Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

Conceptions of Supported Teaching in Schools: A Tripartite Perspective on Developing Teacher Professionalism in Ghana

Linus Mwinkaar¹ & Enock Yeng²

Department of Educational Foundations, University of Business and Integrated Development Studies, Ghana¹ & School of Education, Liberty University, Virginia, United States².

**Corresponding Author: eyeng@liberty.edu

doi: https://doi.org/10.37745/ijeld.2013/vol14n1122

Published January 01, 2026

Citation: Mwinkaar L. and Yeng E. (2026) Conceptions of Supported Teaching in Schools: A Tripartite Perspective on Developing Teacher Professionalism in Ghana, *International Journal of Education, Learning and Development*, 14 (1),1-22

Abstract: This study explored the conceptions of pre-service teachers, mentors, and tutors regarding the supported teaching in schools at McCoy College of Education in the Nadowli-Kaleo District of Ghana and its impact on developing teacher professionalism. Utilizing a convergent mixed-methods design, data was collected from 200 pre-service teachers, 33 mentors, and 20 tutors through questionnaires and written qualitative responses. Quantitative findings revealed that the supported teaching in schools' program positively influenced professional values and attitudes, professional knowledge, and professional practice. Mentors and tutors supported these outcomes, albeit with slightly lower scores, reflecting their observational perspectives. Qualitative results reinforced these findings, indicating that supported teaching in schools enabled pre-service teachers to apply ethical codes of conduct, manage classrooms effectively, utilize teaching resources, including Information and Communication Technology, and engage in culturally responsive practices. Participants expressed: "I have improved my values and attitudes, such as attendance and regularity at school, participation in school activities, and collaboration with mentors and colleagues." The study concludes that supported teaching in schools offers a structured and experiential platform that effectively connects theory with practice, fostering the development of competent, reflective, and professional teachers. It is recommended that teacher education programs continue to integrate supported teaching in schools with enhanced mentorship and structured feedback to further strengthen professional development.

Keywords: supported teaching in schools, teacher professionalism, pre-service teachers, Tripartite, experiential learning.

INTRODUCTION

Globally, the foundation of a nation's educational system is its teachers, and the quality of their training is crucial for developing a skilled and competent workforce (Darling-Hammond, Hyler & Gardner, 2017; Yeng & Tatsi, 2024). In Ghana, the vision for pre-tertiary teacher education aims to cultivate reflective,

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

skilled practitioners who can provide quality education to children nationwide. This vision is based on the understanding that effective teachers must combine professional knowledge, practical skills, and strong values. Although the theoretical aspects of teacher training are essential, practical, field-based experiences are widely recognized as the critical phase where these elements converge into a cohesive professional identity (Nayar & Akmar, 2020). It is during this period that aspiring teachers begin to apply the pedagogical theories learned in their coursework to real classroom situations. However, the focus on practical applications has not been without challenges. For many years, the effectiveness of teacher practicum experiences in Ghana has been subject to scrutiny. Researchers have identified a significant discrepancy between the theoretical knowledge gained in teacher colleges and its practical implementation in real-world school contexts (Ampadu et al., 2021). This disconnect often results in preservice teachers feeling unprepared to navigate complex classroom environments or to address the diverse learning needs of their students. Critics assert that traditional practicum models, often lacking structured support and effective collaboration among all stakeholders, do not sufficiently develop the professional competencies required of modern educators (Bashiru, 2024).

In light of these systemic issues, the Government of Ghana, in collaboration with international organizations, has initiated a comprehensive reform of its teacher education system. This initiative led to the creation of the National Teacher Education Curriculum Framework (NTECF) and the National Teachers' Standards (NTS). These landmark frameworks mark a significant shift, providing a coherent and rigorous structure for teacher preparation. The NTS delineates clear professional competencies across three areas: Professional Values and Attitudes, Professional Knowledge, and Professional Practice. These standards aim to ensure consistency and high quality across all teacher education institutions, addressing historical discrepancies in curricula and training philosophies (Buabeng, Ntow & Otami, 2020). Central to this reform is the four-year Bachelor of Education (B.Ed.) program, which includes the core component known as supported teaching in schools (STS). Unlike earlier practicum models, STS is an integrated, longitudinal program that allocates about 30% of its training time for preservice teachers to be immersed in school settings. This ongoing engagement is designed to promote a deeper, more sustained relationship between theory and practice. The STS program gradually develops skills and confidence over four years, starting from foundational observation and supported teaching in the first year to independent planning, teaching, and action research in the final year (Ministry of Education, 2018). This scaffolding approach aims to facilitate a smooth transition from student to professional. The effectiveness of STS relies on a collaborative, tripartite relationship among preservice teachers, their college tutors, and school-based mentors. The success of this collaboration is essential as these groups work together to guide, support, and assess the preservice teachers' growth. Mentors play a vital role as on-site guides, offering feedback and practical advice, while college tutors connect academic theory with field practice. This collaborative environment enables preservice teachers to develop the competencies outlined in the NTS (Quansah et al., 2025).

Nevertheless, despite the intentional design and clear goals of the STS program, there is still a critical gap in understanding its effectiveness. While the framework exists, the experiences and perceptions of key

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

stakeholders, the preservice teachers, mentors, and tutors, remain largely unexamined. Do these groups share a common understanding of what 'supported teaching in schools' means? How do their roles and interactions affect the development of teacher professionalism? Through the exploration of the distinct and collective perspectives of these three groups, this study seeks to provide an in-depth understanding of how STS is implemented and perceived in practice.

Problem Statement

The Ghanaian government's comprehensive reform of its teacher education system, initiated in 2018, represents a significant investment in producing high-quality educators for the nation. This reform, which resulted in the National Teachers' Standards (NTS) and the Supported Teaching in Schools (STS) program, was a direct response to longstanding criticisms that previous practicum models failed to effectively bridge the gap between educational theory and classroom practice (Bashiru, 2024). The STS program is particularly ambitious, relying on a tripartite collaboration among preservice teachers, college tutors, and school-based mentors. Its success depends on these three groups working together harmoniously to guide the development of preservice teachers. However, a critical gap in the existing literature is the lack of a collective understanding of how this tripartite model is perceived and experienced by its key participants. While policy documents outline the framework for STS, there is no empirical research that examines whether the three groups share a common understanding of their roles, responsibilities, and the program's objectives (Quansah et al., 2025). Specifically, we do not know if the expectations of college tutors align with the practical realities faced by mentors in schools, or if preservice teachers' understanding of their own learning journey matches the guidance they receive. This lack of alignment represents a significant yet unexplored barrier to the program's intended outcomes. Without this insight, it is impossible to determine if the collaborative foundation of STS is as effective in practice as it is in theory.

