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TECHNOLOGICAL ADVANCEMENT ON THE ENHANCEMENT OF MUSIC EDUCATION IN LAGOS STATE

Abstract

This study examines strategies for leveraging information and communication technologies (ICTs) to revitalise music curricula in Lagos State, Nigeria, aligning with the country's Vision 2030 goals. The study aims to assess the current state of music education, propose ICT integration strategies to foster cultural awareness and 21st-century skills and explore the benefits of technology-enhanced music education. Employing mixed-methods approach, the research utilises an online survey administered to Lagos state's primary and secondary school music teachers. The survey combines closed and open-ended questions to gather quantitative and qualitative data. Results indicate a positive outlook among educators regarding technology integration in music education, with many already incorporating various digital tools in their teaching. The study reveals no direct correlation between teaching experience and technology use frequency but suggests a potential link between advanced education and awareness of available resources. While the overall perception of technology's value in developing 21st-century skills is universally positive, varying ratings of music education quality indicate areas for improvement. The findings support recommendations for professional development, resource allocation, curriculum enhancement, and collaborative platforms to improve music education in Lagos further.

Keywords: Music Education, Technology Advancement, Enhancement, Vision 2030

Introduction

Nigeria's Vision 2030 delineates a lofty strategy to placing the nation into a thriving, knowledge-centred economy. Embedded within this framework is the profound importance of nurturing the creative and cultural proficiencies of the young populace. The utilisation of music education, recognised as a potent tool for cultivating artistic expression, cultural consciousness, and societal unity, is poised to play a pivotal role in realising the objectives outlined in Vision 2030. As posited by Offorma (2013), the vision underscores the necessity for curriculum overhauls at all educational tiers, with a specific emphasis on practical competencies, integration of technology, and the promotion of Indigenous languages and cultures to tackle prevailing socio-economic impediments.

Lagos, serving as the epicentre of economic, educational, and cultural endeavours in Nigeria, harbours a diverse demographic and a vibrant artistic milieu, rendering it a fitting state to probe the transformative capacity of technology-enhanced music education. Nonetheless, the existing state of music education in Lagos state, akin to numerous states in Nigeria, confronts notable hurdles such as insufficient infrastructure, inadequate teacher preparation, and a disconnect between the pedagogical framework and contemporary cultural currents.

Within the domain of early childhood education, the endorsement of the Early Childhood Curriculum formulated by UNICEF and the National Commission for Colleges of Education is advocated, with a focus on instilling social conventions, ingenuity, collaborative skills, and rudimentary concepts of numeracy, literacy, colours, and geometrical forms through play-centred methodologies. Concerning primary and secondary education, the spotlight is cast upon multilingualism, encompassing English, French, and predominant local dialects like Hausa, Igbo, and Yoruba, alongside the incorporation of peace education and citizenship studies as foundational disciplines. The educational framework is poised to underscore proficiencies in literacy, numeracy, life competencies, rudimentary science, technology, cultural arts, ICT, agriculture, creativity, and entrepreneurship (Offorma, 2013).

This study examines strategies for leveraging information and communication technologies (ICTs) to reinvent music curricula in Lagos State, equipping students with 21st-century skills and a deep appreciation for Nigeria's rich cultural heritage. By aligning music education with the overarching objectives of Vision 2030, students stand to cultivate artistic expression, cultural cognisance, and societal harmony, thereby contributing to the nation's prosperous trajectory as a knowledge-driven entity.

Objectives

This paper aims to:

- (i)examine the current state of music education in Lagos, Nigeria, and identify the key challenges and opportunities for integrating technology.
- (ii) propose strategies for leveraging ICTs to revitalise music curricula, foster cultural awareness, and develop 21st-century competencies among Lagos's youths.
- (iii)explore the benefits of ICT-enabled music education in nurturing the creative, culturally aware, and socially engaged citizens needed to achieve Nigeria's Vision 2030 goals.

Research Questions

1. What is the current state of music education in Lagos, Nigeria?
2. What are the strategies for leveraging ICT to revitalise the music curriculum, foster cultural awareness, and develop 21st-century competencies among Lags's students?
3. What are the benefits of ICT-enabled music education in nurturing the creative, culturally-aware, and socially-engaged citizens needed to achieve Nigeria's Vision 2030 goals.

