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Mentorship in Teacher Education Programs: A Review of Practices, Outcomes, and Challenges

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ABSTRACT: Mentorship in teacher education plays a vital role in the development of pre-service teachers by bridging the gap between theoretical knowledge and practical application. Effective mentorship fosters professional identity, enhances classroom management skills, and promotes long-term career satisfaction. This review aimed to explore the different models of mentorship in teacher education, their outcomes, challenges, and enablers to identify best practices and provide evidence for improving mentorship programs. A systematic review was conducted using databases such as ERIC, Scopus, and JSTOR. Inclusion criteria focused on peer-reviewed articles published between 2013 and 2024, with a specific focus on teacher education programs. Studies examining mentorship models, outcomes, and challenges were considered. The review identified several mentorship models, including traditional dyadic mentorship, peer and group mentoring, and online/e-mentoring. Key outcomes of mentorship include professional identity development, enhanced instructional skills, and increased teacher retention. Challenges, such as time constraints, mentor overload, and mismatched mentor-mentee pairings, were prevalent. Enablers like structured mentor training and reflective practices emerged as critical for successful mentorship programs. Findings highlight the need for structured, evidence-based mentorship programs in teacher education to improve teacher preparation and retention. Future research should focus on longitudinal and cross-cultural studies to explore the long-term effects of mentorship. This review contributes to the development of mentorship models that can be implemented to support teacher growth and retention globally.

KEYWORDS: Mentorship; teacher education; professional identity; teacher retention; mentorship models

1. Introduction

Mentorship is a vital component of teacher education, significantly influencing the development of pre-service teachers as they transition into professional educators. Within teacher education programs, students gain theoretical knowledge and pedagogical skills, but it is through mentorship that they bridge the gap between theory and real-world classroom practice. Experienced mentors provide guidance, support, and constructive feedback, helping novice teachers navigate the complexities of teaching, including classroom management and student engagement [1]. The significance of mentorship is particularly evident in its impact on

teacher retention. Many beginning teachers, especially in challenging educational environments, leave the profession early due to inadequate support. Structured mentorship programs help address this issue by fostering a supportive environment that boosts confidence and competence. Moreover, mentorship encourages reflective practice, allowing mentees to recognize their strengths and areas for improvement, thereby enhancing teaching effectiveness and student outcomes [2]. Mentorship in teacher education is broadly understood as a professional relationship in which an experienced educator supports the growth of a novice teacher. This relationship may be informal, such as collegial guidance, or formally structured through institutional programs. Theoretical frameworks provide valuable perspectives for understanding how mentorship facilitates professional learning and identity formation [1,3].

Bandura's social learning theory emphasizes learning through observation and imitation, suggesting that novice teachers benefit significantly from watching their mentors' classroom practices and professional interactions [4]. Lave and Wenger's situated learning theory further underscores that meaningful learning occurs within authentic contexts, such as classrooms, where pre-service teachers gradually move from peripheral observation to active participation under mentor guidance [5]. Complementing these perspectives, Mezirow's transformative learning theory highlights the reflective and critical dimensions of mentorship, where dialogue, feedback, and guided reflection can challenge pre-existing assumptions and foster deeper professional growth [6].

In practice, these theoretical lenses show that mentorship is not simply about the transfer of technical skills, but rather about creating opportunities for observation, participation, and reflection. Mentors support pre-service teachers in essential tasks like lesson planning, instructional delivery, and classroom management, while also guiding them through the emotional and logistical challenges of entering the profession. By modeling effective practices, providing consistent feedback, and encouraging critical reflection, mentors help mentees build confidence, resilience, and the capacity to develop as reflective practitioners [7].

