

From Awareness to Conciliation: Education and Policy Coherence between Environmental Issues and Development Imperatives in Africa

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Abstract: Given the imperative for holistic development (e.g., economic, technology, infrastructure) and the well-being of African populations, this article examines the consequences of incoherent public policies in Africa. These incoherencies are further compounded by environmental and climatic constraints, which are frequently exacerbated by the ratification of international agreements that are incompatible with local priorities. International organizations and frameworks, such as the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the United Nations Framework Convention on Climate Change (UNFCCC), advocate for the importance of sensitization and education as key strategies for addressing environmental and climate challenges. Despite the considerable potential of education, the awareness-raising strategy employed by numerous countries has been relatively ineffective in yielding tangible outcomes. The objective of this article is to demonstrate how an education program that prioritizes conciliation over awareness-raising can more effectively tackle Africa's development challenges by fostering policy coherence between environmental sustainability and development imperatives. By diverging from the conventional awareness-raising models, this study presents a contextual and comprehensive approach that respects local particularities and is better aligned with addressing environmental and climate crises.

Keywords: Awareness-raising - Conciliation Education - Environment - Development imperatives - Policy coherence

Resumo: Dado o imperativo de um desenvolvimento holístico (económico, tecnológico, infraestrutural) e do bem-estar das populações africanas, este artigo analisa as consequências de políticas públicas incoerentes em África. Estas incoerências são ainda agravadas pelos constrangimentos ambientais e climáticos, frequentemente exacerbados pela ratificação de acordos internacionais incompatíveis com as prioridades locais. As organizações e os quadros internacionais, como a Organização das Nações Unidas para a Educação, a Ciência e a Cultura (UNESCO) e a Convenção-Quadro das Nações Unidas sobre as Alterações Climáticas (CQNUAC), defendem a importância da sensibilização e da educação como estratégias fundamentais para enfrentar os desafios ambientais e climáticos. Apesar do potencial considerável da educação, a estratégia de sensibilização empregue por muitos países tem sido relativamente ineficaz na obtenção de resultados

tangíveis. O objetivo deste artigo é demonstrar como um programa de educação que dá prioridade à conciliação em vez da sensibilização pode enfrentar mais eficazmente os desafios de desenvolvimento de África, promovendo a coerência política entre a sustentabilidade ambiental e os imperativos de desenvolvimento. Ao divergir dos modelos convencionais de consciencialização, este estudo apresenta uma abordagem contextual e abrangente que respeita as particularidades locais e está mais bem alinhada com a abordagem das crises ambientais e climáticas.

Palavras-chave: Ambiente - Coerência política - Educação para a conciliação - Imperativos de desenvolvimento - Sensibilização

Introduction

The growing literature on policy coherence reflects the governance challenges faced by many countries around the world, including those in Africa (Fopa Tchinda & Talbot, 2023; Righetini & Lizzi, 2021; Peters, 2021). For example, Cloete (2018) highlights governance inefficiencies in policy evaluation and measurement in South Africa, emphasizing that a lack of coordination between different policy frameworks leads to policy incoherence and hinders effective governance. Likewise, England et al. (2018) identify significant gaps in cross-sectoral policy integration, particularly in climate adaptation strategies. Their study shows that many adaptation plans are driven by international reporting requirements rather than local governance priorities, weakening national ownership and limiting effective implementation. Similarly, Olabisi and Wei (2024) examine the governance challenges associated with foreign direct investment policy design in sub-Saharan Africa, identifying weak regulatory frameworks, inconsistent policy implementation, and misalignment between national priorities and international investment expectations as key obstacles.

However, the extent of these challenges varies across contexts. In North Africa, for example, governance challenges are often linked to centralized state institutions, economic stagnation, and political instability, which have led to recent reversals in poverty reduction (World Bank, 2024). In contrast, sub-Saharan Africa faces more persistent struggles with fragmented governance, weak institutions, slow economic development, and vulnerability to climate change, making policy coherence and state capacity significant hurdles (Dougill et al., 2018). Nevertheless, these governance challenges remain a reality across Africa, with the legacy of colonialism

playing a significant role in shaping some of these persistent difficulties (Akhaine, 2020; Habiyaemye, 2020). This colonial legacy is also evident in education systems, which in many cases were originally designed to serve colonial interests rather than local development needs, contributing to gaps in skills, governance capacity, and economic productivity (Diallo & Sanou, 2023; Busia, 2023). Some governments have already risen to the challenge of addressing the effects of policy incoherence, while others are still slow to respond (Moure et al., 2021).

