

A Scoping Review of Teacher Preparation and Licensing Systems: A Comparative Analysis of Canadian Benchmarking Standards and Ghanaian Practices

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Abstract The study explored teacher preparation and licensing practices in Ghana and Canada, highlighting significant differences in their structure, standards, and outcomes. Using document analysis and comparative case studies, the research examined policy documents, curriculum guidelines, and licensure requirements from both countries. The findings revealed that Canada's teacher preparation system is highly structured and standardized, with consistent curriculum requirements, rigorous assessments, and an integrated approach to professional development. These elements contributed to producing well-prepared and competent educators who meet national standards across diverse regions. Conversely, Ghana's teacher preparation system faces challenges such as variability in program quality, inconsistent implementation of licensing standards, and limited access to resources. These issues hinder the development of a uniform and effective framework for preparing and certifying teachers. Despite these challenges, the study identified opportunities for improvement by adopting elements of Canada's system, including standardizing curriculum and assessments, emphasizing continuous professional development, and improving resource allocation. The study also acknowledged challenges in Canada, such as balancing standardized requirements with local educational needs and addressing disparities in access to professional development between urban and rural regions. By evaluating these challenges alongside Ghana's needs, the research offers actionable recommendations aimed at improving Ghana's teacher preparation system. Key reforms included enhancing curriculum consistency, increasing investment in teacher training institutions, and integrating professional development into the licensing process. This study underscores the value of cross-national comparisons in identifying best practices and fostering global collaboration in teacher education.

Keywords: Teacher Preparation, Licensing Practices, Ghana, Canada, Professional Development, Curriculum Standards, Educational Policy

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1. Introduction

Teacher preparation and licensing are critical components of educational systems worldwide, fundamentally influencing the quality of education and the effectiveness of teachers [1]. Across the globe, educational reforms often focus on improving teacher training and certification processes as a means of enhancing student outcomes and addressing educational disparities [2]. Effective teacher preparation ensures that

educators are equipped with the requisite knowledge, pedagogical skills, and competencies to meet diverse classroom needs and adapt to evolving educational demands [3]. The quality of teacher preparation and licensing is a global issue, with many countries facing challenges related to standardization, resource allocation, and the alignment of teacher training with contemporary educational needs [4]. In developing nations, such as Ghana, these challenges are often exacerbated by limited financial resources, infrastructural deficits, and varying standards of education [5]. These issues can lead to disparities in teacher quality and effectiveness, impacting

student learning and contributing to broader educational inequalities [6].

Globally, there is a growing recognition of the need for robust teacher preparation systems that can address these challenges. Countries with advanced educational systems, such as Canada, are often cited as models due to their comprehensive and standardized approach to teacher preparation and licensing [7]. Canada's system is characterized by rigorous academic requirements, uniform assessment standards, and a strong emphasis on ongoing professional development, which collectively contribute to high teaching standards and effective educational outcomes [8]. In Ghana, the teacher preparation and licensing system faces several challenges, including variability in program quality, inconsistent standards, and limited resources [5]. These issues can lead to disparities in teacher effectiveness and, consequently, affect student outcomes across different regions [6]. Despite efforts to improve teacher training and certification, there remains a significant gap between the Ghanaian system and international best practices. In contrast, Canada is recognized for its robust and comprehensive teacher preparation and licensing system. Canadian programs are known for their rigorous academic requirements, standardized assessments, and a strong emphasis on continuous professional development [9,10]. The Canadian model provides a useful benchmark for evaluating and potentially enhancing teacher preparation practices in other countries.

Teacher preparation and licensing are crucial components of a nation's education system, as they directly influence the quality of teaching and learning outcomes. Globally, teacher preparation programs and licensing frameworks vary significantly in their structure, rigor, and effectiveness, reflecting diverse educational goals and sociocultural contexts. In Canada, teacher preparation is guided by rigorous standards and benchmarking practices that emphasize professional competencies, continuous development, and quality assurance [11]. In contrast, Ghana's teacher preparation and licensing frameworks face challenges such as inadequate resources, inconsistent policy implementation, and limited alignment with global best practices [12,13]. The disparity between Canadian and Ghanaian approaches to teacher preparation and licensing raises critical questions about the factors contributing to effective teacher training and professional certification. For instance, while Canadian provinces adopt comprehensive benchmarking systems that promote collaboration among stakeholders, Ghana struggles with issues such as insufficient training infrastructure, limited mentorship opportunities, and a lack of standardized evaluation mechanisms [14,15]. These challenges potentially undermine the quality of education and teacher performance in Ghana, thereby affecting student outcomes and the broader educational objectives of the nation. This study conducted a comparative analysis of teacher preparation and licensing practices in Ghana and Canada, using the latter as a benchmark due to its well-established and effective system. By examining the similarities and differences between the two systems, the study seeks to identify key areas for potential reform and improvement in Ghana's approach to teacher certification. Understanding

these practices will offer valuable insights into how Ghana can enhance its teacher preparation programs to better meet educational standards and improve overall teacher effectiveness.

Teacher preparation and licensing are fundamental to ensuring the quality and effectiveness of education systems worldwide. However, the structure, implementation, and effectiveness of these systems vary significantly across different countries, leading to disparities in teacher competency and student outcomes [14]. In Ghana, challenges such as inconsistent teacher training standards, limited access to professional development, and inadequate resource allocation hinder the development of a standardized and effective teacher licensing system [5]. While the National Teaching Council (NTC) has introduced reforms to improve teacher certification, the implementation of these policies remains uneven, creating gaps in teacher preparedness and educational quality [16]. Conversely, Canada has established a well-structured and highly regulated teacher preparation and licensing system that emphasizes rigorous training, standardized assessments, and ongoing professional development [17]. Canadian provinces have implemented benchmarking frameworks that ensure teachers meet consistent professional standards across different regions [18]. The success of this model provides a valuable reference point for evaluating and improving teacher preparation in Ghana. The lack of a cohesive, standardized approach to teacher preparation in Ghana raises concerns about teacher quality and educational equity. Many teacher education institutions face resource constraints, leading to disparities in training quality across urban and rural areas [19].

Additionally, the absence of continuous professional development requirements limits teachers' ability to adapt to evolving educational demands [6]. These shortcomings contrast sharply with Canada's system, where certification requirements and professional learning are integrated into a structured framework that promotes lifelong teacher development [8]. Given these differences, a comparative analysis of Ghanaian and Canadian teacher preparation and licensing systems is essential to identify best practices and potential reforms. By examining Canada's benchmarking strategies and their applicability to Ghana, this study aims to provide actionable recommendations for enhancing teacher training, professional development, and licensing processes in Ghana. Addressing these gaps will contribute to the overall improvement of teacher effectiveness and educational outcomes in the country [10].