Despite its recognized importance, mentorship in teacher education still faces several gaps in the literature. A key issue is the lack of consensus on what defines effective mentorship. While some studies stress the value of experienced mentors, others highlight the need for structured, standardized programs. However, limited research compares mentorship models across contexts to identify those most effective for pre-service teacher development. Another gap is the scarcity of longitudinal studies examining mentorship's long-term effects on teacher retention and student outcomes. Most research focuses on short-term gains, leaving questions about sustained success unanswered. Additionally, little is known about how mentorship supports diverse pre-service teachers, including those in high-needs schools or from underrepresented backgrounds [8, 9]. Mentor perspectives also remain underexplored. While mentee experiences are often emphasized, less attention is given to the support, training, and challenges mentors face. Addressing these gaps is essential for improving mentorship quality. This review aims to synthesize existing literature on mentorship in teacher education, focusing on effective models, outcomes, and the challenges that influence both mentor and mentee success.

2. Methodology

This review adopts a systematic review design following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework to ensure transparency,

replicability, and methodological rigor. The purpose of using a systematic approach is to comprehensively identify, evaluate, and synthesize studies related to mentorship in teacher education programs, with a focus on understanding mentorship models, their outcomes, and the challenges involved.

2.1. Search strategy.

A systematic search was conducted across the following major academic databases: ERIC (Education Resources Information Center), Scopus, JSTOR, Web of Science, and Google Scholar. These platforms were selected for their extensive coverage of educational research and peer-reviewed literature. The search was carried out using Boolean operators and combinations of the following keywords: "Mentorship" AND "teacher education", "Mentoring models" AND "pre-service teachers", "Mentor-mentee relationship" AND "teacher preparation", "Teacher induction" AND "education programs", "Challenges of mentorship" AND "teacher training". To ensure comprehensiveness, the search included title, abstract, and keyword fields. The search process was documented and results were imported into citation management software for screening and selection.

2.2.Inclusion and exclusion criteria.

To maintain relevance and quality, the following inclusion and exclusion criteria were applied as summarized in Table 1.

Table 1. Criteria used for the systematic review of mentorship in teacher education programs.

Inclusion Criteria	Exclusion Criteria
Articles published in English	Non-English publications
Peer-reviewed journal articles	Dissertations, editorials, or opinion pieces
Published between 2013 and 2024	Studies prior to 2013
Focus on teacher education programs	Mentorship in fields outside teacher education
Address mentorship models, outcomes, or challenges	Studies not directly related to mentorship or teacher preparation

2.3. Data extraction and analysis.

A data extraction form was developed to code selected articles based on the following categories: Mentorship Models (Formal vs. informal, peer mentoring, co-teaching, online mentorship, school-based programs), Outcomes (Teacher development, retention, teaching effectiveness, professional identity, and student outcomes), and Challenges: Mentor preparedness, time constraints, institutional support, mismatched pairings, diversity considerations. The data were analyzed using thematic analysis to identify patterns, similarities, and divergences across studies. Codes were iteratively refined, and themes were grouped according to their relevance to the guiding research questions. Quantitative results were tabulated when applicable, and qualitative insights were synthesized narratively to capture the complexity of mentorship in varied contexts [10, 11]. The database search across initially yielded 1,236 records. After removal of 312 duplicates, 924 articles were screened by title and abstract. At this stage, 721 articles were excluded for not meeting the inclusion criteria (unrelated to teacher mentorship, opinion pieces, or non-empirical studies). The full texts of 203 articles were assessed for eligibility, with 157 excluded due to lack of methodological

rigor, absence of mentorship focus, or insufficient relevance to teacher education. Finally, 40 studies met all criteria and were included in the synthesis (Figure 1).