The consequences of not addressing this gap are substantial. If key stakeholders hold divergent views of STS, it could lead to breakdowns, inconsistent feedback, and a fragmented learning experience for preservice teachers. This would undermine the core purpose of the program and jeopardize the significant investment made in educational reform. Ultimately, this failure would negatively affect the quality of education for Ghanaian children, as the development of competent, professional educators would remain hindered. Therefore, this study aims to examine the conceptions of supported teaching in schools: a tripartite perspective on developing teacher professionalism in Ghana.

Study Purpose

The purpose of this study was to investigate the conceptions of preservice teachers, tutors, and mentors regarding the supported teaching in schools program and its impact on the development of teacher professionalism.

Research Questions

The following research questions were formulated to guide the study:

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

- 1. To what extent do the conceptions of preservice teachers, tutors, and mentors align regarding the implementation and outcomes of the supported teaching in schools' program?
- 2. How do these varying conceptions influence the development of preservice teachers' professional values, attitudes, knowledge, and practice as outlined in the national teachers' standards?
- 3. What are the lived experiences of preservice teachers, tutors, and mentors within the supported teaching in school program?

Significance of the Study

This study holds considerable significance on both theoretical and practical levels, contributing to the field of teacher education in Ghana and beyond. From a theoretical perspective, this study will provide a deeper understanding of how different stakeholders perceive a collaborative model for teacher education. It will enhance the theoretical frameworks surrounding professional development and adult learning by highlighting the complex interactions of roles, expectations, and understandings within a tripartite supervisory structure. The findings can be used to refine and expand theories of mentorship and supervision, particularly within initial teacher training programs in developing nations. Practically, the findings will have immediate implications for policy and practice in Ghana's colleges of education. Through identifying any misalignments in the conceptions of supported teaching in schools among the three groups, the study will offer actionable insights for policymakers. These insights can guide curriculum revisions, the design of professional development for mentors and tutors, and the orientation of new preservice teachers. For instance, if the study uncovers a disconnect in how mentors and tutors perceive their roles, targeted training programs can be developed to foster a more cohesive and effective partnership. Ultimately, this will lead to a more synchronized and supportive learning experience for preservice teachers, enhancing their ability to meet the National Teachers' Standards (NTS).

Additionally, this research establishes a methodological foundation for future studies. The use of a mixed-methods approach combining both quantitative and qualitative data would provide a more comprehensive understanding of the phenomenon than a single-method design could offer. The qualitative component will yield rich, narrative data that captures the nuanced experiences of the stakeholders, while the quantitative component will allow for the generalization of findings. This approach can be replicated to assess the effectiveness of collaborative educational models in other contexts, laying the groundwork for further investigations into how specific conceptions of STS correlate with preservice teacher performance, retention rates, or in-service professional growth. By doing so, it contributes not only to the immediate improvement of Ghana's teacher education system but also to the broader global conversation on what constitutes effective and sustainable teacher preparation.

METHODOLOGY

The study employed a concurrent triangulation design within a mixed-methods framework (Creswell & Creswell, 2018). This design facilitated the simultaneous collection and analysis of both quantitative and qualitative data, allowing for a comprehensive understanding of the conceptions held by the three

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

stakeholder groups involved in the supported teaching in schools (STS) program. The quantitative segment utilized a descriptive survey design aimed at identifying general trends and patterns, while the qualitative component adopted a phenomenological approach to delve into the lived experiences and deeper meanings behind the conceptions (Moustakas, 1994, as cited in Creswell, 2013). By integrating insights from both datasets during analysis, the study provided a well-rounded and validated perspective on the phenomenon.

Population and Sampling Technique

The study's population included all preservice teachers, mentors, and tutors affiliated with McCoy College of Education in the Nadowli-Kaleo District of the Upper West Region, Ghana. This resulted in a total population of 551 respondents: 460 preservice teachers, 56 mentors, and 35 tutors. A multi-stage sampling strategy was implemented for selecting participants. Initially, convenience sampling was employed to designate McCoy College of Education as the research site (Etikan et al., 2016). Within the college, a simple random sampling technique was used to select 200 preservice teachers from the student roster. For mentors, a stratified random sampling approach was employed to ensure representation across departments, leading to the selection of 33 mentors. Additionally, a census sampling technique was applied to include all 35 tutors due to their critical involvement and smaller population size (Ary et al., 1972 as cited in yeng, 2023). Thus, the final sample consisted of 268 respondents.

Instrumentation and Data Collection

Data were collected using a researcher-developed questionnaire designed with a concurrent mixed-methods approach. The instrument comprised two parts: the first, consisting of closed-ended questions utilizing a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), measured agreement levels with various statements regarding the development of professional values, attitudes, knowledge, and practices through the STS program. The second part included open-ended questions aimed at gathering qualitative data about respondents' perceptions and experiences. This blend of closed and open-ended questions enabled triangulation between quantitative trends and qualitative insights.

Data Analysis Procedures

Data analysis followed a concurrent triangulation approach. The quantitative data derived from the Likert scale questions were analyzed utilizing the Statistical Package for the Social Sciences (SPSS) version 31. Descriptive statistics, including frequencies, percentages, means, and standard deviations, summarized the quantitative findings. The qualitative responses from the open-ended questions were transcribed and examined through thematic analysis (Braun & Clarke, 2021). A systematic coding process was employed in identifying themes that emerged from the qualitative data. The final step involved integrating and triangulating the findings from both quantitative and qualitative analyses to deliver a thorough understanding of the research questions.

Ethical Considerations

The study adhered strictly to ethical protocols. Ethical clearance was secured from the relevant institutional bodies before data collection began. Participants received a detailed information sheet and provided

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

informed consent to partake in the study (Code & Psychologists, 2017). They were informed of their right to withdraw from the research at any time without repercussions. To ensure confidentiality and anonymity, all identifiable information, such as names and school affiliations, was coded and omitted from the final report. Data were securely stored on a password-protected computer accessible only to the lead researcher, while all paper-based documents were maintained in a locked cabinet. After a retention period of three years post-study, data will be destroyed permanently.