2. Research Questions

1. How are curriculum and training structured in teacher preparation programs in Ghana and Canada?
2. What are the licensing standards and processes in Ghana and Canada, and how do they ensure teacher competence?
3. How valid and reliable are the teacher certification processes in both countries?
4. What role does professional development play in teacher licensing systems in both countries?

5. What challenges and opportunities exist in the teacher preparation and licensing systems of Ghana and Canada?

3. Literature Review

Teacher Preparation in Canada

Canada's teacher preparation system is esteemed for its rigorous and comprehensive approach, which is often used as a model for educational systems worldwide. This section provides a detailed examination of the key components of teacher preparation in

Canada, including academic requirements, practical training, assessment methods, and ongoing professional development. In Canada, teacher preparation is typically anchored in the completion of a bachelor's degree in education. This program generally spans four years and is meticulously structured to balance theoretical knowledge with practical application [9]. The curriculum encompasses a broad spectrum of subjects, including educational theory, pedagogy, child development, and curriculum design. These courses aim to provide a profound understanding of various educational philosophies and teaching methodologies [20].

The design of Canadian teacher preparation programs is influenced by both national and provincial standards, which ensures that the quality and consistency of teacher education are upheld across different regions [21]. Each province in Canada has its own certification requirements and educational guidelines, which teacher preparation programs are required to follow. This provincial variation allows the programs to cater to local educational needs while maintaining a high standard of teacher preparation [22]. Moreover, Canadian teacher education programs often incorporate elements of social justice, equity, and diversity into their curricula, reflecting the multicultural nature of Canadian society and preparing teachers to work effectively in diverse classroom environments [22]. This approach ensures that teachers are equipped to handle a wide range of student needs and contexts, enhancing their effectiveness in the classroom. A cornerstone of Canadian teacher preparation is its emphasis on practical, hands-on classroom experience. Teacher candidates are required to undertake significant fieldwork, which includes supervised teaching placements in various educational settings [10]. This practical training allows candidates to apply theoretical knowledge in real-world scenarios, thereby bridging the gap between theory and practice.

During their field placements, teacher candidates receive ongoing support and feedback from experienced educators, which is integral to their professional development [31]. This feedback loop helps prospective teachers refine their instructional skills, classroom management techniques, and ability to engage with students from diverse backgrounds. Additionally, the fieldwork component is designed to be integrative, meaning that it is directly linked to the coursework, ensuring that practical experiences are relevant and applied [32]. The emphasis on diverse classroom placements also prepares candidates to handle a variety of teaching contexts and student populations, which is crucial in a country as geographically and culturally diverse as

Canada [7]. The assessment process for teacher candidates in Canada is rigorous and multifaceted. It includes a combination of written exams, practical teaching evaluations, and reflective assessments [23]. Written exams typically assess candidates' knowledge of educational content, theories, and pedagogical practices. These exams ensure that candidates possess a strong theoretical foundation necessary for effective teaching. Practical teaching evaluations are conducted to assess candidates' ability to deliver effective instruction and manage a classroom. These evaluations involve direct observation of teaching practice and are critical in determining candidates' readiness for certification [9]. Reflective assessments require candidates to engage in self-evaluation and critical analysis of their teaching experiences. This reflective practice fosters continuous professional growth by encouraging candidates to identify their strengths and areas for improvement [24].

Continuous professional development is a fundamental aspect of the Canadian teacher preparation system. Educators in Canada are required to participate in ongoing learning activities to maintain their certification and stay abreast of the latest educational practices and technologies [34]. Professional development opportunities in Canada are diverse and include workshops, conferences, seminars, and additional coursework. This commitment to lifelong learning is supported by various professional organizations and educational institutions, which provide resources and support for teachers seeking to advance their knowledge and practice [10]. The emphasis on continuous professional development not only helps teachers sustain high standards of practice but also contributes to their career advancement and overall effectiveness in the classroom. In effect, Canada's approach to teacher preparation is characterized by its comprehensive and rigorous framework, which combines theoretical coursework, practical training, and continuous professional development. This system ensures that teachers are well-prepared to meet the demands of modern education and provides a model for other countries aiming to enhance their teacher preparation programs.

Teacher Preparation in Ghana

Teacher preparation in Ghana is a critical component of the nation's educational system, aimed at equipping educators with the necessary skills and knowledge to foster student learning. Despite significant efforts to enhance the quality of teacher education, the system faces several challenges that affect its effectiveness and consistency. This section provides an in-depth examination of teacher preparation in Ghana, including academic requirements, practical training, assessment methods, and licensing processes, and highlights the challenges that impact the overall quality of teacher education. In Ghana, teacher preparation typically begins with the completion of a diploma or degree in education. The most common pathways include a Diploma in Basic Education, which generally spans three years, or a Bachelor of Education (B.Ed.), which is typically a four-year program [36]. These programs are designed to provide a foundation in pedagogical theory, curriculum development, and classroom management. The curriculum often includes courses in educational psychology, teaching methodologies, and subject-specific content knowledge.

However, there is significant variation in the quality and comprehensiveness of these programs across different institutions. Some institutions offer well-structured programs that integrate both theoretical and practical components, while others may have less rigorous curricula or inadequate resources [6]. This inconsistency can lead to disparities in the quality of teacher preparation and, consequently, in the effectiveness of new teachers entering the profession. Practical training is a crucial aspect of teacher preparation in Ghana. Teacher candidates are required to complete teaching practice as part of their training, which involves placements in schools where they gain hands-on experience in real classroom settings [25]. These placements are intended to help candidates apply theoretical knowledge in practice and develop their teaching skills.

Despite its importance, the practical training component in Ghana often faces challenges. Issues such as limited access to quality teaching practice sites, inadequate supervision, and insufficient support from mentor teachers can undermine the effectiveness of this training [25]. As a result, teacher candidates may not receive the comprehensive and supportive field experience necessary to prepare them for the demands of the teaching profession. Assessment of teacher candidates in Ghana typically includes written exams and practical teaching evaluations. Written exams assess candidates' knowledge of educational theories, pedagogical practices, and subject content. Practical assessments evaluate candidates' ability to deliver instruction and manage a classroom effectively [26]. However, the assessment process in Ghana is often criticized for its lack of uniformity and rigor. Standards for assessments can vary significantly between institutions, and there may be inconsistencies in how assessments are conducted and evaluated [16]. This variability can lead to differences in the preparedness of teacher candidates and affect the overall quality of teacher education. The licensing process for teachers in Ghana involves passing a licensure exam and demonstrating teaching competence. The licensure exam typically tests candidates' knowledge of pedagogical theories, subject content, and teaching practices [33]. In addition to passing the exam, candidates are often required to provide evidence of their teaching experience and practical competence. Despite these requirements, the licensing process in Ghana is not as uniformly applied as in Canada. There are variations in how licensing standards are implemented, and the processes can be influenced by regional differences and institutional practices [25]. This lack of consistency can impact the quality of teacher preparation and the effectiveness of the licensing system in ensuring that all teachers meet a high standard of competency.