In most African countries, the concept of coherence has become an integral part of the discourse in economic, social, environmental, climate and development policies. According to several authors, the concept of policy coherence brings together policies or programs from different sectors, such as health, economy, environment, climate and development (Afionis et al., 2020; Fopa Tchinda & Talbot, 2023; May et al., 2005). More specifically, it is a process that aims to moderate, eliminate contradictions, and/or promote synergies among programs or public policies. Coherence is crucial for optimizing public policy outcomes, ensuring the effective implementation, and avoiding actions that, despite their good intentions, may undermine other governance efforts (Bocquillon, 2018; Peters, 2021).

In terms of contradictions or synergies, several public policies in African countries are directly influenced by internal and external pressures (Gonçalves et al., 2022; England et al., 2018). For example, there are contradictions between the priorities of international donors and those of local governments trying to meet the needs of their populations (AfDB, 2023; AFD, 2024; Fopa Tchinda, 2023; Olabisi & Wei, 2024). On the one hand, governments are trying to meet the urgent needs of their populations, particularly in terms of health, education, infrastructure and food security. On the other hand, they are under international pressure to reduce their environmental footprint and cut greenhouse gas (GHG) emissions. This dual constraint leads to fragmented policies where economic development imperatives clash with climate issues, exacerbating social and economic inequalities (Degron, 2023; Pradier, 2023). Recurring tensions thus arise when it comes to promoting natural resource exploitation, local development, health, education and, more recently, climate change and environmental protection (Diallo & Sanou, 2023;

Gourdon et al., 2024). This situation not only jeopardizes the achievement of the Sustainable Development Goals defined by the United Nations (UN) but also accentuates the vulnerability of the population.

Already severely affected by the weakness of their economies and the lack of effective and viable local infrastructure, several UN reports highlight the threat that climate change poses to African populations, which are among the most vulnerable in the world (Afeworki et al., 2022; Degron, 2023). Between the challenges of poverty and underdevelopment versus the environmental and climatic threats, none can be considered the lesser evil. It is therefore legitimate to ask whether Africa might be forced to compromise its development and well-being imperatives in order to better address environmental and climate challenges.

To address this question of Africa's holistic development and well-being imperatives, our study takes education as a central entry point while also examining its intersections with other key policy sectors. Therefore, education is considered a public policy area, as are sectors such as the economy, energy and the environment. A study on the role of education in addressing climate challenges found that “existing analyses of education systems suggest that they are not fulfilling their potential to motivate action that supports climate change mitigation and adaptation” (UNESCO & MECCE, 2024, p. 30). This finding corroborates the study by Bieler et al. (2017), which analyzed the coherence between education and climate policies in Canada's 13 provinces and territories. According to this study, education policies are insufficient, fragmented, and largely ineffective at addressing climate change comprehensively. This situation is even more acute in African contexts. Our study takes a cross-cutting look at education, environmental, economic and development policies in African countries. It contrasts two approaches: strategies to raise awareness of environmental issues and strategies to conciliate the development imperatives with environmental and climate challenges (Degron, 2023; Gaborit et al., 2024; Pradier, 2023). Our aim is to explore how education oriented towards conciliation can better respond to the continent's current challenges. Currently, education is one of the pillars of Africa's future, which probably explains why the African Union has chosen education as the central theme for the year 2024 (African Union, 2024).

Methodology

To support our analysis, this study is based on a literature review and uses document analysis to examine the materials identified (Mwita, 2022). Consequently, documents were selected based on their relevance to education, environment, climate change, policy coherence, economy, and development in Africa. Sources reviewed include academic articles, policy reports, and information from the official websites of relevant international organizations, including reputable news sources. Keywords such as “education and climate change in Africa,” “policy coherence in environmental and development in Africa,” and “education for sustainable development” were used to identify relevant materials.

Our strategy primarily considered publications from 2015 to 2024 to ensure a focus on recent developments on topics such as policy coherence, Africa’s priorities for its development, environment and climate change. However, in order to place the research question in a broader international context, some foundational studies not specifically focused on Africa were also included. Preference was given to peer-reviewed academic articles, policy reports, and official publications that contribute to an understanding of these interconnected issues. Studies with a limited regional focus outside of Africa or lacking empirical or analytical depth were generally excluded. In addition, related topics were considered to provide a broader contextual understanding.