Reliability, Validity, and Limitations

The validity of the questionnaire was established through a thorough expert review by experienced researchers and professors specialized in teacher education. A pilot study was conducted with a small group of respondents to evaluate the clarity and effectiveness of the instrument before full-scale data collection. The reliability of the Likert scale questions was determined through Cronbach's Alpha coefficient to ensure internal consistency (Tavakol & Dennick, 2011, as cited in Taber, 2018). A significant limitation of the study was its focus on a single-site case study at McCoy College of Education. While this approach provided rich insights, it restricted the generalizability of findings to other teacher education institutions in Ghana. Moreover, the study's reliance on self-reported data potentially introduced social desirability bias, as participants might have responded in ways deemed socially acceptable rather than reflecting their true perspectives.

Results And Discussion

This section presents the findings of the study, which were derived from the analysis of both quantitative and qualitative data. The results are organized and discussed in relation to the research questions, offering an in-depth examination of the perceptions of preservice teachers, mentors, and tutors regarding the supported teaching in schools (STS) program. Following the presentation of the key findings, this section also includes a detailed discussion of the results, considering existing literature and theoretical frameworks, highlighting the study's unique contributions to the field of teacher education in Ghana.

Research Question 1: To what extent do the conceptions of preservice teachers, tutors, and mentors align regarding the implementation and outcomes of the supported teaching in schools' program?

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

Table 1: Conceptions of preservice teachers in developing professional values and attitudes

Items	Mea	Std.	T
	n	Deviation	
Field experience increases pre-service teachers' perception of	4.69	.69	20
themselves as a potential agent of change in the school, community, and country			0
Field experience increases pre-service teachers' knowledge and appreciation of the ethical teacher codes of conduct in their	4.74	.55	20 0
development as professional teachers.			
Field experience helps pre-service teachers to develop a positive	4.59	.67	20
teacher identity and act as a good role model for students.			0
Field experience helps pre-service teachers to critically and	4.62	.71	20
collectively reflect to improve teaching and learning.	~		0
Field experience helps pre-service teachers to engage positively with	4.45	.83	20
colleagues, learners, parents, SMC, PTA, and the wider public as part			0
of a community of practice.			
Overall Mean	4.62	0.69	20
			0

Source: Field Data (2025).

Table 1 indicates a high level of agreement among participants regarding the positive outcomes of the STS program, as evidenced by an overall mean of 4.62 (SD = 0.69) on a 5-point Likert scale. This suggests that preservice teachers, tutors, and mentors collectively view the STS framework as valuable and effective for promoting professional growth. Among the individual survey items, the strongest agreement was on the statement that field experience "increases preservice teachers' knowledge and appreciation of the ethical codes of conduct necessary for their development as professional teachers" (M = 4.74, SD = 0.55). This reflects a strong consensus that STS significantly contributes to enhancing ethical awareness and professional responsibility among preservice teachers. The second-highest mean score was associated with the belief that field experience enables preservice teachers to "see themselves as potential agents of change in the school, community, and country" (M = 4.69, SD = 0.70). This highlights the perception that STS plays a crucial role in fostering a sense of agency and broader societal responsibility in future educators. In contrast, the item with the lowest mean score, though still viewed positively, was that STS helps preservice teachers "engage positively with colleagues, learners, parents, SMC, PTA, and the wider public as part of a community of practice" (M = 4.45, SD = 0.83). The relatively higher standard deviation for this item suggests a divergence in perceptions among the three groups, possibly indicating differing views on the effectiveness of collaboration and community engagement within the STS framework. Overall, the consistently high mean scores across all items reflect a shared perception of the STS program as essential for developing teacher professionalism, which includes professional identity, ethical practice, reflective teaching, and collaborative engagement.

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

The qualitative data further support the quantitative findings, providing insight into how preservice teachers perceive the impact of the STS program on their professional development. Participants emphasized that STS facilitated a deeper understanding of teachers' codes of conduct and professional expectations. For instance, one preservice teacher noted:

"Through STS, I learned about teachers' code of conduct, where I was oriented that every teacher must dress decently, not engage in any sexual relationship with students, behave positively towards students, teachers, and the wider society, and stay away from other ill-behaviors that will render us unprofessional. So, I behaved professionally" (Pre-service Teacher 1). This data illustrates how STS promotes ethical awareness and reinforces adherence to professional norms, echoing Bandura's (1997) assertion that modeling and guided practice are crucial for internalizing professional behavior. Another participant highlighted the development of professional values and attitudes, stating: "I have improved my values and attitudes, such as attendance and regularity at school, participating in school activities, and collaborating with mentors and my colleagues. These are required of me as a teacher" (Pre-service Teacher 9).

Such accounts indicate that STS not only imparts knowledge about professional codes but also encourages the internalization of positive habits and collaborative practices, reinforcing the development of teacher identity and professional responsibility. These qualitative insights align with the quantitative findings, demonstrating that STS fosters both the ethical and behavioral dimensions of teacher professionalism, contributing to the holistic preparation of preservice teachers to meet the demands of contemporary education (Darling-Hammond, 2017; Fullan, 2011).

Table 2: Conceptions of tutors in developing professional values and attitudes

Items	Mean	Std. Deviation	T
Field experience increases pre-service teachers' perception of themselves as a potential agent of change in the school,	4.45	.617	33
community, and country			
Field experience increases pre-service teachers' knowledge and appreciation of the ethical teacher codes of conduct in their development as professional teachers.	4.48	.506	33
Field experience helps pre-service teachers to develop a positive teacher identity and act as good role models for students.	4.18	.726	33
Field experience helps pre-service teachers to critically and collectively reflect to improve teaching and learning.	4.21	.739	33
Field experience helps pre-service teachers to engage positively with colleagues, learners, parents, SMC, PTA, and the wider public as part of a community of practice.	4.33	.479	33
Overall Mean	4.33	0.61	33

Source: Field Data (2025).

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

Table 2 indicates that mentors view supported teaching in schools as a significant contributor to the professional values and attitudes of pre-service teachers, with a grand mean of 4.33 and a standard deviation of 0.61. The highest mean scores were linked to ethical understanding (M = 4.48, SD = 0.51) and the perception of pre-service teachers as agents of change (M = 4.45, SD = 0.62). These results suggest that mentors believe STS is particularly effective in nurturing professional ethics and a sense of responsibility among pre-service teachers. Slightly lower means were observed in areas such as teacher identity and reflective practice, ranging from approximately 4.18 to 4.21, indicating some variability in how these qualities are demonstrated in practice.