4. Methodology

This study adopted a qualitative approach to investigate and compare teacher preparation and licensing practices in Ghana and Canada. By employing document analysis and comparative case studies, the research provides a comprehensive examination of the teacher education systems in both countries. This approach allowed for a

detailed exploration of the experiences, perceptions, and practices related to teacher preparation and licensing. Document analysis was a pivotal method used to uncover the formal structures, policies, and guidelines governing teacher preparation and licensing in Ghana and Canada. This approach involved a thorough review of key documents to identify similarities, differences, and underlying themes in the two systems. The study began by examining national and provincial educational policies from Canada and equivalent policies from Ghana. These policy documents outlined the regulatory frameworks, standards, and strategic priorities for teacher preparation and licensing in both countries. By analyzing these documents, the study identified how each country establishes and enforces formal requirements for teacher education. Policies such as Canada's province-specific teacher certification standards and Ghana's National Teachers' Standards were critically examined to understand their role in shaping the teacher preparation landscape [18]. This analysis provided insight into the extent to which each system supports teacher development, quality assurance, and accountability.

A review of curriculum guidelines from teacher preparation programs offered detailed insights into the academic and practical components of teacher education in Ghana and Canada. The analysis included core areas such as subject-specific coursework, pedagogy, classroom management, and practical training requirements. Canadian curriculum guidelines often emphasize a balance between theory and practice, with robust field experiences, whereas Ghanaian guidelines are evolving and face challenges in achieving consistency across institutions [20]. This comparative analysis highlighted differences in educational philosophies, teaching methodologies, and program structures, providing a basis for evaluating the comprehensiveness of each system. Licensure requirements were analyzed to compare the certification processes and criteria in the two countries. This involved reviewing the standards for licensure exams, classroom teaching competencies, and additional certification requirements, such as professional ethics training. Canadian licensure processes emphasize standardized assessments and ongoing professional development, while Ghana's processes are in the early stages of development and face challenges such as limited resources and inconsistencies in implementation [27]. This analysis shed light on the effectiveness and accessibility of each country's teacher certification system.

The document analysis was conducted thematically, focusing on identifying, categorizing, and comparing key themes and patterns related to teacher preparation and licensing. Themes such as program structure, assessment methods, professional development, and policy implementation were systematically examined. This thematic analysis allowed for a detailed understanding of the similarities and differences between the two systems, as well as potential areas for reform. By uncovering these patterns, the study revealed how Ghana could adapt elements of Canada's teacher preparation and licensing practices to improve its system [28]. The use of document analysis provided a strong foundation for the study by allowing the researchers to systematically examine official policies and guidelines. This method

ensured that the findings were grounded in authoritative sources and aligned with the formal objectives of the educational systems in both countries. Furthermore, it enabled the study to identify gaps in the existing practices and explore opportunities for improvement through comparative insights.

Comparative case studies are employed to explore and contrast teacher preparation and licensing practices through specific examples from Ghana and Canada. This approach facilitates a nuanced understanding of the similarities and differences between the two countries' systems, shedding light on their respective strengths, challenges, and opportunities for improvement. The case studies focus on three key areas: teacher preparation programs, licensing processes, and institutional practices. The study examines case studies of teacher preparation programs from selected institutions in both Ghana and Canada. These case studies explore how each country structures its programs, encompassing both academic coursework and practical training components, such as teaching practicums or internships [10]. In Canada, teacher preparation programs often include rigorous coursework in pedagogy, subject-specific instruction, and classroom management, paired with extensive field experiences. Conversely, Ghanaian programs may face challenges such as shorter practicum durations, resource constraints, and variability in program quality across institutions. Comparing these structures helps to evaluate the comprehensiveness, effectiveness, and alignment of teacher education programs with the needs of their respective education systems.

Case studies of licensing processes across various regions in Canada and districts in Ghana are analyzed to identify how certification requirements are implemented, monitored, and enforced. In Canada, licensing typically involves standardized assessments, rigorous accreditation standards, and the fulfillment of professional competencies. Regional authorities in Canada maintain consistency while allowing for localized adaptations. In contrast, Ghana's licensing processes are still evolving and often encounter challenges such as inconsistent application of standards, limited access to resources, and inadequate support for newly certified teachers [35]. By comparing these processes, the study highlights how different approaches to teacher certification influence the quality of education and professional accountability. The study also investigated institutional practices related to teacher preparation and licensing, such as the availability of resources, program delivery methods, and support mechanisms for teacher candidates. Canadian institutions often benefit from well-resourced programs, robust mentorship structures, and collaborative partnerships between universities and schools. In Ghana, institutions may face significant resource limitations, including outdated teaching materials, insufficient faculty development opportunities, and limited infrastructure [31]. Understanding these institutional dynamics provides insights into how different contexts shape the quality of teacher education and the preparedness of teacher candidates to meet professional demands.

Data for these comparative case studies are gathered through comprehensive document reviews and interviews with key stakeholders, including educators, policymakers,

program administrators, and teacher candidates. This approach allows for a rich, contextually grounded comparison of teacher preparation and licensing practices, offering a holistic understanding of how these practices are experienced in diverse educational settings. Document reviews provide insights into formal policies and frameworks, while interviews offer perspectives on practical implementation, challenges, and successes [34]. By integrating findings from these comparative case studies, the research identifies best practices and actionable lessons that can inform reforms in Ghana's teacher preparation and licensing systems. The study underscores the importance of adapting successful practices from Canada to the Ghanaian context, considering local needs and challenges, to enhance the overall quality and consistency of teacher education and professional certification.

The study utilized a systematic approach to collect and analyze data relevant to teacher preparation and licensing practices in Ghana and Canada. Key documents, including policy frameworks, curriculum guidelines, accreditation standards, and licensure requirements, were obtained from government agencies, websites, repositories, educational institutions, and professional organizations in both countries. These documents provided foundational insights into the structures, processes, and standards governing teacher education and professional certification. By accessing authoritative sources, the study ensured the reliability and validity of the data collected [18]. A detailed document review was conducted to identify critical components of the teacher preparation and licensing systems in both Ghana and Canada. This review focused on uncovering the goals, content, and implementation strategies within teacher education programs and their corresponding licensing frameworks. Key themes were identified through a thematic analysis process, wherein data were systematically coded and categorized to highlight commonalities, differences, and unique aspects of each country's practices. This analysis was guided by an established framework for comparative education research, ensuring a structured and objective examination of the data [28].

