





Integrating educational research into curriculum review for basic education: A structuration perspective

 **Simsolia Ntinda**¹⁺
 **Nomanesi**
Madikizela-Madiya²

^{1,2}Department of Educational Foundations, University of South Africa, South Africa.

¹Email: 64128369@mylife.unisa.ac.za

²Email: Madiyn@unisa.ac.za



(+ Corresponding author)

ABSTRACT

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Over the years, scholars have engaged in discussions regarding the research-practice nexus, with emphasis on practice-oriented and socially relevant research. What seems to be limited in such discussions is how curriculum reviews (as a normative societal trajectory) and educational research can dialectically inform each other in a duality of structure and agency. To contribute towards reducing this gap, this paper draws from a study that examined the integration of educational research into Namibia's review of the basic education curriculum. The Structuration Theory was used as an analytical framework, following a qualitative research approach. Semi-structured interviews were conducted with 12 relevant Senior Education Officers (SEOs) to explore how agents (curriculum reviewers, the curriculum panel, and stakeholders) interact with structures (policy frameworks, institutional norms, and resource allocation) to either enable or constrain the research-curriculum review nexus. The paper argues that, while some structures may seem to create opportunities for research engagement, other challenges, including lack of resources, political interference, inadequate collaborative approaches, and limited time, are also structural and constraining. These shortcomings limit the applicability of research on curriculum review, resulting in curricula that often lack evidence-based foundations. On the other hand, they create research opportunities for the possible development of frameworks that combine findings with stakeholder insights. Recommendations include the need for reflexive monitoring of the ongoing relationship between agents' actions and the transformation of educational structures. Participatory methods and dedicated support systems are also recommended for the effective integration of research into curriculum review processes.

Contribution/Originality: This study employs Giddens' Structuration Theory to analyze the interplay of structures, institutional rules, and agents' actions in shaping educational policy during Namibia's curriculum review. It identifies gaps in existing literature, especially regarding empirical research, and extends the theory's application to curriculum review in Sub-Saharan Africa.

1. INTRODUCTION

Focusing on curriculum review as a trajectory, this paper contributes to the existing discourses and debates regarding the research-practice nexus for societal development and transformation. Various factors necessitate the review of curricula for relevance and responsiveness to societal needs, and only a few are outlined in this introduction. First, in the 21st century, delivering quality education depends on a flexible and responsive curriculum that adapts to the evolving needs of society (Arvanitis, 2024; IBE-UNESCO, 2018; Kolasi, 2020; Vreuls, Koeslag-Kreunen, van

der Klink, Nieuwenhuis, & Boshuizen, 2022). Educational systems around the world continually adjust to meet these changing demands, and the curricula that support them are essential for imparting knowledge and skills to learners. Second, the changing social, political, economic, and environmental landscapes necessitate that educational systems respond proactively (Basu, 2020). These changes, especially the political ones, often come with different ideologies and agendas of those in power, which become a reason for curriculum review, even if contested. Third, Smith and Johnson (2023) and Martinez (2023) highlight a gap between educational outcomes and workforce requirements, underscoring the need for more systematic curriculum review processes, guided and centered on experiential learning and skill development.

For any of the above factors to be addressed, relevant and necessary knowledge towards curriculum review can be obtained through continuous and timely research in consideration of societal needs. Yaşar and Aslan (2021) identify critical questions that should guide the processes, to which research can be resourceful. These include what knowledge is most worthy to teach, why it should be preferred over other forms of knowledge, what different parts of knowledge should be interrelated, who qualifies to teach what knowledge, to whom, and in what conditions. These questions are even more critical in the African context, where curricula have been largely based on imposed colonial knowledge systems and imaginings, some of which are irrelevant to local African needs (Kanu, 2003; Mavhunga, 2006). Ruth and Ramadas (2019) highlight that several African nations have adopted a Competency-Based Curriculum (CBC), which is influenced by Western ideas. In such a context, educational research should serve not only as a tool but also as a catalyst for change, influencing curriculum development and review. However, there is limited explicit knowledge on how educational research gets integrated into curriculum review processes in some African contexts and how such integration informs ongoing research. As such, curriculum reviews may be reproducing structures that are not transformative and are counter to development in the countries concerned. This paper draws from research that was conducted in Namibia to reduce this knowledge gap. The study explored the interaction between structure and agency in the integration (or not) of research in the country's basic education curriculum review processes.

