Challenges Towards the Implementation of the Standards-Based Curriculum in Ghana: A Systematic Review

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This systematic review examines the challenges associated with the successful nationwide implementation of the standards-based curriculum in Ghana. A comprehensive search was conducted in three electronic databases (ERIC, ProQuest, and Google Scholar). Studies were screened and selected based on predefined inclusion and exclusion criteria. The inclusion criteria consisted of peer-reviewed articles published between 2019 and 2024 that addressed challenges related to the implementation of the standards-based curriculum in Ghana. Non-peer-reviewed literature and studies conducted outside this timeframe were excluded. A total of 20 studies met these criteria and were included in the review. Thematic analysis was employed to synthesize the findings, and the quality of the studies was assessed using the Critical Appraisal Skills Programme checklist. The review identified four primary themes of challenges: teacher preparation and training, teacher-related issues, supervision, and resources and infrastructure. Significant barriers identified included inadequate pre- and post-implementation teacher training, insufficient resources, logistical issues with supervision, and disparities in support. It is recommended that teachers should actively pursue continuous professional development through self-directed learning and fully leverage on the professional learning communities (PLCs) to improve teachers' adaptability to the tenants of the standards-based curriculum.

Keywords: standards-based curriculum, curriculum implementation, curriculum implementation challenges, PRISMA, barriers

INTRODUCTION

The focus on quality education outlined in the Sustainable Development Goal 4 has spurred significant educational reforms globally, as nations endeavour to improve their education systems to provide high-quality education that aligns with internationally recognized standards (Odell et al., 2020; Gouëdard et al., 2020; Malik, 2018). In response to the growing demand for skills that are relevant in the 21st century, numerous countries have initiated comprehensive curriculum reforms aimed at fostering the development of citizens capable of thriving in modern, dynamic societies. Notably, countries such as England, Finland, Germany, and France have enacted significant modifications to their national curricula to address the shifting educational needs, thereby ensuring that their education systems are better equipped to prepare students for the challenges of today and the future (Barannikov et al., 2023; Clément, 2023; Halinen, 2018; Röhner, 2013).

Education fostering competence formation has increasingly garnered attention across various African countries, becoming a central component of numerous educational reforms (Ruth & Ramadas, 2019; Mulenga & Kabombwe, 2019). South Africa was the first African country to implement a competency-based curriculum in 1998, to transform public attitudes and equip citizens with employable skills to meet the challenges of the 21st century (Mulenga & Kabombwe, 2019). By 2006, Tanzania had adopted the competency-based curriculum for primary and secondary schools (Ruth & Ramadas, 2019). In 2012, Cameroon followed by introducing the curriculum (Wiysahnyuy, 2021). Rwanda launched the competency-based curriculum in April 2015, and Kenya introduced it in 2017 (Mulenga & Kabombwe, 2019; Sifuna & Obonyo, 2019). While each country adopted the competency-based curriculum to address specific contextual challenges, the overarching goal across these countries is to foster educational transformation by equipping students with the essential knowledge, skills, and attitudes needed to navigate and address contemporary and persistent social problems. Despite the progress of global educational reforms, their implementation is not without challenges. In England, Berry (2018) found critical gaps in teaching methodologies, assessment practices, resource allocation, teacher training, incentives, and curriculum design. Similarly, in African countries such as Kenya, Zimbabwe, and South Africa, studies have documented persistent obstacles, including inadequate teacher training, resource constraints, and teacher resistance to reform initiatives (Momanyi & Rop, 2020; Dube & Jita, 2018; Chanda & Mafugu, 2022; Mabunda, 2023). These challenges underscore the complexities of translating educational policies into practice across diverse contexts.

A standards-based curriculum, as define by Manjunath and Banerjee, (2022), refers to an educational approach that emphasizes clear, measurable outcomes for student learning aligned with specific standards. This model is designed to ensure that all students achieve a consistent level of knowledge and skills, facilitating equitable educational opportunities (Pak et al., 2020). The motivation for adopting such a curriculum in Ghana and many other countries is driven by the need for more efficient and cost-effective education systems, the challenges of adapting to a rapidly changing, technology-driven society, and the global shift towards a knowledge economy that

requires education to align with international economic and labour market demands (National Council for Curriculum and Assessment, 2018; Manjunath & Banerjee, 2022; Sundberg & Wahlström, 2012) .Moreover, adapting the standards-based model to Ghana's unique socio-cultural and economic context is crucial to addressing local educational challenges, ensuring that the curriculum meets both international benchmarks and the specific needs and aspirations of Ghanaian learners.

In Ghana, the standards-based curriculum has been introduced to guide teaching and learning at the pre-tertiary level of education. This curriculum aims to equip Ghana's youth with the essential knowledge, skills, and competencies necessary to become informed and responsible citizens (National Council for Curriculum and Assessment, 2018). The core rationale of the curriculum review is to align with a national priority: transforming the structure and content of the education system from a focus on merely passing examinations to a broader emphasis on character development, value cultivation, and producing literate, confident, and engaged citizens capable of thinking critically to solve problems (National Council for Curriculum and Assessment, 2018). The standard-based curriculum aims to produce graduates who are not only effective problem-solvers and creative thinkers but also individuals who possess the confidence and competence to actively contribute to Ghanaian society as responsible citizens, both locally and globally (National Council for Curriculum and Assessment, 2018; Asante et al., 2024; Aboagye & Yawson, 2020). The pedagogical guidelines within this framework support a learner-cantered approach rooted in social constructivist principles, integration of information and communication technology (ICT), inclusive and differentiated instruction, authentic assessment, and the development of key competencies such as creativity and innovation, communication and collaboration, critical thinking and problem-solving, digital literacy, cultural identity and global citizenship, and personal development and leadership (National Council for Curriculum and Assessment, 2018; Asante et al., 2024; Aboagye & Yawson, 2020; Arthur & Obeng, 2023).