Qualitative data from mentors supported these findings. One mentor noted the relational and community aspects of STS, stating, "Pre-service teachers during their STS were always invited to attend PTA meetings at the school. Interacting with these individuals helped them build strong relationships with students, other teachers, and parents. Developing a positive attitude towards relationships with parents and the community will aid them in succeeding as teachers in their respective schools and communities once they become professional educators" (Mentor 8). Another mentor remarked on the ethical and attitudinal development of pre-service teachers: "I believe STS is genuinely aiding the formation of pre-service teachers during their training as professionals. Through their engagement in STS, they have cultivated the right values and attitudes necessary to become effective educators" (Mentor 5).

These results suggest that mentors acknowledge STS as a means of fostering both ethical and relational competencies, ensuring that pre-service teachers develop the attitudes essential for professional practice within both the school environment and the broader community.

Table 3: Conceptions of mentors in Developing Professional Values and Attitudes

20
20
40
20
20
20
20
20

Source: Field Data (2025).

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

Table 3 presents tutors' perceptions of the supported teaching in school (STS), revealing overall positive views with a grand mean of 4.18 and a standard deviation of 0.57. The highest mean was recorded for knowledge and appreciation of ethical codes of conduct (M = 4.40, SD = 0.50), closely followed by the perception of pre-service teachers as agents of change (M = 4.30, SD = 0.47). Lower mean scores were noted for items related to teacher identity and engagement with the broader school community (M = 4.05–3.90), indicating some variation in the tutors' observations of the reflective and collaborative practices of pre-service teachers.

Qualitative results from tutors further support these findings. One tutor emphasized the connection between STS and professional standards as well as practical learning: "Professional values and attitudes form the first domain of the National Teaching Standards (NTS), which includes the code of conduct for teachers. Teachers must see themselves as role models and agents of change, and they should reflect on their teaching to improve their practices. Knowledge and application of these issues were at their peak during the STS experience. The STS experience shaped pre-service teachers by providing the guidelines, values, standards, expectations, behaviors, and relationships necessary for the teaching profession" (Tutor 1). Another tutor highlighted the importance of practical settings for developing professional values: "Professional values and attitudes are best developed in a practical setting. I think STS has provided pre-service teachers with the opportunity to practice these values. Many of them have shown improvement in developing these values and attitudes while working in the field" (Tutor 12). The results indicate that tutors view STS as a bridge between theory and practice, offering pre-service teachers opportunities to internalize professional values, demonstrate ethical behavior, and engage in reflective practice, although engagement with the wider community may vary across different contexts.

Research Ouestion 1 Discussion

The findings of this study reveal a significant alignment in the perceptions of pre-service teachers, mentors, and tutors regarding the implementation and outcomes of the supported teaching in schools (STS) program, particularly in relation to fostering professional values and attitudes. Quantitative data indicate that all three stakeholder groups scored above the criterion mean of 3.0, with pre-service teachers reporting the highest perceived impact (M = 4.62, SD = 0.69), followed by mentors (M = 4.33, SD = 0.61) and tutors (M = 4.18, SD = 0.57). This strong concordance suggests that STS effectively provides a structured environment for cultivating ethical awareness, professional identity, reflective capacity, and engagement within both school and community contexts (Bandura, 1997; Darling-Hammond, 2017). A notable convergence in perspectives was observed about STS being a vehicle for instilling ethical standards and promoting teacher agency. Preservice teachers highlighted how their engagement in the program led to the internalization of professional codes of conduct and the development of critical habits such as punctuality, collaboration, and active participation. One pre-service teacher summed this up by stating, "Through STS, I learned about teachers' code of conduct... So, I behaved professionally."

Mentors echoed this sentiment, particularly noting the impact of STS on relational and community-oriented competencies. They indicated that the program facilitated effective interactions between pre-service teachers and various stakeholders, including students, colleagues, and parents, thereby reinforcing positive collaborative attitudes. A mentor observed, "Pre-service teachers...attend PTA meetings...helped them

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

build strong relationships with students, other teachers, and parents." Tutors, while generally in agreement with both pre-service teachers and mentors, emphasized the alignment of STS with the National Teachers' Standards (NTS) and the importance of translating theoretical knowledge into practice. They highlighted that STS creates opportunities for reflective practice, essential for enacting professional values. One tutor stated, "Professional values and attitudes are best developed when given the practical setting to practice them...STS has provided them the opportunity."

Despite this general agreement, some divergence emerged among the groups. Pre-service teachers reported the highest perception of impact, likely due to their direct immersion in the STS program. Mentors and tutors recognized positive outcomes but scored slightly lower, which may reflect the differing focus of their roles: mentors guided practical applications, while tutors prioritized alignment with formal professional standards (Wenger, 1998; Fullan, 2011). Additionally, perceptions regarding engagement with the wider school community were more variable, with tutors rating this component slightly lower than pre-service teachers and mentors, signaling a difference in views on the consistency of pre-service teachers' collaborative engagement. In summary, the findings indicate that while all stakeholders share agreement on the core outcomes of STS, including ethical development, teacher identity, and professional agency, the variations in mean ratings reveal the distinct perspectives and roles of each group. The qualitative data reinforce this pattern, illustrating the nuanced ways pre-service teachers experience STS personally, mentors facilitate relational and contextual learning, and tutors ensure adherence to professional standards. This convergence and divergence provide a comprehensive understanding of the multi-layered implementation of STS, highlighting the complementary roles of stakeholders in shaping the professional development of pre-service teachers (Darling-Hammond, 2017; Bandura, 1997; Wenger, 1998).

Research Question 2: How do these varying conceptions influence the development of preservice teachers' professional values, attitudes, knowledge, and practice as outlined in the National Teachers' Standards (NTS)?

Table 4: Pre-Service Teachers' Conceptions of STS on Professional Knowledge

Items Mean		T
	Deviation	
4.50	.81	200
4.54	.83	200
4.50	.83	200
4.53	.80	200
4.52	0.81	200
	4.50 4.54 4.50 4.53	Deviation 4.50 .81 4.54 .83 4.50 .83 4.53 .80

Source: Field Data (2025).