The goal of basic education in Namibia is to equip learners for a knowledge-based society and global competitiveness across various development sectors, contributing to the achievement of the national developmental goals and realizing Vision 2030 (Ministry of Education Arts and Culture, 2016). However, the country has been observing ongoing performance challenges among learners in schools. As part of efforts to address these challenges, Namibia's basic education curriculum underwent a review cycle from 2012 to 2022 (Ministry of Education Arts and Culture, 2023). An education conference held in Namibia in 2011, involving multiple stakeholders, highlighted the urgent need for a comprehensive curriculum review aligned with Vision 2030 and aimed at improving socioeconomic development (Josua, Auala, & Miranda, 2022). Following that conference, the reforms introduced sought to ensure the curriculum remains relevant amidst changing societal demands. Nonetheless, challenges persisted in effectively integrating research into curriculum reviews, particularly within the scope of Basic Education in Namibia. The research from which this paper draws was motivated by this observation.

The paper is composed of seven sections. Following this introduction is the section where we review literature related to curriculum review and the role of research in such processes. This is followed, third, by the theoretical framework where we discuss Giddens's structuration and its concepts, which assisted us in data analysis. The fourth section presents the methodology we followed to generate data. The fifth section is the findings, followed by the sixth section, the discussion of findings, and lastly, the conclusions.

2. LITERATURE REVIEW

Educational research is only valuable if it directly or indirectly impacts people's lives. In fact, Opstoel et al. (2024) define educational research as "an applied discipline with a dual purpose of advancing both theory and practice". This statement suggests that educational research should not be conducted just for the sake of knowledge generation because that generated knowledge is useless if not applied in real-life situations. Akkerman, Bakker, and Penuel (2021)

point out that different societal groups expect research to inform discussions and help improve education relevance. Lock, Hill, and Dyjur (2018) highlight the role of research in identifying challenges and developing effective strategies. However, some researchers worry about how relevant this research truly is to society. In fact, such concerns about the divide between research and practice are ongoing (Opstoel et al., 2024; Sjölund, Lindvall, Larsson, & Ryve, 2023). Farley-Ripple, May, Karpyn, Tilley, and McDonough (2018) and Broekkamp and van Hout-Wolters (2007) describe this concern as bidirectional, involving both the creation and use of relevant research, as well as factors influencing its applicability, such as the disconnect between researchers and practitioners or policymakers, and doubts about research quality. Harris and Jones (2020) and Courtney (2024) also note that many education systems struggle to bridge research and practice due to the complex language used in research reports, practitioners' limited time, and ineffective communication strategies. Furthermore, Kim and Jung (2019) observe that although research can provide valuable insights and serve as a foundation for understanding, its usefulness is often limited because many studies go unpublished, restricting access to vital information.

On the other hand, integrating education research is seen as having a role in improving the quality and effectiveness of curriculum review and the education system at large. Courtney (2024) highlights that research is a cornerstone of effective curriculum development, providing the data needed for educators and policymakers to make sound, evidence-based decisions. Gouëdard, Pont, Hyttinen, and Huang (2020) shared that around the world, there is a growing consensus on key curriculum themes, such as student well-being and problem-solving skills, even as different nations adopt varied approaches to reform. This reflects a broad understanding that curricula must evolve to meet the changing needs of society and diverse learners. In South Africa, for example, reforms are being driven by a need to align educational content with modern societal demands, sparking debate about what constitutes essential knowledge in today's world (Soudien & Chisholm, 2021). This underscores that curriculum review is not just a routine task; it is a critical opportunity for quality assurance and for ensuring that education continues to serve the broader development of society (Lock et al., 2018).