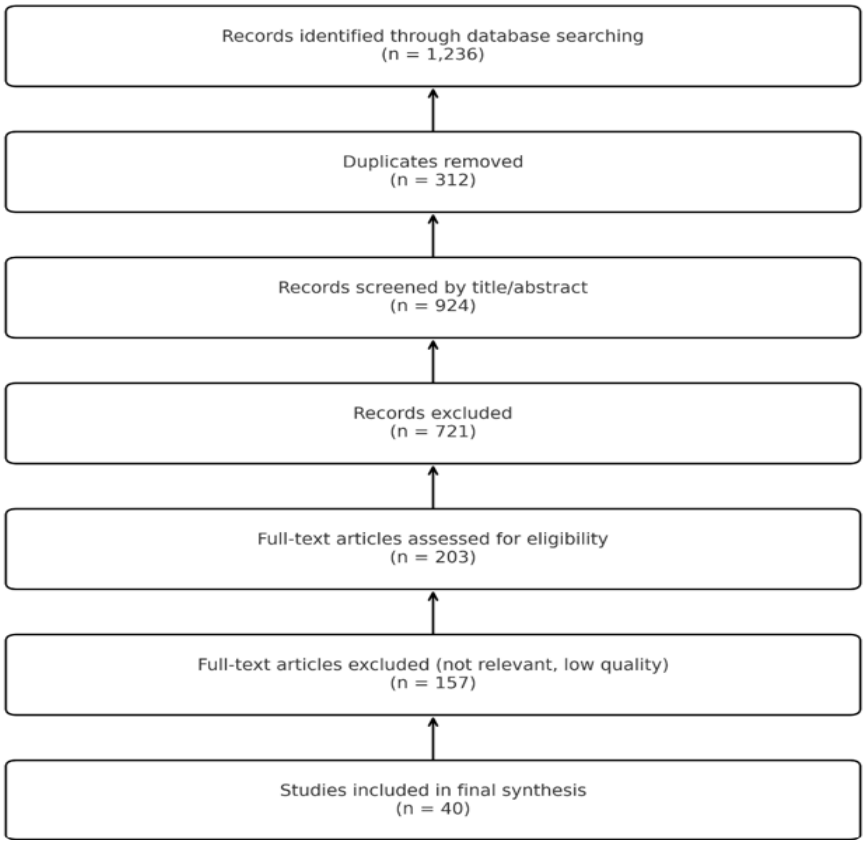

Figure 1. PRISMA flow diagram.

3. Models of Mentorship

3.1.Overview of mentorship.

The The systematic review included a range of peer-reviewed studies published between 2013 and 2024 that focused on mentorship within teacher education programs. The selected studies were conducted in diverse geographic contexts, including North America, Europe, Asia, and Australia, providing a global view of mentorship practices and models in teacher preparation. Study designs varied and included qualitative case studies, mixed-method approaches, longitudinal studies, and experimental research. Each study contributed unique insights into how mentorship supports pre-service teachers during their transition into the professional teaching environment. Most studies examined structured mentorship programs implemented during teaching practicum or induction phases, while others explored informal or naturally occurring mentorship relationships between experienced and novice teachers.

Expanding on this, notable contrasts emerged when comparing mentorship practices across contexts. In the Global North, particularly in high-income countries such as the United States, Canada, and parts of Europe, mentorship programs are often institutionalized with structured frameworks, formal mentor training, and strong policy backing. These contexts frequently emphasize reflective practice, evidence-based teaching strategies, and professional identity formation. Conversely, in the Global South and low-resource settings, mentorship is often shaped by contextual realities such as limited institutional resources, larger class sizes, and fewer trained mentors. Programs in these settings tend to rely more heavily on informal

mentoring, peer support networks, and culturally embedded practices of teacher learning. Despite resource constraints, studies from low-resource contexts highlight the resilience and adaptability of mentorship models, often emphasizing relational trust, community involvement, and localized pedagogical knowledge.

This comparative perspective underscores that while mentorship universally supports pre-service teachers, the design, implementation, and perceived effectiveness of mentorship models are deeply influenced by broader cultural, institutional, and socio-economic conditions. These differences point to the importance of tailoring mentorship approaches to specific educational ecosystems rather than adopting one-size-fits-all models.

3.2.Models of mentorship.

A diverse set of mentorship models was identified across the studies, reflecting varying institutional goals, cultural practices, and resource availability (Figure 2). This is the most common model, involving a one-on-one relationship between a pre-service teacher (mentee) and an experienced teacher (mentor). Studies report that dyadic mentorship fosters deep professional connections and personalized guidance. Mentors provide targeted feedback on lesson planning, classroom management, and instructional strategies. However, the success of this model heavily depends on mentor quality and the alignment between the mentor's teaching philosophy and the mentee's needs [12, 13].