As such, this study contributes to the literature on education and sustainable development in Africa by critically analyzing the intersection of environmental issues and development imperatives through the lens of education policy. Our analysis is informed by a cross-cutting approach, drawing on insights from educational, environmental, economic, and policy studies. Through a qualitative synthesis of relevant literature, we identify gaps, assess policy coherence, and explore implications for sustainable development in Africa.

Beyond enriching academic debates, this study also seeks to provide decision makers with concrete ways to integrate a balanced perspective on both environmental and development imperatives into education policy. By highlighting the interconnectedness of education, environmental concerns, and development

imperatives, our findings contribute to a more coherent and sustainable future for the African continent.

Environmental challenges and development needs: Towards an Integrated Approach

Environmental and Climate Issues in Africa

According to a systematic review covering the period from 1990 to 2022, Africa is the region with the highest number of studies on environmental policy coherence, following the European Union (Fopa Tchinda & Talbot, 2023). Far from reflecting greater coherence in national and local policies, this finding reveals the interest that Africa is drawing from international organizations that are leaders in promoting environmental and climate issues (AFD, 2024; AfDB, 2023). This interest can be explained in two ways.

First, the increase in environmental and climate crises on the continent. According to several studies, Africa is one of the most vulnerable regions in the world to the effects of climate change, a reality shared by several other continents such as Europe and North America (Degron, 2023; Itaka & Nkongoto, 2024; JeuneAfrique, 2023). This vulnerability is explained by the high dependence of many populations on natural resources (e.g., agriculture and fisheries) and the low adaptive capacity of the road, energy, and economic infrastructure (Diallo & Sanou, 2023). In addition, flooding, coastal erosion, drought, desertification, and declining water resources severely affect livelihoods and exacerbate social and economic inequalities (Norbrook, 2023). For example, Lake Chad has lost more than 90 percent of its surface area since the 1960s (UNEP, 2018). As a result, its shrinking exacerbates regional tensions and conflicts over resources, primarily affecting the most vulnerable populations.

Second, the importance of the African biosphere to GHG mitigation (Bigombe Logo & Toukéa, 2023; Bisthoven, 2021; JeuneAfrique, 2023). This biosphere includes natural ecosystems and biodiversity, such as tropical forests, savannas, wetlands, deserts and coasts. Large tropical forests, such as those in the Congo Basin, play a critical role in carbon sequestration. Therefore, the protection and management of these forests are closely linked to the global goal of reducing

greenhouse gas emissions (AFD, 2023; Degron, 2023). While international organizations often prioritize the conservation of natural ecosystems and biodiversity, these resources can also play a crucial role in supporting the development and well-being of African populations, a priority highlighted in the African Union's Agenda 2063 (African Union, 2015).

The imperatives of development and well-being

Infrastructural, technological and economic development, alongside the well-being of the population, are major priorities for the governments worldwide. This is particularly true for African countries, where economic inequalities, climate challenges and the desire for steady and sustainable growth characterize the context (Rabier, 2024).

For instance, Habiyaemye (2020) emphasizes that African countries with abundant natural resources, including the Democratic Republic of Congo, Angola, and Sierra Leone, encounter significant economic inequalities despite their vast mineral wealth. These nations face challenges such as slow economic growth, persistent poverty, and weak human capital, largely resulting from inadequate resource governance and economic mismanagement. In a similar vein, Gourdon et al. (2024) explore the economic and environmental challenges associated with the extraction of critical minerals, such as lithium and cobalt, which are pivotal for the green energy transition. While these minerals offer immense growth prospects, governance issues and foreign dominance in the sector frequently limit their benefits for local populations. These imperatives are part of a dynamic where economic development, poverty alleviation, health, education and environmental sustainability come together to shape the continent's future. However, the “lack of policy coherence affects the ability of African countries to properly coordinate and synchronize development initiatives to achieve desired outcomes” (Owusu-Sekyere, 2020, p. 755). Although Africa is one of the richest continents in terms of natural resources and development opportunities, most of its countries remain among the poorest in the world (AfDB, 2023; Diallo & Sanou, 2023; Habiyaemye, 2020).