Vision 2030: What Next for Technology in Music Education

Nigeria's Vision 2030, as delineated in the UNODC Strategic Vision for Nigeria 2030, endeavours to tackle pivotal impediments in the nation's progress and correlates significantly with the Sustainable Development Goals (SDGs) set forth by the United Nations. This document delves into the interrelation between Vision 2030, the SDGs, and the prospective impact of music education in elementary schools towards attaining these objectives.

SDG 4, with a specific focus on education, aims to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all", as stated by the United Nations in 2015. Pertinent objectives related to primary education comprise:

Objective 4.1: Guarantee that every girl and boy finish free, fair, and high-quality primary and secondary education. Objective 4.5: Eradicating gender inequalities in education and guaranteeing equal entry to all educational levels for marginalised groups. Objective 4.7: Ensuring that all learners attain the knowledge and skills necessary to advocate for sustainable development.

Onyeji and Onyeji (2023) present an exhaustive examination of formal music education within the contemporary context of Nigeria, shedding light on its existing status, obstacles, and methods for ensuring long-term growth. From its colonial origins to the contemporary era, the historical trajectory of formal music education in Nigeria underscores the necessity for a culturally pertinent and sustainable approach. Such an endeavour resonates with the principles of SDG 4.7, advocating for an educational system that fosters sustainable development and acknowledges the richness of cultural diversity as outlined by the United Nations (2015).

A primary concern highlighted by Onyeji and Onyeji (2023) is the prevalence of Western musical influences in Nigerian educational frameworks, a pronounced issue initially pointed out by Okafor (1992) and Nzewi (1999) respectively. This cultural disparity has resulted in the emergence of what Nzewi (1999) described as "alienated trained musicians," underscoring the urgency for a more culturally attuned educational approach. The authors' advocacy for an "Africa-sensed curriculum" reverberates with contemporary studies focusing on the decolonisation of music education (Hess, 2015; Bradley, 2012).

Onyeji and Onyeji (2023) examined access and quality issues within music education across various educational tiers. In the tertiary education sector, they identify obstacles such as insufficient facilities and diminished benchmarks, both of which have a direct bearing on the attainment of SDG 4.3's objective of ensuring equal access to high-quality higher education. The circumstances prevalent in primary and secondary schools, where music often takes a back seat or is encompassed within broader subject areas, further underscore the hurdles encountered in realising the aims of SDG 4.1 (pertaining to free, fair, and quality primary and secondary education).

Onyeji and Onyeji (2023) emphasised the necessity of culturally relevant pedagogical approaches and locally derived teaching materials, which resonates with the aspirations of SDG 11.4, which seeks to enhance endeavours geared towards the preservation and protection of

cultural heritage. This particular strategy supports scholarly investigations that illustrate the advantages of culturally responsive music education in nurturing student involvement and fostering a sense of cultural identity (Abril, 2013; Campbell, 2018).

The 2030 Education Agenda, as part of the broader Sustainable Development Goals, underscores various critical aspects that directly impact art-teacher education:

Quality Education: Emphasising the significance of quality education leading to pertinent and efficient learning outcomes, SDG 4 necessitates that art-teacher education programmes guarantee the production of educators capable of delivering superior and relevant art education.

Skills for Employment and Entrepreneurship: The agenda advocates for a substantial rise in the number of youth and adults equipped with relevant skills for employment and entrepreneurship. Art education holds the potential to nurture creativity and innovation, which are fundamental skills for the contemporary job market.

Cultural Diversity and Sustainable Development: The SDGs highlight the value of appreciating cultural diversity and acknowledging culture's role in sustainable development. They stress the pivotal role of art education in conserving and promoting cultural heritage.

Lifelong Learning: The concept of lifelong learning is central to the 2030 Education Agenda. Therefore, art teacher education should equip educators to facilitate lifelong learning within the arts domain.