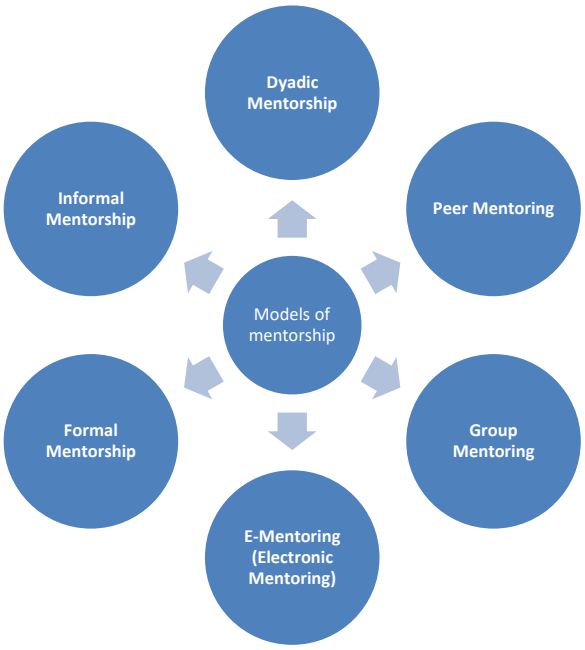

Figure 2. Models of mentorship.

Peer mentoring involves collaboration between individuals at similar stages of professional development, such as pre-service teachers supporting each other during practicums. Group mentoring, on the other hand, includes one or more mentors working with a cohort of mentees. These models enhance collaborative learning, reduce isolation, and foster mutual reflection. Studies show these approaches are especially effective in building professional learning communities and shared problem-solving skills [14, 15].

With the advancement of digital tools, e-mentoring has emerged as an accessible alternative, particularly useful in remote or underserved areas. Platforms such as discussion

forums, video conferencing, and email are used to sustain mentor-mentee interactions. Research indicates that e-mentoring offers flexibility, diverse mentor access, and asynchronous support. However, it may lack the immediacy and relational depth of face-to-face mentoring [16, 17].

Formal mentorships are institutionally organized, with clear objectives, timelines, and assessments. These programs often include mentor training and program evaluation components, contributing to higher program fidelity and accountability. Informal mentorships develop organically and are based on mutual respect and shared interests. While often effective due to their relational nature, informal mentoring lacks consistency and may result in unequal access to quality mentoring experiences [18, 19].

4. Outcomes of Mentorship

Mentorship within teacher education programs plays a pivotal role in shaping the early careers of pre-service and novice teachers. Literature consistently demonstrates that effective mentorship leads to a range of positive outcomes, not only for the mentees but also for mentors, schools, and the broader educational ecosystem. Key outcomes identified across the reviewed studies include professional identity development, improved classroom management and instructional skills, emotional and professional support, and increased teacher retention and satisfaction [1, 20]. Key outcomes of mentorship in teacher education programs is summarize in Table 2.

Table 2. Key outcomes of mentorship in teacher education programs.

Outcome	Description	Citations
Professional identity development	Mentorship helps mentees internalize professional values, refine teaching philosophies, and develop a strong sense of identity and belonging in the education community.	[20–23]
Classroom management & instructional skills	Mentors enhance mentees' real-world teaching abilities by guiding them through behavior management, differentiated instruction, and adaptive lesson delivery.	[2, 8, 24]
Emotional and professional support	Provides mentees with emotional reassurance, resilience strategies, and guidance in navigating institutional culture and professional networks.	[1, 3, 12, 20, 25]
Increased teacher retention & satisfaction	Quality mentorship boosts job satisfaction, reduces attrition, and promotes long-term professional commitment and growth, especially during early career stages.	[26, 27]

4.1. Professional identity development.

One of the most significant outcomes of mentorship is the formation and evolution of a pre-service teacher's professional identity. Becoming a teacher involves more than acquiring technical knowledge; it entails internalizing the values, behaviors, and ethical standards of the profession. Mentors serve as role models, providing insights into what it means to be a teacher beyond the classroom tasks. Through observation, dialogue, and reflection, mentees begin to construct their own identities, balancing personal beliefs with professional expectations [20, 21]. Several studies highlighted that mentees who engaged in regular, meaningful mentoring relationships were more likely to articulate a clearer vision of their teaching philosophy and professional goals. Mentorship helped them develop confidence in their abilities and a stronger sense of belonging in the educational community. In group or peer mentoring settings, collaborative reflection also allowed for the exploration of diverse perspectives, further enriching the identity formation process [22, 23].

