

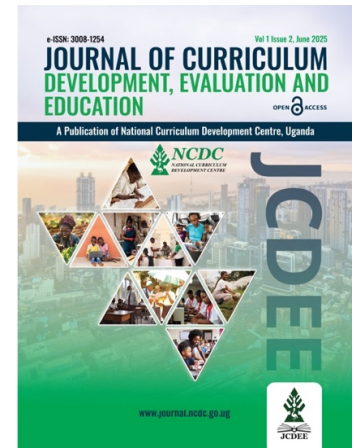
Utilizing Teacher Education and Curriculum Guidance Materials for Effective Pedagogy in Sub Saharan Africa

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Abstract

The quest for effective teaching methodologies remains a global concern, particularly for developing nations striving to optimize learning outcomes. While much of the existing research focuses on factors like curriculum design and teacher professionalism, less attention has been paid to how curriculum materials and structured teacher training influence pedagogical effectiveness in sub-Saharan Africa. The paper draws on both Schiro's Social Efficiency Curriculum theory and Siemens' Connectivist theory as theoretical lenses to investigate how teacher education and curriculum guidance materials can enhance effective pedagogical practices in the region and prepare learners for societal roles. The study analyzed peer-reviewed articles and grey literature, using a systematic literature review and textual narrative synthesis methodology. Findings reveal that effective pedagogy in developing contexts depends not only on what teachers know, but also on how they are trained; the instructional support availed through curriculum guidance materials, learning through networks and connections, knowledge sharing, materials that promote reflective teaching, inclusive education, and alignment with local realities. It concludes by recommending policy actions to improve teacher training and effective pedagogy, by integrating culturally responsive pedagogy, promoting experiential and project-based learning, and ensuring continuous curriculum evaluation.

Keywords: *Curriculum in Africa, Curriculum Theory, Teacher Education, Teaching methodologies, Education Reform.*

Background

The concept of effective teaching is highly contentious and many education systems worldwide take keen interest in investing more resources to maximize teaching outcomes (Kyriakides & Panayiotou, 2023; Mupa & Chinooneka, 2015). Although various studies in Sub-Saharan Africa emphasize an effective pedagogy for improving education outcomes (Moussaoui & Rachid, 2023; USAID, 2015), such studies have paid less attention to factors such as teacher education and curriculum guidance materials in promoting effective teaching (USAID, 2015; Sharma, 2023). The only available studies developed from the west point to teacher experience, professionalism, conduct and supportive resources as critical factors for implementing an effective pedagogy (Marie, 2021; Paris, Polson-Genge & Shanks, 2010). The only available studies developed from the west point to teacher experience, professionalism, conduct and supportive resources as critical factors for implementing an effective pedagogy (Marie, 2021; Paris, Polson-Genge & Shanks, 2010).



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However, it can be emphasized that teacher education and curriculum guidance materials are also significant factors that can be utilized in promoting effective and quality pedagogical management, though ignored by previous studies.

Teacher education and curriculum guidance materials are vital in meeting the increasingly complex needs of learners (INASP, 2020). This implies that Sub-Saharan African governments should prioritize the establishment of sustainable and high-quality teacher training Programmes (Mwesigye et al. 2024), as well as investing in curriculum guidance resources to support the improvement of pedagogical delivery in a rapidly changing education landscape on the continent (Sekiwu, 2023; Ssempala & Namazzi, 2024). It is against this backdrop that this paper discusses the possibility for effective utilization of both teacher education and curriculum guidance materials to support pedagogical management. This could serve as an alternative strategy for maximizing educational experiences and outcomes in developing countries like Uganda.

Conceptual Analysis

There is need to conceptualize teacher education, curriculum guidance material, and an effective pedagogy. To do so, this section pauses and discusses these questions “What is teacher education? What scope of teacher education is vital for effective pedagogical management in developing countries? What are curriculum guidance materials? How important are curriculum guidance materials in implementing an effective pedagogy? What is an effective pedagogy? What does an effective pedagogy consist of?” Teacher education is the process of equipping teacher- trainees with the knowledge, professionalism, attitudes, behavior and skills required to support virtuous teaching at the relevant level (UNESCO, 2024). The scope of teacher education also entails attaining sound pedagogical theory and professional skills to enable quality education outcomes (Flores, 2023). Literature also reveals that in order to attain Sustainable Development Goal 4 (SDG4) which is emphatic on quality education, teacher-trainees need to be given necessary support in terms of training, professional development, and opportunity to engage in research on effective pedagogical delivery and increased education outcomes in a changing education context (UNESCO, 2019). More still, on the question of teacher professionalism and reform policy initiatives, the Global Framework for Professional Teaching Standards (GFPTS) proposes attaining high qualification in teacher education, being handy with expert knowledge, skills, and vast understanding of discipline-specific subject matter to be able to teach students well (Haney et al., 1995). This requires mastery of teaching methodologies and orientation about the social, cultural, and developmental issues relating to to their students and learning processes (Avalos, 2011). Since the quality of teachers is partly determined by their education and training, it is crucial that a thorough analysis is done to establish how the process can be utilized to promote effective pedagogy.