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

The findings from Table 4 indicate that pre-service teachers view the STS program as significantly effective in enhancing their professional knowledge, achieving an overall mean of 4.52 with a standard deviation of 0.81, which is well above the criterion mean of 3.0. The items rated highest focus on developing a comprehensive understanding of the official school curriculum (M = 4.54, SD = 0.83) and grasping how children develop and learn in diverse contexts (M = 4.53, SD = 0.80). This suggests that pre-service teachers see STS as essential for consolidating their content knowledge, pedagogical skills, and curriculum comprehension, aligning with expectations set by the National Teachers' Standards (NTS).

Qualitative results support these quantitative outcomes. One pre-service teacher highlighted the importance of STS in fostering pedagogical competence: "STS was more than important since it marked the induction stage in my life as a prospective teacher, where I had the first experience in the teaching field. It had helped me to build a strong foundation for my pedagogy since I received comments from different supervisors and mentors with different expertise. Adding to that, as a reflective teacher, I have developed the habit of taking vital reflections to improve upon teaching and learning when finally inducted into the field" (Pre-service Teacher 1).

These results indicate that pre-service teachers perceive STS not only as a platform for applying theoretical knowledge but also as a chance to enhance reflective practice and pedagogical understanding, significantly impacting their professional development in accordance with NTS expectations.

Table 5: Mentors' Conceptions of STS on Professional Knowledge

Items	Mean	Std. Deviation	T
Field experience enables pre-service teachers to familiarise themselves with the education system and key policies guiding it	4.30	.728	33
Field experience helps pre-service teachers to develop comprehensive knowledge of the official school curriculum, including learning outcomes	4.06	.428	33
Pre-service teachers have secure content, pedagogical, and pedagogical content knowledge for the school and grade that they teach.	3.67	.692	33
Field experience helps pre-service teachers to understand how children develop and learn in diverse contexts and apply this in their teaching.	3.88	.739	33
Overall Mean	3.98	0.65	33

Source: Field Data (2025).

From Table 5, mentors reported a generally positive perception of the supported teaching in schools (STS) program in developing pre-service teachers' professional knowledge, achieving a grand mean of 3.98 with a standard deviation of 0.65, which is notably above the criterion mean of 3.0. However, their mean scores were lower compared to those reported by pre-service teachers, indicating a divergence in perceptions regarding knowledge acquisition. Mentors rated familiarity with the education system the highest (M = 4.30, SD = 0.73), but noted comparatively lower development in secure content, pedagogical, and pedagogical content knowledge (M = 3.67, SD = 0.69). This suggests that while mentors acknowledge the

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

progress made by pre-service teachers, they also identify areas for further growth in consolidating and applying knowledge in various teaching contexts.

Qualitative results from mentors reinforce this observation. One mentor observed, "Even though preservice teachers have not fully developed their professional knowledge, STS has exposed them to various methods and criteria used in teaching and learning. It also helped them understand how to address learners with diverse needs" (Mentor 1). Another mentor commented, "I believe pre-service teachers develop their professional knowledge during their field practice. I have noticed substantial improvements in their understanding of curriculum issues, their ability to engage a diverse range of learners, and their pedagogical skills as they participate in field experiences" (Mentor 6). The results suggest that mentors view STS as a vital component for structured exposure to curriculum, pedagogy, and learner diversity, while also emphasizing that mastering professional knowledge is an ongoing developmental process.

Table 6: Tutors' Conceptions of STS on Professional Knowledge

Items	Mean	Std.	T
		Deviatio	
		n	
Field experience enables pre-service teachers to familiarise themselves	3.85	1.18	33
with the education system and key policies guiding it			
Field experience helps pre-service teachers to develop comprehensive	3.90	.911	33
knowledge of the official school curriculum, including learning			
outcomes			
Pre-service teachers have secure content, pedagogical, and pedagogical	4.05	.998	33
content knowledge for the school and grade that they teach.			
Field experience helps pre-service teachers to understand how children	3.90	.912	33
develop and learn in diverse contexts and apply this in their pre-service			
teaching.			
Overall Mean	3.93	1.00	33

Source: Field Data (2025).

Results presented in Table 6 show that tutors hold similarly positive perceptions of STS, recording an overall mean of 3.93 and a standard deviation of 1.00. This suggests that they recognize the importance of STS in enhancing the professional knowledge of pre-service teachers, albeit with slightly greater variability compared to pre-service teachers and mentors. Tutors rated secure content and pedagogical knowledge the highest (M = 4.05, SD = 0.99), while their understanding of the education system and curriculum familiarity received slightly lower scores ($M \approx 3.85 - 3.90$). This reflects observed differences in the readiness of preservice teachers to translate theoretical knowledge into practical applications.

Qualitative data support these findings. One tutor remarked, "The STS equipped pre-service teachers to understand the structure of the educational system by exposing them to various teaching and learning resources. It helped them become familiar with different instructional strategies related to lesson

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

preparation and delivery. STS provided pre-service teachers with the experience of knowing how, why, and when to assess learners' expectations during and after the instructional period" (**Tutor 5**). Another tutor highlighted the connection between theoretical knowledge and practical application: "Pre-service teachers learn a great deal of concepts and theories in college, but they rarely have the opportunity to practice them and deepen that knowledge during their field experiences at STS" (**Tutor 3**).

These results indicate that tutors view STS as essential for consolidating professional knowledge and pedagogical skills, while also offering vital hands-on opportunities to apply theory, assess learning, and effectively manage classroom dynamics.

Research Question 2 Discussion

The analysis of Tables 4, 5, and 6 provides an in-depth understanding of how pre-service teachers, mentors, and tutors perceive the role of supported teaching in schools (STS) in developing professional knowledge as outlined in the National Teachers' Standards (NTS). The differing conceptions among these groups highlight both similarities and differences in their perspectives, which in turn influence the professional values, attitudes, knowledge, and practices of pre-service teachers. Overall, there is a consensus across all groups that STS plays a crucial role in enhancing professional knowledge. Pre-service teachers reported the highest mean scores, particularly in areas such as familiarity with the education system and understanding child development. This aligns with the NTS's emphasis on comprehensive subject knowledge and understanding of learners as an essential aspect of effective teacher preparation (Department for Education, 2018). Mentors and tutors, while somewhat less enthusiastic, also recognized the program's positive impact, especially in curriculum knowledge and pedagogical content knowledge. This agreement suggests that STS provides a shared platform for all stakeholders to engage with and reinforce the core components of the NTS. The practical experiences provided through STS allow pre-service teachers to apply theoretical knowledge in real-world settings, fostering a deeper understanding of professional standards and expectations (Darling-Hammond, Hyler & Gardner, 2017).