4.2. Classroom management and instructional skills.

Mentorship significantly enhances the practical skills necessary for effective classroom instruction. While teacher education programs provide foundational pedagogical theories, it is through mentorship that pre-service teachers learn to apply these theories in real-world settings. Mentors guide mentees through the complexities of classroom management, student engagement, differentiated instruction, and assessment strategies. For example, mentees benefit from observing mentors' model classroom routines, implement behavioral interventions, and scaffold instruction for diverse learners [2, 8]. Feedback from mentors helps mentees refine lesson plans, adapt teaching strategies, and manage classroom dynamics more effectively. The hands-on guidance provided during mentorship accelerates the acquisition of instructional competence and promotes adaptive teaching practices. Studies included in the review found that mentees in well-structured mentorship programs demonstrated faster development in lesson delivery, student interaction, and classroom control than their peers without mentoring support. This outcome is particularly crucial in high-needs or challenging educational environments, where classroom management can be one of the most significant barriers to teacher effectiveness [8, 24].

4.3. Emotional and professional support.

Beyond instructional guidance, mentorship provides essential emotional and psychological support to novice teachers. Entering the teaching profession can be overwhelming, marked by stress, self-doubt, and emotional fatigue. A mentor serves as a trusted confident, offering reassurance, empathy, and practical advice for managing stress and maintaining well-being [1, 25]. Literature underscores the value of mentors who are approachable, supportive, and non-judgmental. Such mentors help mentees navigate the emotional highs and lows of teaching, offering coping strategies for burnout and frustration. Emotional support also enhances mentees' resilience, allowing them to bounce back from setbacks and maintain motivation during their professional journey [3, 20]. Furthermore, professional support extends to helping mentees understand institutional cultures, build collegial networks, and navigate professional development opportunities. This holistic support system cultivates a sense of agency and preparedness among novice teachers, helping them transition more smoothly into full-time roles [3, 12].

4.4. Increased teacher retention and satisfaction.

Mentorship has a well-documented impact on teacher retention and job satisfaction. High attrition rates among new teachers, especially within the first five years, are a major concern in many educational systems. Many novice teachers leave the profession due to feelings of isolation, lack of preparedness, and insufficient support. Mentorship directly addresses these issues by providing structured guidance and a sense of community. Studies have shown that teachers who receive quality mentoring are more likely to stay in the profession, report higher job satisfaction, and demonstrate greater commitment to their schools and students. Mentorship also instills a culture of continuous learning and reflection, fostering long-term professional growth. Programs that pair new teachers with experienced mentors help reduce turnover, thereby contributing to greater school stability and improved student outcomes [26, 27].

5. Challenges and Barriers

Despite the acknowledged benefits of mentorship in teacher education programs, several challenges and barriers often hinder the effectiveness and sustainability of mentorship initiatives (Table 3). These issues can undermine the quality of the mentor–mentee relationship and compromise the professional growth of pre-service teachers. Based on the reviewed literature, four primary challenges consistently emerge: time constraints and mentor overload, inconsistent program structures, lack of mentor training or institutional support, and mismatched mentor–mentee pairings [28, 29].

Table 3. Key challenges and barriers in mentorship for teacher education.

