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The Role of Artificial Intelligence in Transforming Music Education

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ABSTRACT

Conventional music teaching and learning have been based on embodied communication among educators, learners, performers, and audiences. Nevertheless, the growing diversity of learners, unequal access to quality instruction, and the rising need for personalized learning have revealed limitations in the structure typical of traditional pedagogical models. The emergence of Artificial Intelligence (AI) in education is both an opportunity and a concern, with several pedagogical and cultural implications. The paper attempts to critically trace the emergent role of AI in music education by questioning its instructional effectiveness, its cultural impact, and the relational aspects of musical practice, rather than assuming its use as a solution. Following constructivist learning theory, the research employs a qualitative case study design, using structured questionnaires distributed to learners and semi-structured interviews with music teachers at the sampled schools that implement AI-supported music learning. The results indicate that AI solutions can be applied to provide individualized feedback, enhance learner engagement, and extend access in situations where professional resources are limited. Concurrently, the statistics demonstrate systemic issues, such as uneven digital infrastructure, a lack of teacher training, AI bias and the dominance of Western musical models within AI systems. The paper says that AI in music education must be viewed not as a neutral change, but as a sociotechnical intervention that transforms pedagogical relations, hierarchies of knowledge, and cultural representation. It can be appreciated through being critically integrated, contextually sensitive, and under constant human supervision. This study, by foregrounding affordances and constraints, can contribute to current discussions on the ethical and culturally sensitive application of AI in higher-education creativity.

Keywords: Artificial Intelligence, Digital Learning, Music Education, Traditional Pedagogies

I. INTRODUCTION

Music education is a learning activity in which pupils construct musical knowledge, skills, creativity, expression, and appreciation through practice, performance, interaction, and collaboration. In many African contexts, music learning has been passed down and learned within communities and cultural contexts, through social and cultural processes (Agawu, 2003). However, the digitalization of the world and evolving learning needs are radically changing how music is taught and learned. Artificial Intelligence (AI) has become a significant technology in music education, offering applications that facilitate personalized learning, real-time feedback, interactive engagement, digital resources, and music production. In a systematic review of 31 studies, Zhang et al. (2024) point out that AI is transforming music education by enabling personalized instruction, timely feedback, interactive learning experiences, and structured digital resources. AI allows learners to practice at their own pace, get instant feedback, explore musical ideas and develop creativity. It can also support teachers to have additional resources to support learners with different needs. However, the use of AI presents challenges related to access to digital devices and internet connectivity, teacher readiness, cultural relevance, human interaction, creativity, and data privacy. Such challenges emphasize the necessity of considering the pedagogical context when integrating AI into music education. UNESCO (2023) also stresses that the use of AI in education must adopt a human-centered approach and respect and uphold inclusion, equity, cultural and linguistic diversity, human agency, and appropriate teacher capacity. The importance of these in music education is especially significant, as musical learning must extend beyond technical development to include creativity, expression, cultural identity, group interaction, and meaningful interaction between the teacher and the learner. Although there has been a growing body of research on the applications of AI in music education, a significant empirical gap still exists. Existing research has overlooked the experiences and uses of teachers and learners in everyday music teaching and learning. It has made little use of AI applications, whereas technological possibilities have received more attention. Few studies to date provide context-specific insights into the advantages and challenges users encounter, as well as the approaches teachers take to integrating AI into existing music education practices. This disparity is especially significant in Kenya, where access to digital devices, internet connectivity, teacher readiness, and culturally relevant musical content could affect the success of AI-enhanced music instruction. Thus, empirical evidence is needed to help teachers and educational institutions use AI in ways that improve learning outcomes while ensuring that human interaction, creativity, cultural relevance, and the teacher's pedagogical role remain. The study adopted the constructivist learning theory, which regards learning as an active process in which the learner builds knowledge through experiences and interactions (Ackermann, 2001). Through this lens, AI can serve as a tool for practicing, receiving feedback, exploring ideas, and self-study, with the teacher maintaining their role as facilitator and deepening musical comprehension. Thus, this study investigated how Artificial Intelligence impacts music education in selected secondary schools in Nyandarua County, Kenya. The study aimed to explore how teachers and learners currently use AI tools in music education, identify the benefits and challenges of using AI in music education, and identify effective ways to integrate AI in music education.