In such a context, poverty remains a major challenge across many African countries, where many of the population lives below the poverty threshold. For instance, the World Bank (2024) reports that of the 692 million people globally in extreme poverty in 2024, 67% of them reside in Sub-Saharan Africa. According to several reports by international organizations, economic growth in some countries has not always translated into significant poverty reduction (Beegle & Christiaensen, 2019; UN-CEA, 2022; World Bank, 2022a). The development imperative rests on the adoption and implementation of coherent and effective economic policies that are able to redistribute the fruits of growth away from corruption (Habiyaremye, 2020; Pradier, 2023; Fopa Tchinda, 2023). Beyond poverty reduction, infrastructure development is essential to ensure the well-being of local populations (Owusu-Sekyere, 2020). For example, limited access to potable water, electricity, and safe roads not only hampers economic development, but also affects people's quality of life. In sub-Saharan Africa, nearly 568 million people lack sustainable access to electricity (World Bank, 2022b). Moreover, access to quality healthcare is also fundamental to the well-being of populations (Chirisa et al., 2020). Many parts of the continent face health challenges ranging from infectious diseases such as malaria and HIV to underfunded healthcare systems. This critical state of health infrastructure is often blamed on poor governance and a lack of adequate funding for health networks. Finally, education is also a development imperative for Africa (Busia, 2023; Owusu-Sekyere, 2023; African Union, 2024). With its predominantly young population, Africa has significant demographic potential that must play a critical role in its development through quality education, by stimulating research and innovation with models adapted to African contexts (World Bank, 2024). For example, Uleanya (2023) highlights that youth comprises 60% of Botswana's population, underscoring the importance of investing in education to prepare the next generation for future challenges. However, the lack of adequate funding and the adoption and implementation of innovative education policies and programs are all factors that hinder the continent's progress towards the ranks of the developed world.

Contrasting local versus donors' priorities

Far from the Western diplomatic circle, where most of Africa's so-called priorities are shaped, the realities of local governments and populations often diverge from those set by international donors and UN agencies regarding climate change and environmental protection. As such, Agenda 2063, the African Union's long-term development framework, focuses primarily on priorities centered on pillars such as the economy, development, and scientific and technological innovation (African Union, 2015). Depending on the will of each country, this agenda calls for its principles to be adopted at regional and national levels, as close as possible to people's daily lives. However, such an agenda cannot be achieved by ignoring the recurrence of multiple environmental crises. It must be implemented in a way that takes into account local realities, without ignoring people's current priorities for development and well-being (Degron, 2023; Norbrook, 2023; Rabier, 2024). Focusing solely on environmental and climate issues to the detriment of these priorities would risk alienating populations from these environmental challenges. To achieve this, alternative and integrated approaches must be considered, with the participation of populations, by conciliating holistic development and well-being priorities with international climate and environmental concerns (Pradier, 2023). In such a context, education seems to be an appropriate lever to accompany such a change, conciliating policies in these different fields to innovate and achieve steady and sustainable development, following local paradigms (Akhaine, 2020; Busia, 2023; Noyoo, 2022).

Education to the rescue of policy incoherence

UNESCO's recommendations

In 2021, UNESCO outlined its goal "to incorporate environmental education as a fundamental component of the basic curriculum in all nations by 2025" (Merçan & Selçuk, 2023, p. 105). The initiative was following a study of school policies and curricula in 46 UNESCO member countries, including several in Africa (UNESCO, 2021). The findings highlighted that "over half of education policies and curricula studied made no mention of climate change" (UNESCO, 2021, p. 2). While the report notes a growing awareness of environmental and climate issues in the scientific literature on Africa, this is not reflected in educational policies and

programs (UNESCO, 2021). The report recommends that greater emphasis be placed on integrating environmental issues into education, mobilizing not only cognitive but also socio-emotional skills. UNESCO also recommends, among other measures, that school staff be equipped with strong sustainable development skills through a shift from a theoretical to action-oriented learning and the integration of sustainability into national education policies (UNESCO, 2021; UNESCO, 2024). While these recommendations are valuable and may be valid in other contexts, they do not address the imperatives of development and well-being for African populations. In fact, they present a one-way sensitization model that fails to conciliate environmental issues with the imperatives of development and human well-being. As they stand, these proposals will find it difficult to be accepted in an African society where the main priorities are economic growth, health, education and the development of energy, roads and technological infrastructure (Chirisa et al., 2020; UN-CEA, 2022; Owusu-Sekyere, 2020).