Challenge	Description	Citations
Time constraints and mentor overload	Mentors face heavy workloads, leading to limited time for quality interactions with mentees; often seen as an added burden, particularly in under-resourced schools.	[28–30]
Inconsistent program structures	Variability in mentorship models, lack of standardized guidelines, and unclear expectations lead to unequal mentoring experiences and reduced program effectiveness.	[8, 13, 31]
Lack of mentor training/support	Many mentors are untrained and unsupported, lacking skills specific to mentoring; institutions often provide insufficient recognition or professional development.	[22, 24, 25]
Mismatched mentor–mentee pairings	Poor compatibility between pairs can hinder communication and trust, leading to disengagement and reduced mentoring outcomes.	[13, 32]

One of the most commonly cited barriers to effective mentorship is the limited time available to mentors. Most mentors are full-time teachers with demanding schedules, including lesson planning, grading, administrative responsibilities, and classroom management. Adding mentorship responsibilities to their workload often leads to time constraints and stress. As a result, mentors may struggle to meet regularly with mentees, provide timely feedback, or engage in meaningful reflective dialogue. Several studies highlight that mentorship responsibilities are often perceived as an additional burden rather than a formal, supported component of a mentor's role. When mentorship is undervalued or inadequately integrated into teaching schedules, the quality of interaction between mentor and mentee can suffer. In such cases, mentorship becomes superficial or irregular, with limited impact on the mentee's development. This issue is particularly severe in under-resourced schools, where teacher shortages and high student-teacher ratios intensify time-related pressures [29, 30].

The lack of standardized structures across mentorship programs presents another significant challenge. In many institutions, mentorship models vary widely in design, duration, objectives, and implementation strategies. Some programs are highly structured with clearly defined goals, expectations, and support systems, while others rely on informal arrangements without consistent guidelines or accountability measures. This inconsistency leads to unequal experiences among pre-service teachers. For example, while some mentees receive sustained and targeted mentorship aligned with their professional development goals, others may only receive occasional check-ins with minimal feedback. Moreover, unclear or vague expectations regarding the roles of mentors and mentees can result in confusion, role ambiguity, and ineffective relationships. The absence of a shared framework or best practices across institutions also limits the scalability and evaluation of mentorship models. Without coherent structures, it becomes difficult to measure effectiveness, replicate successful approaches, or refine program components based on evidence [8, 13, 31].

Many teacher education programs lack comprehensive training for mentors. While experienced teachers are often expected to take on mentorship roles, they may not have the pedagogical skills, mentoring strategies, or emotional intelligence required to effectively support novice teachers. The assumption that good teaching automatically translates into good mentoring is flawed, as mentorship requires a distinct set of interpersonal and coaching competencies. Furthermore, mentors frequently report feeling unsupported by their institutions. They may not receive adequate professional development, time allowances, or recognition for their mentorship efforts. This lack of support contributes to low motivation, uneven mentoring quality, and in some cases, mentor burnout. Institutions that fail to invest in mentor preparation and ongoing development risk undermining the potential of mentorship to contribute meaningfully to teacher preparation [22, 24, 25].

The success of mentorship relationships is highly dependent on compatibility between mentor and mentee. Poorly matched pairs whether in terms of personality, subject area, teaching philosophy, or professional goals, can lead to ineffective communication, frustration, and disengagement. Several studies indicate that forced or arbitrary pairings often result in strained relationships that do not foster trust or meaningful dialogue. When mismatches occur, mentees may feel unsupported, misunderstood, or hesitant to seek feedback. Similarly, mentors may find it difficult to relate to or motivate their mentees, diminishing the quality of the experience for both parties. Institutions that fail to consider compatibility factors or offer opportunities for mentees to choose their mentors may inadvertently reduce the effectiveness of their programs [13, 32].

6. Enablers and Best Practices

For mentorship in teacher education programs to achieve its full potential, it is essential to identify and implement key enablers and best practices that support both mentors and mentees (Table 4). Research highlights several critical factors that contribute to successful mentorship, including structured mentor training, the promotion of reflective practices and feedback loops, and the integration of mentorship into the teacher education curriculum. These practices not only enhance the quality and consistency of mentorship but also ensure its alignment with the broader goals of teacher preparation programs [9, 24, 28].