Lock et al. (2018) and Ruth and Ramadas (2019) stress that curriculum review is a global trend driven by the need for effective strategies to address contemporary challenges in education. Educational research is a crucial bridge between theoretical knowledge and practical application, making it an indispensable part of this review process (Karseth, Wahlström, & Pizmony-Levy, 2023). Pamela and Mwila (2022) hold the same sentiment, suggesting that it is particularly important for curriculum teams to have access to research and policy evaluations to inform their work. Nkambule and Amsterdam (2018); Mahabeer (2018); Ruth and Ramadas (2019), and Gichuru et al. (2021) observe that many African nations, with their long history of adapting curricula to both local and global issues, are increasingly adopting a knowledge-focused approach. However, countries like South Africa, Kenya, and Tanzania have voiced concerns that their post-independence, knowledge-based curricula aren't adequately equipping students with the skills needed for the job market. This has led to a re-evaluation of educational goals, with experts being brought in to help incorporate research-backed strategies that promote critical thinking and social skills essential for the workplace.

A successful curriculum review process should encourage continuous improvement and reflection, grounded in solid, evidence-based research as suggested by Lock et al. (2018). These reviews typically involve a diverse group of stakeholders, including curriculum panels and subject matter specialists. These groups are often composed of local and international experts, teachers, educators, and senior education officials from various fields. A notable gap, however, is the lack of clear, specific guidelines for integrating educational research into this process. Yet, Smith and Johnson (2023) and Tiky (2019) emphasise that research is vital for improving teaching practices and informing policy decisions, providing key insights that can drive meaningful change.

2.1. Curriculum and Review in Namibia

Namibia's pre-independence education system was structurally influenced by the apartheid era, which deepened ethnic divisions and restricted access to quality schooling. These historical limitations determined both the content and availability of education, largely favouring a small minority while systematically marginalising the majority (Ministry of Education Arts and Culture, 2016). Following independence, the Namibian government and the Ministry of Education acknowledged the critical need to overhaul these structures to better reflect the nation's cultural diversity and foster genuine inclusivity.

The transition to a new educational model centers on the interaction between frameworks (structures) and individual actions (agency), primarily through a comprehensive curriculum review. A key step in this process was the establishment of the National Institute for Educational Development (NIED) in 1990 within the Ministry of Education to lead change. Its mandate included developing and continually reviewing curricula, alongside training and supporting teachers for effective classroom delivery (Ministry of Education Arts and Culture, 2016). NIED's involvement in both curriculum design and teacher professional development underscores the active role of policymakers and practitioners in working within the new frameworks to ensure equitable access to education. These efforts align with Education for All (EFA) goals, emphasizing a commitment to both equity and quality, and encouraging community participation in shaping educational practice (Amukugo, 2017).

A primary aim of post-independence educational reforms was to create a unified, equitable, high-quality, and competitive system available to all citizens (Josua et al., 2022). This required a major overhaul of the curriculum, moving away from racially biased content and assessment methods toward an approach that is more relevant, learner-centered, and democratic. Consequently, the curriculum has been subject to continuous review, notably in the 1990s, 2005/2006, and most recently in 2015, with subsequent years dedicated to implementation. A recent UNESCO (2024) highlights significant progress toward Sustainable Development Goal 4 (SDG 4), citing an impressive primary enrollment rate of 99.4% and a lower secondary graduation rate of 96.5%. Nevertheless, the report points out a critical disparity between the technical skills taught to students and the actual demands of the job market, particularly in emerging sectors like Information Technology, renewable energy, and green hydrogen. Despite ongoing curriculum adjustments, the report also notes that deep-seated challenges persist, including high failure rates, grade repetition, and dropout rates, which are especially pronounced among male students. The UNESCO analysis urgently calls for a comprehensive and practical curriculum review aligned with national priorities, though it overlooks the crucial integration of research into this revision process. This gap underscores the potential value of targeted studies, like this one, for transforming the Namibian education system.