On the other hand, curriculum guidance materials or resources have been defined as educational resources that provide curriculum content and instructional experiences which aid teachers to develop curricula and lesson plans for use in actual instructional situations (ACRL, 2017). These resources provide a basis for interpretation of the curriculum content, and enhance both teacher practice and student learning outcomes which are key components of an effective pedagogy (Catholic Education, 2020). And the concept of effective pedagogy refers to a student-centered teaching and learning approach where educators are reflective in their theory, practice and policy implementation in teaching and learning for the realization of positive impacts on the learners (Bixler, 2023; Kanga, 2016). Specifically, effective pedagogies focus on teacher behavior during teaching, what they know and understand and their beliefs (or why teachers act the way they do) during classroom instruction (Husbands & Pearce, 2012; East Grand Rapids Public Schools, 2011).

The core idea drawn from the above thinking is that effective pedagogies enable utilization of reflective practices where learners are deeply and collaboratively engaged with content. Effective pedagogies also encourage creativity in learning while preparing learners for employability (Bixler, 2023). The major focus of effective pedagogy is to develop higher order thinking and Meta cognition. The focus is also to make

good use of dialogue and questioning in order to achieve learning (Husbands & Pearce, 2012). In a word, the aim of effective pedagogies is to design learning where the teacher encourages learners to have a deep understanding of targeted concepts, principles and strategies of learning, and the use of learning methods that are accompanied by teacher guidance (Raida & Jamaludin, 2020).

Theoretical framework

The theoretical lens for this paper is underpinned by Schiro's Social Efficiency Curriculum theory as cited by (Yaşar & Aslan, 2021) and it is applied to teacher education. The Social Efficiency Curriculum theory emphasizes that the curriculum should train learners/individuals to be productive members of society through skill based instruction, standardized curricula and measurable outcomes, to acquire relevant competences for future progression and future role modeling (Yaşar & Aslan, 2021). This implies that what is provided in teacher education should provide teacher-trainees with the capacity to initiate transformative learning in order to mold learners into respectable and useful leaders. In other words, the theory does not focus on the learner as a child, but as a potential adult members of the society (Yaşar & Aslan, 2021).

The Social Efficiency Curriculum theory aims to connect classroom learning with authentic social experiences, allowing students to see the relevance and practicality of what they are learning and apply them accordingly. Therefore, applying this theory directly to the teacher education programme means that there is urgency to prepare teachers by equipping them with the necessary knowledge, skills, values, ethics and training appropriate to transform learners (students) into practical, innovative, creativity, and problem-solving citizens for a rapidly changing global society as indicated by Sekiwu (2023). More so, the training involves the interpretation and use of curriculum support materials that target enablement of learner creativity for effective teaching.

On the other hand, the paper adopts Siemens' Connectivist theory cited by (WGU, 2020) to analyze the impact of curriculum support materials on effective pedagogical management. This theory focuses on the idea that people learn and grow when they form connections (WGU, 2020; Pappas, 2023). The core assumption of the Connectivist theory is that while utilizing curriculum guidance materials in classrooms, learners make connections to things that excite them and helping them to learn (Pappas, 2023). The connections may be with individuals, materials or experiences that make curriculum materials meaningful. Effective pedagogical delivery is about nurturing and supporting critical learner connections and networks to facilitate fruitful knowledge sharing experiences in the classroom environment.

Therefore, the lesson here is that utilization of the Social Efficiency Curriculum theory in the classroom is intended to ensure effective pedagogical management when the teacher utilizes their vast knowledge, experience, skills, positive attitude and professionalism to support learning that enables learners become social change agents. Again, the Connectivist theory provides that process of teaching requires that learning encourages student connections and networks in the classroom as a measure of not only knowledge sharing but also building the capability of learners to use the shared knowledge to participate in social empowerment.