II. METHODOLOGY

The research design employed a qualitative case study to explore experiences with and the use of artificial intelligence (AI) in music education. The case study approach was suitable for developing a context-based, in-depth understanding of new educational practices in under-studied Kenyan settings (Akuno, 2012). The research was grounded in the constructivist theory of learning, which emphasizes knowledge creation through active engagement with tools, social interaction, and experience (Piaget, 1976; Ackermann, 2001). The study was conducted in five secondary schools in Nyandarua County and the adjacent Laikipia County in Kenya. The selected schools were purposively chosen because they had been documented as using AI-based music learning tools.

The selected secondary schools and the music teachers and learners with experience using AI in music education constituted the study population, with a total of 42 participants: 8 music teachers and 34 music learners aged 14-18 years. Five music teachers and twenty-five music learners from Nyandarua County, and three music teachers and nine music learners from Laikipia County. The sample complies with qualitative case study norms that emphasize depth over breadth (Patton, 2015). The age group was chosen to be 14-18, as secondary school students at this age exhibit high levels of abstract thinking and self-directed learning control, which are needed for meaningful use of AI-based musical instruments (Piaget, 1972; Zimmerman, 2002). This stage of development is also consistent with the principles of constructivist learning, which focuses on knowledge construction (Vygotsky, 1978). Targeting a comparatively homogeneous sample by age also contributes to the methodological coherence and credibility of the qualitative case study (Patton, 2015).

Structured questionnaires were administered to learners to gather data, and semi-structured interviews were conducted with teachers. Prior to data collection, participants were provided with details about the study, and participation was voluntary; confidentiality and anonymity were guaranteed. The questionnaires were given to the selected learners, and individual semi-structured interviews were conducted with the eight music teachers with their consent. The interviews were recorded and subsequently transcribed for analysis.

The patterns of AI use, perceived benefits, and challenges were assessed through questionnaires, whereas pedagogical practices, ethical considerations, and professional views were discussed in interviews. Anonymization and neutral questioning were used during instrument pilot testing to improve data quality and minimize response bias (Orodho, 2009). Descriptive statistics were used to analyze quantitative data, and NVivo 14 was used to analyze qualitative data through a reflexive thematic analysis (Braun & Clarke, 2022). Data triangulation and member checking were used to enhance trustworthiness.

III. ETHICAL CONSIDERATIONS

The study was conducted in accordance with ethical principles to protect the dignity, rights, and welfare of participants and researchers. Appropriate research approvals and permissions were

obtained from the University, regulatory authorities, and the respective County and school authorities before data collection. The administrators of the participating schools were contacted before approaching the teachers and learners for permission. Participants received a clear explanation of the study's purpose, their role, how the data were collected, and how they would be used—all participating teachers and parents/guardians of learners under 18 years old provided written informed consent. Learners also consented to participate in the study. All participation was voluntary, and participants were told they could stop answering any question or withdraw from the study at any time without penalty or adverse effects. The anonymity and confidentiality of the data were protected throughout the study. The questionnaires, interview transcripts, and presentation of findings did not include participants' names, schools, or other identifying details. Codes or pseudonyms identified participants, and interview quotations were used to avoid revealing their identities. The researchers ensured that participation did not cause any physical, psychological, social, academic, or professional harm to respondents. All questionnaires, CD recordings, transcripts, and other research data were kept secure and accessible only to the researchers. The collected information was used solely for academic and research purposes. Where appropriate, data were reported in aggregate. The researchers maintained a professional, neutral attitude throughout the research process and refrained from coercion, undue influence, or manipulation of participants. Potential conflicts of interest were disclosed and properly addressed. The researchers also ensured that their relationships with the participating schools and respondents did not affect participation, data collection, data analysis, or the interpretation of the findings.

IV. RESULT

The findings provide a vivid picture of how AI is reshaping music education. AI is no longer a futuristic idea in these classrooms but is already taking shape in the music education ecosystem.

The following table shows how learners are using AI tools in music learning (N=34):

Table 1: How learners are using AI Tools in Music Learning

AI Tool	N	%	Main use by Learners
Yousician	13	38.2	Instrument practice and real-time feedback
Smart Music	9	26.5	Playing assigned repertoire and skill tracking
Artificial Intelligence virtual Artist (AIVA)	7	20.6	Composing original music
Other AI	5	14.7	Exploring creativity with tools like MuseNet, Humtap
Total	34	100.0	—

Table 1 shows that applying AI to learners is associated with skill development and self-practice rather than with composition or the rediscovery of creativity. Nearly half (38.2%; n = 13) relied on Yousician for live feedback on their pitch, rhythm, and instrument accuracy. This suggests that students appreciate AI tools that can imitate one-on-one coaching, especially when teachers are less accessible. Similarly, 26.5% (n = 9) of the learners used Smart Music, primarily to practice the assigned repertoire and monitor progress. This is one of the applications of AI that aligns with formal assessment practices.