Challenges and Opportunities

Numerous challenges and opportunities are present in aligning art-teacher education in Nigeria with the 2030 Education Agenda:

Challenges

Curriculum Relevance: The existing art-teacher education curricula may not comprehensively cover the skills necessary for sustainable development.

Resource Constraints: Limited resources in various Nigerian educational institutions could impede the execution of comprehensive art education programmes.

Societal Perceptions: The perception of art education as less significant compared to other subjects may influence its prioritisation in educational policies.

Opportunities

Cultural Heritage: Nigeria's abundant cultural heritage is a solid basis for formulating art education programmes that contribute to sustainable development.

Economic Potential: The creative industries present substantial prospects for economic expansion and job generation, aligning with the SDGs' emphasis on economic progress.

Technological Advancements: Emerging technologies offer new avenues for art creation and education, presenting opportunities for innovative teaching approaches.

Music Education

Music education is a fundamental aspect of cultural and intellectual advancement. It has received considerable attention from both researchers and instructors. Music education influences cognitive, emotional, and social development, and it has been extensively documented, establishing it as an essential element of a comprehensive educational journey.

Music education facilitates the development of a wide range of abilities that go beyond mere musical skills. It nurtures self-discipline, persistence, and innovation, providing students with invaluable resources for personal advancement and academic achievement (Hallam, 2010). Furthermore, a multitude of research has illustrated the beneficial impacts of music education on cognitive growth, particularly in domains such as spatial-temporal reasoning, language learning, and mathematical proficiency (Vaughn, 2000; Schellenberg, 2004).

Besides its scholarly advantages, music education holds a vital position in enhancing emotional and social aspects. Participation in musical endeavours encourages the expression of oneself, the development of emotional intelligence, and the cultivation of empathy (Juslin & Sloboda, 2001). Collaborative musical engagements nurture skills in teamwork, communication, and a feeling of inclusion, all of which contribute to establishing a more comprehensive and united educational setting (Kokotsaki & Hallam, 2007).

Music education in Nigeria, is a significant cultural legacy firmly established within the varied musical customs of the nation's diverse ethnic communities. Nevertheless, incorporating music education into official educational environments has encountered obstacles and inconsistencies.

In Nigeria, the longstanding incorporation of traditional music education within communal spheres has been fundamental and predominantly disseminated through oral transmission and non-formal pedagogical modalities (Mans, 2009). While this method has been pivotal in safeguarding the nation's musical legacy, its integration into structured educational frameworks has remained circumscribed.

In contemporary times, endeavours have emerged to integrate music education into the Nigerian educational framework, acknowledging its capacity to cultivate cultural consciousness, artistic ingenuity, and cognitive advancement (Omibiyi-Obidike, 2002). Nevertheless, the realisation of these aspirations has been impeded by an array of impediments, encompassing insufficient financial allocations, scarcity of proficient music instructors, and restricted resource availability (Okafor & Ng'andu, 2007).

Despite the obstacles, select institutions have initiated measures to advance music education by instituting degree programmes and establishing dedicated music departments (Omojola, 2010). Moreover, non-governmental entities and grassroots endeavours have surfaced, furnishing avenues for music education and championing its significance within the Nigerian educational milieu (Akpabot, 2017).

Integrating Technology to Music Curricular

In contemporary times, integrating information and communication technologies (ICTs) is essential across diverse academic fields, particularly music education. Digital advancements have transformed music composition, performance, and consumption, mandating a substantial reevaluation of pedagogical approaches in music curriculum development. This research recommends employing ICTs to reform music curricula, guaranteeing that students are adept at the competencies and understanding necessary to excel in the digital age.

The conventional method of music instruction, rooted in physical instruments, printed materials, and in-person teaching, is being questioned due to the swift progress of technology. Information and communication technologies (ICTs) present numerous prospects for enriching the educational process, nurturing creativity, and enabling collaborative learning settings. Nonetheless, successfully incorporating these technological tools into music programmes necessitates a thorough grasp of their functionalities, constraints, and educational significance.

