sustaining meaningful, long-term partnerships. At the top of the model, the Foundational Pillars—*Strategic Alignment* and *Institutional Support*—represent the structural and policy-level commitments necessary for collaboration to take root. These include shared goals, integrated curricula, and recognition of partnership roles in workload planning and institutional strategy. Flowing from these pillars are the Functional Practices, such as *Reciprocal Mentorship*, *Flexible Structures*, and *Shared Professional Learning*.

These operationalize collaboration through two-way supervision, co-teaching opportunities, adaptable scheduling, and the co-design of learning and assessment experiences. These practices were reported as highly impactful by participants and were found to be most effective when supported by relational dynamics. At the base of the model are the Enabling Conditions, including *Relational Trust*, *Informal Communication Channels*, and *Continuity Through Leadership Stability*. These human elements, though often overlooked in formal policy, emerged as essential from interviews and field documents. Trust and open communication served as the social glue of collaboration, while leadership continuity ensured that partnerships could endure across academic years. Importantly, the model includes a feedback loop, illustrating that successful collaborative practices can, in turn, shape institutional policy and strengthen foundational support. This cyclical relationship emphasizes that collaboration is not static but evolves through reflection, responsiveness, and shared learning over time.

Discussion

This study explored the dynamics, challenges, and strategic elements of school–university collaboration in teacher education through a convergent mixed-methods design. By integrating survey responses with qualitative insights from multiple stakeholders, the study developed a multi-level framework that illustrates how foundational structures, functional practices, and enabling conditions interact to sustain meaningful collaboration. The findings affirm earlier research while also offering new insights into the relational and structural synergies that make collaboration not only possible but productive and sustainable.

1. From Coordination to Co-construction

One of the most consistent findings across both data sets was the importance of moving beyond transactional relationships—such as occasional mentor visits or placement checklists—towards transformative collaboration grounded in shared ownership. This aligns with Zeichner’s (2018) call for a shift from “placement-centered” to “practice-centered” partnerships, where schools and universities co-design, co-deliver, and co-assess teacher education. The high ratings for collaboration quality in the survey, coupled with the qualitative emphasis on joint supervision and co-teaching, underscore the potential of reciprocal mentorship as a vehicle for shared professional growth (Goodnough et al., 2022; Burn & Mutton, 2015).

2. The Overlooked Power of Informal Relationships

While much of the literature on teacher education partnerships focuses on formal agreements, structural models, or practicum frameworks (Allen et al., 2018), this study highlights the critical role of informal communication and relational trust. Participants repeatedly cited informal tools—WhatsApp messages, impromptu calls, or hallway conversations—as essential to solving problems, building confidence, and maintaining momentum. This supports Le Cornu’s (2016) argument that trust and openness are “invisible scaffolds” of effective collaboration. These findings suggest that institutional policies must go beyond logistics to nurture interpersonal culture through sustained dialogue and mutual respect.

3. Institutional Asymmetry and the Equity Challenge

A persistent tension in the study was the unequal recognition and reward structures between school and university partners. University-based educators reported institutional workload credit for supervision and partnership development, while school mentors often described their involvement as “voluntary” or “invisible” labor. This asymmetry echoes concerns raised by Brennan et al. (2021) and Tack and Vanderlinde (2019), who argue that meaningful partnerships require equitable investment and validation from both sides. Without formal recognition, schools risk disengaging from the partnership, especially under conditions of high workload and staff turnover.

4. Sustaining Continuity Through Leadership and Policy

Another key insight was the vulnerability of collaboration to leadership changes. Several participants noted that when a committed mentor or coordinator left their post, collaborative efforts stalled or collapsed altogether. This finding aligns with international research showing that continuity in leadership and vision is crucial for embedding partnerships into institutional culture (Hammerness & Klette, 2019). Strategic alignment, as represented in the top layer of the model, must therefore be supported by policy frameworks that outlast individuals and incorporate collaboration into job descriptions, appraisal systems, and long-term planning (Cochran-Smith et al., 2020).

5. Feedback Loops: When Practice Informs Policy

A novel contribution of this study is the feedback mechanism identified in the framework—where successful collaborative practices lead to renewed institutional support and policy revision. Rather than treating policy as a fixed input, this dynamic suggests that practice can shape policy in responsive systems. This resonates with recent work by Darling-Hammond and Oakes (2021), who emphasize adaptive leadership and data-informed decision-making as hallmarks of effective teacher education reform.