Methodology

The study adopted a systematic review of literature, based on secondary data sources and a textual narrative synthesis, to foster critical analysis and synthesis of findings from multiple studies that used different methodologies (Morley et al., 2019; Namazzi & Ssempala, 2024). This enabled the researchers to draw connections, make analysis, summarize and explain the findings from multiple studies, to create a comprehensive understanding of how curriculum guidance materials and teacher training promote effective pedagogy. The study specifically opted for the textual narrative synthesis because of the analytical rigor involved. The literature reviewed included peer-reviewed studies and gray literature written in English from 2016 to 2025 (Evans et al., 2021). The researchers used the following data bases to search for literature; EBSCO, ProQuest's, ERIC, JSTOR, dissertation abstracts, and Google Scholar, putting

emphasis on literature related to utilization of curriculum guidance materials, teacher education and effective pedagogy. The following sources were excluded from the study; all articles not published in English, all sources and documents that were Editorials, letters, commentaries on the theme, and all sources that were not directly related to the theme. More so, all literature was subjected to textual descriptions; analysis of relationships between studies based on year of publication, content and research methodology.

Findings and Discussion

Teacher Education for an Effective Pedagogy

Teacher education plays a huge impact in enabling an effective pedagogy. For example, research indicates that teacher education equips teacher trainees with appropriate knowledge, attitudes, behavior and skills to be in position to transform teaching in the developing world (UNESCO, 2024; Bixler, 2023). This view relates to the assumptions of the social efficiency curriculum theory which proposes preparation of learners for future social roles (Yaşar & Aslan, 2021). Supporting implementation of an effective pedagogy must be supported by an effectual teacher training process that inevitably boosts teacher competencies (Nseibo, et al., 2022), as enshrined in Sustainable Development Goal 4.7 “to ensure that all learners acquire the knowledge and skills needed to promote sustainable development” (United Nations , 2024).

One of the 21st century competences that promote an effective pedagogy, however, is the transition from traditional methods of teaching and learning to a modern pedagogy which looks at learning for social change and empowerment (Dorji, 2022). This transition would provide solutions to global challenges like climate change and pollution, political and civil conflicts, extreme poverty, as well as the global health pandemics. The transitioning from traditional teaching to more practical teaching, partly engages students in discovering remedial measures of addressing social challenges as these mentioned above. Students are taught to become problem-solvers other than rote learners. (World Bank, 2023; United Nations, 2024). In most cases, though it is essential to transition towards 21st century teaching and learning in the modern Sub-Saharan African education system, many learners in the region continue to find their education systems short of practical solutions to the surrounding social challenges. (Winthrop & Sengeh, 2022; World Bank, 2023; Windle Trust International, 2021). However, Africa has always inherited a colonially outdated curriculum (Watkins, 2006; Abrokwa, 2017). This curriculum has often pushed teachers to teach theoretical knowledge at the expense of practical instruction (Pillay, 2021; Sekiwu et al., 2022).

In order to deal with the challenges of theoretical learning, the Social Efficiency Curriculum theory assumes that it is crucial to deliver classroom content with the aim of preparing learners to apply it effectively, and be able to take on social roles. In his article “The value of African wisdom: Reflections for modern education in Uganda”, Sekiwu (2023) argues that the preparation of learners to be able to play social roles implies that the curriculum and the subsequent teaching done should allow the modern African teacher to prepare their students to be critical thinkers, creative, problem-solvers, social leaders and people equipped with wisdom to transform the planet. In order to ensure this, (Nurlaelawati & Novianti, 2017) advise that teacher education in developing countries must embrace modern effective approaches to learning like genre based and blended education, as well as providing exposure opportunities to teacher trainees to engage in research on how to instruct their learners to become agents of social change.

Another challenge hindering transitioning from traditional to more practical learning is insufficient resources needed to restructure the teaching methodology in the Global South. Insufficient resources are brought about by increasing government budget deficits (Sekwat, 1997; Sekiwu et al., 2019). The challenge of inadequate resources hinders the implementation of a curriculum for social change (Yob et al., 2016). The question therefore is how can teaching and learning in Africa be made more practical amidst insufficient resources accruing from government budget deficits? Ghimire (2024) says that teaching and learning can be made more practical by leveraging low-cost technologies, resource sharing, and building collaborations with civil society organizations that can help maximize available resources and improve educational outcomes.