Since its introduction in 2019, the implementation of the standards-based curriculum in Ghana has received substantial attention from the academic community. Despite the novelty of this curriculum and the considerable number of individual studies conducted, a systematic review synthesizing these findings into a cohesive body of knowledge has not yet been undertaken. Existing research has examined various dimensions of the curriculum's adoption and impact, focusing on critical areas such as implementation challenges, teachers' knowledge, readiness, efficacy, concerns, the integration of constructivist principles, assessment practices, and supervision (Aboagye & Yawson, 2020; Apau, 2021; Addai-Mununkum & Setordzi, 2023; Kanluoru et al., 2024; Ashun, 2022). While these studies provide valuable insights, many highlight a significant number of implementation challenges that tend to vary based on the geographical scope within which the studies were conducted. The findings are largely localized rather than representative of nationwide experiences. Consequently, these isolated studies do not fully reflect the broader, systemic challenges of implementing the standards-based curriculum as national issues that require urgent attention. A more comprehensive and cohesive approach to analysing these challenges was necessary to better inform policy and practice at the national level. To address this gap, a systematic literature review was

undertaken to answer the research question: What are the barriers to achieving nationwide success in the implementation of the standards-based curriculum in Ghana? By synthesizing existing studies, this review aimed to provide an integrated understanding of the challenges, offer insights to support more effective implementation strategies and contribute to the discourse on curriculum reform in Ghana.

METHOD

Search Strategy

This systematic review was conducted following the updated Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure a rigorous, transparent, and replicable approach. A thematic analysis was used as the analytical framework to identify, interpret, and report recurring patterns and themes in the data extracted from relevant studies. A comprehensive and systematic search strategy was implemented to identify relevant literature. Electronic databases, including ERIC, ProQuest, and Google Scholar, were searched using a combination of keywords and a Boolean operator. The search terms included: "standards-based curriculum" AND "Ghana," "curriculum reform" AND "implementation challenges in Ghana," "teacher training" AND "standard-based curriculum in Ghana" AND "supervision" AND "curriculum implementation in Ghana."

Eligibility Criteria

The review adhered to well-defined inclusion and exclusion criteria to select relevant, high-quality studies. Eligible studies were peer-reviewed articles published between 2019 and 2024, focusing on Ghana's standards-based curriculum or classroom instructional practices during the period of its implementation. The inclusion criteria required studies to highlight challenges related to implementing any aspect of the standards-based curriculum. Only studies published in English were included to ensure accessibility and consistency in interpretation. Excluded studies consisted of non-peer-reviewed literature, conference papers, reviews, book chapters, books, opinion pieces, editorials, and articles not directly focused on the implementation challenges of the standards-based curriculum, or studies conducted outside of Ghana. Literature published outside the specified time frame was also excluded to maintain relevance to current discussions.

Study Selection

The study selection process followed a structured, three-phase approach. In the initial screening phase, the titles and abstracts of the studies retrieved from the database searches were reviewed for relevance. Studies that met the initial criteria underwent a full-text review, where their content was thoroughly evaluated to confirm alignment with the review's focus. In the final selection phase, studies that met all inclusion criteria were subjected to detailed analysis. To ensure the validity of the selection process, two independent reviewers assessed all the studies, resolving any disagreements through discussion.

Data Extraction

A standardized data extraction form was developed to systematically capture key information from the included studies. Extracted data included the author(s), year of publication, research design and participants, and key findings. Particular attention was given to recurring themes and challenges reported in the studies.

Data Synthesis

Thematic analysis was used to synthesize the extracted data. This involved systematically coding the data from each study, and analysing it line by line to identify recurring concepts. These codes were then grouped into broader themes that encapsulated the challenges of implementing the standards-based curriculum in Ghana. The themes were further analysed to explore their implications, providing a nuanced understanding of the challenges to the nationwide curriculum implementation in Ghana.

Quality Assessment

The quality assessment for the systematic review was conducted using the Critical Appraisal Skills Programme (CASP) checklist to evaluate the credibility and reliability of the included studies. The assessment focused on key elements such as the clarity of research aims, methodological rigor, validity, and reliability of data, and the relevance of findings to the review's objectives. Each study was assigned a certainty level based on these criteria, categorized as high, moderate, low, or very low certainty. High-certainty studies demonstrated comprehensive and credible evidence with no significant methodological flaws. Moderate-certainty studies exhibited minor methodological issues but provided meaningful evidence with minimal risk of bias. Low-certainty studies had notable weaknesses, such as unclear sampling or partial alignment with the review objectives, which made their evidence less reliable. Very low-certainty studies did not meet essential quality standards. However, most studies included in this review demonstrated moderate certainty, as some methodological flaws were noted, particularly regarding validity and reliability. Despite the absence of a clear approach for determining the quality of their findings and conclusions, traces of data triangulation were observed. Despite these limitations, the findings were considered relevant to the review.

The Critical Appraisal Skills Programme checklist was adapted to align with the context of Ghana's standards-based curriculum, with specific criteria added to evaluate the studies' alignment with the curriculum and their focus on key thematic areas. Two independent reviewers evaluated each study to minimize bias, with discrepancies resolved through discussion, and a third reviewer consulted when necessary to reach a consensus. All decisions and rationales for certainty levels were documented to ensure transparency and accountability. By applying defined decision rules, adapting the existing tools, and maintaining a transparent assessment process, the systematic review upheld high standards of quality and relevance. This strategy ensured that the included studies provided robust and credible evidence to effectively address the research question.