The swift evolution of technology fundamentally challenges conventional paradigms in music pedagogy, which traditionally rely heavily on tangible instruments, printed materials, and direct instructional interactions. Information and communication technologies (ICTs) present diverse avenues for enriching the educational encounter within music instruction. These technological innovations offer prospects to augment student creativity, foster collaborative learning environments, and introduce pioneering instructional methodologies. Nevertheless, effectively integrating these digital tools into music curricula necessitates a comprehensive grasp of their capabilities, constraints, and pedagogical ramifications. As technology progresses, music educators must adapt and explore novel strategies to harness ICTs effectively, refining their pedagogical approaches and equipping students with the requisite competencies for success in the digital era.

Crawford (2017) expounded upon the benefits and challenges of digital audio workstations (DAWs) within music composition and production. Among the benefits enumerated are the potential to stimulate students' creativity, promote experimental approaches, and cultivate an ethos of innovation in musical undertakings. Nonetheless, challenges may manifest in mastering the technical complexities inherent to DAWs, effectively integrating them into instructional methodologies, and ensuring their seamless operation within educational environments dedicated to music. By adeptly navigating these challenges and capitalising on the strengths afforded by DAW technologies, educators can unlock the pathways to enhance students' compositional proficiencies, facilitate collaborative initiatives, and broaden their comprehension of music production procedures.

Wise et al. (2011) scrutinised the effects of online learning environments on music theory instruction, determining that such platforms can heighten student involvement and facilitate self-directed learning. Online educational platforms have expanded the accessibility of music theory education to a broader demographic. Learners can now engage with course content and instructional sessions remotely, providing enhanced flexibility and convenience. Consequently, this development has facilitated inclusion for those previously hindered by geographical

limitations or scheduling conflicts from participating in conventional face-to-face instructional settings.

Online educational settings frequently integrate multimedia elements, including audio recordings, videos, and interactive tools. These elements enrich the educational journey by offering auditory illustrations, visual supplements, and interactive tasks to solidify theoretical understandings. For instance, platforms may integrate ear-training modules, enabling learners to hone their listening abilities more effectively.

Furthermore, Bauer (2014) examined the utility of mobile applications in instrumental practice, recognising their efficacy in cultivating autonomous learning practices and furnishing instantaneous feedback. The value of mobile apps in instrumental training stems from their accessibility, portability, and adaptability. With the prevalence of smartphones and tablets, instrumentalists can now tap into many resources wherever they go, facilitating practice and skill refinement on the fly. This ease of access has empowered musicians to assume control over their learning trajectory, facilitating regular, self-guided practice sessions tailored to the specific objectives and timetables.

A primary advantage associated with mobile applications lies in their ability to promote self-directed learning methodologies. These applications commonly integrate interactive functionalities, such as adaptable practice schedules, exercise generators, and performance assessment utilities. By utilising these functions, musicians can customise their practice regimens according to individual requirements, establish realistic objectives, and track their advancements longitudinally. Such personalised approaches instil a sense of ownership and drive, thereby stimulating proactive engagement in skill enhancement endeavours among musicians.

Lagos State and Her Educational System

Lagos, a coastal metropolis on West Africa's Atlantic seaboard, is Nigeria's foremost city, both economically and socio-politically. Despite no longer being the nation's capital, Lagos remains the centre of gravity for Nigeria's economy and society. With a population of approximately 24.8 million and a growth rate of 3.2% annually, Lagos is projected to become the third largest consumer market in the world by 2030, with an estimated population of 35.8 million (Bank-Olemoh, 2016).

The educational landscape in Lagos is diverse and complex. The city boasts numerous tertiary institutions, including universities, polytechnics, and colleges of education. Lagos State alone has eight tertiary institutions, including the University of Lagos, Yaba College of Technology, and Lagos State University (LASU) (Bank-Olemoh, 2016). The state is also well-served by primary and secondary schools, both public and private.

However, the education system faces significant challenges in terms of capacity and quality. In the primary and secondary sectors, there are approximately 1,705 government schools and 15,003 private schools, serving a student population of about 2.3 million (Bank-Olemoh, 2016).

The shortage of public educational facilities has led to a proliferation of private schools, with roughly 60% of school-age children in Lagos attending private institutions (Uduku et al., 2021).

