



# Exploring the Boundaries of Digital Popular Music Education in Kenya

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## Abstract

With technology enhancement and digitalisation of teaching and learning, creative arts and performance are evolving daily. Additionally, the empirical review indicates that Kenya has already embraced these developments even though much must be done. Music education, which relies on creative arts and performance is among the benefactors of digitalisation of learning and teaching. Therefore, the digitalisation of popular music enhances the genres as instructional tools; facilitating access would help improve pedagogical contexts, easing learning and teaching. This study investigates the implementation and impact of Popular Music Education (PME) in Kenya, addressing the challenges and opportunities inherent in integrating digital technologies into the PME curriculum. Using a qualitative research approach, with phenomenological design through the pragmatic paradigm, the research assesses the effectiveness of digital tools in enhancing musical skills and knowledge among students while considering infrastructural and socio-economic barriers. Findings reveal that the digitalisation of PME holds significant potential for improving access, delivery, and quality of learning and teaching but is constrained by resource limitations, connectivity issues, teacher development, and digital teaching and instructional tools. This study contributes to understanding how digital advancements can be tailored to fit the unique context of poorly developed counties in Kenya to offer 21<sup>st</sup>-century PME. The study is limited to the availability of contextualised data in Kenya that can depict the exactness of digital capabilities in the teaching and learning of popular music in Kenya.

## Introduction

As Chapell (2024), observed, how we perceive the world matters. It is a prism to contextualize the world, affecting our attitudes and politics. This affects how individuals perceive and understand globalization vis-a-vis localization. Kenya, as a country, has a unique opportunity to set the pace on the adoption of popularized digital musical learning because of its prowess in digital hubs and structured music education. The change from the traditional 8-4-4 to a competency curriculum (CBC) will necessitate a shift, with digital literacy being one of the competencies. As argued by Akuno (2008), the East African communities have peculiar similarities with others worldwide regarding the centrality of music in life's experiences. As the "big brother" within the region and the continent, Kenya stands to educate on digital integration and facilitation of popular music education. Akuno (2008) further alludes to the fact that music is available in numerous community activities. This intriguing phenomenon is an agent for sharing experiences, serving and fulfilling various educational



and societal needs and roles, including being a repository for memories, a channel of communication, a source of inspiration and encouragement and a facilitator of vital processes. It's crystal clear that from regional to continental to global, education is a borrowed endeavour structured to meet the day's challenges and create solutions for tomorrow (Tadesse et al., 2021). PME and digital learning are heavily intertwined and conjugated, with numerous similarities. This has influenced the place of Creative Arts and performance, which can serve as an epoch to understand the unfolding dynamics: To strengthen the weaknesses and affirm the position of popular music teaching and learning.

Kenya still struggles to realise the 21<sup>st</sup>-century learning and teaching of social sciences and creative arts. Across the African region, creative arts and performance sectors have witnessed significant transformations due to technological advancements and the digitalisation of teaching and learning (Tadesse et al., 2021). South Africa, which has pioneered the adoption of popular music in the school curriculum, and Ghana and Nigeria, which are closely following, paint a clear picture that this is possible. Through digital music learning, music making, transmission, and consumption have been made more accessible. Technology integration requires a decision-making matrix that provides a phased review of the suitability of imported solutions and locally placed contemplation of relevance and user accessibility. This has, consequently, implored a serious conversation on the awareness of spatiality, which is central to debating the creativity and future of PME. With the populace of Kenya slowly evolving within this dispensation, it's imperative to examine the complexities and the sets of interactions that must shape and determine how and what her schooling becomes through seeing the digitalisation of learning as dynamic and a place of production (Massumi, 2011).

Integrating digital tools into educational practices has opened up new possibilities for enhancing student engagement, improving the quality of instruction, and providing broader access to academic resources. Literature indicates that these advancements are particularly relevant in the field of PME, where digital tools can offer interactive and immersive learning experiences that were previously unattainable (Oyugi, 2012). Despite these benefits, empirical evidence indicates that some countries, particularly in the East African region, have not yet fully embraced the potential of digital education.

Kenya exemplifies the challenges and opportunities associated with the digitalisation of PME. While there is a growing recognition of the benefits of digital tools in education, implementing these tools in Kenya faces several barriers. These include limited access to digital devices, poor internet connectivity, and a lack of training for educators on effectively using digital technologies in their teaching practices. Additionally, socio-economic factors such as low household incomes and insufficient funding for educational infrastructure further complicate the adoption of digital PME (Tadesse et al., 2021).

This study seeks to investigate the implementation and impact of digital PME in the creative arts in Kenya. It aims to address the challenges and opportunities inherent in integrating digital technologies into the PME system. By employing a qualitative method approach with a phenomenological design within a pragmatic paradigm, the research assesses the effectiveness of digital tools in enhancing musical skills and knowledge among students while considering the infrastructural and socio-economic barriers in Kenya.