FINDINGS

The study selection process was clearly outlined using a PRISMA flow diagram, which illustrated the number of records identified through database searches, as well as those screened for eligibility, excluded, and ultimately included in the final analysis. This diagram provided a transparent overview of the review process, from the initial search to the final selection of studies for synthesis. As shown in Figure 1, a total of 791 articles were identified: 469 from ERIC, 22 from ProQuest, and 300 from Google Scholar. After removing 25 duplicates, the remaining 766 articles underwent a thorough screening using inclusion and exclusion criteria. Of these, 439 articles did not meet the criteria and were excluded. The remaining 327 articles were further assessed for eligibility, resulting in the exclusion of 307. Ultimately, 20 articles were deemed relevant for the study and included in the final analysis. The PRISMA flowchart is provided below.
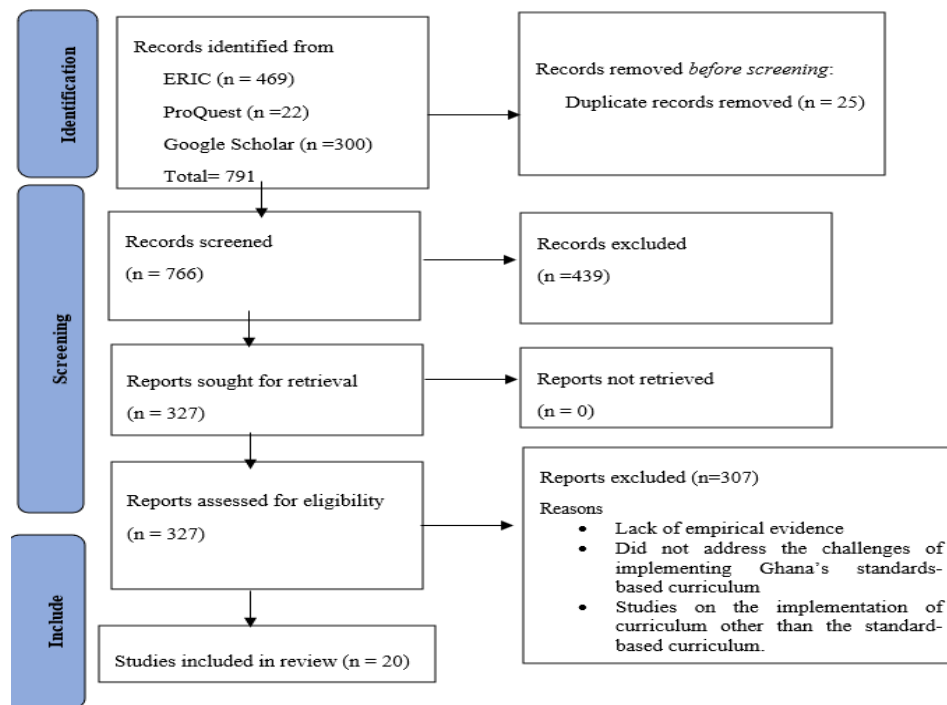

Figure 1
PRISMA flow diagram for the review

Table 1
Study characteristics

Author/Year	Study Design	Participants	Summary of Results
Dampson (2021)	Explanatory sequential	Basic schoolteachers and head teachers	PLC activities in basic schools are predominantly low, with shared and supportive leadership as the only exception, while many schools have never conducted PLC meetings or fail to adhere to the delivery methods in the PLC manual.
Nii Akai Nettey et al. (2024)	Multiple case studies	Basic schoolteachers	Teachers, despite their challenges, had a strong desire to integrate ICT into their instruction and learning activities. These challenges are the limited number of ICT tools and the absence of fully subscribed software package that runs on them, the lack of electrical outlets in some classrooms, poor internet connectivity and power fluctuation.
Mahama (2022)	Cross-sectional survey	In-service teachers	Majority of respondents exhibited low levels of creativity nurturing behaviours.
Asante et al. (2024)	Triangulation	Junior high school teachers	The standard-based curriculum is updated and proactive, fostering group work, lifelong skills, job market preparation, inclusive education, gender equality, and the promotion of Ghanaian culture, but it faces challenges due to insufficient teaching materials and inadequate teacher training for implementation.
Danquah & Poku (2024).	Descriptive phenomenology	A circuit supervisor, a head teacher, and teachers	The lack of consultation, training, and resources has resulted in challenging experiences for teachers.
Appiah & Owusu (2023)	Sequential explanatory	Basic schoolteachers	The teachers hold diverse beliefs about developing core competencies, with positive views emphasizing teaching skills and effectiveness, but negative views highlighting challenges such as large class sizes, inadequate digital literacy development, insufficient training, and a lack of teaching and learning materials.
Addai-Mununkum & Setordzi (2023)	Descriptive phenomenology	Basic school teachers	Teachers adopt teaser, cooperative, experiential, and inquiry-based approaches to implement the new curriculum; however, the implementation is hindered by inadequate resources and challenges related to teachers' personality traits and competency factors.
Aikins & Arthur-Nyarko (2019)	Descriptive survey	Primary school students	The unavailability of ICT equipment and pupils' lack of access to ICT infrastructure impede teachers' integration of ICT in their lessons.
Kanluoru et al. (2024)	Descriptive survey	English language teachers and head teachers	Teachers faced challenges in implementing the Common Core Programme. However, they showed interest in effective evaluation techniques and recognized the importance of assessing students' skills in innovative ways.
Nyamekye et al. (2023)	Sequential explanatory	Junior high school teachers	The findings revealed a paradox: teachers had a positive view of constructivism but rarely applied its principles in practice. Data triangulation showed inconsistencies between teachers' claims and actual classroom behaviours. Limited resources and time constraints were identified as key barriers to implementing constructivist pedagogy.
Mochiah & Adibi (2023)	Descriptive survey	Basic schoolteachers	The findings of the study showed that teachers were adequately trained on the new standard based curriculum before its implementation. Unfortunately, the study revealed that teachers and students lack the recommended teaching and learning materials.
Owusu-Fordjour et al. (2022)	Descriptive survey	Basic school science teachers	Basic schoolteachers meet numerous challenges, including a limited curriculum and inadequate knowledge about the new curriculum. This is coupled with the unavailability of resources to help in the implementation of the curriculum. In general, the findings of this study show that teachers' preparation is moderate, and the material or infrastructure needed for implementation is also lacking for the successful implementation of the new basic science curriculum.
Nkonkonya et	Cross-sectional	School	Effective supervision is hindered by inadequate transportation, lack