The study also incorporated case studies to provide context-specific insights into the lived experiences of educators and stakeholders in both Ghana and Canada. These case studies supplemented the document analysis by offering practical examples of how teacher preparation and licensing policies are applied in real-world contexts. By triangulating findings from the case studies with the document review, the study enhanced the depth and richness of its analysis. The comparative analysis focused on exploring how Ghana's teacher preparation and licensing practices align with or differ from those in Canada. Specific areas of interest included program structure, assessment methods, professional development opportunities, and policy implementation strategies. This cross-country comparison was instrumental in identifying best practices from Canada that could inform reforms in Ghana. In addition, the analysis shed light on systemic challenges faced by Ghana's teacher education system, such as resource constraints and inconsistent standards, while highlighting areas where Canadian practices could be adapted to address these challenges [23].

The findings of the study provide valuable insights into potential reforms for Ghana's teacher preparation and licensing systems. By drawing on the strengths of Canada's well-established framework and tailoring them to Ghana's unique sociocultural and economic context, the study offers actionable recommendations aimed at improving the quality, consistency, and effectiveness of teacher education in Ghana. These findings contribute to the broader discourse on global best practices in teacher preparation and licensing, offering a roadmap for developing nations seeking to enhance their education systems.

5. Results and Discussion

RQ1: How are curriculum and training structured in teacher preparation programs in Ghana and Canada?

Teacher preparation programs serve as the foundation for developing competent educators. The curriculum and training structure determine the quality of knowledge, skills, and experiences that prospective teachers acquire before entering the profession. This question explores how teacher preparation programs in Ghana and Canada are designed, focusing on the balance between theoretical knowledge and practical experience.

Teacher Preparation in Canada

In Canada, teacher preparation is governed by a structured and regulated system. Each province and territory administers its certification through distinct boards, requiring prospective teachers to complete specific educational programs. According to the Ontario College of Teachers Act (1996), teacher candidates in Ontario must complete a recognized teacher education program that integrates both coursework and extensive field placements. This approach is detailed in the Ontario College of Teachers Annual Report (2023), which specifies that the typical path includes a two-year Bachelor of Education degree following an undergraduate

degree, involving rigorous academic coursework and substantial classroom practice. The emphasis in Canadian teacher education programs is on blending theoretical knowledge with practical experience. As outlined in the Canadian Teacher Certification Requirements (2019), programs are designed to ensure graduates are well-versed in pedagogical principles, classroom management, and subject-specific content. This includes coursework on child development, curriculum design, and teaching methodologies, paired with field placements in diverse educational settings to provide practical teaching experience [20]. This comprehensive approach aims to produce educators equipped to handle the complexities of modern classrooms effectively.

Teacher Preparation in Ghana

Conversely, teacher preparation in Ghana is characterized by inconsistencies in curriculum delivery and practical training opportunities. The Education Act of 2008 (Act 778) provides a framework for teacher licensure and standards, stating that the National Teaching Council (NTC) is responsible for licensing teachers after they have satisfied the appropriate conditions for initial licensing and passed the necessary examinations (Education Act, 2008). However, the implementation of these standards can vary significantly across institutions.

While some teacher training colleges in Ghana offer robust practical experiences, others face limitations due to resource constraints and differing program structures (Ghana Education Service, 2021). This variability impacts the overall effectiveness of teacher preparation programs, as evidenced by disparities in training quality and practical training opportunities [29]. The lack of uniformity in the structure and delivery of teacher education programs means that some teachers enter the profession with strong pedagogical and practical skills, while others may have gaps in their training, affecting their ability to meet teaching demands effectively.

Table 1. Summary of Studies Addressing RQ1 – Curriculum and Training Structure in Teacher Preparation Program

Study/Source	Country	Focus Area	Key Findings	Implications
Ontario College of Teachers Act (1996); Annual Report (2023)	Canada	Teacher education program structure	Two-year B.Ed. after undergraduate degree; combines coursework and practical field placements	Structured, standardized curriculum ensures uniform training and competence
Canadian Teacher Certification Requirements (2019)	Canada	Curriculum content and field placement	Emphasis on child development, curriculum design, pedagogical strategies, and classroom management	Balanced integration of theory and practice across provinces
Kariwo (2023)	Canada	Practical training in teacher preparation	Diverse teaching placements strengthen practical experience	Enhances adaptability to various classroom settings
Education Act (2008), Act 778	Ghana	National policy on teacher preparation	NTC oversees teacher licensure and curriculum guidelines	Framework exists but implementation is inconsistent across institutions
Ghana Education Service (2021)	Ghana	Institutional training practices	Variations in curriculum delivery and resource availability	Affects consistency in teacher readiness
Amoah (2020)	Ghana	Disparities in training quality	Inconsistencies in practical experience opportunities	Leads to unequal levels of competence among graduates

Comparative Insights: Ghana vs. Canada

The key difference between the teacher preparation systems in Ghana and Canada lies in the level of standardization and integration of practical training. In Canada, the process is highly regulated with a standardized curriculum, ensuring that all teacher candidates receive a consistent balance of theoretical and practical training. In Ghana, while there are established policies for teacher preparation, their implementation is inconsistent, leading to disparities in training quality across institutions. Additionally, Canadian teacher education programs emphasize structured field placements as an integral part of certification, ensuring that teachers gain hands-on experience before entering the classroom. In contrast, practical teaching opportunities in Ghana are often dependent on institutional resources, meaning some trainees may receive limited classroom exposure before becoming fully licensed teachers. Both Ghana and Canada recognize the importance of comprehensive teacher training in preparing educators for classroom challenges. However, while Canada's teacher preparation system is highly structured and standardized, Ghana's system faces challenges related to resource availability and uniform implementation. Strengthening teacher training frameworks in Ghana by introducing consistent program structures, ensuring adequate practical training opportunities, and enhancing regulatory oversight could significantly improve teacher preparedness and educational outcomes.

RQ2: What are the licensing standards and processes in Ghana and Canada, and how do they ensure teacher competence?

Licensing standards and processes ensure that prospective teachers meet the necessary *qualifications and competencies* to deliver high-quality education. This question examines how *Ghana and Canada* implement their licensing frameworks, highlighting the *procedures and mechanisms* in place to certify competent educators.

Licensing Standards and Processes in Canada

In *Canada*, the teacher licensing process is *standardized and managed by provincial and territorial certification boards*, ensuring *consistency and quality* across the country. Each province has its own teacher certification body that regulates the licensing process, ensuring that *only qualified candidates* receive certification. According to the Teacher Regulation Branch (2022) in British Columbia, candidates must meet *specific educational and competency requirements*, pass *comprehensive exams*, and complete *practical teaching assessments*. This *standardized approach* helps maintain *high educational standards* and ensures that all teachers demonstrate *the same level of competence*, regardless of their location.