Despite linking educational reforms with national development objectives, specifically Vision 2030's goal of establishing a knowledge-based society, a notable deficit remains in the integrated use of research to inform the selection of appropriate curriculum content. Research by Carl and Negumbo (2017) and Mushelenga (2020) highlights a crucial omission: teachers, as the primary implementers, have frequently been excluded from the initial planning and design phases. This exclusion has resulted in resistance to change, dampened motivation for implementation, and ultimately contributed to poorer student outcomes.

These persistent problems fuel frustration and anxiety, which may exacerbate societal issues, including rising crime levels. Ipinge and Kasanda (2013) observed that the government utilises necessary curricular adjustments to pursue a more prosperous future for its citizens through enhanced educational results. As societal complexities mount, it becomes increasingly vital for educational content to evolve, effectively addressing these pressing issues and adequately equipping students with essential real-world skills (Josua et al., 2022).

A pre-review of the curriculum is currently underway, spanning the period from 2015 to 2026 (Kambeyo, Nauyoma, & Julius, 2023). This framework defines the country's current status and aspirational goals, outlining a schedule for achieving them. Education occupies a central role in this process, highlighting its significance across the iterations of the National Development Plan (NDP) from the second through the seventh. As the 2030 milestone

approaches, a critical assessment of progress in both curricular reform and educational research is essential (Ministry of Education Arts and Culture, 2024). Such an evaluation is key not only for improving educational practices but also for realizing broader socio-economic development in Namibia.

Amukugo (2017) argues that although the curriculum review aimed to promote democratic principles and enhance educational quality, these objectives remain largely unrealized. Expanding on this, Katshuna and Shikalepo (2023) identify several contributing factors: teachers' limited understanding of the curriculum, the exclusion of key stakeholders from the review process, and financial constraints. Further findings from the Ministry of Education Arts and Culture (2016) and Cunningham (2018) emphasize the ongoing difficulties Namibia faces in meeting the curriculum's aims. Collectively, these studies reveal a substantial gap between the *formulation* of the curriculum and its *real-world implementation*. This gap presents a significant opportunity for targeted educational research to identify solutions and facilitate a more effective integration of the curriculum into classroom practice.

2.2. Theoretical Framework: Structuration Theory

This study utilized Anthony Giddens's Structuration Theory (Giddens, 1990) to explore the reciprocal relationship between the objectives guiding curriculum review policies and the impact of educational research. The theory posits that social existence emerges from the continuous, mutual interaction between individuals (agents) and social structures. Structures simultaneously provide the foundation for social activities and are the result of those activities, underscoring that they are not separate from human actions but are continually generated and sustained through them (Giddens, 1990).

In the specific context of curriculum review, agents encompass curriculum developers, educational researchers, policymakers, teachers, and other relevant stakeholders. The structures include policy frameworks, institutional arrangements, established professional norms, resource allocation for research and development, and communication pathways. Kolasi (2020) and Giddens (1990) emphasize that social structures are not the same as social relations; rather, they are composed of the rules and resources necessary for maintaining social systems. This clarification is especially pertinent for curriculum reviewers, whose actions are shaped by policies and guidelines that may either support or impede their integration of research during the review process and in its subsequent outcomes.

From a structurationist viewpoint, the observed gap in research utilization cannot be simplistically blamed on individual agents failing to use research or on overly rigid structures alone. Instead, it is viewed as a dynamic process where agents, through their routine professional practices, either reinforce existing structures that hinder research integration or, through reflexive monitoring and innovative actions, actively work to reshape these structures to enable a better use of research. Namibia's educational transformation itself serves as a clear illustration of Structuration Theory in action, with new structures replacing the restrictive apartheid frameworks and stakeholders' agency proving crucial in the ongoing review of education. This interplay has been fundamental to the development of a unified, equitable, and high-quality education system that accurately reflects the nation's identity and its citizens' aspirations.

3. METHODOLOGY

The study that informs this paper operated within an interpretive paradigm, which is based on the premise that realities are socially constructed rather than fixed and objective. Interpretivism values the importance of individual experiences and contexts (Schwandt, 2015) and naturally complements Structuration Theory due to their shared focus on social constructivism and the concept of the duality of structure. The research specifically investigated the social complexities within the National Institute for Educational Development (NIED), analyzing how the interactions and experiences of various agents affected the integration of research findings into the curriculum revision process. This interpretivist stance highlights the socially constructed nature of knowledge and the power dynamics that ultimately shape curriculum review decisions.