V. CONCLUSION

This study has offered an empirically grounded framework for understanding and enhancing school–university collaboration in teacher education. By combining quantitative survey data with qualitative insights from a diverse group of stakeholders—including teacher educators, school mentors, and pre-service teachers—the research sheds light on the structural, pedagogical, and relational components that make partnerships effective and sustainable. A central contribution of this work is the strategic model presented in Figure 1, which outlines three interdependent levels of collaboration: foundational pillars (strategic alignment and institutional support), functional practices (such as reciprocal mentorship and flexible structures), and enabling conditions (relational trust, informal communication, and leadership continuity). This layered approach reinforces the growing recognition in teacher education that successful partnerships

are not the result of isolated interventions, but of systemic design and sustained commitment (Cochran-Smith et al., 2020; Goodnough et al., 2022). Importantly, the study highlights how relational dimensions—often underemphasized in policy documents—are in fact central to the day-to-day functioning of collaborative models. Informal communication channels, mutual respect, and trust emerged as vital in maintaining engagement and responsiveness.

These findings echo recent calls for relational agency (Edwards, 2023) and cultural responsiveness in teacher education partnerships, suggesting that technical design alone is insufficient without strong interpersonal foundations. Moreover, the study underscores a critical tension: while universities often benefit from structured workload models and formal roles in collaboration, schools—particularly mentors—frequently participate without institutional recognition or compensation. Addressing this asymmetry is crucial for achieving equity in partnership, a point reinforced by international research advocating for shared leadership and distributed expertise (Tack & Vanderlinde, 2019; Hammerness & Klette, 2019). The feedback loop included in the model represents a novel insight. It positions effective practice not just as an output of good policy, but as a driver of adaptive institutional change. When collaborative strategies are successful on the ground, they can inform new policies, attract additional support, and strengthen long-term commitment. This view aligns with dynamic systems thinking in teacher education reform (Darling-Hammond & Oakes, 2021) and offers a hopeful pathway for institutions aiming to build resilient partnerships. Yet, like all research, this study is not without limitations. It focuses on a particular regional and institutional context, and while the themes are broadly relevant, generalizability remains a concern.

Future studies should extend this model across different cultural and national **settings**, and ideally incorporate longitudinal approaches to assess how collaborations evolve over time and under changing leadership or policy regimes. In conclusion, this research affirms that school–university collaboration cannot be reduced to placements and paperwork. It is a dynamic, evolving relationship that must be cultivated intentionally and sustained through shared vision, mutual accountability, and human connection. Institutions that invest in all three levels—structure, practice, and trust—are best positioned to prepare teachers who are not only pedagogically competent, but also professionally confident, contextually aware, and socially engaged.

VI. IMPLICATIONS OF THE STUDY

The findings of this study offer valuable implications for the practice, policy, and further research of school–university collaboration in teacher education. One of the most immediate takeaways is the importance of fostering a culture of reciprocal engagement between universities and schools. Rather than treating practicum supervision as a one-way process, institutions should encourage joint reflection, co-teaching, and co-construction of learning objectives. This calls for a shift from compliance-based models of mentorship toward collaborative ones, where both school mentors and university faculty are seen as co-educators. Mentor training and practicum design should explicitly support these practices, incorporating shared professional development sessions and formative feedback loops involving all stakeholders. The use of informal yet functional communication channels, such as instant messaging and shared digital repositories, also emerged as crucial in enhancing responsiveness and sustaining relational trust—elements that, while often overlooked in formal agreements, proved essential to successful collaboration in this study. From a policy and leadership standpoint, the study underscores the need for institutional structures that not only encourage but also reward meaningful collaboration. Findings revealed a persistent asymmetry between schools and universities in terms of workload recognition, time allocation, and administrative support.

To address this imbalance, educational leaders should institutionalize collaboration through mechanisms such as performance evaluations, workload credit, and professional recognition for school mentors. Memoranda of Understanding (MoUs) should be co-developed with input from all parties to clearly articulate roles, responsibilities, and the shared goals of partnership. In addition, the sustainability of collaborative efforts is heavily dependent on leadership continuity. Several cases in the study demonstrated that the departure of a key coordinator or mentor could disrupt or dismantle years of partnership work. For

this reason, distributed leadership models, where collaboration is embedded across roles and supported by policy rather than individuals, are essential. These findings also point to several directions for future research. The strategic model developed in this study provides a foundation for further empirical validation in different educational and national contexts.

Comparative studies could explore how the model performs across centralized and decentralized systems, or between resource-rich and resource-constrained institutions. Longitudinal research is particularly needed to trace how partnerships evolve over time, especially in response to policy reforms or staffing changes. Moreover, future studies might focus more deeply on the experiences and outcomes of student teachers within various collaborative models, evaluating how these impact their professional identity, readiness, and long-term retention in the profession. Another area worth exploring is how relational trust—highlighted in this study as a vital enabler—is built, maintained, and potentially undermined across different institutional cultures. Taken together, these implications affirm that school–university collaboration is not a peripheral feature of teacher education but a core structural and relational necessity. When designed strategically, enacted professionally, and supported institutionally, such collaboration can lead to not only stronger teacher preparation programs but also more resilient educational partnerships. As teacher education continues to adapt to the evolving demands of classrooms and communities, the ability to build and sustain these collaborative ecosystems will be essential to the development of responsive, reflective, and well-supported teachers.