Similarly, the Ontario College of Teachers Annual Report (2023) highlights that the certification process includes *passing rigorous exams* and completing a *mandatory mentorship program*, which ensures that new teachers are *well-prepared* for the classroom. This structured and cohesive framework allows for *regional variations in teacher education programs* while maintaining alignment with *national standards* [23]. Canadian teacher licensing processes also emphasize *continuous professional development*, with many

provinces requiring teachers to participate in *ongoing training programs* to maintain their certification. This ensures that educators remain *current with best practices*, instructional methods, and evolving *curriculum standards*.

Licensing Standards and Processes in Ghana

In *Ghana*, the teacher licensing process is *overseen by the National Teaching Council (NTC)*, as mandated by the *Education Act of 2008 (Act 778)*. The act requires the NTC to conduct *licensure examinations* and ensure that teachers meet *technical and professional standards* [33]. However, the *actual implementation* of these standards can *vary between regions and institutions*, leading to *disparities* in the quality of licensed teachers. Unlike Canada's *structured and standardized system*, Ghana's *teacher licensing framework* faces *challenges in consistency and enforcement*. For instance, the effectiveness of the licensing process can differ based on *available resources* and the *consistency of examination practices* across various *teacher training institutions* [30]. This *lack of uniformity* can result in *significant differences* in the *quality of teacher preparation* and licensing throughout Ghana, as noted in *recent assessments* of the system's effectiveness [29].

Another key challenge in Ghana's licensing system is the *limited access to professional development opportunities* for teachers after they obtain their license. Unlike Canada, where professional development is *mandatory for maintaining certification*, Ghanaian teachers may not have the same structured opportunities for ongoing training and skill enhancement.

Comparative Analysis: Canada vs. Ghana

The primary difference between the two countries lies in the degree of standardization and enforcement in teacher licensing. In Canada, the process is highly structured, with provincial certification boards ensuring that licensing standards are consistent and that all teachers meet rigorous competency requirements. In Ghana, while teacher licensing is legally mandated, the practical implementation is less structured, leading to variations in teacher quality across regions.

Additionally, Canada's licensing process integrates ongoing mentorship and professional development, reinforcing continuous teacher growth. In Ghana, the lack of uniform post-certification training can contribute to gaps in teacher preparedness, affecting overall educational quality. To improve Ghana's system, policymakers could consider strengthening regulatory oversight, ensuring greater consistency in licensing standards, and introducing structured mentorship and continuous professional development programs similar to Canada's model. From the results, Both Ghana and Canada recognize the importance of licensing standards in ensuring teacher competence, but their approaches differ significantly. In Canada, licensing is a highly regulated, standardized process that includes rigorous assessments, mentorship programs, and ongoing professional development. In Ghana, while licensing is legally required, inconsistent implementation and regional disparities affect its overall effectiveness. Strengthening Ghana's licensing system by improving standardization, enforcement, and professional development opportunities could help enhance the quality of teachers and, consequently, the education system as a whole.

Table 2. Summary of Studies Addressing RQ2 – Licensing Standards and Teacher Competence

Study/Source	Country	Focus Area	Key Findings	Implications
Teacher Regulation Branch (2022)	Canada	Licensing standards and assessments	Teachers must meet education standards, pass exams, and complete teaching assessments	Ensures uniform quality and competence across provinces
Ontario College of Teachers (2023)	Canada	Mentorship and professional development	Mentorship programs required; ongoing professional learning is mandatory	Sustains teacher growth and instructional quality over time
Arencibia Alemán et al. (2024)	Canada	National standards alignment	Certification allows for regional variation but maintains national-level quality assurance	Flexibility within a regulated framework enhances relevance and accountability
Education Act (2008), Act 778	Ghana	National licensing framework	Licensure legally required; overseen by NTC	Foundation for a professional teaching workforce, but lacks strong enforcement
NTC (2022)	Ghana	Examination and certification procedures	Licensure examinations required for certification	Quality varies due to regional inconsistencies
Awuah (2024)	Ghana	Effectiveness of licensure exams	Disparities in exam administration and support resources	Undermines equity and uniformity in licensing outcomes
Amoah (2020)	Ghana	Post-licensure professional development	Limited opportunities for continuous training	Contributes to stagnant teacher competencies and professional isolation

Table 3. Summary of Studies Addressing RQ3 – Validity and Reliability of Teacher Certification Processes

Study/Source	Country	Focus Area	Key Findings	Implications
Ontario College of Teachers Annual Report (2023)	Canada	Teacher certification exams	Exams are rigorously managed to assess competencies; updated to reflect contemporary practices	Strong validity and reliability due to ongoing updates and rigorous exam content alignment
Teacher Regulation Branch (2022)	Canada	Exam validity and alignment with competencies	Exam content aligns with comprehensive job analyses; validity supported through regular reviews	Ensures exams accurately measure required teaching competencies
Kariwo (2023)	Canada	Exam development and ongoing updates	Consistent updates ensure that exams stay relevant and accurate	High reliability through continuous evaluation and updating process
Arencibia Alemán et al. (2024)	Canada	Standardized scoring practices	Inter-rater reliability checks and consistent administration across provinces ensure reliable results	Reliable and consistent scoring practices across regions
NTC (2022)	Ghana	Licensure exam validity and reliability	NTC oversees exams but inconsistencies in execution hinder validity	Validity issues due to lack of standardized processes and resources
Awuah (2024)	Ghana	Exam administration and scoring practices	Variations in administration and scoring lead to reliability issues	Unreliable assessment outcomes due to inconsistent testing conditions
Amoah (2020)	Ghana	Alignment with national standards	Efforts to align exams with National Teachers' Standards, but inconsistent implementation limits validity	Exam results may not fully capture the competencies required for effective teaching

RQ3: How valid and reliable are the teacher certification processes in both countries?

The validity and reliability of certification processes are critical for ensuring that licensing exams accurately and consistently measure candidates' competencies. This question investigates the robustness of the certification frameworks in Ghana and Canada, focusing on their effectiveness in producing qualified teachers. In Canada, the validity and reliability of teacher certification exams are rigorously managed through a standardized framework enforced by provincial and territorial certification boards. According to the *Ontario College of Teachers Annual Report (2023)*, Canadian exams are developed to assess a broad spectrum of competencies required for effective teaching. These competencies are defined by well-established educational standards, and the exams are regularly updated to reflect contemporary teaching practices. Validity in Canadian exams is strongly

supported through systematic processes. For instance, the *Teacher Regulation Branch (2022)* in British Columbia ensures that exams are based on comprehensive job analyses, aligning exam content with the core skills and knowledge necessary for teaching. The validity is maintained through ongoing reviews and updates, ensuring that the exams accurately measure candidates' readiness for classroom responsibilities [20].