A qualitative research approach was adopted for this study, utilising a phenomenological research design. This design was chosen to gather rich data from participants and explore how structures and agencies mutually interact and influence each other concerning the use of research in curriculum review. As Alase (2017) notes, phenomenology provides a framework for understanding the lived experiences of participants.

The study concentrated on the expertise of agents and their perceptions regarding curriculum reviewers' perspectives on the role of research in Namibia's curriculum review process. Key findings were developed from participants' insights into the review process, the extent of stakeholder involvement, the specific challenges encountered, and the operational procedures of the curriculum division concerning research. This entire methodological framework was aligned with Giddens' (1990) structuration framework.

NIED was purposefully sampled as it is the sole institution responsible for the development and review of Basic Education in Namibia. The focus was on staff from the Curriculum, Research, and Development division, as well as the Professional and Resource Development division, to gather perspectives from both curriculum reviewers and researchers. The Curriculum and Research Division consists of six subdivisions, each led by a Chief Education Officer. This study includes a sample of twelve participants: six Chief Education Officers and three Senior Education Officers involved in prior curriculum reviews, along with all three Education Officers from the Research Subdivision. However, for the sake of participant anonymity and confidentiality, all participants were coded as Senior Education Officers (SEOs) 1-12. Coded numbers 1-12 were assigned randomly.

The interviews and verifications were conducted between October 2023 and March 2024. Interviews lasted between 50 minutes and 2 hours. Interviews were tape-recorded and later transcribed using Otter.ai and thematically analyzed using Atlas. ti. Before data collection, ethical clearance was granted by the institution where the researchers were located, from which the lead author requested permission from the Ministry of Education (MoE), which was granted. This was followed by preparing a permission letter through emails for both NIED management and the participants, ensuring a respectful and transparent procedure. The participants emailed the signed acceptance letters and provided informed consent to participate in the study. Interviews were scheduled and conducted according to the participants' suggested times, and all took place at NIED.

4. FINDINGS

The findings are organized into the following themes: structural constraints, collaborative opportunities, gaps in research, agency, and adaptation.

4.1. Structural Constraint

The findings reveal a tension between agency (the ability of SEOs to make decisions) and structure (which includes the frameworks and policies guiding those decisions) in Namibia's effort to incorporate educational research into its basic education curriculum review. While SEOs emphasized the importance of research-based information for enhancing curriculum quality, they also highlighted the lack of comprehensive policies, clear guidelines, and a dedicated research manual from the Ministry or NIED to support their research integration efforts during the review process. For example, SEO 9 said, "*We do not have a ministerial policy or circular that guides us on how we should integrate research, the type of research, and the quantity of research that should be integrated when reviewing the curriculum. It is left to us to decide, and it is difficult*". This deficiency creates a structural obstacle that limits their capacity to effectively utilize research findings.

While SEOs often conduct informal research during school visits and when overseeing curriculum implementation, they seldom undertake formal research to inform their decisions or enhance education quality in Namibia. The SEOs mentioned that they mainly engage in formal research only when instructed by the Ministry of Education or UNICEF to carry out specific studies in certain regions or on particular issues requiring urgent attention. One of them said, "The ministry funded and directed us to conduct a formal study during the COVID

outbreak. We also conducted research on the usage of smartboards at the Advanced Level (AS). *If more funds could be provided, we are willing and ready to conduct the research*".

The comment highlights the agent's willingness to integrate research, but was limited by a lack of funds, insufficient time, and limited resources, which could delay the curriculum review process. As a result, SEOs feel overwhelmed by high public expectations to enhance education. One participant remarked, *"All eyes are on us to transform our education system, forgetting that both research and curriculum review require support and teamwork from all stakeholders. If the review fails to be successfully implemented, then the whole nation fails, not just us,"* (SEO 3). The comment highlights a need for support and accountability from all stakeholders.