The challenges in the tertiary education sector are equally daunting. In 2016, while 1.7 million candidates applied for university admission through the Joint Admissions and Matriculation Board (JAMB), the total carrying capacity of all tertiary institutions in Nigeria was only 750,000 (Bank-Olemoh, 2016). This severe shortage of university places has created a significant market opportunity, particularly for international education providers.

The Lagos State government has recognised the importance of education in its development agenda. The state's vision is to become "Africa's Model Megacity and Global Economic and Financial Hub that is Safe, Secure, Functional and Productive" by 2025 (Bank-Olemoh, 2016). To achieve this, the government has initiated several strategic projects:

1. LASU Business School: A partnership with Cornell University to establish a world-class business school.
2. University of Education: Conversion of Adeniran Ogunsanya College of Education into a full-fledged university.
3. Open and Distance Learning University: Transformation of Michael Otedola College of Primary Education to meet the growing demand for university education.
4. ReadySetWork: A 13-week entrepreneurship and employability programme for final-year students.
5. CodeLagos: An initiative to teach one million Lagosians to code by 2020.
6. Technical and Vocational Education and Training (TVET): A comprehensive restructuring of the TVET system to meet industry demands.

These initiatives demonstrate the state's commitment to addressing its educational challenges. However, implementation remains a significant hurdle due to the sheer scale of the challenges and the rapid population growth of the city.

It is worth noting that Lagos State comprises 20 Local Government Areas (LGAs), including 16 urban LGAs that make up the Lagos Metropolis and four rural LGAs (Uduku et al., 2021). This administrative structure adds another layer of complexity to the management and development of the education sector.

In conclusion, while Lagos boasts a rich tapestry of educational institutions and ambitious plans for the future, the system struggles to meet the needs of its burgeoning population. As Lagos continues to grow and aspire to its vision of becoming Africa's Model Megacity, addressing these educational challenges will be crucial to its success.

Methodology

This study employs a mixed-methods approach to investigate the current state of music education in Lagos, Nigeria, and explore strategies for enhancing it through technology integration. The research design aligns with the following objectives:

Examine the current state of music education in Lagos, Nigeria, and identify the key challenges and opportunities for integrating technology. Propose strategies for leveraging ICTs to revitalise music curricula, foster cultural awareness, and develop 21st-century competencies among Lagos's youths. Explore the benefits of ICT-enabled music education in nurturing the creative, culturally aware, and socially engaged citizens needed to achieve Nigeria's Vision 2030 goals.

The study uses an online survey developed using Google Forms, administered to primary and secondary school teachers in Lagos State. This cross-sectional design enables efficient data collection from a diverse sample of educators across the regions.

The data collection Instrument is an online questionnaire comprised of closed and open-ended questions, structured as follows: the demographic information, the current state of music education (addressing Objective 1), the challenges and opportunities in technology integration (addressing Objective 1), the current and potential uses of ICTs in music education (addressing Objectives 1 and 2), the perceptions of technology's role in fostering cultural awareness and 21st-century skills (addressing Objectives 2 and 3), the perceived benefits of ICT-enabled music education for Vision 2030 goals (addressing Objective 3).

The closed-ended questions utilised Likert scales and multiple-choice options, while open-ended questions allow for detailed qualitative responses. The data collection procedure is to distribute the survey link via email and WhatsApp's WhatsApp numbers to music teachers in Lagos State. Regular reminder emails and WhatsApp groups and numbers should be used to encourage participation, and a more than four-week survey period should be used to maximise response rates.

The quantitative data is analysed using descriptive statistics of frequencies and percentages, and the qualitative data undergoes a thematic analysis, with responses categorised to identify key themes related to the research objectives.

The study is limited to Lagos State and may not be generalisable to other regions of Nigeria. The online survey format also introduces self-selection bias, as only teachers with internet access will be included. This methodology aims to provide a comprehensive understanding of the current state of music education in Lagos State and the potential for technology integration to enhance music education in line with Vision 2030.