Table 4. Enablers and Best Practices Supporting Effective Mentorship in Teacher Education

Enabler / Best Practice	Description	Citations
Structured mentor training	Provides mentors with essential coaching, feedback, and emotional support skills; enhances consistency, builds mentor confidence, and improves mentoring relationships. Ongoing training fosters reflective peer exchange and supports mentor retention.	[3, 11, 12, 18, 21]
Promotion of reflective practice and feedback loops	Encourages critical analysis of teaching, fosters self-awareness and professional growth. Mentors guide reflection through discussions and specific, constructive feedback, helping mentees connect theory to practice and develop adaptive teaching skills.	[1, 13, 25, 33, 34]
Curriculum integration of mentorship	Embedding mentorship within the teacher education curriculum aligns coursework with field experience. Promotes coherence, accountability, and shared expectations among universities, mentors, and mentees, reinforcing mentorship as central to teacher preparation.	[1, 13, 24, 36, 37]

One of the most important enablers of effective mentorship is the provision of structured training for mentors. While experienced teachers often possess strong classroom skills, they may not be inherently equipped with the competencies needed to guide novice educators.

Structured mentor training programs prepare mentors for their roles by equipping them with skills in coaching, communication, observation, and constructive feedback. These programs often include modules on adult learning theory, emotional intelligence, and strategies for supporting reflective practice [3, 11].

Mentor training also helps standardize mentorship experiences, ensuring consistency across different schools or institutions. When mentors receive similar training, they are better able to understand their responsibilities, set appropriate expectations, and provide meaningful guidance to mentees. Furthermore, trained mentors are more likely to foster trusting and productive relationships with pre-service teachers, creating safe spaces for dialogue, experimentation, and professional growth. Institutions that prioritize mentor training typically report higher satisfaction among mentees and improved teaching readiness. Structured training also contributes to mentor retention and motivation, as mentors feel more confident and valued in their roles. As a best practice, mentor training should be ongoing, with opportunities for mentors to engage in peer learning, share challenges, and reflect on their own mentoring experiences [12, 18, 21].

Another critical enabler of successful mentorship is the promotion of reflective practices and the establishment of regular feedback loops. Reflective practice encourages pre-service teachers to critically examine their teaching methods, identify areas of strength and improvement, and consider how their beliefs and values impact their work. When embedded within mentorship, reflection fosters continuous learning and professional development [13, 33]. Mentors play a central role in guiding reflection by asking probing questions, facilitating post-lesson discussions, and helping mentees analyze their classroom experiences. Feedback loops regular cycles of observation, feedback, goal-setting, and review, ensure that pre-service teachers receive timely and actionable input on their teaching performance. This feedback is most effective when it is specific, constructive, and focused on both strengths and developmental areas. Structured reflection and feedback promote self-awareness, adaptability, and a growth mindset among novice teachers. They also help mentees make sense of their learning experiences, connect theory to practice, and internalize professional standards. Institutions that incorporate reflective journals, teaching portfolios, or peer dialogue into their mentorship programs often observe enhanced teacher confidence and competence [1, 34, 25].

The integration of mentorship into the teacher education curriculum is a best practice that ensures alignment between coursework and field experiences. When mentorship is embedded as a formal component of teacher preparation, rather than treated as a peripheral activity, it becomes a central vehicle for learning and development. This integration can take several forms, including co-designed practicum courses, assessment tasks linked to mentorship goals, and collaborative planning between faculty and mentor teachers. Curriculum integration ensures that theoretical knowledge gained in university settings is immediately applied and contextualized in real classrooms through guided practice [1, 24, 36]. It also reinforces the importance of mentorship by treating it as an essential element of the learning process, rather than an optional or informal experience. Additionally, integrated mentorship enables better coordination between university supervisors, mentors, and teacher candidates, promoting coherence and shared expectations. When mentorship is linked to curricular outcomes, both mentors and mentees have a clear roadmap for development. This facilitates goal-setting, accountability, and progress monitoring. Moreover, curriculum-integrated mentorship allows

for assessment of teaching competencies and professional dispositions in authentic contexts, thus supporting the overall goals of teacher accreditation and quality assurance [13, 37].