The SEOs collectively identified several critical difficulties. These included pressure exerted by policymakers, political agendas that exploit weaknesses in education reviews for campaign gains, a shortage of available empirical research, inadequate support from external stakeholders, and a heavy workload. This overwhelming set of duties encompasses administrative tasks, training sessions, workshops, the creation of subject materials, and the continuous monitoring of curriculum implementation. Comments in this regard included the following from one participant: *"We are overloaded, although we set targets, we have too many responsibilities, and all have to be completed within a given due date, thus we opt for informal research where we do not even use a specific guideline."* As a result, while informal insights hold merit, their impact on major decisions may not equal that of rigorous formal research. The potential of educational research to significantly inform and transform curricula is immense. Yet, realizing this potential mandates a dedication to collaboration and adopting practices that are contextually sensitive and genuinely respectful of all stakeholders' voices.

Ultimately, while official policies are designed to either empower or restrict individual agency, the flexibility to incorporate research in this scenario is significantly compromised by the absence of foundational structures. These vital supporting elements include adequate funding, accessible resources, mentorship opportunities, and the collaborative networks essential for knowledge sharing and innovation.

4.2. Collaborative Opportunities

Despite facing challenges, participants highlighted a robust collaboration at NIED, across regional education directorates, and at Headquarters in Windhoek. They praised NIED management for their support and fostering teamwork. SEO 3 mentioned, *"All the SEOs meet to discuss current issues, strategic plans, budgets, and such as curriculum review and research; we refer to it as our parliament"*.

Despite limited formal research training, the eagerness to ask for help and collaborate with higher education institutions, while sharing results with stakeholders, fosters a lively exchange that enhances the educational process. SEO4 mentioned, *"We have seen better collaboration with stakeholders, including higher education institutions. Recently, NIED signed a memorandum of understanding with the University of Namibia to support our research efforts."*

This statement highlights the dedication to collaboration, stressing the significance of teamwork in research and curriculum review. Despite ongoing structural challenges, the initiative and resourcefulness of the SEOs help foster a more connected and adaptable educational system. This network can promote continual growth and flexibility, reflecting a commitment to overcoming barriers and improving the educational experience for all stakeholders.

Consequently, while structural challenges persist, the agency of SEOs can promote a more interconnected and responsive educational system, encouraging continuous development despite these difficulties.

4.3. Gaps in Research

All the participants primarily utilized desktop reviews to analyze and compare international research with the Namibian curriculum review. However, the indigenous language SEOs pointed out a significant lack of empirical studies focused on indigenous languages, especially in comparison to those for science subjects. One of them commented: *"There is little educational research on different local languages in Namibia, compared to other fields of study. This*

can contribute to a lack of indigenous knowledge" (SEO 7). This reliance on desktop reviews reflects a structuration process in which the available literature and resources shape existing curriculum frameworks and research practices. In the absence of such resources, however, this could lead to a notable knowledge gap.

SEOs reported a lack of empirical research in specific subjects that could inform content decisions. They noted that many studies were conducted by researchers outside NIED and were neither communicated nor shared with the Ministry of Education or NIED; some were not published at all. A participant stated, "*There are so many studies that are conducted by academics and students on education in Namibia, but they do not benefit the Ministry because they are not shared with us or published*" (SEO10). These studies often aimed to fulfill academic requirements rather than contribute meaningfully to existing knowledge. If shared, they could benefit the development of localized educational strategies and foster a more evidence-based approach to curriculum review, ultimately enhancing the quality of education for students and empowering educators to make informed decisions that reflect both local needs and global standards.

The training sessions and workshops organized by the Ministry of Education revealed a complex interaction between individual agency and the established framework for Education Officers (SEOs). While SEOs were empowered to undertake research and review the curriculum, the effectiveness of this training and its resultant impact on their work warrant further exploration. Participants expressed uncertainty about their ability to bridge identified knowledge gaps and to conduct reviews that are both thorough and meaningful. As noted by one participant (SEO3), "*We were not engaged in a detailed study or academic research; instead, we conducted a desktop study to compare our findings with reports from other countries or school visits on implementation.*" This statement highlights a reliance on desktop research methods, which, while providing valuable insights, lack the methodological rigour associated with empirical studies.