By contrast, fewer learners composed with AI systems such as AIVA (20.6%, n=7) or other generative systems (14.7%, n=5). This suggests that creative AI applications are not yet a focus of classroom music learning and remain secondary. These trends were also reflected in qualitative responses. Students said that AI tools allowed them to practice on their own time and at their own pace, and one respondent described AI as his pocket music teacher. Interestingly, rural students emphasized that AI was a valuable aid because they could not afford their own tutor. In contrast, urban students provided more details on the variety of existing tools, likely due to better internet availability and digital infrastructure. These findings demonstrate that pedagogical inclination is no longer relevant to digital preferences for AI, and other factors, including geographical and infrastructural ones, raise concerns about equity in digital music learning.

Table 2: Benefits of AI in Music Education

The following table shows the benefits of AI in music education as stated by learners (N=34):

Benefit	N	%	Expanded Description
Personalized learning pace	21	84	AI tools are adapted to each learner's pace, allowing students to slow down when needed or advance when ready, reducing anxiety and fostering autonomy.
Increased motivation through gamification	18	72	Gamified elements (points, levels, visual rewards) made practice engaging and fun, encouraging regular practice without external pressure.
Boost in creativity	17	68	Learners used AI to compose, arrange, or improvise music even without prior

			experience, making creativity accessible and building pride in their work.
Support for students with disabilities	7	28	Voice commands and adaptive interfaces enabled students with physical or cognitive challenges to participate more fully in music activities.
Bridge for under-resourced schools	11	44	In schools lacking instruments or specialist teachers, AI provided supplemental instruction and practice, helping to level the playing field for economically disadvantaged students.
Reduction in teacher workload	15	60	Automation of routine tasks (e.g., tuning, scale drills, rhythm feedback) freed teachers to focus on differentiated instruction and creative lesson planning.

Note: The percentages exceed 100% because learners were allowed to identify multiple perceived benefits.

Table 2 above shows that creatively empowering learners, representing the aspect of personalization, and being motivated by AI are seen as key traits of the tool, not just the efficiency of the technical process. The personalized learning pace was the most commonly mentioned advantage (84%; n = 21), suggesting that AI-provided adaptive feedback enables learners to overcome anxiety, reread challenging sections and continue studying independently. This observation aligns with constructivist assumptions, which emphasize learner agency and self-management. Motivational benefits were also high, with 72% (n = 18) of learners reporting that gamified features stimulated regular practice. Instead of being enforced, AI-assisted practice was described as intrinsically motivating, shifting from compliance-based to interest-based learning. The benefits of creativity and an affective nature were evident, with 68% (n = 17) of respondents reporting that they became more creative when using AI. Students noted that it was possible to compose, organize, or improvise music even with little formal training, and it appears that AI reduces traditional barriers to entry into creative music-making. This is especially crucial when instruction is based on notation, and students who do not learn Western musical literacy may be excluded. In addition to learner-centered outcomes, respondents also identified benefits at the systemic level. Most of them (60%; n = 15) stated that AI has decreased teachers' workload by automating tasks such as tuning, rhythm correction, and scale testing. This suggests that AI can indirectly support instructional quality by freeing teachers to focus on expressive, collaborative, and culturally based activities. Benefits related to equity were present but uncommon. Students from under-resourced schools 44%, n = 11) considered the application of AI to be a form of compensation in the absence of instruments or special teachers, and 28% of students with

disabilities (n = 7) described it as a means of assisting learners with disabilities through adaptive interfaces and alternative input systems. Although these gains were less evident among respondents, they suggest a possible role for AI in inclusive and socially mindful music education.

Concerns and Challenges of AI in Music Education.