Promoting effective pedagogies in modern schools in the developing world can also be through supporting inclusive classrooms (You et al., 2019). Teacher education training must equip teacher-trainees with the pedagogical methodologies of dealing with inclusive and diversity classrooms as Sekiwu (2010) also argues. Again, global initiatives on dealing with the gaps of exclusion in education have also been put forward, as articulated in Sustainable Development Goal (SDG) number 4 (United Nations, 2024; USAID, 2015; World Bank, 2023). But in trying to grapple with strengthening teacher education in order to promote education for social efficiency, there is urgency to also tackle numerous learning barriers in most schools across a number of developing countries. According to (Ludago, 2020), these learning barriers include poor quality of assessment, quality of services and infrastructural challenges especially in Universal Primary Education (UPE) and Universal Secondary Education (USE) schools in Africa (World Bank, 2023). There is also the inadequate capability of teachers in managing cases of student disability issues, mainly because of insufficient teacher training in Special Needs Education (SNE). Therefore, in order to optimally promote an effective pedagogy in developing countries, teacher training Programmes ought to focus on grilling teacher-trainees on how to handle inclusive education practices, as well as ensuring quality learner assessment in order to produce competitive school graduates (UNESCO, 2024; United Nations, 2024; Ainscough, Sleet & Bes, 2019).

Research further shows that teacher education should again focus on enhancing teachers' knowledge and positive beliefs about their urgency and obligation to improve the learning environment of special needs of children. This can be done through emphasizing practical training and support systems for teacher-trainees in inclusive education (You, Kim & Shin, 2019), which strategy directly conforms to the social efficiency curriculum theory (Yaşar & Aslan, 2021). Strengthening inclusive education also requires tailoring teacher-trainees to understand and utilize culturally responsive teaching methodology as another strong instrument for the promotion of effective pedagogical management as elaborated by (Wen, Zhang, Kong, & Han, 2022).

Since the Social efficiency theory proposes equipping learners with skills of solving future problems after school (Yaşar & Aslan, 2021), teacher education should equip teachers with skills to be able to integrate technology into teaching (UNICEF, 2022). This will enable them to leverage digital resources for more engaging and effective learning experiences that suit developing countries. For instance, after the outbreak of the COVID-19 global health pandemic, the entire world system saw it prudent for each education system to integrate eLearning into their instruction philosophies. Again, with the coming of Artificial Intelligence (AI) programmes in education, it is the challenge of all schools to devise strategies to incorporate AI into teaching and learning. This can be perfected through training teachers on how to utilize technology-based platforms to ensure quality teaching, research and assessment literacy (Johnson, 2011; American Association of Colleges of Nursing, 2022). When teacher education emphasizes a blended learning model for all teacher-trainees, this has been found to be effective in enhancing the experiences of both teacher educators and pre-service teachers or teacher-trainees (Calderón, Scanlon, MacPhail, & Moody, 2020). However, with limited government budget in the education sector in Africa, it becomes increasingly difficult to fully implement blended learning models. Many teacher training institutions and schools lack access to necessary technology-based infrastructure such as reliable internet, digital devices, and adequate teacher training for effective online and hybrid teaching (Mellati et al., 2019). Financial constraints prevent widespread adoption of these technologies, hindering the ability to integrate modern educational practices that combine in-person and digital learning. As a result, despite the potential benefits of blended learning in enhancing educational access and quality, these challenges make its widespread implementation more complex and delayed (Jhurree, 2005).

Another strategy which promotes an effective pedagogy and can be employed during teacher education is to encourage pre-service teachers to utilize collaborative and interactive learning in the classroom experiences (Nur & Butarbutar, 2022). The purpose of collaborative learning is to allow exchange of ideas and best practices as a learning group. Such collaboration may be in the form of organizing learners into discussion groups to share their diverse knowledge and experiences about a topic of study. It is important

for the teacher to strategically form these discussion groups putting into consideration the cultural and educational background of learners, their intellectual capabilities and diversity in social experiences. On the part of pre-service teachers during their training, it is also important for trainers to put these preservice teachers in discussion or collaborative groups basing on their years of service, duration of training for each teacher and their significant contributions to teacher performance (Darsinah & Purwatiningsih, 2020).

Such collaborations during teaching and training create beneficial socializations that encourage mentorship that equips pre-service teachers with the ability to impart in learners the knowledge for social efficiency. Such knowledge for social efficiency enables learners identify the needs of society during teaching and provide classroom-based solutions to addressing these needs of society (Yua & Yang, 2023; Windle Trust International, 2021). This further means that teacher trainees initiate practical classroom experiences, allowing learners to analyze knowledge with the hope of applying such knowledge to distinct societal experiences. It means that collaborative learning is that which allows teachers to apply theoretical knowledge in real-world settings, preparing learners for the challenges they might face in future (Yaşar & Aslan, 2021). The same thinking could be complemented with the introduction and integration of culturally responsive teaching methods in order to cater for diverse classroom situations (Aglazor, 2017), and for the fact that not all learners learn the same way (Norwood, 2023).