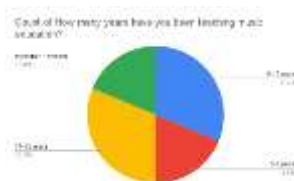
Presentation and Analysis of Data on Enhancing Music Education through Technology in Lagos School, Nigeria, for Achieving Vision 2030

Music education in Lagos, Nigeria, is pivotal in nurturing young talents and preparing them for a successful future. With the advent of technology, new opportunities exist to enhance the learning experience, foster creativity, and develop essential 21st-century skills. This presentation analyses survey data collected from music educators in Lagos, focusing on integrating technology in music education and its impact on achieving Vision 2030.

Data Summary

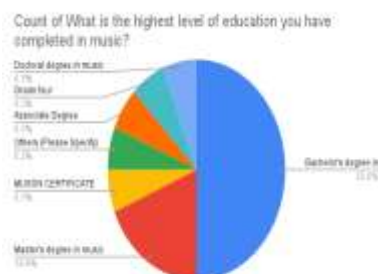
The data consists of responses from music educators regarding their teaching experience, educational background, the quality of music education, and the use of technology in their teaching. Here are the key findings:

1. Teaching Experience and Education Level:



- Respondents have a range of teaching experience from 0-5 years to more than 15 years.

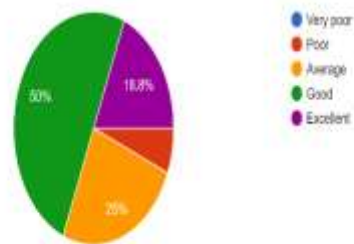
Most respondents have a Bachelor's degree in music, with a few holding a Master's degree or a MUSON Certificate.



2. Quality of Music Education:

Most educators rate the overall quality of music education in their schools as 'Good' or 'Excellent'. A few respondents rated it as 'Average'.

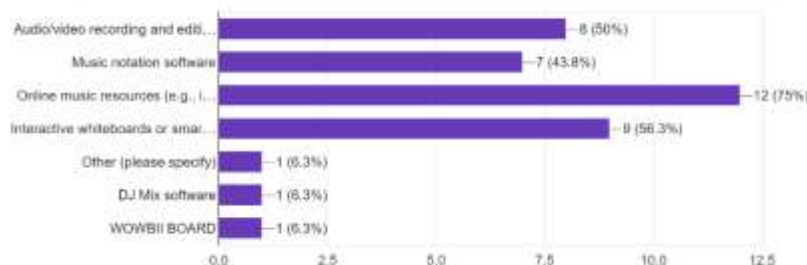
How would you rate the overall quality of music education in your school?
15 responses



3. Incorporation of Technology:

- Many educators frequently incorporate technology into their music lessons, with some doing so always and others sometimes.
- Technological tools such as quizzes, audio editing and recording software, scorewriters, and digital audio workstations are deemed valuable for enhancing music education.

Which of the following technology tools do you currently use in your music classes? (Select all that apply)
16 responses



4. Schools Represented in the Survey

The survey captured teachers' responses across various educational institutions in Lagos, Nigeria. The represented schools encompass early years learning centres, primary schools, and secondary schools, including local and international curricula. Here is a breakdown of the data:

Total Number of Schools: 15

School Types:

- International Schools (3):

Italian International School Lekki, LASU International School, French School

2. Faith-based Schools (3):

A Prince with God School, Deeper Life High School Lagos Campus, African Church Grammar School, Ita-Iyalode.

3. Montessori/Early Learning Centres (1):

Christozera Montessori School

4. Private Schools with Multiple Branches (2):

Meadow Hall School and Chrisland Schools

5. Other Private Schools (6):

Princewill Schools, Chokhmah International School, Kings Wisdom School, Fountain Heights Schools Surulere, Oasis of Goshen Schools, God's Hill School

6. Secondary Schools/Colleges (2):

Toyek College and Kasma College

The sample includes a mix of local and international curricula, providing a broad perspective on music education approaches. There is representation from faith-based institutions, which may offer insights into integrating cultural and religious elements in music education. Including early learning centres and Montessori schools suggests data on early childhood music education practices. The presence of schools with multiple branches (e.g., Chrisland Schools) may provide insights into standardised approaches to music education across different locations. The mix of primary and secondary schools allows for comparing music education practices across different educational levels.