However, subtle differences emerge regarding the emphasis placed on various aspects of professional knowledge. Pre-service teachers rated their development in areas such as pedagogical content knowledge and understanding of diverse learners more positively than mentors and tutors. This discrepancy may be due to the direct and immersive nature of their experiences, which enables immediate application and reflection (Nayar & Akmar, 2020). Mentors and tutors, on the other hand, provided more moderate assessments, likely because their roles center on observation and guidance rather than direct participation. Their perspectives are valuable in identifying areas where pre-service teachers may need further development to fully meet the NTS criteria. This finding aligns with research indicating a disconnect between the supervisory roles of mentors and the experiential learning of pre-service teachers, often leading to varied perceptions of professional growth (Quansah et al., 2025).

The differing conceptions also play a role in the development of professional values and practices. Reflections from pre-service teachers indicate a growing awareness of the importance of ethical conduct, reflective practice, and adaptability, key components of the NTS (Ministry of Education, 2018). For

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

example, one pre-service teacher emphasized the importance of receiving feedback from various supervisors and mentors, which contributed to their professional growth. This highlights how sustained, diverse feedback is essential for shaping professional identity (Bashiru, 2024). Mentors and tutors stressed the significance of STS in fostering collaborative skills and a commitment to continuous improvement. Their observations underscore STS's role in shaping the professional identity of pre-service teachers and preparing them for the demands of the teaching profession, an outcome supported by recent studies on the impact of school-based placements (Nsowah et al., 2025).

The findings emphasize the importance of aligning STS programs with the NTS to ensure that all stakeholders share a common understanding of professional expectations. The convergence in perceptions suggests that STS effectively promotes key aspects of professional knowledge. However, the differences highlight areas where targeted interventions may be necessary to address specific needs and enhance the overall effectiveness of the program. This necessitates the creation of clearer communication channels and shared professional development opportunities for mentors and tutors, a recommendation echoed in recent literature on effective teacher training models (Buabeng, Ntow & Otami, 2020). In conclusion, the varying conceptions of pre-service teachers, mentors, and tutors regarding STS provide valuable insights into the complexities of professional development in teacher education. By acknowledging and addressing these differing perspectives, teacher education programs can better support the development of well-rounded professionals equipped to meet the challenges of the teaching profession.

Research Question 3: What are the lived experiences of preservice teachers, tutors, and mentors within the STS program?

Table 7: Pre-Service Teachers on Professional Practice

Items	Mean	Std.	T
		Deviation	
Field experience helps pre-service teachers to carry out small-scale	4.31	.847	20
action research to improve practice.			0
Field experience helps pre-service teachers to use a variety of	4.26	1.129	20
teaching and learning resources, including ICT, to enhance learning.			0
Field experience helps pre-service teachers to identify the	4.38	.883	20
appropriate skills of managing behaviour and learning with small and			0
large classes.			
Pre-service teachers develop skills of considering and respecting	4.45	.843	20
learners' cultural, linguistic, socio-economic, and educational			0
backgrounds in planning and teaching.			
Field experience enables pre-service teachers to listen to learners and	4.19	.986	20
give constructive feedback.			0
Overall Mean	4.32	0.93	20
			0

Source: Field Data (2025).

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

The data presented in Table 7 reveal that pre-service teachers view STS as making a significant contribution to their professional practice, yielding a grand mean of 4.32 with a standard deviation of 0.93. The item with the highest rating pertains to the development of skills that honor learners' diverse backgrounds (M = 4.45, SD = 0.843). Other highly rated aspects include classroom management (M = 4.38, SD = 0.883) and small-scale action research (M = 4.31, SD = 0.847).

Qualitative evidence further supports these findings. For instance, one pre-service teacher remarked, "Based on what I have learned from my mentors at school about the use of instructional materials, I have developed an impressive capacity for creating and utilizing materials effectively" (Pre-service Teacher 4). Another student expressed, "I'm not sure I would have excelled in my professional practice without engaging in STS. It really opened my eyes to a myriad of issues related to professional practice, which is one of the domains of NTS that I have gained by the end of my training" (Pre-service Teacher 11).

Table 8: Mentors on Professional Practice

Items	Mean	Std.	T
		Deviatio	
		n	
Field experience helps pre-service teachers to carry out small-scale action	4.00	.707	33
research to improve practice.			
Field experience helps pre-service teachers to use a variety of teaching	3.94	.704	33
and learning resources, including ICT, to enhance learning.			
Field experience helps pre-service teachers to identify the appropriate	4.27	.574	33
skills of managing behaviour and learning with small and large classes.			
Pre-service teachers develop skills of considering and respecting learners'	4.12	.696	33
cultural, linguistic, socio-economic, and educational backgrounds in			
planning and teaching.			
Field experience enables pre-service teachers to listen to learners and give	3.64	.784	33
constructive feedback.			
Overall Mean	3.99	0.69	33

Source: Field Data (2025).

The data presented in Table 8 indicate that mentors have an overall mean score of 3.99, with a standard deviation of 0.69, reflecting positive perceptions of the supported teaching in schools in enhancing professional practice. Mentors rated skills related to classroom management and respect for learners' diverse backgrounds quite highly. However, mean scores were lower for listening and providing constructive feedback, suggesting some variability in the observed outcomes. Further qualitative insights support these findings: "As a Mentor, I realized that STS provided pre-service teachers with their initial experience in research and classroom management, effectively laying a solid foundation for their skills and experiences in teaching" (Mentor 3). "I have observed that all the pre-service teachers under my supervision are excelling in their classroom and broader school activities, which significantly contributes to the development of their professional skills and abilities" (Mentor 15).

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

Table 9: Tutors on Professional Practice

Items	Mean	Std.	T
		Deviation	
Field experience helps pre-service teachers to carry out small-scale	4.00	.973	20
action research to improve practice.			
Field experience helps pre-service teachers to use a variety of	4.05	1.146	20
teaching and learning resources, including ICT, to enhance learning.			
Field experience helps pre-service teachers to identify the	4.25	1.069	20
appropriate skills of managing behaviour and learning with small and			
large classes.			
Pre-service teachers develop skills of taking into account and	4.20	1.056	20
respecting learners' cultural, linguistic, socio-economic, and			
educational backgrounds in planning and teaching.			
Field experience enables pre-service teachers to listen to learners and	3.75	.967	20
give constructive feedback.			
Overall Mean	4.0	1.04	20

Source: Field Data (2025).