al. (2022)	survey	Improvement and Support Officers, head teachers, and teachers	of office space for SISOs, insufficient resources like safety gear and fuel, an overwhelming workload, and a lack of advanced qualifications for SISOs.
Arthur & Obeng (2023).	Concurrent	Kindergarten and primary school teachers	The teachers largely acknowledged the importance of the curriculum and its influence on learning outcomes for learners when fully used. However, lack of teaching and learning resources and insufficient teacher professional training hinders effective teaching and learning.
Ashun (2022)	Sequential explanatory	School Improvement Support Officers (SISOs), Junior High Schools head teachers, and teachers	Head teachers and School Improvement Support Officers (SISOs) faced several challenges, including poor road networks that disrupted planned supervision, delays in the district directorate's response to supervisory reports, lack of resources for regular supervision, insufficient up-to-date knowledge and skills for organizing supervision, and financial constraints.
Nomah et al. (2022)	Sequential explanatory	Frontline Assistant Directors (FAD's) and School Improvement Support Officers	The accessibility of island schools by external supervisors was a major challenge. This was due to a lack of readily available canoes and the required accessories for safe travelling by water
Sampson et al. (2020)	Descriptive survey	Kindergarten and primary school teachers	The study found that the Continuous Professional Development Learning (CPDL) program, introduced alongside the implementation of the National Pre-tertiary Curriculum, is not being effectively implemented. Challenges such as a lack of trained coaches (subject leads) and weak monitoring of PLC sessions are hindering the program's effectiveness and sustainability.
Ampofo et al (2020)	Descriptive survey	Basic schoolteachers	Lack of training in the use of computers and other ICTs, lack of knowledge about the use of computers, little previous experience, computer equipment being unreliable, computers not accessible, lack of time to use the computers, lack of confidence in the usage of the computers and timetable constraints are the challenges the teachers in basic schools in Ajumako face in incorporating ICT into teaching and learning.
Ntumi et al. (2023)	Embedded	Basic schoolteachers	Teachers consider the NPECF as relevant for Ghanaian educational fortunes; however, a myriad of classroom challenges come with the implementation process
Donkoh & Amoakwah (2024)	Explanatory sequential	Basic schoolteachers	The participants reported four key challenges in implementing these strategies: inadequate teaching and learning resources, limited time, insufficient teacher knowledge of learner-cantered instruction, and large class sizes.

The literature reviewed in Table 1 presents a varied sample of studies conducted from the angle of quantitative, qualitative and mixed method approach. The population of these studies encompasses some key players in the implementation process of a developed curriculum. Gauging from the perspectives of these studies, they present a solid ground for the evaluation of the challenges in the implementation of the standard-based curriculum in Ghana. Thematically, the synthesised curriculum implementation challenges from these reviewed studies were catalogued under teacher preparation and training challenges, teacher-related challenges, supervision challenges, and resources and infrastructural challenges.

Teacher Preparation and Training Challenges

From Table 1, a significant barrier to the successful implementation of the standards-based curriculum in Ghana is related to inadequate teacher preparation and training, both before and after the implementation of the new curriculum. Asante et al. (2024) emphasized that teachers were not adequately trained before the curriculum's rollout, which has left them ill-equipped to deliver the curriculum requirements effectively. This issue is compounded by deficiencies in post-implementation training, with Dampson (2021) noting that many schools did not conduct regular Professional Learning Community (PLC) meetings or adhere to the prescribed training manuals, resulting in a gap between what teachers were taught and what they were able to apply in the classroom. Ntumi et al. (2023) and Owusu-Fordjour et al. (2022) similarly pointed out that the lack of sufficient pre-implementation training left teachers with limited understanding of the new curriculum, which in turn impacted their teaching effectiveness. Moreover, Sampson et al. (2020) found that the Continuous Professional Development Learning (CPDL) program, introduced to support teachers during the curriculum transition, was not being effectively implemented. Challenges such as a lack of trained subject leads and weak monitoring of PLC sessions hindered the program's sustainability and effectiveness. Regarding the use of ICT in teaching and learning, Ampofo et al. (2020) emphasized that teachers in Ajumako faced significant challenges in integrating them into their lessons due to insufficient training in the use of computers and other ICT tools.

Teacher-related Challenges

The review also revealed various teacher-related challenges, particularly concerning the integration of ICT and learner-cantered teaching strategies. Nii Akai Nettey et al. (2024) found that teachers, despite their strong desire to integrate ICT into their instruction, faced numerous obstacles, including a lack of confidence and knowledge in using ICT tools effectively. Ampofo et al. (2020) emphasized that teachers faced significant barriers in using ICT for instruction, primarily due to a lack of knowledge, prior experience, and a general lack of confidence in using computers for teaching purposes. Moreover, insufficient teacher knowledge of learner-cantered instruction, as noted by Donkoh and Amoakwah (2024), hinder the successful application of learner-cantered strategies. Kanluoru et al. (2024) also highlighted that while teachers showed interest in innovative techniques, they faced difficulties in adapting to the new teaching methods required by the curriculum. This inability to adjust is partly linked to individual teachers' personality traits and teaching styles, which did not align with the demands of the new curriculum. Addai-Mununkum and Setordzi (2023) also noted that teachers' competencies, particularly in adopting cooperative, experiential, and inquiry-based approaches, were hindered by personal traits and insufficient professional skills. Furthermore, Mahama (2022) found that many teachers exhibited low levels of creativity in nurturing core competencies in students, which is crucial for fostering critical thinking and problem-solving skills. Teachers' lack of knowledge about creative teaching approaches further exacerbates this challenge, limiting their capacity to promote student creativity and innovation. Similarly, Nyamekye et al. (2023) observed a disconnection between teachers' positive views of constructivism and its rare

application in practice. Teachers' claims of understanding constructivist principles did not align with their actual classroom behaviour, largely due to challenges such as limited resources and time constraints.

Supervision Challenges

Supervision plays a crucial role in supporting teachers during the implementation of the standards-based curriculum, yet several studies identified significant challenges in this area. Nkonkonya et al. (2022) reported that School Improvement Support Officers (SISOs) faced logistical difficulties, such as inadequate transportation to remote schools, a lack of office space, and a shortage of essential resources like safety gear and fuel. These challenges made it difficult for SISOs to provide effective supervision and support to teachers. Furthermore, SISOs were often overburdened with supervising a large number of schools, which reduced the quality of the support they could offer. Ashun (2022) also noted that supervisors faced delays in responding to reports from the district directorate and struggled with poor road networks, which affected the timeliness of their supervisory visits. These delays, coupled with financial constraints, further hinder the effectiveness of the supervision system. In island schools, transportation challenges were even more pronounced, as external supervisors faced difficulties accessing schools due to the lack of canoes and necessary accessories for safe travel (Nomah et al., 2022). These supervisory challenges create significant barriers to the successful implementation of the curriculum, as effective supervision is essential for ensuring that teachers adhere to the curriculum guidelines and continuously improve their teaching methods.