The role of Curriculum Guidance Materials in implementing an Effective Pedagogy

Curriculum guidance materials are resources and documents designed to support the development, implementation, and evaluation of an educational curriculum. They provide guidance to teachers, administrators, and educational planners on how to effectively deliver instruction and help students meet the desired learning outcomes (Foster, 2018). These materials typically outline the scope and sequence of lessons, teaching strategies, assessment methods, and other key components of the educational process. According to Haury (1992), some common types of curriculum guidance materials include:

1. **Curriculum Frameworks:** These documents outline the overall structure, content, and educational goals of a curriculum for a specific subject or grade level.
2. **Teacher's Guides:** These are detailed instructional manuals that provide specific strategies, lesson plans, and activities for teachers to use in the classroom.
3. **Learning Objectives:** These materials break down what students are expected to know and be able to do by the end of a lesson, unit, or course.
4. **Assessment Guidelines:** They outline how students' progress should be evaluated, including both formative (ongoing) and summative (final) assessments.
5. **Resource Lists:** These may include recommended textbooks, online resources, multimedia, or other materials that support teaching and learning.
6. **Differentiation Strategies:** These materials help teachers tailor their instruction to meet the diverse needs of students, ensuring that all learners, regardless of ability, can access the curriculum.
7. **Sample Lesson Plans and Activities:** These provide teachers with practical examples of how to structure lessons and engage students.

Writing about "*Pedagogy, curriculum, teaching practices and teacher education in developing countries*", Westbrook et al (2013) argue that curriculum guidance materials are crucial in providing the most effective pedagogies. However, this paper employs the Connectivist theory, as theoretical lens, to critically analyze the effect of curriculum guidance materials in enabling an effective pedagogy. Firstly, the Connectivist theory hypothesizes that learning occurs as a result of connections (Pappas, 2023). The implication of deploying the Connectivist theory is that curriculum guidance materials need to be organized and presented for learning in a structured manner. This will enable learners to relate and effectively grasp such curriculum materials (Sharma, 2023). However, (Ludago, 2020; Nevenglosky, Cale, & Aguilar, 2019) also emphasize that learning and connections are contextual (USAID, 2015).

Therefore, in order to implement an effective pedagogy in the school system in the developing world, it is crucial to consider the contextual factors that shape the educational infrastructure, programme development, and student characteristics. It also means that the curriculum is well structured, clearly stipulating the content and educational goals of learning. The teacher's guides detailing instructional manuals with specific strategies, lesson plans, and activities for teachers to use in the classroom are well provided for. Resource lists and differentiation strategies to help teachers tailor their instruction to meet the diverse needs of students are also in place (Aggarwal & Wu, 2021).

Precisely, the curriculum materials and resources should be tailored to the specific needs and learning styles of the student body in the country if effective pedagogy must be achieved. This is meant to emphasize the importance of the curriculum in addressing the ecological, rural, and social urban challenges which highly exist in developing countries (United Nations, 2024). Specifically, curriculum guidance materials must provide for lesson objectives which clearly break down what students are expected to know and be able to do by the end of a lesson, unit, or course. Assessment guidelines need to be provided, outlining how students' progress should be evaluated, including both formative (ongoing) and summative (final) assessments.

Similarly, the Connectivist theory further postulates that the diverse historical, cultural and contextual perceptions of effective pedagogy in different countries play a significant role in shaping the concept of development of curriculum materials (Windle Trust International, 2021). For instance, in countries with a well-developed public welfare system, social pedagogy is viewed as dealing with diverse services in the social and educational sectors. In countries with less developed welfare infrastructure like Africa, the social pedagogy is more rooted in civil society due to the limited reach and capacity of formal state institutions. Civil society organizations, such as Non-Governmental Organizations, grassroots groups, and local communities, step in to fill gaps in social services and education delivery (Hämäläinen, 2013).