The perceptions of tutors, as presented in Table 9, reveal an overall mean score of 4.0, with a standard deviation of 1.04. Notably high scores were observed in managing classroom behavior (M = 4.25) and respecting learners' diversity (M = 4.20), while the score for listening and providing feedback was marginally lower (M = 3.75). Direct quotations from tutors support these quantitative findings: "STS provides pre-service teachers with a practical setting to apply the various theories and concepts they have learned at college. Through their engagement in STS, they developed the skills and capabilities to utilize appropriate resources and strategies for addressing students from diverse cultural, linguistic, and socioeconomic backgrounds" (Tutor 6). Another tutor also stated that "STS is an invaluable practical environment that aids pre-service teachers in enhancing their professional practice as they collaborate in planning and teaching alongside their mentors during field experiences" (Tutor 15).

Research Question 3 Discussion

The findings presented in Tables 7, 8, and 9 indicate that the STS plays a crucial role in developing professional practice among pre-service teachers. Participants in the program report improvements in classroom management, the use of teaching resources including ICT, and the incorporation of students' diverse backgrounds into their teaching strategies. Their hands-on experiences with instructional materials, lesson planning, and classroom activities enable them to connect theoretical knowledge with practical application, in alignment with the National Teachers' Standards (NTS) (Ministry of Education, 2019).

Mentors support these findings, noting that STS fosters foundational professional development. They highlight that pre-service teachers gain essential skills in research, classroom management, and meaningful engagement in school activities, which are vital for the holistic preparation of teachers (Tawiah et al., 2023).

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

Tutors echo this perspective, emphasizing that STS allows pre-service teachers to co-plan and co-teach, effectively merging pedagogical theory with practice (Boateng et al., 2019).

The integration of both quantitative and qualitative results reveals a strong consensus among stakeholders that STS supports experiential learning. The program not only develops practical teaching skills but also encourages reflective practice, collaboration, and responsiveness to diverse learner needs, essential competencies outlined in the NTS (Darling-Hammond et al., 2019; Avalos, 2020). There are minor differences in areas like feedback and reflective skills, suggesting that ongoing support and structured mentoring could further enhance the professional development of pre-service teachers. In summary, the experiences of pre-service teachers in the STS program are predominantly positive. The program offers a structured and practical environment for the development of professional skills, equipping pre-service teachers with the necessary strategies and dispositions to meet the demands of the teaching profession. Both mentors and tutors confirm the effectiveness of STS in bridging the gap between theory and practice, underscoring its importance in teacher preparation programs (Darling-Hammond et al., 2022; Akyeampong et al., 2020).

Findings, Conclusion, Recommendations, and Implications

This section provides a summary of the study's findings, formulates conclusions based on the results, and presents recommendations and implications for teacher education practices. The investigation explored the conceptions of pre-service teachers, mentors, and tutors concerning the Supported Teaching in Schools, emphasizing its contribution to the development of teacher professionalism.

Findings of the Study

Conceptions of preservice teachers, tutors, and mentors in Developing Professional Values and Attitudes

The study highlighted that pre-service teachers, mentors, and tutors all viewed STS as a valuable tool for enhancing professional values and attitudes. Pre-service teachers reported an impressive overall mean score, showing strong consensus that STS empowered them to see themselves as potential agents of change, cultivate a positive teacher identity, and engage in reflective and collaborative practices. Similarly, mentors and tutors expressed favorable views. Qualitative feedback supported these findings. For instance, one preservice teacher remarked, "I've really improved my values and attitudes, such as being more consistent with my attendance, getting involved in school activities, and collaborating more closely with mentors and colleagues" (Pre-service Teacher 9). Tutors echoed this sentiment, stating, "The best way to develop professional values and attitudes is through hands-on experience, and STS offered them just that, an opportunity to grow" (Tutor 12).

Conceptions of preservice teachers, tutors, and mentors in Developing Professional Knowledge

Participants also noted that STS significantly bolstered the professional knowledge of pre-service teachers, encompassing their understanding of the education system, school curriculum, pedagogical content knowledge, and the needs of diverse learners. Pre-service teachers recorded a grand mean of 4.52 (SD = 0.81), while mentors and tutors rated it 3.98 and 3.93, indicating overall positive impressions. Qualitative responses emphasized the tangible benefits of STS. One pre-service teacher expressed, "STS was crucial"

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

as it marked the beginning of my journey as a future teacher. Feedback from various supervisors and mentors, each with their own expertise, helped me lay a solid groundwork for my teaching philosophy" (Pre-service Teacher 1). Tutors supported this viewpoint, stating, "While pre-service teachers absorb a lot of theories and concepts in college, STS gives them the chance to apply and deepen that knowledge through real-world experiences" (Tutor 3). These insights suggest that STS effectively bridges the divide between theoretical knowledge and practical classroom application, fostering experiential learning and reflective growth.

Experiences of preservice teachers, tutors, and mentors in Developing Professional Practice

In terms of professional practice, the study found that STS offered pre-service teachers valuable opportunities to develop essential skills in classroom management, the use of teaching resources, including ICT, culturally responsive teaching, small-scale action research, and gathering learner feedback. Pre-service teachers noted an overall mean of 4.32 (SD = 0.93), while mentors scored it at 3.99 and tutors at 4.0, reflecting recognition from all parties regarding STS's role in enhancing professional practice. Qualitative feedback included statements like, "STS provides pre-service teachers with the hands-on environment they need to implement the theories and concepts learned in college. They cultivate skills and the ability to apply the right resources and strategies for students from diverse cultural, linguistic, and socio-economic backgrounds" (Tutor 6). Another pre-service teacher shared, "I honestly don't think I would have excelled in my professional practice without STS. It has opened my eyes to numerous challenges related to effective teaching" (Pre-service Teacher 11).

These findings clearly illustrate that STS serves as a vital platform, offering authentic, experiential opportunities for pre-service teachers to refine their pedagogical skills and meet the professional standards set by the NTS.

CONCLUSION

The study successfully confirmed that the supported teaching in schools program is an effective, experiential platform that positively influences all three domains of the NTS: professional values, knowledge, and practice. The quantitative and qualitative findings firmly conclude that STS enables the development of competent, reflective, and professional teachers. However, the study also highlights that the program's future success depends on deliberate actions to synchronize the human element by addressing the identified divergences in stakeholder conceptions through targeted training and robust communication protocols.