Resources and Infrastructural Challenges

A consistent theme across the studies was the lack of sufficient resources and infrastructure to support the implementation of the standards-based curriculum (Danquah & Poku, 2024). Asante et al. (2024) reported that the insufficiency of teaching materials was a major barrier to curriculum delivery, as teachers could not effectively deliver lessons without the necessary resources. Similarly, Mochiah and Adibi (2023) found that teachers lacked the recommended teaching and learning materials, which severely hampered their ability to execute the curriculum. Owusu-Fordjour et al. (2022) further emphasized that inadequate infrastructure, such as the lack of digital tools and appropriate classroom setups, further hindered teachers' ability to teach the curriculum effectively. These infrastructural deficiencies were compounded by logistical barriers faced by supervisors, such as a lack of transportation and essential resources to visit remote schools (Nkonkonya et al., 2022). Multiple studies identified the lack of adequate ICT tools as a primary barrier to integration. Nii Akai Nettey et al. (2024) noted that the limited number of ICT tools and the absence of fully subscribed software packages hindered the effective use of technology in classrooms. Aikins and Arthur-Nyarko (2019) reinforced this finding, emphasizing that the unavailability of ICT equipment and pupils' lack of access to infrastructure were major impediments. Furthermore, Ampofo et al. (2020) highlighted that the unreliability of computers and limited access to these devices added to the challenges faced by teachers. In addition,

Donkoh and Amoakwah (2024) found that inadequate teaching and learning resources contributed to the challenges teachers faced in implementing learner-cantered strategies.

DISCUSSION

The implementation of the standards-based curriculum in Ghana encapsulates a multifaceted set of challenges that reflect deeply entrenched systemic and contextual issues within the basic education framework. These challenges illustrate the complexities and often unintended consequences of translating policy into practice. The interplay of these factors collectively undermines the curriculum's objectives, impeding its potential to achieve equitable and transformative educational outcomes. At the heart of these challenges lies the issue of teacher preparation and professional development. Curriculum change demands more than mere adjustments in content delivery, it requires a comprehensive transformation in pedagogical paradigms and instructional strategies (Chaitey, 2023). However, as noted by Asante et al. (2024) and Ntumi et al. (2023), pre-implementation training for teachers has been insufficient in equipping them with the requisite skills and knowledge to meet the curriculum's demands. This gap suggest a significant deficiency in teachers' preparedness to effectively implement the curriculum prior to its rollout. Consequently, its resultant impact is the perpetual reliance on traditional, teacher-cantered instructional methods, which fundamentally conflict with the learner-cantered pedagogical approaches that are central to the standards-based curriculum.

The persistence of traditional teaching practices, as highlighted by Awuah (2022) and Koranteng (2023), reflects a potential resistance to change and the inability of existing professional development programs to foster the innovative competencies required for effective implementation. Such systemic inertia limits the curriculum's capacity to cultivate critical thinking, creativity, and other 21st-century skills among students, thereby perpetuating traditional learning outcomes that fail to meet global educational standards. The challenges of teacher preparation in Ghana mirror broader trends observed across Africa. Studies from Kenya, Zimbabwe, and other contexts reveal similar struggles in transitioning into new curricula (Momanyi & Rop, 2020; Dube & Jita, 2018; Chanda & Mafugu, 2022; Okeyo & Mokua, 2023). These findings reveal that inadequate investment in teacher training is a structural deficiency that transcends national boundaries. Limited professional development opportunities leave teachers unprepared for the pedagogical shifts required by curriculum reforms, creating a ripple effect that diminishes their ability to implement the curriculum effectively. Moreover, the cascading effects of insufficient teacher preparation also extend beyond the classroom. When teachers are ill-equipped to adapt to reforms, students are deprived of the active, engaging, and competency-based learning experiences envisioned by the curriculum (Nevenglosky, 2018). This not only stifles students' intellectual growth but also exacerbates systemic inequities in educational quality, particularly in under-resourced schools where such deficiencies are more pronounced. Thus, the gap between curriculum expectations and classroom realities becomes a critical barrier to achieving the overarching goals of the educational reform.

While initial training may provide a foundational understanding necessary for effective implementation, the absence of continuous professional development limits teachers' capacity to adapt to evolving curriculum demands and emerging classroom challenges (Dampson, 2021; Alkaabi, 2023). The ineffective implementation of initiatives like the Professional Learning Community (PLC), intended to address skill gaps, reflects weak policy execution and inadequate follow-up interventions (Sampson et al., 2020; Dampson, 2021). This inefficiency underscores the disconnection between program design and its practical utility in equipping teachers to sustain reform efforts. As Bekoe (2023) asserts, the success of a curriculum reform hinges on equipping teachers with the skills, strategies, and behavioural shifts required to align with the curriculum's objectives. Therefore, without addressing the systemic weaknesses in teacher training and ongoing professional development, the standard-based curriculum is unlikely to achieve its transformative goals, leaving the education systems stagnated in outdated practices and disconnected from 21st-century educational goals.