Although participants recognised the Ministry of Education's efforts to connect them with stakeholders at both national and international levels, some raised concerns about the Cambridge standards. They recommended more research to establish a local accreditation body like Namibia's National Qualifications Authority (NQA) to promote a more tailored educational framework that aligns with local needs and contexts. This local accreditation body could help ensure that educational standards reflect the specific challenges and opportunities within the region, ultimately enhancing the quality and relevance of the curriculum for students. By doing so, it would foster greater engagement and trust among educators, parents, and the community, while supporting the development of a skilled workforce that meets national goals.

4.4. Agency and Adaptation

The study highlights an interdependent relationship among the SEOs, the Ministry of Education, and other stakeholders involved in the curriculum review process. The participants' engagement in various stages of curriculum review and educational research contributed to the continual refinement and modification of the curriculum. Diverse expertise, worldviews, beliefs, norms, and values characterized the individuals involved in this collaborative process, indicating the need for an inclusive approach toward curriculum development and review.

Figure 1 shows the interdependence between structure and agencies, as they are cyclical and influence each other. One section cannot operate effectively without the other; therefore, all components are equally vital in the creation and reproduction of new knowledge in curriculum review, particularly in integrating educational research.

Although all Subject Education Officers (SEOs) were acknowledged as subject matter experts, some nonetheless expressed reservations about feeling unprepared to undertake formal research. The Research Unit provided vital assistance for these activities, playing a crucial role by designing research instruments like online questionnaires and interview guides, and offering support to SEOs in presenting and analysing data. Despite this, the division itself was hampered by a deficit of modern software necessary for advanced data analysis. This situation clearly illustrated how individual agency can work to modify or overcome existing structural limitations within the education system.

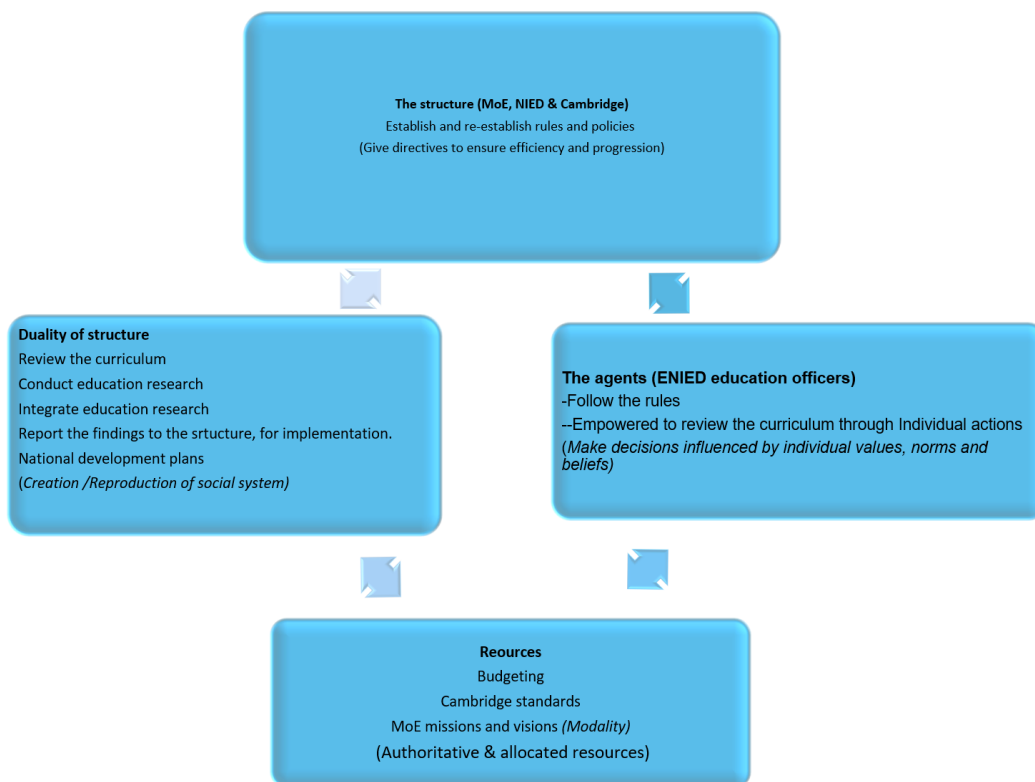


Figure 1. The interdependency between the structure and agency within the Namibian curriculum review.
Note: Giddens (1990).