Recommendations

Based on the study's findings, the following recommendations are proposed to enhance the effectiveness of the Supported Teaching in Schools (STS) program:

- 1. Colleges of education should implement mandatory PD sessions that focus on the interpretation of the National Teachers' Standards (NTS). This will address key differences in perceptions by ensuring that all supervisors operate with a unified understanding of the expected competencies for preservice teachers (Quansah, 2022).
- 2. Formalize at least one mandatory meeting per semester that involves the preservice teacher, the mentor, and the tutor. These triad meetings should utilize shared rubrics to discuss observations, analyze the consistency of feedback, and collaboratively establish specific professional growth goals.

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

- 3. To effectively develop professional values and attitudes, the final STS grade should include a significant, assessed reflective portfolio component. This component will require preservice teachers to explicitly connect their in-school practices to the ethical and attitudinal domains of the NTS.
- 4. The Ministry of Education should create an official, user-friendly STS handbook that clearly defines the roles and responsibilities of preservice teachers, mentors, and tutors. This will help foster greater alignment in perceptions across all colleges of education.

Contributions to Knowledge

This study makes several noteworthy contributions to the field of teacher education:

- 1. The research provides empirical evidence regarding the effectiveness of the Supported Teaching in Schools (STS) program in fostering professional values, knowledge, and practices among preservice teachers.
- 2. The study illuminates the perspectives of pre-service teachers, mentors, and tutors concerning STS, revealing areas of both agreement and disparity.
- 3. The findings and recommendations of the study offer valuable insights for enhancing the STS program, emphasizing the importance of targeted training, effective communication protocols, and standardized feedback mechanisms.

Implications for Practice

The study's findings have implications for:

- 1. The research suggests that STS can be a valuable component of teacher education programs, providing pre-service teachers with hands-on experience and opportunities for professional growth.
- 2. The study's recommendations can inform policy and practice in teacher education, particularly in the context of the National Teachers' Standards (NTS).

Future Research Directions

Future studies could investigate:

- 1. The long-term impact of STS on teacher professionalism and student outcomes.
- 2. Comparative studies on the effectiveness of STS programs across different contexts and institutions.

REFERENCES

- Akyeampong, K., Westbrook, J., & Pryor, J. (2020). The speed school pedagogy and how it unlocks the creative and learning potential of disadvantaged children in Ethiopia (Version 2). University of Sussex. https://hdl.handle.net/10779/uos.23478908.v2
- Ampadu, E., Butakor, P. K., Amponsah, S., & Yeboah, R. (2021). Exploring the professional identities of pre-service teachers studying at the University of Ghana. *International Journal of Education Economics and Development*, 12(1), 27-44.
- Ary, D., Jacobs, L. C., & Razavieh, A. (1972). Introduction to research in education.

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

- Avalos, B. (2023). Teacher professional development: revisiting critical issues. In *Approaches to teaching* and *Teacher education* (Vol. 43, pp. 59-71). Emerald Publishing Limited.
- Bandura, A. (1997). Self-efficacy: The exercise of control. Macmillan.
- Bashiru, A. (2024). Examining teacher education in Ghana regarding pre-service teachers' ethnic awareness. Bowling Green State University.
- Boateng, P., Arhin, A. K., Sekyere, F. O., Koto, A., & Adarkwah, S. N. (2019). Teaching efficacy beliefs of Ghanaian basic school teachers and their subject specializations. *African Journal of Teacher Education*, 8, 281-298.
- Braun, V., & Clarke, V. (2021). Thematic analysis: A practical guide. SAGE Publications.
- Buabeng, I., Ntow, F. D., & Otami, C. D. (2020). Teacher education in Ghana: Policies and practices. *Journal of Education and Practice*, 11(16), 11-19.
- Code, A. E., & Psychologists, P. L. (2017). Ethical principles of psychologists and code of conduct. *Published online*.
- Creswell, J. W. (2013). Steps in conducting a scholarly mixed methods study.
- Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches. SAGE Publications.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development. *Learning Policy Institute*.
- Darling-Hammond, L., Wechsler, M. E., Levin, S., & Tozer, S. (2022). Developing Effective Principals: What Kind of Learning Matters?. *Learning Policy Institute*.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
- Fullan, M. (2011). Whole system reform for innovative teaching and learning. *Microsoft-ITL Research* (*Ed.*), *Innovative Teaching and Learning Research*, 30-39.
- Ministry of Education. (2012). Teacher Education Policy. Accra: Ministry of Education.
- Ministry of Education. (2018). National Teachers' Standards. Accra: Ministry of Education.
- Nayar, A., & Akmar, S. N. (2020). Technology Pedagogical Content Knowledge (TPCK) and Techno Pedagogy Integration Skill (TPIS) among pre-service science teachers: A case study of a university-based ICT-based teacher education curriculum. *Journal of Education and Practice*, 11(6).

Online ISSN: 2054-6300 (Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

- Nsowah, F. A., Yeboah, E., Osei, R. D., Nimoh, V., & Agyeman, S. O. (2025). Examine senior high school mathematics teachers' assessment for learning practices for students' progress and better examination attainment. *European Journal of Education Studies*, 12(3).
- Quansah, F., Essel, D. W., Gyapong, N. A., Yabana, I. N. N., Dzakadzie, Y., Asamoah, P., & Addison, K. (2025). Enhancing Teacher Training Through Self-Efficacy and Emotional Intelligence: A Conditional Process Model of Pre-Service Teachers' Well-Being and Academic Achievements. *Brain and Behavior*, 15(5), e70578.
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, 48(6), 1273-1296.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55.
- Tawiah, R. S., Opoku-Asare, N. A., & Gyekye-Ampofo, M. (2023). Effects of High Teacher Turnover on Student Academic Performance: A Case of Sekyere Afram Plains District of Ashanti Region, Ghana. *International Journal of Research and Innovation in Social Science*, 7(9), 1103-1111.
- Wenger, E. (1998). Communities of practice: Learning as a social system. Systems thinker, 9(5), 2-3.
- Yeng, E. & Tatsi, S. (2024). Exploring how teachers' gender biases and students' self-efficacy beliefs impact mathematics instruction. *International Journal of Mathematics and Statistics Studies*, 12(4),36-51. https://10.37745/ijmss.13/vol12n43651
- Yeng, E. (2023). The influence of teachers' familiarity on competency in integrating instructional technology in mathematics teaching. *International Journal of Research and Innovation in Social Science*, 7(9), 505-515. https://dx.doi.org/10.47772/IJRISS.2023.70943