The lack of resources for both teaching and supervision creates a cyclical problem, where teachers are ill-equipped to deliver lessons effectively, and supervisors lack the necessary tools to provide adequate support and oversight. Inadequate resources and infrastructure constitute one of the most significant challenges in achieving the successful nationwide implementation of the standards-based curriculum in Ghana. The implementation of a curriculum is intrinsically linked to the efficacy of supervision systems, which play a critical role in monitoring and supporting teachers (Jonyo & Jonyo, 2019; Govender, 2018; Gouëdard et al., 2020). Effective supervision facilitates the alignment of teaching practices with curriculum goals, underscoring the importance of curriculum leaders in steering the implementation process. However, the reviewed literature revealed that in the Ghanaian context, systemic weaknesses significantly compromise the supervision framework, undermining the successful implementation of the standards-based curriculum (Nkonkonya et al., 2022; Ashun, 2022; Maling, 2019). The logistical challenges faced by School Improvement Support Officers (SISOs), such as inadequate transportation and insufficient resources, are particularly pronounced in remote areas, impeding consistent supervisory visits (Nkonkonya et al., 2022; Ashun, 2022). This presents a situation where teachers in deprived areas receive little or no supervisory support. This creates a ripple effect, limiting the provision of critical support to teachers, reflecting disparities in curriculum implementation in schools in deprived communities compared to urban schools which are easily accessible. This deficiency in supervisory capacity directly affects teachers' ability to refine their instructional methods and adapt to new pedagogical demands, hindering professional growth and the achievement of curriculum objectives.

Despite the challenges, the implementation of the standards-based curriculum in Ghana marks a significant educational reform designed to improve learning outcomes through clear benchmarks, structured assessments, and competency-based instruction (Aboagye & Yawson, 2020; Oppong, 2024). While this approach has been successful in countries such as Australia, the United States, and China (Doecke et al., 2024; Prigodich, 2021; Mahr, 2020; Chen et al., 2024), its feasibility, effectiveness and long-term sustainability in Ghana require careful evaluation. Doecke et al. (2024) emphasize that the success of a standards-based curriculum depends on a strong alignment between policy directives

and classroom realities. However, the continued reliance on traditional teaching methods, unequal resource distribution, and weak professional learning communities indicate a gap between the curriculum's theoretical framework and its practical implementation in Ghana. This raises critical concerns about whether the intended educational transformation can be achieved without a more context-specific implementation strategy.

IMPLICATION OF FINDINGS

The findings suggest that in Ghana, the successful implementation of the standards-based curriculum is currently jeopardized by significant barriers at the implementation phase. Critical factors such as teacher preparedness, availability of resources, professional development support, and robust monitoring systems exhibit notable deficiencies. If these challenges remain unaddressed, they will continue to obstruct the fulfilment of the curriculum's requirements in classrooms. Consequently, the curriculum is unlikely to meet its intended objectives without targeted interventions to overcome these obstacles. The implications of these challenges are extensive. Weak supervision and inadequate training hinder teachers' capacity to effectively implement the curriculum, perpetuating suboptimal instructional practices. This not only compromises the quality of teaching and learning but also risks undermining the broader goals of the educational reform in Ghanaian basic schools. Teacher deficiencies in knowledge and capacity to execute key domains of the curriculum such as constructivist principles, integration of ICT, and learner-cantered pedagogy imply that many teachers especially veterans are underdeveloped. This shows that while Ghana has transformed the basic school curriculum, it has not succeeded in preparing teachers to align with the innovations imbedded in it. Even when teachers demonstrate high self-efficacy in implementing the curriculum, lack of materials and infrastructure will undermine their efficiency. Some teachers may struggle to adopt the curriculum fully while others may remain redundant in their practices. These challenges suggest that the curriculum's potential to develop in students critical competencies outlined in the curriculum is compromised.

Moreover, if these challenges are not addressed promptly, the Professional Learning Community (PLC) meetings, intended to support continuous professional development, may lose their relevance over time. Basic school teachers will continue to lack the requisite knowledge and skills to effectively implement the curriculum, adhere to conventional teaching practices, and receive minimal support through supervision. Should this trend persist, the standards-based curriculum will likely have limited impact on Ghanaian students and society in the long run.

RECOMMENDATIONS

To enhance the effective implementation of the standards-based curriculum in Ghana, it is recommended that the Ministry of Education, National Council for Curriculum and Assessment (NaCCA), and Ghana Education Service (GES) prioritize the design and implementation of comprehensive policies that address critical issues related to teacher preparation, capacity, resources, and supervision. Specifically, a robust system for regular supervision should be established to ensure teachers' efforts align with the

curriculum's objectives. Additionally, teachers should be provided with the necessary tools, training, and support to implement the curriculum effectively. This includes increased investment in logistical resources, capacity-building programs for School Improvement Support Officers (SISOs) and school heads, and ensuring the continuous provision of school infrastructure and instructional materials. Furthermore, teachers should be encouraged to pursue continuous learning through self-directed research and active engagement in professional learning communities (PLCs) to improve their adaptability to the demands of the standards-based curriculum.

REFERENCES

Aboagye, E., & Yawson, J. A. (2020). Teachers' Perception of the New Educational Curriculum in Ghana. *African Educational Research Journal, 8*(1), 6-12.

Addai-Mununkum, R., & Setordzi, S. (2023). Implementing Curriculum Change in Ghana: Exploring Teachers' Experiences with Enacting 21st-Century Pedagogies. *American Journal of Qualitative Research, 7*(4), 119-139. https://doi.org/10.29333/ajqr/13660

Aikins, M. V., & Arthur-Nyarko, E. (2019). Challenges facing information and communication technology implementation at the primary schools. *Educational Research and Reviews, 14*(13), 484-492. https://doi.org/10.5897/ERR2019.3751

Alkaabi, A. M. (2023). *Designing Enduring and Impactful Professional Development to Support Teacher Growth.* In Innovations in Teacher Development, Personalized Learning, and Upskilling the Workforce (pp. 1-23). IGI Global. DOI: 10.4018/978-1-6684-5518-0.ch001

Ampofo, J. A., Abigail, A. A., & Yao, N. F. (2020). Incorporating ICT into teaching and learning in junior high schools in Ajumako: challenges for teachers and their support strategies. *International Journal of Management & Entrepreneurship Research, 2*(5), 365-379. https://doi.org/10.51594/ijmer.v2i5.174

Apau, S. K. (2021). Teachers' Concerns about the Implementation of the Standard-Based Curriculum in Ghana: A Case Study of Effutu Municipality. *Educational Research and Reviews, 16*(5), 202-211. DOI: 10.5897/ERR2020.4051