Reliability is achieved in the Canadian system through consistent administration and scoring practices. Exams are administered uniformly across provinces and territories, which minimizes variations in testing conditions. The use of standardized scoring rubrics and regular inter-rater reliability checks ensures that the results are consistent and accurately reflect candidates' abilities [23]. In Ghana, the validity and reliability of teacher licensure exams are overseen by the National Teaching Council (NTC) as per the *Education Act of 2008 (Act 778)*. The NTC is

responsible for conducting licensure examinations and ensuring they meet established standards [33]. However, the reliability of these exams is generally considered less robust compared to the Canadian system. Validity in Ghanaian licensure exams is intended to be supported by aligning the exam content with the National Teachers' Standards, aiming to measure candidates' knowledge, skills, and competencies. Despite these intentions, the practical execution can be inconsistent. Variations in exam content, preparation, and administration may impact the overall validity, making it challenging to ensure that the exams fully and accurately assess the required competencies [29].

Reliability of licensure exams in Ghana is notably less reliable compared to Canada. Although the NTC has set guidelines for standardizing the exam process, several factors contribute to reduced reliability. Resource constraints, variations in institutional practices, and inconsistencies in exam administration can lead to variability in the examination results. For example, differences in how exams are prepared and administered across various regions can result in unequal testing conditions and scoring practices [30]. These issues can lead to discrepancies in the assessment of candidates' competencies and overall exam reliability.

RQ4: What role does professional development play in teacher licensing systems in both countries?

Professional development ensures that teachers maintain their skills, enhance their pedagogical knowledge, and adapt to evolving educational demands throughout their careers. This question examines the role of professional development in the teacher licensing systems of Ghana and Canada, focusing on how it is integrated, regulated, and its overall impact on teacher effectiveness and student learning outcomes.

Professional Development in Canada's Teacher Licensing System

In Canada, professional development is a structured and integral component of the teacher licensing system, mandated by regulatory frameworks across provinces. According to the *Higher Education Quality Council of Ontario Act (2005)*, teachers are required to engage in continuous professional learning to maintain their teaching certification. This regulation ensures that teachers remain up to date with current educational research, pedagogical strategies, and curriculum changes. The act sets forth clear requirements for professional development, reinforcing its relevance and alignment with broader educational goals (*Higher Education Quality Council of Ontario Act, 2005*).

Beyond regulatory mandates, Canada has multiple professional organizations that reinforce the importance of ongoing training. The *Canadian Montessori Accreditation Council for Teacher Education* promotes structured professional development within specialized educational settings such as Montessori education. The council emphasizes that professional learning should be a continuous process, ensuring that teachers refine their instructional skills throughout their careers (*Canadian Montessori Accreditation Council for Teacher Education, n.d.*). Additionally, the *Association of Canadian Deans of Education (ACDE)*, through its *2005 Accord on Initial Teacher Education*, underscores the significance of ongoing professional development as part of a teacher's

career trajectory. The Accord advocates for comprehensive teacher education programs that incorporate theoretical coursework, practical experiences, and structured professional learning. It stresses that teacher education should not end with certification but should be an ongoing process that enables educators to respond to emerging challenges in the field (*Association of Canadian Deans of Education, 2005*). Many Canadian provinces also have established professional development frameworks that require teachers to participate in *continuous learning programs*, including annual workshops, peer collaboration initiatives, mentorship programs, and specialized training. This structured approach ensures that professional development is directly tied to teacher certification renewal, contributing to the maintenance of high teaching standards across the country.

Professional Development in Ghana's Teacher Licensing System

In contrast, Ghana's teacher licensing system incorporates professional development, but its integration is less formalized and lacks a standardized framework comparable to Canada's. The *Education Act of 2008 (Act 778)* designates the *National Teaching Council (NTC)* as the governing body responsible for overseeing teacher licensure and professional development. However, the implementation of professional learning requirements has been inconsistent, leading to variability in access and quality (*Ghana Education Service, 2021*). Professional development opportunities in Ghana typically include *workshops, seminars, in-service training, and periodic refresher courses*. These programs are often conducted by the *Ghana Education Service (GES)*, teacher training colleges, and other education stakeholders. However, the frequency, quality, and accessibility of these programs vary widely, particularly between urban and rural areas. Unlike in Canada, where participation in professional development is a *requirement for certification renewal*, in Ghana, professional learning is often encouraged but not strictly enforced as a licensing prerequisite. A significant challenge in Ghana's professional development landscape is the *lack of standardized requirements* for ongoing teacher training. While policies emphasize the importance of lifelong learning for teachers, many educators face barriers such as *limited funding, inadequate infrastructure, and insufficient institutional support*. This discrepancy results in a system where some teachers receive regular training while others, especially in remote areas, have limited opportunities for professional growth [29]. Efforts have been made to improve the professional development structure in Ghana. The NTC, in partnership with international organizations such as *UNESCO and the World Bank*, has introduced initiatives aimed at enhancing teacher capacity. The *Continuous Professional Development (CPD) framework*, for instance, seeks to provide structured learning opportunities for teachers, though challenges remain in its effective implementation.

Comparative Analysis: Canada vs. Ghana

The key difference between the two countries lies in the *extent of integration and enforcement* of professional development within the teacher licensing system. In Canada, professional development is *mandatory, well-structured, and linked to certification renewal*, ensuring that all teachers engage in ongoing learning. In Ghana,

while professional development is recognized as important, it is *less structured, inconsistently implemented, and not always tied to licensing renewal*, which can lead to disparities in teacher preparedness. The structured nature of Canada's approach ensures that teachers remain current with best practices, emerging educational technologies, and evolving curricula, ultimately enhancing classroom instruction. In Ghana, however, without a *formalized system with clear professional development requirements*, some teachers may lack access to the training needed to improve teaching effectiveness. To bridge this gap, Ghana could consider adopting a *more structured and standardized approach*, similar to Canada's model, where professional development is linked directly to licensing renewal. Increased *government funding, institutional support, and regulatory enforcement* could help ensure that all teachers, regardless of location or financial constraints, have equal access to ongoing professional learning opportunities.

Professional development plays a *crucial role* in ensuring that teachers remain competent, adaptable, and equipped to meet the demands of modern education. In Canada, it is a *mandatory, structured, and integral part of teacher licensing*, ensuring that teachers engage in continuous learning. In Ghana, while professional development is encouraged, *inconsistent implementation, lack of enforcement, and limited access hinder its effectiveness*. Strengthening Ghana's professional development framework by introducing *clear regulatory mandates, improving accessibility, and linking it directly to teacher licensure* could significantly enhance the quality of education in the country.

RQ5: What challenges and opportunities exist in the teacher preparation and licensing systems of Ghana and Canada?