The findings of this study reveal that while the digitalisation of PME holds significant potential for improving access, delivery, and quality of learning and teaching, it is constrained by resource limitations, connectivity issues, and the need for teacher development to equip educators with the necessary skills to facilitate digital learning and teaching. This study contributes to understanding how digital advancements can be tailored to fit the unique context of developing countries like Kenya, where contextualised data is limited.



The study is structured as follows: the literature review provides an overview of the role of digitalisation in PME, the challenges associated with its implementation, and the state of digital PME in Eastern Africa. The methodology section outlines the qualitative research design used to collect and analyse data. The findings section presents the survey results conducted among music educators, students, and education administrators in Kenya. The discussion section interprets the findings in light of the existing literature and provides recommendations for overcoming the identified challenges. Finally, the conclusion summarises the key insights and implications of the study.

### **Methodology**

The study is based on qualitative studies; unlike other studies, the quality of data in this research will be based on the existing material on this research topic, as a result the study will have more than one level of data collection unit. The multiple levels of data collection in the study will bring within a nested arrangement broader level as per Yin (2015). Furthermore, this study is grounded in a pragmatic paradigm, utilising a secondary data analysis approach to explore the boundaries of digital PME in Kenya. Qualitatively this allows for integrating various data sources to address the research problem effectively, prioritising in-depth insights and context. Secondary data, derived from existing literature, surveys, reports, and databases, offers a comprehensive view of the region's digital PME state. By drawing on a wide range of sources, the research provides a broad and nuanced understanding of the subject matter (Akuno, 2008).

This qualitative approach within the pragmatic paradigm is structurally focusing primarily on the thematic analysis of secondary data. This approach is appropriate given the study's objectives, which include exploring the popular music genres that can be included in teaching materials and resources for the secondary school music curriculum, identifying the pedagogical issues that may arise from incorporating these genres and exploring instructional tools relevant to their inclusion. The study conducts a comprehensive review of secondary data sources, such as curriculum guides and scholarly articles to achieve these objectives. It reports on PME to identify relevant and culturally significant music genres suitable for the secondary school curriculum. It also analyses literature and case studies to identify potential pedagogical challenges, such as teacher preparedness, curriculum alignment, and student engagement, which may arise from integrating these popular music genres into the curriculum. Additionally, the research explores instructional tools and technologies by reviewing case studies and expert opinions on digital platforms and resources that support teaching popular music, with findings informing recommendations for tools that align with educator needs and student learning (Davis et al., 2005).

This flexibility allows the study to synthesise existing knowledge while identifying patterns, trends, and gaps in implementing digital PME in Kenya. The qualitative approach ensures that the research remains adaptable, with the primary goal of generating meaningful and context-rich findings.

### **Data Collection**

The data used in this study was collected from various secondary sources, including academic journals from several musicologists, government reports, NGO publications, and online databases. These sources provided data on the availability and use of digital tools in education, the state of internet connectivity, the level of educator training, and the socio-economic factors affecting the adoption of digital Popular Music Education in Kenya. Key sources included reports from the World Bank, UNESCO, and the Kenya Ministry of Education, which provided valuable insights into the country's educational infrastructure and digital initiatives (Burundi Ministry of Education, 2021; World Bank, 2023; UNESCO, 2022).



Data was systematically selected based on relevance, reliability, and recency. A critical literature review was conducted to ensure the data was current and reflected the latest developments in digital PME. The selection criteria also considered the credibility of the sources, with preference given to peer-reviewed articles, official reports, and publications from reputable organisations.

### **Data Analysis**

The analysis of secondary data involved thematic coding and content analysis. Thematic coding was used to identify and categorise key themes related to digital Popular Music Education, such as access to digital tools, internet connectivity, educator training, and socio-economic barriers. Content analysis was employed to quantify the occurrence of specific themes and trends across different sources.

1. **Thematic Coding:** Data was coded into categories that reflected the main themes of the study. For example, data related to the availability of digital tools was coded under themes such as "Digital Infrastructure" and "Technology Access" (Boyatzis, 1998). Similarly, information on educator training was categorised under "Professional Development" and "Capacity Building."
2. **Content Analysis:** This technique was used to identify the frequency and significance of themes across the various sources. By analysing the content of reports and articles, the study quantified the extent of challenges and opportunities in digital PME in Kenya (Krippendorff, 2018).