Appiah, K. R., & Owusu, S. (2023). Ghanaian ESL Teachers' beliefs and Implementation of the Core Competencies of Ghana's New English Language Curriculum. *European Journal of Applied Linguistics Studies, 6*(2). DOI: 10.46827/ejals.v6i2.463

Arthur, S. E., & Obeng, P. K. (2023). Ghanaian teachers' perception on their readiness in implementing the standard-based curriculum. *West African Journal of Educational Sciences and Practice, 2*(1), 21-32. https://doi.org/10.57040/wajesp.v2i1.329

Asante, G., Arhin, D., Essien, N., Bentil, S., & Asibey, G. (2024). Implementation of the Standard-Based Curriculum: An Overview of Pre-Tertiary Curriculum in Ghana (1951-2019). *Open Access Library Journal, 11*(2), 1-24. http://doi.org/10.4236/oalib.1111125

Ashun, E. A. (2022). Challenges of instructional supervision of social studies lessons in the public basic junior high schools in Ghana. *Universal Journal of Social Sciences and Humanities*, 6-15. DOI: 10.31586/ujssh.2022.269

Awuah, F. (2022). Classroom assessment of learners: Assessment practices of Junior High School Social Studies teachers in two districts of Ghana. *Asian Journal of Advanced Research and Reports*, 24-40. DOI: 10.9734/AJARR/2022/v16i1030507

Barannikov, K., Remorenko, I., & Froumin, I. (2023). *How Countries Reform Their Curricula to Support the Development of Key Competences*. In Key Competences and New Literacies: From Slogans to School Reality (pp. 411-426). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-23281-7_15

Bekoe, S. (2023) Towards a Theory: The Constraining Hold of High-Stakes External Assessment on Curriculum Implementation. *Creative Education, 14*, 993-1013. doi: 10.4236/ce.2023.145063.

Berry, M. (2018*). Implementing the national curriculum in England*.

Chaitey, S. A. (2023). *Implementation of Ghana's standards-based curriculum by religious and moral education teachers in the Kwahu West Municipality* (Doctoral dissertation, University of Cape Coast).

Chanda, P., & Mafugu, T. (2022). Issues Surrounding Teachers' Readiness in Implementing the Competency-Based 'O'Level Geography Syllabus 4022 in Zimbabwe. *International Journal of Learning, Teaching and Educational Research, 21*(8), 43-57. https://doi.org/10.26803/ijlter.21.8.3

Chen, X., Wang, L., Shao, X., & Wei, R. (2024). An analysis of Chinese chemistry curriculum standards based on OECD Education 2030 Curriculum Content Mapping. *Disciplinary and Interdisciplinary Science Education Research, 6*(1), 2.

Clément, P. (2023). The introduction of competence-based education into the compulsory school curriculum in France (2002–2017): Hybridity and polysemy as conditions for change. *In Contextualizing Global Flows of Competency-Based Education* (pp. 35-50). Routledge

Dampson, D. G. (2021). Effectiveness of professional learning communities in Ghanaian basic schools through the lenses of socio-cultural theory. *Journal of Educational Issues, 7*(2), 338-354. doi:10.5296/jei.v7i2.19114

Danquah, E., & Poku, E. D. (2024). Experiences of Teachers Implementing the Standards-Based Curriculum in La-Nkwantanang, Ghana: Should the Experiences be Overlooked?. *Pan-African Journal of Education and Social Sciences, 5*(1), 28-40. DOI: 10.56893/pajes2024v05i01.03

Doecke, B., Parr, G., & Owen, C. (2024). The value of comparative research in an era of standards-based reforms: Sustaining a critically reflexive professional praxis. An Australian case study. *L1-Educational Studies in Language and Literature, 24*(2), 1-21. https://doi.org/10.21248/l1esll.2024.24.2.613

Dube, B., & Jita, T. (2018). Rethinking healthy school relations for curriculum change in Zimbabwe: A relational leadership approach. *Issues in Educational Research, 28*(4), 901-917.

Gouëdard, P., Pont, B., Hyttinen, S., & Huang, P. (2020). *Curriculum reform: A literature review to support effective implementation.* https://doi.org/10.1787/19939019

Govender, S. (2018). South African teachers' perspectives on support received in implementing curriculum changes. *South African Journal of Education, 38*(1). https://doi.org/10.15700/saje.v38ns2a1484

Halinen, I. (2018). The new educational curriculum in Finland. *Improving the quality of childhood in Europe, 7*, 75-89. Alliance for Childhood European Network Foundation.

Jonyo, D. O., & Jonyo, B. O. (2019). Curriculum Supervision and Implementation in Kenya: The Role of Secondary School Heads. *European Journal of Educational Sciences, 6*(2), 46-56. Doi: 10.19044/ejes.v6no2a4

Kanluoru, R. D., Zinteng, J., Ni-Ana, P. G., & Fuseini, M. (2024). Challenges to the Implementation of the Common Core Programme JHS English Curriculum: A Case of Tumu Municipality. *International Journal of Rehabilitation & Special Education, 4*(2). DOI: 10.48165/ijrse.2024.4.2.1

Koranteng, D. A. (2023). *Assessing the usage of multimedia resources in teaching and learning of social studies concepts in junior high schools in Ghana*.

Mabunda, P. (2023). The challenges and problems of implementing the curriculum and assessment policy statements: School managers' perspectives and experiences. *Perspectives in Education, 41*(4), 65-81.

Mahama, I. (2022). Creative Teaching as a Component of the New Standard-Based Curriculum in Ghana: Curriculum Rushed or Curriculum Planned?. Mediterranean *Journal of Social & Behavioral Research, 6*(1), 27-33. https://doi.org/10.30935/mjosbr/11569

Mahr, L. (2020). *Education Reform and the Transition to Standards-Based Grading in the United States.*

Malik, R. S. (2018). Educational challenges in 21st century and sustainable development. *Journal of Sustainable Development Education and Research, 2*(1), 9-20. https://doi.org/10.30935/mjosbr/11569

Maling, B. J. (2019). An examination of how middle school principals make sense of their role in leading standards-based educational reform. University of Southern Maine.