Implementing awareness-raising strategies

In general, the most common actions, which absorb a significant part of the budgets in the environmental and climate action plans of several countries, are focused on awareness-raising (Khatibi et al., 2021; Government of Canada, 2020). On the social front, environmental and climate issues have led to activism through demonstrations and protests. Similarly, these actions have been driven by an “environmentalist approach focused on awareness-raising and activism” (Gaborit et al., 2024, p. 158). In the military field in France, for example, the climate and defense strategy integrate four axes consisting of “awareness-raising and training on climate change defense issues [...], adaptation of the armed forces [...], environmental protection [...], cooperation” (Vandier, 2023, p. 16). According to Halpern et al. (2024), it is essential to raise awareness among authorities and the public and to influence the implementation of climate policies. Similarly, in a study on governance and natural resource management in West Africa, Diallo and Sanou (2023) identify awareness-raising campaigns as an essential lever for promoting sustainable management of transboundary natural resources and strengthening cooperation between communities living in border areas. Furthermore, “the 2030

Agenda for Sustainable Development and the Paris Agreement on Climate Change unanimously emphasize the importance of education and public awareness in the march towards sustainable development” (UNESCO & UNFCCC, 2017, p. IV). This is an observation that places awareness-raising and education among the important strategies integrated in the fight against the effects of environmental and climate crises.

From awareness to conciliation

Although weakly mentioned in some school curricula in several countries around the world, this awareness-raising strategy is slow to produce effective results in many countries, particularly in Africa (UNESCO, 2021). This situation highlights the need for African countries in particular to adopt alternative strategies to those used in Western countries (Akhaine, 2020; Amin, 2017; Noyoo, 2022). As a matter of fact, the daily reality of the African population is different from that of the population of developed countries such as the United States, Canada, France, or even China. This conclusion is corroborated by numerous studies (e.g., Ake, 1981; Akhaine, 2020; Amin, 1974; Noyoo, 2022). For instance, Samir Amin, as cited by Noyoo (2022), underscores the imperative for African countries to adopt autonomous and alternative development models rather than replicating Western paradigms. Similarly, Claude Ake, as discussed by Akhaine (2020), advocates for development strategies that prioritize local conditions and political autonomy over externally imposed models.

From this perspective, we propose to reject the model of awareness-raising on environmental and climate issues in favor of an approach that conciliates the imperatives of development and well-being with climate challenges (see Figure 1). The principle of awareness-raising conveys ignorance (Scussel, 2024; Wayland, 2023); in this case, it could suggest that African populations are ignorant of environmental and climate challenges (Diallo & Sanou, 2023). Yet environmental and climate crises are rooted in African memory, as populations in past centuries possessed the knowledge necessary to deal with them through indigenous knowledge (Bigombe Logo & Toukéa, 2023; Oloruntoba & Falola, 2020; UNESCO, 2021). The conciliation approach is intended to be holistic and respectful

of ancestral and local knowledge. It promotes coherence in education policies by integrating environmental issues, development and well-being, three essential components for solving environmental and climate crises. This conciliation approach may be better suited to African populations because: (1) it does consider local development priorities; (2) it values ancestral and local knowledge; (3) it allows African countries to freely dispose of their natural resources without necessarily aligning themselves with Western models; (4) it is perceived as an opportunity rather than a constraint; (5) its integration into educational policies brings added value to students who will see it as a lever for development and not as a constraint imposed to meet the priorities of Western chancelleries.