VII. LIMITATIONS OF THE STUDY

While this study provides meaningful insights into the strategic components of school–university collaboration in teacher education, several limitations must be acknowledged to contextualize the findings and guide future inquiry. First, the study was conducted within a relatively narrow geographic and institutional context, focusing on a select number of schools and universities with existing or emerging partnerships. Although purposive sampling allowed for the inclusion of diverse voices—university staff, school mentors, and pre-service teachers—the findings may not be fully generalizable to contexts where school–university relationships are absent, underdeveloped, or governed by different systemic norms. Institutional culture, national education policy, and levels of decentralization likely influence the nature and sustainability of collaboration, and these variables were not the focus of this study. Second, while the use of a mixed-methods design enhanced the depth and validity of the findings, the cross-sectional nature of data collection limits our ability to draw conclusions about the evolution of partnerships over time. The study captured a snapshot of collaboration at a single point, yet many aspects of school–university relationships—such as trust-building, leadership transitions, and the maturation of co-teaching models—are inherently dynamic.

A longitudinal approach would provide richer insights into how such collaborations grow, adapt, or decline across academic cycles or policy shifts. Third, the reliance on self-reported data—particularly through surveys and interviews—introduces the possibility of social desirability bias. Participants may have framed their responses in ways that reflect institutional expectations or personal ideals rather than actual practice. While triangulation with document analysis helped mitigate this risk, further validation through classroom observations, meeting transcripts, or mentor evaluations could offer more objective data on collaborative behavior. Lastly, although the study aimed to represent all key stakeholders in the partnership, the voice of student teachers, while included, was somewhat limited due to institutional access and timing constraints. As emerging professionals who directly experience both ends of the school–university bridge, their perceptions of mentoring quality, coherence of learning, and institutional responsiveness deserve deeper exploration in future research. Despite these limitations, the study offers a useful framework for understanding and improving collaborative practice in teacher education. By acknowledging these constraints, we hope to encourage further research that extends, adapts, and challenges the findings presented here in diverse educational contexts.

VIII. FUTURE RESEARCH

The findings of this study open several promising avenues for future research in the field of teacher education and institutional collaboration. While the strategic framework developed here offers a conceptual foundation for understanding sustainable school–university partnerships, its applicability and adaptability across different contexts remain to be tested and refined. One direction for future research involves the validation and comparative application of the model across diverse educational systems. Since this study was conducted in a specific national and institutional context, further investigations in other regions—particularly those with different governance structures, resource allocations, and cultural expectations around teacher education—would provide valuable insights into the model’s transferability. Cross-country comparative studies could also explore how contextual factors, such as centralized vs. decentralized education systems or public vs. private institutional models, influence the structure and dynamics of collaboration. Another important area for future inquiry is the use of longitudinal designs to examine how collaborative partnerships evolve over time. Trust, leadership stability, and institutional commitment were all highlighted in this study as crucial elements, yet these are inherently dynamic and subject to change. Long-term studies could help capture the life cycle of partnerships, identify critical turning points, and provide evidence on what helps collaborations endure beyond individual champions or isolated initiatives.

Additionally, more research is needed to foreground the perspectives of student teachers, whose voices were present but somewhat limited in this study. As primary beneficiaries of school–university partnerships, student teachers can offer firsthand insights into how collaboration affects their preparedness, confidence, and transition into the profession. Future research could explore how various mentoring models, levels of coherence between theory and practice, and opportunities for co-reflection shape the development of teacher identity and pedagogical competence. There is also scope to examine under-researched elements of relational dynamics, such as how trust is cultivated or eroded, how conflict is negotiated between institutional partners, and what leadership behaviors are most effective in maintaining collaborative momentum. Ethnographic or narrative methodologies could be particularly useful in capturing the lived experiences of participants within these evolving ecosystems. Finally, in light of ongoing digital transformation in education, future studies could explore the role of technology in facilitating collaboration—especially in contexts where geographic dispersion or resource constraints make face-to-face interaction difficult. Research into hybrid and asynchronous mentorship models, digital co-teaching platforms, and shared virtual professional learning communities could further expand the field’s understanding of how innovation can support equity and engagement in partnership work. In sum, the future of research in this area lies not only in refining theoretical models but in continuing to ground them in the realities of practice. Collaborative teacher education will increasingly demand nuanced, flexible, and context-responsive solutions—and sustained research attention will be critical to ensuring that partnerships continue to evolve in ways that are inclusive, impactful, and enduring.

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