Manjunath, M., & Banerjee, S. (2022). Unpacking the Meaning of a Standards-based Education System. *Voices of Teachers and Teacher Educators, 11*(1), 49-58. http://45.127.197.188:8090/index.php/vtte/article/view/1818

Mochiah, J. N. A., & Adibi, M. G. D. (2023). The New Standard Based Curriculum in Ghana; Prospects, Challenges and the Way Forward. *Journal of Education and Practice, 7*(4), 67-79. doi.org/10.47941/jep.1389

Momanyi, J. M., & Rop, P. K. (2020). Teacher preparedness for the implementation of competency based curriculum in Kenya: A survey of early grade primary school teachers' in Bomet East Sub-County. *The Cradle of Knowledge: African Journal of Educational and Social Science Research, 7*(1), 10-15.

Mulenga, I. M., & Kabombwe, Y. M. (2019). *A competency-based curriculum for Zambian primary and secondary schools: learning from theory and some countries around the world.*

National Council for Curriculum and Assessment (2018). *National pre-tertiary education curriculum framework for developing subject curricula.* Ministry of Education.

Nevenglosky, E. A. (2018). *Barriers to effective curriculum implementation* (Doctoral dissertation, Walden University).

Nii Akai Nettey, J., Osei Mensah, R., Asafo-Adjei, R., & Adiza Babah, P. (2024). Analyzing the challenges basic school teachers face in integrating Information and Communication Technology into teaching and learning activities in a developing country. *Cogent Education, 11*(1), 2364544. https://doi.org/10.1080/2331186X.2024.2364544

Nkonkonya, M. K., Dick-Sagoe, C., Adu, G. A., & Ennim, F. (2022). School Improvement and Support Officer as curriculum leader in Pru East district-Ghana: roles, challenges, and the way forward. *Journal of Positive School Psychology, 6*(3), 1337-1351.

Nomah, E., Issaka, J., Abotowuro, S., & Ahiadzu, L. S. (2022). Accessibility Issues Facing School Supervision: A Study of Island Schools in the Krachi-East and Krachi-West Education Directorates, Ghana. *Universal Journal of Social Sciences and Humanities, 2*(3), 133–143. DOI: 10.31586/ujssh.2022.363

Ntumi, S., Agbenyo, S., Tetteh, A., Ebow Yalley, C., Yeboah, A. & Gyapong Nimo D., (2023). Teacher preparedness and implementation of the national pre-tertiary education curriculum framework in Ghana. *Journal of Educational Research and Practice, 13*, 251–269. https://doi.org/10.5590/JERAP.2023.13.1.18

Nyamekye, E., Zengulaaru, J., & Nana Frimpong, A. C. (2023). Junior high schools teachers' perceptions and practice of constructivism in Ghana: The paradox. *Cogent Education, 10*(2), 2281195. DOI: 10.1080/2331186X.2023.2281195

Odell, V., Molthan-Hill, P., Martin, S., & Sterling, S. (2020). Transformative education to address all sustainable development goals. *Quality education,* 905-916.https://doi.org/10.1007/978-3-319-69902-8_106-1

Okeyo, S. M., & Mokua, Z. O. (2023). Preparedness of Teachers for implementing Competency-Based Curriculum System of Education in public secondary Schools in Nyamira South Sub-County. *East African Journal of Education Studies, 6*(2), 406-418.https://doi.org/10.37284/eajes.6.2.1387

Oppong, R. (2024). *Teacher's Perceived Usefulness of ICT: The Case of Standard-Based Curriculum Implementation in Ghanaian Basic Schools*. https://hdl.handle.net/2077/83634

Owusu-Fordjour, C., Koomson, C. K., Essuman, S. A., Annan, S. T., & Awortwe, L. (2022). An Assessment of Personnel and Infrastructural Readiness for the Implementation of the New Basic School Science Curriculum in the Northern Region of Ghana. *Ghana Journal of Education: Issues and Practice (GJE), 10*(2).

Pak, K., Polikoff, M. S., Desimone, L. M., & Saldívar García, E. (2020). The adaptive challenges of curriculum implementation: Insights for educational leaders driving standards-based reform. *Aera Open, 6*(2), DOI:https://doi.org/10.1177/2332858420932828.

Prigodich, K. A. (2021). *Early Implementation of a Standards-Based Mathematics Curriculum: Understanding Teacher Perspectives and Concerns* (Doctoral dissertation, Portland State University).

Röhner, C. (2013). *Competence-oriented curriculum reform in the Federal Republic of Germany. In International handbook of curriculum research* (pp. 208-216). Routledge.

Ruth, C., & Ramadas, V. (2019). The" Africanized" Competency-Based Curriculum: The Twenty-First Century Strides. *Shanlax International Journal of Education, 7*(4), 46-51. DOI: https://doi.org/10.34293/ education.v7i4.640

Sampson, L. Y., Maxwell, S. K., Samuel, B. K., Samuel, N. A., Dogbe, M., & Eunice, A. D. (2022). Implementation of continuous professional development: Initial observations among basic school teachers in two municipal education directorates in Volta Region of Ghana. *Journal of Teaching and Learning in Africa, 5*(1), 1–12

Sifuna, D. N., & Obonyo, M. M. (2019). Competency based curriculum in primary schools in Kenya-prospects and challenges of implementation. *Journal of Popular Education in Africa, 3*(7), 39-50.

Sundberg, D., & Wahlström, N. (2012). Standards-based curricula in a denationalised conception of education: The case of Sweden. *European Educational Research Journal, 11*(3), 342-356. http://dx.doi.org/10.2304/eerj.2012.11.3.342

Wiysahnyuy, L. F. (2021). The competency based approach in Cameroon public secondary schools: Modes of appropriation and constrains. *International Journal of Humanities Social Sciences and Education, 8*(1), 92-103. https://doi.org/10.20431/2349-0381.0801011

Yalley, C. E. & Kankam, B. (2022). Implications of the hidden curriculum towards the development of desirable attitudes and values among students: Perceptions of Senior High School Social Studies teachers. *The Social Educator, 7*(1), 55-71