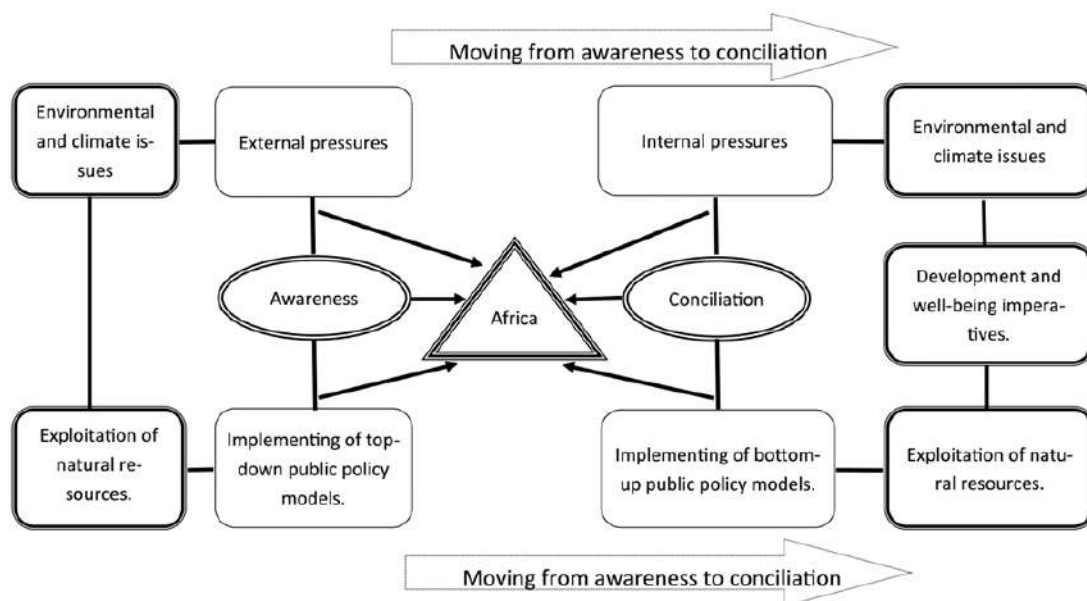


Figure 1: Moving from awareness to conciliation

Conclusion

Considering the critical need for development and well-being of African populations, this analysis has examined the awareness-raising strategies that have so far been adopted in several countries to tackle environmental and climate crises (Khatibi et al., 2021; Diallo & Sanou, 2023). The limited integration of environmental and climate concerns into education policies and programs across multiple nations suggests a failure in engaging and persuading the education community. Furthermore, even in Western countries, these strategies have been

slow to yield meaningful reductions in greenhouse gas emissions or alleviate environmental crises (UNESCO, 2021; Norbrook, 2023).

In this regard, there is little evidence to suggest that these strategies will yield meaningful benefits for African populations, whose priorities diverge significantly from Western focuses on reducing GHG emissions and protecting biodiversity. Instead, most African governments and populations prioritize health, education, economic growth, and the development of roads and technological infrastructure (Chirisa et al., 2020; AfDB, 2023; African Union, 2024). Western-imposed constraints on Africa concerning environmental and climate issues have driven the adoption of inconsistent policies, exacerbating the living conditions of African populations (Fopa Tchinda, 2023; Owusu-Sekyere, 2020; Pradier, 2023).

In this article, we have proposed an approach that shifts the focus from an awareness model to a conciliation model. A limitation of this study is the lack of an in-depth empirical analysis of the specific cases of each African country. Although the study proposes a reflection on the importance of conciliatory education, further research on the concrete results and measurable impact of this approach in different African countries would be necessary to fully validate its effectiveness.

However, by integrating this model into educational policies, education on these environmental and climate crises can evolve from a simple awareness-raising to a conciliation strategy. In this way, it will be possible to use the results of the imperatives of development and well-being to face these challenges of sustainability holistically. This requires the innovation of educational models adapted to the African context, capable of proposing practical solutions to the specific challenges of each country (Busia, 2023; Uleanya, 2023).

In order to promote the development of innovative educational models that are adapted to the African context, it is essential that governments contextualize curricula in a manner that reflects African values while also incorporating digital and technological skills, including coding and Artificial Intelligence, with the aim of preparing students to thrive in the Fourth Industrial Revolution (Uleanya, 2023; Magagula & Awodiji, 2024). Concurrently, the scope of technical and vocational education should be enhanced to ensure that training is aligned with labor market demands, facilitated by localized innovation and research that fosters African-led

solutions (Busia, 2023; Magagula & Awodiji, 2024). Furthermore, the enhancement of teacher training through the integration of advanced pedagogical approaches is crucial for ensuring effective delivery. The utilization of digital learning platforms and community-based centers to bridge the rural-urban educational divide will lead to enhanced access to quality education (Busia, 2023; Wanyama et al., 2024). Finally, policy reforms and public-private partnerships should drive competency-based, technology-driven education systems that align with Africa's development needs (Wanyama et al., 2024; Magagula & Awodiji, 2024).

By promoting this approach in the educational system, African countries will not only be able to motivate their youth to contribute to the development and well-being of their populations, but also to adopt efficient solutions compatible with their local realities, while playing a central role in the global transition to a sustainable future.

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