These groups mentioned above provide crucial support, promote social cohesion, and create learning opportunities where government resources and infrastructure may be inadequate. Civil society's involvement ensures a more accessible, inclusive approach to education and social care, allowing for the customization of programs that meet local needs and cultural contexts, empowering individuals and communities to take an active role in their development. This highlights issues of subjectivity regarding nature of curriculum guidance materials provided in countries of the Global North and those provided by countries of the Global South. However, these geographical and economic diversities between the Global North and Global South may create flexibility in customizing the curriculum to suit developing countries for an effective pedagogy to be realized. More so, integrating culturally responsive curriculum materials helps in engaging learners and making the content more applicable and adaptable to different contexts to support realization of a positive learning environment (UNESCO, 2018). At the same time, designing curriculum guidance materials that connect with diverse learning environments allows educators to make the best use of available resources, which ensures inclusivity and relevance of the curriculum.

Since the theory proposes connecting materials to known experiences, this informs the teacher to always embrace experiential and project-based learning modes of instruction for purposes of incorporating into their teaching those local contexts and real-life situations that suit local educational needs in developing countries. Introducing experiential and project-based learning into the curriculum encourages hands-on learning experiences, collaboration, and critical thinking, which are elements that promote deeper understanding of concepts (InTeGrate, 2023; Sullivan, 2019). Meanwhile integrating local contexts and knowledge into the curriculum acknowledges and values indigenous knowledge (MOICHELA, 2017; Sekiwu et al., 2024). All these ex-experiential-driven classroom initiatives are intended to make education in developing countries more relevant and meaningful for the learners. For instance, Wambsganss (2022) argues that an effective pedagogy would mean that real-life situations designed within the curriculum and used in classroom learning help students connect theoretical concepts with practical applications to enhance their understanding of the theoretical knowledge. With such considerations, an effective curriculum can be achieved.

Further still, application of the Connectivist theory in the classroom would also demand teachers to establish mechanisms for continuous review and adaptation of the curriculum framework, teacher's guide, learning objectives, assessment guidelines as well as lesson planning and activities (Tunnell, 2022). This whole process is intended to ensure alignment of content and delivery with evolving educational needs and societal changes (American Association of Colleges of Nursing, 2022). And in order to realize an effective pedagogy, such reviews should be regular to allow for diagnostic and prescriptive curriculum evaluations (Sharma, 2023). More so, connectivity means embedding social and emotional learning components within the curriculum, as well as building an effective communication strategy between the teacher and learner (Ochwo et al., 2018). All these activities and experiences are intended to enhance students' emotional intelligence, resilience and the development of students' interpersonal skills. This contributes the holistic development of teaching and learning as a virtue for an effective pedagogy (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

Conclusion

This paper underscores the fact that teacher education and curriculum guidance materials play a crucial role in promoting effective pedagogy globally. Teachers must be well-prepared and equipped with the right tools to facilitate meaningful learning experiences. The paper provides a conceptual analysis of teacher education, effective pedagogy and curriculum guidance materials. The paper's theoretical framework is the analytical lens used to critically examine the role of teacher education and curriculum guidance materials in fostering an effective pedagogy for Sub Saharan countries. The analysis of this paper has indicated that teacher education equips teacher-trainees with the necessary skills, knowledge, and strategies to improve the quality of classroom instruction, while continuous professional development ensures teachers remain effective and up-to-date. Likewise, curriculum guidance materials provide a structured framework that ensures consistency, standardized content and clear learning outcomes, as well as promoting fairness across education systems. However, the research gap is insufficient access to high-quality teacher education and curriculum guidance materials, which limits teacher effectiveness in improving pedagogy in developing economies. There is also a problem of ensuring that theoretical knowledge is tailored to local contexts and to addressing diverse learning needs. Therefore, bridging these research gaps would vastly enhance educational outcomes.

As a way of policy recommendation, there is need to strengthen teacher education programmes in Sub Saharan countries by investing in comprehensive teacher training that equips teachers with the requisite knowledge, skills and attitudes for implementing an effective pedagogy. Such training should emphasize the integration of modern teaching methodologies, inclusive practices, and learning technologies in the classroom. Again, education systems should develop contextually and culturally relevant curriculum materials tailored to local contexts. The education system developers and policy makers should ensure that curriculum resources are engaging, inclusive, and aligned with the needs and experiences of learners. It is important also to train and sensitize teachers on how to build Collaborative Learning Communities (CLCs) through professional development platforms like teacher education workshops, seminars, conferences, and encouraging teachers to belong to communities of practice. The CLC framework facilitates knowledge-sharing and exchange of best practices for consolidated teaching effectiveness. Finally, education systems should establish mechanisms for continuous review and adaptation of the curriculum to align with evolving educational needs and societal changes.

Conflict of Interest

There is no conflict of interest registered whatsoever

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