'What Works' and Where? Mapping and Synthesising African Early Childhood Education and Foundational Literacy and Numeracy Research

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Abstract

Children's holistic development has become a crucial concern for countries in the Global South. This has sparked urgent policy conversations and raised critical questions about what measures and strategies are useful and effective in enhancing children's cognitive, emotional, and physical growth. However, 'what works' and policy debates often exclude indigenous African 'working' pedagogical approaches and interventions. Therefore, this study aims to promote the visibility of African-based research evidence and unpack the hidden indigenous working strategies that enhance children's learning outcomes. Using the mapping and synthesis method, we observe that several effective strategies and interventions specific to sub-Saharan Africa are invisible in international journals. We argue that 'what works' is culturally and contextually dependent and requires attention in intervention scaling.

Keywords: Early Childhood Education, Foundational Literacy and Numeracy, 'What Works', pedagogy, African-based, Indigenous.

Introduction

The imperative of nurturing childhood development and fostering early learning has gained significant national and global attention. This is particularly crucial for countries in the Global South, including Sub-Saharan African (SSA) countries, where children's development lags behind the global threshold. To address this gap, it is essential to use context-appropriate research evidence to inform policy and practice. This study aims to do just that by focusing on African-based research evidence and indigenous strategies that enhance children's learning outcomes.

More often, research and intervention evidence from the Global North on 'what works' attract global conversations and policy debates, shaping and dominating the implementation of policies and programmes in the Global South. This evidence may, however, not be contextually relevant to the Global South. Owing to this misconstruction of what is assumed to be working with neglect of 'what works' and how it works in other contexts such as SSA, we undertake this mapping and synthesis exercise to unpack this critical issue. The outcomes of this research have the potential to significantly influence and improve early childhood education and foundational literacy and numeracy policies and practices in SSA, making it a crucial and timely endeavour.

One pathway to ensuring that children from low socioeconomic contexts advance towards the global learning standard commences with access to quality preschool and early primary education. Therefore, we map and synthesise Early Childhood Education (ECE) and

Foundational Literacy and Numeracy (FLN) research stemming from SSA-based researchers to delineate the extent to which it underscores the effectiveness of indigenous pedagogical interventions and implementation. We aim to showcase the landscape of preprimary and early-grade learning research relating to effective teaching practices related to literacy, numeracy, and socio-emotional skills that enhance students' learning outcomes in SSA.

Method

In response, we undertook a comprehensive desktop-based search, mapping and synthesis of ECE and FLN research conducted by SSA-based researchers across 48 countries. We pre-developed a protocol to guide this mapping exercise with a specific interest in literature that contains at least one SSA-based researcher and focuses on one or more of the 48 countries. Utilising four international databases, we first mapped research published in international journals. Secondly, we focused on five countries – Ghana, Kenya, Tanzania, Senegal, and Uganda – to draw unpublished/locally published literature from institutional repositories, Africa Journals Online, and local journals to understand the availability of African ECE and FLN that are invisible internationally. We systematically mapped literature from 2020 to 2022 without language restrictions, ensuring a comprehensive and inclusive approach to our research.

The mapping included studies across varied focus interests. However, this paper discusses studies reporting on what (pedagogical approaches/interventions) and where (in and outside the classroom), children's learning outcomes are effectively occurring.

Preliminary Findings

Our analysis encompassed 802 peer-reviewed papers, revealing a promising trajectory of ECE and FLN research by SSA-based researchers. Of this number, 56 per cent were published in international journals compared to 44 per cent that were locally published. While this seems promising, it is also worrying to see a significant number of African ECE and FLN literature that are not visible in international spaces. This implies that indigenous approaches to effectively enhancing children's learning outcomes are excluded from 'what works' conversations. More importantly, contextually relevant evidence may be overlooked on how African-based researchers assess, evaluate, and their view of children's early learning processes and the effectiveness of policy, practice, and interventions.

Notably, collaborations involving researchers outside SSA were more prevalent in generating internationally visible ECE and FLN research evidence than individual or regional collaborations. Fundamentally, this is driven by enhanced funding opportunities for international collaboration compared to intra-SSA collaborations, which determine the benchmark of 'what works' likely to override the perspectives of the indigenous people.

Our synthesis has yielded significant results for consideration. SSA-based researchers, mostly in unpublished literature, have reported several effective local approaches that are observed to enhance reading, numeracy, and socio-emotional outcomes. Key focus areas include African play materials and styles, local learning strategies and unstructured physical environment (Gerde, H. K. et al., 2020; Ogunyemi, F. T., & Henning, E., 2020). Strong evidence exists that SSA-based teachers use technology and local language computerised applications in teaching and learning (Ajayi, H. O., et al., 2021; Maphosa, V., & Dube, B., 2021; Ngwoke, D.

et al., 2021; Odewumi, M. O., & Bello, I., 2020). The use of African indigenous mother tongue languages stands out as a central focus, revealing ongoing debates over language choice and initiatives aimed at enhancing the relevance of educational content.

Moreover, significant attention is directed towards teachers and the use of local teaching materials, emphasising a robust focus on instructional quality (Naugah, J. et al., 2022). Additionally, studies underscore community-based learning centres, collaborative culture, and parental home strategies to enhance children's development and learning outcomes (Birhan, W. et al., 2021; Rohde R. et al., 2020). There was conspicuously little emphasis on evaluating ECE and FLN quality, interventions, and policy.

Conclusion

In light of these findings, we provide insights and recommendations on how ECE and FLN research trends can inform evidence-based policymaking and practice. We discuss the significance of hidden African evidence that can change our understanding of what is long perceived as 'working' evidence, and yet it is usually not. This approach is pivotal in addressing critical developmental and educational needs, fostering optimal growth and learning outcomes.

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