7. Implications for Policy, Practice, and Research

The findings from this review of mentorship in teacher education programs carry significant implications for policy, practice, and future research Figure 3. First, at the policy level, there is a pressing need for teacher education standards to explicitly mandate structured mentorship as a core component of teacher preparation. Education ministries and accrediting bodies should develop national or regional standards that define mentor qualifications, expectations, and outcomes. These policies must also ensure that institutions allocate sufficient time, funding, and resources for effective mentorship programs, especially in diverse and high-need educational contexts [1, 38].

Figure 3. Implications for policy, practice, and research.

From a practice standpoint, the development and implementation of mentor preparation programs is essential, as the effectiveness of mentorship is often constrained by the limited training mentors themselves receive. Universities and school districts must collaborate to design comprehensive training initiatives that go beyond basic orientation and instead provide systematic instruction on adult learning theories, effective feedback strategies, emotional and psychosocial support, and reflective practice. Such programs should not be confined to one-off workshops but structured as ongoing professional development with opportunities for mentor collaboration, peer observation, and iterative improvement. Embedding mentorship more intentionally within teacher education curricula is equally important, ensuring clear alignment between theoretical coursework and field-based experiences so that mentees can bridge knowledge with practice in meaningful ways [39, 40]. From a research perspective, this review underscores the urgent need for longitudinal studies that trace the long-term effects of mentorship on teacher retention, classroom effectiveness, and student learning outcomes, as most existing studies remain short-term and context-specific. Expanding cross-cultural research is also necessary to illuminate how mentorship practices differ across educational

systems, cultural contexts, and socio-economic conditions, particularly in contrasting Global North and Global South or high-income and low-resource settings [2, 8]. Comparative studies in these areas would be valuable for identifying adaptable, culturally responsive models of mentorship. Furthermore, examining the perspectives and experiences of mentors themselves is critical, as understanding their challenges, motivations, and professional development needs can inform the creation of more targeted and sustainable support structures. Taken together, these practice and research implications point toward the need for a systemic, evidence-informed, and policy-supported approach to mentorship in teacher education, an approach that ensures the preparation of confident, capable, and resilient teachers who are well-equipped to thrive in diverse and evolving educational landscapes [18, 21].

8. Conclusion

This review highlights the critical role mentorship plays in shaping the professional journey of pre-service teachers within teacher education programs, contributing to the development of professional identity, enhancement of instructional and classroom management skills, provision of emotional and professional support, and improved teacher retention and job satisfaction. Various models ranging from traditional dyadic mentorship to peer, group, and online mentoring, offer flexible approaches, yet their effectiveness depends heavily on structure, institutional support, and mentor preparation. The review identifies barriers such as inconsistent program structures, lack of mentor training, time constraints, and mismatched pairings, underscoring the urgent need for structured, evidence-based mentorship initiatives. To address these challenges, teacher education programs should embed mentorship as a formal and integral component of curricula, supported by systematic mentor training in areas such as pedagogical coaching, equity and inclusion, and reflective practice, as well as mechanisms for evaluating quality and impact. Policymakers must establish national standards to ensure consistency and allocate resources to support sustainable mentorship models, while school leaders should foster institutional cultures that value mentoring, providing adequate time, resources, and professional communities to strengthen mentor-mentee relationships. A more inclusive approach is also necessary, particularly for pre-service teachers from underrepresented backgrounds, including gender, ethnicity, socio-economic status, and geographic location. Future research should prioritize longitudinal and cross-cultural studies to examine how mentorship models function across diverse contexts, particularly contrasting Global North and Global South or high-income and low-resource settings, to identify scalable and context-sensitive practices. Strengthening mentorship is not merely an enhancement of teacher education but a necessity for preparing competent, resilient, and reflective teachers capable of thriving in diverse educational environments.

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Competing Interests

The authors declare that they have no competing interests regarding the publication of this article.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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Author Contributions

Felix Mwesigwa conceptualized the study, designed the methodology, and contributed to writing the manuscript. Nalukenge Nakato conducted data analysis and assisted in drafting the manuscript. All authors read and approved of the final manuscript.

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