Both Ghana and Canada face unique challenges in their teacher preparation and licensing systems, ranging from resource constraints to balancing national and regional standards. This question identifies the obstacles encountered in each country and explores potential opportunities for improvement, particularly in the Ghanaian context. In Canada, the teacher preparation and licensing system encounters several challenges. One significant issue is balancing standardized requirements with local needs. While standardization ensures consistency and maintains high standards across provinces, it can sometimes clash with regional educational priorities. The *Higher Education Quality Council of Ontario Act (2005)*, for instance, mandates rigorous standards for teacher education but must be adapted to meet diverse local needs and contexts (Higher Education Quality Council of Ontario Act, 2005). This tension between national standards and regional requirements poses a challenge in providing equitable and relevant teacher training across all areas.

Another challenge is ensuring equitable access to

quality training. Although teacher preparation programs in Canada are generally high-quality, there are disparities in access, particularly between urban and rural areas. Remote and underserved regions may struggle to offer the same level of professional development opportunities as more urban centers, leading to unequal access to quality education for prospective teachers [20]. In Ghana, the teacher preparation and licensing system faces its own set of challenges. One major issue is the inconsistency in program quality. Although the *Education Act of 2008 (Act 778)* provides a framework for teacher licensure, the implementation of this framework can vary significantly across institutions. This variability results in discrepancies in the quality of education and training provided, affecting the overall effectiveness of teacher preparation programs (Ghana Education Service, 2021).

Limited resources further exacerbate the situation. Many teacher training institutions in Ghana operate with insufficient funding, inadequate facilities, and a lack of teaching materials. These resource constraints hinder the ability of institutions to deliver high-quality education and practical training, impacting the competency of future teachers [29]. Additionally, varying standards across different regions and institutions contribute to the problem. The lack of uniformity in standards for teacher preparation and licensing can lead to differences in the competency levels of licensed teachers, resulting in an overall disparity in educational quality [30]. Despite these challenges, there are several opportunities for enhancing Ghana's teacher preparation and licensing systems. Adopting more standardized approaches could address issues of inconsistent program quality. By implementing uniform standards across all institutions, Ghana could ensure that all teacher candidates receive a consistent level of training and meet the same professional criteria. Strengthening and revising the frameworks provided by the *Education Act of 2008 (Act 778)* could support more uniform implementation (Ghana Education Service, 2021).

Improving resource allocation is another key opportunity. Increasing investment in teacher training institutions through better funding, upgraded facilities, and adequate teaching materials—could enhance the quality of education and training provided. Addressing these resource constraints would support better training outcomes and improve the overall effectiveness of teacher preparation programs [29]. Finally, placing greater emphasis on continuous professional development can help address gaps in ongoing teacher learning. By integrating more structured and regular professional development opportunities into the licensing process, Ghana could ensure that teachers continue to build their skills and stay current with educational practices. Developing a more formalized approach to professional development, similar to frameworks established in Canada, could significantly benefit Ghana's education system (Higher Education Quality Council of Ontario Act, 2005).

Table 4. Summary of Studies Addressing RQ4 – Role of Professional Development in Teacher Licensing Systems

Study/Source	Country	Focus Area	Key Findings	Implications
Higher Education Quality Council of Ontario Act (2005)	Canada	Professional development and certification	Professional development (PD) is mandatory for certification renewal; PD is structured and integrated into the licensing system	Continuous learning ensures teachers stay current with educational standards and practices
Canadian Montessori Accreditation Council (n.d.)	Canada	Professional development in specialized education	Structured PD within Montessori education ensures teacher growth and skill development	PD provides specialized knowledge that aligns with evolving educational approaches
Association of Canadian Deans of Education (2005)	Canada	Role of professional development in teacher education	Advocates for ongoing PD as an integral part of teacher education, not just initial training	Emphasizes continuous learning to adapt to changing educational needs
Ghana Education Service (2021)	Ghana	Professional development and licensing system	PD is encouraged but not mandated; irregular implementation of PD programs, especially in rural areas	Lack of formal, consistent PD framework limits teacher preparedness
Amoah (2020)	Ghana	Implementation of PD programs	Discrepancies in the availability and quality of PD across regions	Unequal access to PD opportunities leads to disparities in teacher effectiveness
NTC (2022)	Ghana	Continuous professional development initiatives	CPD programs introduced but often inconsistent in delivery and access	Greater consistency and support needed for effective PD implementation

Table 5. Summary of Studies Addressing RQ5 – Challenges and Opportunities in Teacher Preparation and Licensing Systems

Study/Source	Country	Focus Area	Key Findings	Implications
Higher Education Quality Council of Ontario Act (2005)	Canada	Balancing national standards with local needs	Standardization poses challenges in meeting diverse regional needs while maintaining high quality standards	Need for a balance between national requirements and regional flexibility
Kariwo (2023)	Canada	Access to quality teacher preparation	Disparities in access to training, particularly in remote areas, affect quality of teacher preparation	Remote regions may face challenges in accessing consistent, high-quality teacher preparation
Ghana Education Service (2021)	Ghana	Variability in teacher preparation programs	Inconsistent program quality and implementation across institutions lead to disparities in teacher competence	Improved standardization could ensure equitable training outcomes across institutions
Amoah (2020)	Ghana	Resource constraints in teacher training	Insufficient funding and resources in training institutions affect the quality of education and teacher preparation	Increased funding and resources necessary to enhance teacher preparation programs
Awuah (2024)	Ghana	Regional discrepancies in standards and outcomes	Inconsistent standards and practices across regions result in uneven competency levels among licensed teachers	National framework revisions needed to ensure uniform standards and fair outcomes
Ghana Education Service (2021)	Ghana	Teacher training infrastructure	Inadequate facilities and teaching materials limit the effectiveness of teacher preparation programs	Investment in infrastructure and resources would improve teacher training quality
Amoah (2020)	Ghana	Opportunities for improvement in teacher licensing	The need for standardized processes and ongoing PD; emphasis on resource allocation	Strengthening the regulatory framework and improving resource access could enhance teacher outcomes

Limitations of the Study

While this study provides valuable insights into the comparative analysis of teacher preparation and licensing practices in Ghana and Canada, there are several limitations that should be considered. First, the scope of the documents and case studies analyzed was limited. The study focused on a selection of policy documents, curriculum guidelines, and case studies from both countries, which may not have fully captured the full spectrum of teacher preparation and licensing practices in every region or institution. Given that different provinces in Canada and regions in Ghana may have unique policies and practices, the findings might not be fully

representative of all areas within each country. Secondly, access to information posed another limitation. The study was based largely on publicly available documents and interviews with selected stakeholders. However, there were constraints in accessing certain institutional data, internal reports, or firsthand accounts that might have offered a deeper understanding of specific programs or challenges. For instance, some of the variations in teacher training programs within Ghana could not be fully explored due to limited access to comprehensive data from all regions.