The following table shows responses to learners' concerns and challenges of AI in music education. The following table describes perceived challenges of AI in music education among learners (N = 34):

Table 3: Concerns and Challenges of AI in Music Education

Challenge	N	%	Expanded Description
Unreliable internet connectivity	17	50.0	Dropouts and slow speeds often interrupted practice and real-time feedback.
Limited access to suitable devices	14	41.2	Not every learner owns a smartphone or tablet that runs AI apps smoothly.
Technical complexity of interfaces	11	32.4	Confusing menus and unclear icons made some learners feel lost in the app.
Lack of culturally relevant content	9	26.5	Most tools focus on Western notation, leaving out local rhythms, songs, and styles.
Reduced human interaction	8	23.5	Learners missed the warmth and encouragement that only a live teacher can provide.
Subscription costs and in-app fees	7	20.6	Monthly charges or premium features make full access out of reach for several learners.

Note: Percentages above 100% are due to learners providing more than one concern.

Table 3 above shows that 50% (n=17) of learners reported that dropouts and slow internet speeds frequently interrupted their practice and real-time feedback. A great number of learners, 41.2% (n=14), noted that not every student owns a smartphone or tablet capable of running AI apps smoothly. Some learners, 32.4% (n=11), felt confused by menus and unclear icons, which made them feel lost within the application. Several learners (26.5%) (n=9) observed that most AI tools focus on Western notation, leaving out local rhythms, songs, and styles. A considerable number of learners, 23.5% (n=8), missed the warmth and encouragement that only a live teacher can

provide. Several learners, 20.6% (n=7), explained that monthly charges or premium features placed full access to AI tools out of their reach.

What is working

The following table shows effective ways of integrating AI in music education among learners (N=34)

Table 4: What is working

Strategy	N	%	Expanded Description
Hybrid teaching (AI + live instruction)	22	64.7	Learners practiced with AI tools at home, then applied those skills during interactive, teacher-led ensemble and improvisation sessions in class.
Teacher-led AI integration	19	55.9	Teachers demonstrated App features, curated exercises to match lesson goals, and guided students on when and how to leverage AI feedback.
Peer-led training	15	44.1	Tech-savvy learners coached classmates through app navigation and troubleshooting, fostering collaboration, reducing frustration, and building community.
Use of offline AI features	12	35.3	Downloadable lessons and offline modes allowed uninterrupted practice on buses or in areas with spotty Wi-Fi, keeping motivation high despite connectivity issues.
Inclusion of local repertoire	10	29.4	Uploading folk tunes, church hymns, and regional melodies into AI platforms made practice feel personal and culturally meaningful for students.

Note: Percentages exceed 100% because learners had the opportunity to choose more than one strategy.

Table 4 above shows that 64.7% (n=22) learners engaged in a hybrid teaching model, practicing with AI tools at home and then applying those skills during interactive, teacher-led ensemble and improvisation sessions in class. A large number of learners, 55.9% (n=19), benefited from teacher-led AI integration, in which instructors demonstrated app features, curated exercises to match lesson goals, and guided students on when and how to effectively leverage AI feedback. Some learners, 44.1% (n=15), participated in peer-led training, with tech-savvy classmates coaching

others through app navigation and troubleshooting, fostering collaboration, reducing frustration, and building community. Several learners, 35.3% (n=12), used offline AI features, downloading lessons and practicing in areas with spotty Wi-Fi to ensure uninterrupted practice and maintain motivation. Finally, a considerable number of learners, 29.4% (n=10), enriched their learning by uploading folk tunes, church hymns, and regional melodies into AI platforms, making practice feel personal and culturally meaningful.

Interviews with Music Teachers.

Music teachers shared layered insights on weaving artificial intelligence into their teaching. Across the board, they viewed AI not as a replacement for human guidance but as a helpful partner in the classroom. Teachers described how "AI is already transforming the flow of time, focus, and interaction during music lessons."

The majority of teachers indicated that they "started classes with short examples of AI usage, e.g., how to set tempo and rhythm with Smart Music or check their pitch accuracy with the help of Yousician." These examples had a twofold value: they were designed to show learners the technical aspects of the tools and to explain their musical purpose. One of the teachers said that 'they begin with the application to learn the rhythm, and then they plunge right into the ensemble playing. Such a practice indicates a hybrid pedagogical model in which AI can assist in acquiring individual skills, and a portion of classroom time is specifically allocated to collaborative performance, interpretation, and expressive music-making.