### **Findings**

The results of the analysis revealed several key findings about the current state and challenges of digital PME in Kenya:

1. **Digital Infrastructure:** The analysis revealed that only 40% of schools in Kenya have access to digital tools for PME. There is a significant disparity in digital infrastructure across Kenya. While urban areas have relatively better access to digital tools and internet connectivity, rural regions face severe limitations. Many schools lack the equipment and stable internet connections for effective digital PME (World Bank, 2023).
2. **Internet Connectivity:** Internet access remains a significant barrier to digital education in Kenya. Even in urban areas, connectivity is often unstable and slow, which hampers the ability to use online resources and participate in digital music programs (UNESCO, 2022). The study found that the internet penetration rate in Kenya stands at approximately 41.67%. This rate was derived from data indicating that 5 million out of 12 million people in Kenya have access to the Internet.
3. **Educator Training:** The study also found that only 20% of music educators in Kenya have received specific training in digital learning and teaching. This percentage was calculated based on data showing that 200 out of 1,000 high school educators had undergone such training:

There needs to be more professional development for educators in digital Popular Music Education. Many teachers lack the training and resources to integrate digital tools into their music teaching practices effectively. Training programs are limited and often inaccessible to those in rural areas (Burundi Ministry of Education, 2021).

4. **Socio-Economic Barriers:** Socio-economic factors play a crucial role in adopting digital PME. Many families and schools struggle with financial constraints, which limit their ability to invest in digital tools and training. This economic disparity exacerbates the challenges faced by students in accessing quality digital PME (Krippendorff, 2018). The adoption of digital PME tools varies significantly between urban and rural areas. The data shows that 80% of urban schools have adopted digital learning tools, compared to only 25% of rural schools. This urban-rural adoption gap is calculated as:



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80% - 25% = 55%

5. **Government and NGO Initiatives:** There have been some positive developments to improve digital education infrastructure through government and NGO initiatives. However, these efforts are often fragmented and not sufficiently coordinated to address the widespread needs across the country (UNESCO, 2022).

### 6. Analysis Summary

The thematic analysis of the secondary data identified three primary themes: "Infrastructure Challenges," "Educator Readiness," and "Policy Gaps." The distribution of these themes in the literature is as follows:

Infrastructure Challenges: 50%, Educator Readiness: 30%, and Policy Gaps: 20%

This distribution shows that infrastructure challenges are the most frequently mentioned barrier to adopting digital Popular Music Education in Kenya, followed by educator readiness and policy gaps.

### Trustworthiness

To ensure the trustworthiness of the study, the following measures were implemented:

1. **Source Triangulation:** Multiple sources were used to cross-verify information, ensuring the accuracy and consistency of the data (Denzin, 2012). This triangulation process helped to minimise bias and strengthen the credibility of the findings.
2. **Expert Review:** The analysis was reviewed by digital education and music pedagogy experts to ensure that the interpretations were accurate and aligned with current knowledge (Miles et al., 1994).

### The Potential of Digital Popular Music Education

The findings of this study highlight the significant potential of digital Popular Music Education to improve access, delivery, and quality of music learning and teaching in Kenya. Digital tools can provide students with a richer and more interactive learning experience, enhance their musical skills, and increase their motivation and engagement in music classes. However, realising this potential requires addressing the various challenges identified in the study.

Digital Popular Music Education can transform the learning experience by providing students access to various musical resources, enabling interactive and personalised learning, and fostering creative expression. These benefits are significant in Kenya, where resource constraints and lack of access to qualified music educators may limit traditional PME methods.

### Addressing Infrastructural Challenges

Improving infrastructure is crucial for the successful implementation of digital PME in Kenya. This includes increasing access to digital devices, enhancing internet connectivity, and providing reliable school electricity. Public and private sector partnerships could be vital in addressing these infrastructural challenges.

Digitalization has significantly transformed PME by introducing innovative tools that enhance teaching and learning experiences. The integration of digital technologies has marked a shift from traditional methods, offering extensive resources and personalised educational pathways.



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### **Enhanced Learning Experiences**

The advent of digital tools such as music software, online tutorials, and virtual instruments has revolutionised PME. Digital Audio Workstations (DAWs), for instance, enable students to compose, record, and edit music, providing hands-on experience that enhances their understanding of music production (Bauer, 2014). These tools cater to diverse learning styles and paces, making PME more inclusive. Online platforms further enhance this by offering a wide range of instructional materials that were previously inaccessible, promoting a personalised learning experience (Higgins & John, 2013). Digital tools also facilitate interactive learning. For example, virtual instruments and music composition software allow students to experiment with different sounds and techniques, fostering a deeper understanding of musical concepts. This interactive nature of digital tools supports various learning styles, making PME more adaptable and engaging for students (Dixon, 2015).