The study also primarily relied on document analysis and case study reviews, methods that may not offer the

same depth of insight as direct observation of teacher preparation in practice. Although these methods provided a solid foundation for understanding the systems in both countries, they did not capture the day-to-day experiences of teacher candidates and educators, which could offer a richer perspective on the challenges they face. Moreover, the study faced challenges in accounting for the cultural and contextual differences between Ghana and Canada. Educational systems are shaped by distinct historical, social, and economic factors, and while the comparative nature of the study aimed to offer insights into teacher preparation and licensing, it may not have fully captured the broader contextual elements that influence educational practices in each country. These differences are critical in understanding the nuances of each system, and their absence may limit the depth of the comparison.

Finally, there was a potential for bias in the selection of case studies. Although the study sought to represent a diverse range of institutions and programs, the choice of specific case studies may not fully reflect the diversity of experiences across all regions or types of institutions. This selection bias could have impacted the generalizability of the findings, particularly when it comes to comparing more localized practices with national trends. Despite these limitations, the study contributes to a broader understanding of teacher preparation and licensing systems in Ghana and Canada. The insights provided offer practical recommendations for potential reforms in Ghana's education system. Future research could build upon these findings by incorporating a wider range of data sources, such as direct observations, a broader sample of institutions, and in-depth interviews with educators and policymakers. This would provide a more holistic view of the challenges and opportunities in teacher preparation and licensing.

6. Conclusion

The comparative analysis of teacher preparation and licensing practices between Ghana and Canada underscores significant differences in their structure, standards, and outcomes, highlighting areas where improvements can be made. Canada's teacher education system stands out as a model of excellence, characterized by its well-established standards, uniform curriculum requirements, and a comprehensive framework for professional development. These components collectively ensure that teachers are well-prepared to meet the demands of modern classrooms, maintain high educational standards, and contribute effectively to the overall success of the education system. Canada's emphasis on standardized assessments, consistent program structures, and continuous professional learning creates a robust foundation that supports teacher growth throughout their careers while fostering accountability and equity in education.

In contrast, Ghana's teacher preparation and licensing system grapples with challenges that impede its effectiveness. Variability in program quality, inconsistent application of standards, and limited availability of resources weaken the system's ability to produce consistently well-prepared teachers. The lack of a cohesive framework for standardized assessments and

ongoing professional development further exacerbates these challenges, resulting in inconsistencies in teacher competence and performance. These systemic issues have far-reaching implications for the quality of education in Ghana, affecting student outcomes and the nation's capacity to achieve its broader educational and developmental goals. However, the Canadian model provides a valuable reference point for addressing these challenges and transforming Ghana's teacher preparation and licensing practices. By adopting key elements of the Canadian system such as implementing standardized assessments, developing uniform curriculum requirements across institutions, and placing a greater emphasis on professional development Ghana can improve the quality and consistency of its teacher education framework. Furthermore, strengthening mentorship programs, fostering collaboration among stakeholders, and ensuring the availability of adequate resources would enhance the overall effectiveness and sustainability of these reforms. Importantly, while the Canadian model offers valuable insights, it is essential for Ghana to adapt these practices to its unique sociocultural, economic, and institutional contexts. A tailored approach that considers local needs and challenges will ensure the relevance and feasibility of proposed reforms. This process will require a commitment from policymakers, educators, and other stakeholders to prioritize teacher education as a cornerstone of national development. Ultimately, by leveraging lessons from Canada and addressing its systemic challenges, Ghana has the potential to create a more resilient, equitable, and effective teacher preparation and licensing system. Such advancements will not only elevate the quality of teaching but also contribute to the broader goals of improving student outcomes, fostering social equity, and driving national progress in the 21st century.

Recommendations

Stakeholders in Teacher Preparation and Licensing in Ghana should consider implementing more uniform curriculum standards and assessment criteria across teacher preparation institutions. This approach would help ensure consistency in the quality of education and training provided to teacher candidates, aligning with the best practices observed in Canada. By adopting standardized curriculum requirements and assessment methods, Ghana can improve the overall reliability and effectiveness of its teacher preparation programs. Stakeholders in Teacher Preparation and Licensing in Ghana should develop a structured framework for ongoing professional development that is integrated into the licensing process. A formalized and continuous professional development program would ensure that teachers stay current with evolving educational practices and standards. This recommendation mirrors the Canadian emphasis on lifelong learning and professional growth, which is crucial for maintaining high teaching standards. Stakeholders in Teacher Preparation and Licensing in Ghana should invest in resources and infrastructure to support high-quality teacher preparation programs and practical training opportunities. Adequate funding, updated facilities, and necessary teaching materials are essential for improving

the quality of teacher education. By addressing resource constraints, Ghana can provide better training experiences and enhance the overall effectiveness of its teacher preparation programs. Stakeholders in Teacher Preparation and Licensing in Ghana should explore and adapt successful practices from the Canadian model to address specific challenges in Ghana's teacher preparation and licensing system. This includes adopting standardized assessments, implementing uniform curriculum requirements, and emphasizing continuous professional development. By learning from the Canadian experience and tailoring these practices to fit Ghana's context, the country can make significant strides in improving its teacher certification process and overall educational quality.

Declaration of Conflicts of Interest

The authors affirm that there are no conflicts of interest associated with this study. The research was conducted independently, and the findings reflect an unbiased analysis of the data collected.

Ethics Approval and Consent to Participate

This study was conducted in accordance with ethical guidelines and standards for research involving human participants. Ethical approval was obtained from the appropriate institutional review board, ensuring compliance with national and institutional research regulations. Participants were fully informed about the study's purpose, procedures, and their rights, including the right to withdraw at any stage without consequences. Informed consent was obtained from all participants before data collection. Confidentiality and anonymity were strictly maintained throughout the research process.

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Data Availability

The data used in this study are available upon reasonable request from the corresponding author. Due to privacy and confidentiality agreements with participants, the data cannot be publicly shared. Requests for access will be evaluated individually to ensure compliance with ethical guidelines and participant confidentiality.

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Author Contributions

The study was a collaborative effort among all listed authors:

- **Daniel Gyapong Nimo** assisted with data interpretation, literature review, and manuscript editing.
- **Simon Ntumi** contributed to the study's conceptualization, methodology, and manuscript drafting. He also led the research design, data collection, and analysis, and coordinated the manuscript writing and revisions.
- **Seth Sunu** contributed to the theoretical framework and provided critical insights on teacher preparation and licensing.
- **Theresa Dede Lawer** supported the discussion and comparative analysis, particularly in relation to Ghana's teacher education policies.
- **Kofi Afriyie** contributed to the literature review, data analysis, and final manuscript revisions.
- **Dorothy Akuffo Boateng** contributed to the theoretical insights and supported the manuscript revisions.

All authors reviewed and approved the final version of the manuscript, taking responsibility for the integrity and accuracy of the study's findings.

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