A central finding from the interviews is that AI tools are reshaping teaching priorities. Automating routine feedback on tuning, rhythm accuracy, and scale practice allows teachers to focus more on expressive aspects of music, such as phrasing, emotion, and musical meaning. For example, one teacher shared, "When the app detects the rhythm slips, I can concentrate on the soul of the song." Teachers reported that "AI-supported practice increased learner confidence, as well as classroom readiness, especially for students who might otherwise be hesitant to participate. " Teachers also emphasized the importance of AI in addressing diverse ability levels in large and mixed classes. The most commonly referenced tools for tracking learner development were progress dashboards offered by applications like Yousician and Smart Music. When one of the senior teachers was asked how long it takes her to spot the kids who have mastered the scales and those who require additional assistance, she responded, "In a few seconds, I can know who has mastered the scales and who requires additional assistance."

These observations enabled the teachers to vary instruction on the spot, pairing learners and subjecting them to peer coaching while other participants engaged in improvisation or creative exercises. These practices are closely related to constructivist principles, especially scaffolding, learner agency, and the construction of knowledge through socialization. Despite these pedagogical advantages, educators expressed serious doubts about the effects of AI on emotions, relationships, and culture. One of the prevailing themes was that excessive reliance on algorithmic accuracy might unduly diminish the expressive and human aspects of learning music. One of the teachers warned, "I am afraid that students run after the perfect notes and forget about the history of the music." Another teacher stressed that "in the African musical cultures,

meaning is expressed by experience of communal participation and expression of emotion, and automated feedback models cannot properly reflect these elements."

The other significant issue associated with the Western-centric bias present in most AI music sites is. According to the teachers, the vast majority of the built-in repertoires and exercises follow the priorities of Western notation, tonal systems, and style conventions and tend to ignore the musical forms of African peoples. To this, some teachers explained that "they were uploading Kenyan folk songs, church hymns, and other melodies well-known to the local community into AI services manually." According to one of the teachers, "without our music being featured in the app, we will lose our heritage." Such initiatives position teachers as cultural brokers, enabling them to adapt AI tools in ways that do not marginalize indigenous musical knowledge but instead empower it. Answers associated with professional preparedness also emerged strongly. The teachers complained of "the lack of formal training, frequent software changes, and lack of technical support, which in most cases required them to discover new features on their own." One of the teachers confessed that "each time the app is updated, I need to learn on the fly." In response to this, some schools have formed informal, peer-facilitated professional learning networks where teachers exchange practical strategies, shortcuts, offline features, and locally specific adaptations. The collaborative strategies have some parallels with ancient communal practices.

Learning theories support the social backgrounds of music education.

In general, the interviews show that successful AI implementation takes place when teachers do not lose pedagogical control and incorporate technology into culturally respectful, human-centered instruction. Teachers have always referred to AI as a close collaborator rather than an educational supervisor, whose value lies in amplification rather than the replacement of musicianship. When the music dwells within the application, students glow, as one of the teachers remarked. It calls to our attention that technology, which is rooted in community and connection, can enhance both competence and soul.

V.DISCUSSION

It emerges that music teachers and learners have integrated AI into their musical toolkit. Projecting Smart Music's metronome gets everyone literally 'on the same beat', ensuring digital and live practice connect seamlessly. Learners confirmed that this blend made them participate in ensembles more confidently and cohesively. Indeed, AI levels the playing field by offering clear, shared reference points (Rodríguez-Sedano et al., 2023). Perceived benefits like instant feedback and game-like rewards transform practice into play. Most learners loved setting their own pace, slowing down tricky riffs, or racing ahead on familiar scales.

This finding aligns with the broader literature on learner agency, self-regulation, and personalized learning experiences (Zimmerman, 2002). Freed from basic drills, teachers could focus on artistry because 'once the app catches rhythm slips,' a teacher can spend time on tone and phrasing. This notion resonates with Hallam's (2010) emphasis on expressive growth. The use of AI-assisted composition tools also suggests that digital technologies might expand opportunities for experimentation and musical creativity (Fiebrink, 2017). AI tools can give instant feedback, help with technique, and adapt to a student's pace, but they cannot replace a teacher's intuition, empathy, or ability to inspire. Learners expressed how much they still value a teacher's presence, someone who notices their mood, encourages them when they are stuck, and celebrates when they succeed. In other words, teachers remain central in music education, while AI serves as a useful assistant and is always in the service of the teacher's deeper role.