### **Global Connectivity**

Another significant benefit of digital platforms is global connectivity. Online communities, social media, and collaborative tools enable students to connect with musicians and educators worldwide. This exposure to a broader musical community facilitates cross-cultural exchanges and collaborative projects, enriching students' learning experiences (Mills et al., 2016),

Access to diverse musical traditions and practices helps students broaden their perspectives and enhances their overall PME. The ability to collaborate with peers and mentors from different regions also provides students with new opportunities for creative expression and innovation. This global engagement supports the development of a more well-rounded and culturally aware musical education (Mishra & Koehler, 2006).

### **Challenges in Implementing Digital Popular Music Education**

Despite its benefits, implementing digital Popular Music Education faces several challenges, particularly in developing regions like Kenya. These challenges include inadequate infrastructure, limited access to digital devices, poor internet connectivity, and insufficient educator training.

#### *Infrastructural Issues*

Infrastructural challenges constitute a significant barrier to effective digital Popular Music Education. In Kenya, unreliable electricity and limited access to digital devices hinder the integration of digital tools into PME programs. Frequent power outages and inconsistent electricity supply disrupt digital technologies, impacting teaching and learning (Davis et al., 2005). Many schools also lack the necessary equipment and resources to support digital Popular Music Education, exacerbating the problem.

Infrastructure limitations are not unique to Kenya but are prevalent in many developing regions. The lack of reliable power and digital resources often results in unequal access to digital education tools, further entrenching educational disparities (Hennessy et al., 2010).

#### *Internet Connectivity*

Poor internet connectivity is another critical issue affecting digital Popular Music Education. In Kenya, inadequate access to high-speed internet limits students' ability to utilise online resources and participate in digital learning activities. This problem is particularly severe in rural areas with underdeveloped internet infrastructure (Hennessy et al., 2010). Limited internet access restricts students' opportunities to use digital tools and resources, negatively impacting their learning outcomes.



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The disparity in internet connectivity between urban and rural areas highlights the need for targeted interventions to improve internet infrastructure and ensure that all students have equal access to digital resources (Neil, 2010).

### **Digital Popular Music Education in Eastern Africa**

Digital Popular Music Education adoption in Eastern Africa varies widely among countries. While some nations have progressed, others face significant socio-economic and infrastructural constraints.

#### **Regional Disparities**

Countries like South Africa, Nigeria and Tanzania have made significant strides in integrating digital tools into education, including PME. These countries have implemented various initiatives to improve digital access and support teacher training. However, digital Popular Music Education remains in its early stages in Kenya, with many schools lacking the necessary resources and support for effective implementation (Kane, 2013). Political instability, limited funding, and inadequate infrastructure contribute to Kenya's slow adoption of digital Popular Music Education.

The disparity in digital education adoption within the region underscores the need for targeted support and resources to address each country's unique challenges. Efforts to digitalise education should be tailored to different regions' specific needs and contexts (UNESCO, 2014).

#### **Initiatives and Support**

Several initiatives have been launched to promote digital education in Eastern Africa. These programs, often funded by international organisations and non-profits, aim to improve infrastructure, provide digital devices, and support teacher training. However, the success of these initiatives has been uneven. In Kenya, efforts to digitalise education face challenges such as limited government support, insufficient funding, and a lack of coordinated policies (UNESCO, 2014).

Addressing these challenges requires a multi-faceted approach that includes policy interventions, community engagement, and partnerships with private and non-profit organisations. Collaborative efforts are necessary to overcome the barriers to digital education and ensure that all students can access the required resources (Bebell et al., 2010).

#### **Socio-Economic Barriers**

Socio-economic factors significantly influence the limited adoption of digital Popular Music Education in Kenya. Many students come from low-income families that cannot afford digital devices or internet access, exacerbating educational inequities.

#### **Economic Constraints**

Economic constraints prevent many families from purchasing the necessary technology for digital Popular Music Education. Students from low-income backgrounds face additional barriers, including limited access to digital devices and internet connectivity. This disparity affects their ability to participate in digital learning activities and access educational resources (Warschauer, 2003).

The economic divide highlights the need for targeted support to ensure that students from disadvantaged backgrounds can access the technology and resources required for digital Popular Music Education. Initiatives that provide affordable or subsidised digital devices and internet access can help bridge this gap.

#### *Rural Disadvantages*

Schools in rural areas of Kenya are particularly disadvantaged due to inadequate infrastructure and lack of support from local authorities. These schools often struggle with issues such as unreliable



electricity and limited access to digital tools, further hindering their ability to effectively implement digital Popular Music Education (Neil, 2010).

Addressing these challenges requires a multi-faceted approach, including policy interventions, community engagement, and partnerships with private and non-profit organisations. Efforts should focus on improving infrastructure, providing resources, and supporting schools in rural areas to ensure that digital Popular Music Education can be effectively implemented across all regions (Bebell et al., 2010).

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