5. DISCUSSION OF FINDINGS

Curriculum review and educational research are interdependent processes that mutually influence one another. Although Namibia has proactively reformed its educational frameworks, the incorporation of research findings into these updates has frequently been limited. This often results in curricula that may not fully address the diverse needs of learners and leads to a disconnect between theoretical guidance and actual practice (Harris & Jones, 2020). Therefore, it is critical to ground curriculum reforms in research to guide decision-making and enhance educational outcomes (Basu, 2020; Tiefenbacher, 2020). Understanding the epistemological foundations of educational research and how they are applied is essential for the effective creation and utilisation of knowledge within education (Tiky, 2019). Both formal and informal research are crucial for informing curriculum review decisions. Even when conducting informal studies, SEOs must adhere to research ethics. Upholding ethical standards ensures that the knowledge produced is both rigorous and respectful of the involved communities. This perspective aligns with Basu (2020) and Courtney (2024), who underscore the necessity of ethical research in promoting positive transformation.

Educational research plays a pivotal role in refining the curriculum review process by championing evidence-based practices and fostering stakeholder collaboration (Akkerman et al., 2021; Basu, 2020). Continuous engagement with research cultivates a culture of inquiry among educators and policymakers, effectively bridging the gap between theory and practice. Furthermore, the collaborative nature of educational research supports social justice by enabling diverse voices to contribute to knowledge creation and dissemination (Karseth et al., 2023). It is vital for educational research to pinpoint curriculum gaps and inform necessary updates that align with both national and local educational objectives, while also empowering stakeholders by integrating their perspectives. Integrating research into curriculum development results in a more relevant program that better addresses learners’ needs and drives systemic improvements. Linking educational research with the curriculum review processes ensures relevance, consistency, and adaptability to local contexts (Inyega, Arshad-Ayaz, Naseem, Mahaya, & Elsayed, 2021; Lock et al., 2018). However, systemic structural challenges, such as insufficient funding, limited research capacity, and inadequate institutional support, hinder the effective incorporation of educational research into curriculum review (Ruth &

Ramadas, 2019; Shah, 2022). This highlights an urgent need for systemic reforms and increased investment in educational resources to support a more cohesive, research-informed approach to curriculum development.

The Ministry's proactive measures, such as encouraging evidence-based decision-making and financially supporting staff attendance at conferences, aim to establish new structures. These efforts legitimize the importance of evidence and allocate resources like conference funding (domination). However, if the established norms (legitimation) or practical resources do not sufficiently support integration, the agents' actions may be constrained, leaving the research-practice gap unresolved.

6. CONCLUSION

As Namibia continues to modernise its educational frameworks, it is crucial to sustain a deliberate focus on embedding educational research into curriculum decisions. Future reforms must prioritise empirical evidence to effectively address the diverse needs of learners, thereby improving educational outcomes and cultivating a flexible, innovative education system. The present study reveals that educational research occupies a complex yet indispensable role in Namibia's curriculum review process. It pinpoints factors that encourage collaboration and informed decision-making, alongside persistent barriers that impede effective research integration. Moving ahead, adopting a collaborative, research-driven approach is essential to ensure the curriculum meets the varied demands of students and remains adaptable to evolving educational contexts. Acknowledging that education is shaped by structural factors but also actively propelled by agency enables the development of more inclusive and adaptable curricula. Educational research holds immense potential to inform and enhance these curricula, provided there is a firm commitment to stakeholder collaboration and to adopting practices that genuinely respect and incorporate all voices.

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Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

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