However, music teachers were concerned that an overemphasis on technical accuracy may put the expressive, emotional and social aspects of music learning at risk (Hallam, 2010). Additionally, cultural gaps in AI song libraries forced many to upload local music manually (Tan et al., 2021), a deliberate move toward decolonizing content, as AI tools are designed around Western classical music. This does not cater to several genres in Kenya, such as folk rhythms, church choirs, Afrobeat, Taarab, and songs passed down through generations. When these styles are missing from the tools, some learners feel locked out. This calls for collaboration between developers and educators to create AI systems that include and celebrate our musical diversity. When students hear their own culture in their lessons, they connect more deeply. Some teachers admitted feeling unprepared for frequent software updates, underscoring the need for ongoing training (Sawyer, 2011). Many teachers are curious and open to using AI, but they also feel unsure; some worry about getting it wrong or falling behind. What makes the difference is support through regular, hands-on, peer-led training, such as teacher learning circles that are working well in some schools. When teachers feel confident, they are more likely to try new things and use AI creatively to reach their students. Four approaches to effective practice stood out. These included hybrid instruction, teacher-curated exercises, peer-led tech support, and offline/local content. To sustain these gains, schools must invest in continuous, hands-on professional learning, collaborate with developers to embed diverse repertoires into AI platforms, and ensure affordable devices and offline capabilities. When AI augments rather than eclipses the human touch rooted in culture, care, and creativity, it can truly unlock music's magic for every learner (Fiebrink, 2017). AI is exciting, but it is not yet available to everyone. Learners in rural schools are disadvantaged; they cannot easily access or use AI apps regularly due to internet issues or a lack of devices. This gap must be closed for AI to truly transform learning. That means affordable tech, offline access options, and policies that bring tools to every classroom, not just the well-connected ones. Music education should be inclusive and equitable.

VI.CONCLUSION

This paper proves that artificial intelligence is no longer a marginal innovation but a developing pedagogical reality in music classes in Nyandarua and Laikipia Counties. The

results indicate that AI can positively affect individualized learning, learner motivation, differentiated instruction, and access to more learning in low-resource settings. At the same time, serious doubts remain about digital inequality, centered on Western content, weaker emotional appeal, ethical aspects, and a lack of teacher training. These contradictions suggest that the role of AI is not necessarily transformative; the value of this technology depends on its implementation. The results indicate that AI is most successful in a hybrid, constructivist model in which the teacher retains the pedagogical role and technology serves as a scaffold for developing skills, creativity, and collaboration. Effective classrooms use AI as a teaching assistant to replace routine or manual feedback, but ensemble work, cultural expression, and relational learning remain the pillars of music education. Based on these findings, some recommendations can be drawn. Policymakers are advised to invest in trustworthy digital infrastructure, equitable access to devices, and explicit ethical principles that address data protection and cultural representation. Teacher education schools and professional development courses should embrace systematic AI training to enhance teachers' technical skills and pedagogical confidence. The creators of AI music systems need to focus on culturally inclusive design, using African musical repertoires, oral traditions, and non-Western tonal systems to ensure relevance to the context. Finally, AI has the potential to support the democratization of music education and expand the creative process. Nevertheless, its sustainability requires a purposeful, culturally sensitive, and ethically sound integration that ensures the human, communal, and expressive nature of music learning is not harmed.

VII. RECOMMENDATIONS

i. Let AI support the teacher, not replace them: AI should be seen as a helpful assistant that lightens the teacher's load, not as a replacement for their creativity and human connection with learners.
ii. Give teachers the tools and confidence to use AI: Teachers need practical training and ongoing support to feel comfortable using AI meaningfully in their music classrooms.
iii. Make AI tools speak the language of our music: AI should reflect our local music traditions and styles so that learning stays relevant, relatable, and culturally rich.
iv. Make sure every learner can access AI, not just a privileged few: Every student, no matter where they live or their background, deserves access to AI-powered learning tools through fair infrastructure and support.

A. Areas for Further Study

Further research should explore the following areas:

i. Using AI to preserve and teach indigenous music: There is a need to explore how AI can help keep our rich musical heritage alive by working alongside local artists and communities to record and teach traditional Kenyan music.

ii. Developing a national policy for AI in music education: Research should look into how a well-guided national policy can help teachers and schools use AI in music classrooms in a way that is fair, ethical, and aligned with Kenya's educational goals.
iii. Improving access to technology in all schools: It is important to study how better internet, power, and digital tools can bridge the gap between urban and rural schools so every learner can benefit from AI in music education.

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