The limitation of this study is that the exact distribution of respondents across these schools is not provided, which may affect the representativeness of the data. The list does not specify which schools offer primary, secondary, or both levels of education, which could impact the analysis of level-specific practices. The socio-economic backgrounds of the school's student populations are not explicitly stated, which may be a factor in access to technological resources for music education. This diverse range of schools provides a rich dataset for exploring the current state of music education and the potential for technology integration across various educational settings in Lagos, Nigeria.

5. Contribution to 21st-century Skills:

Educators believe that technology-enhanced music education contributes significantly to developing 21st-century skills such as creativity, critical thinking, collaboration, and communication. Some highlighted the role of technology in fostering globalisation and enhancing students' creative and planning abilities.

Analysis

The data suggests that music educators have a positive outlook regarding the integration of technology in music education. The consistent use of technological tools indicates an understanding of their potential to enhance the learning experience and prepare students for future challenges. However, the varying ratings of the overall quality of music education indicate areas for improvement.

The key Observations include

Experience vs. Technology Use:

There is no direct correlation between years of teaching experience and the frequency of technology use. Educators with varying levels of experience incorporate technology similarly.

Education Level vs. Technology Tools:

Educators with higher qualifications suggest a broader range of technological tools, indicating a potential link between advanced education and awareness of available resources.

Perceived Value of Technology:

The perception of technology's value in developing 21st-century skills is universally positive, underscoring its importance in modern education.

Conclusion

Integrating technology in music education in Lagos Primary and Secondary, Nigeria, is seen as a beneficial approach to enhancing educational quality and preparing students for the future. The survey data highlights a positive reception among educators, with many already utilising technological tools in their teaching. However, the disparity in the perceived quality of music education suggests room for improvement.

Recommendations

Professional Development:

Music educators should be organised to attend regular training and workshops to stay updated with the latest technological advancements and teaching methodologies.

Resource Allocation:

Ensure that schools have the necessary technological tools and resources to facilitate effective music education.

Curriculum Enhancement:

Integrate technology into the music education curriculum to standardise its use across different schools and ensure consistent quality.

Collaborative Platforms:

Educators should be able to share best practices, resources, and innovative teaching strategies on platforms, fostering a community of continuous improvement.

Feedback Mechanisms:

Implement regular feedback mechanisms to assess the effectiveness of technology integration and make necessary adjustments.

By embracing these recommendations, music education in Lagos can be significantly enhanced, contributing to the broader goals of Vision 2030 and the development of well-rounded, skilled individuals ready to thrive in the 21st century.

References:

- Aboluwodi, A., & Owolewa, O. (2018). Repositioning Education to Achieve Sustainable Development Goals in Nigeria. *International Journal of Advanced Research in Public Policy, Social Development and Enterprise Studies*, 3(1), 2536-6556.
- Abril, C. R. (2013). Toward a more culturally responsive general music classroom. *General Music Today*, 27(1), 6–11. <https://doi.org/10.1177/1048371313486476>
- Abril, C. R. (2013). Toward a more culturally responsive general music classroom. *General Music Today*, 27(1), 6–11.

- Adebayo, F. O., & Olusegun, L. S. (2018). Integrating ICT into music education in Nigeria: Challenges and prospects. *Music Education Research*, 20(1), 115-127.
- Akpabot, S. E. (2017). Music education in Nigeria: A public advocacy for its formal integration into the education system. *The Dyke*, 11(1), 73-85.
- Akuno, E. A. (2016). Music education's role in realising the Sustainable Development Goals in Kenya. *Arts Education Policy Review*, 117(3), 154–162.
- Alaska, S. (2013). Contemporary Issues in Fine and Applied Arts Education in Nigeria and the Way Forward. *International Journal of Science and Research*, 2(6), 13–16.
- Amusa, L. O., & Toriola, A. L. (2014). The state of physical education and school sport in Nigeria. *African Journal for Physical, Health Education, Recreation and Dance*, 20(2), 450-465.
- Anyanwu, S. (2022, March 4). Federal Government unveils UNODC Strategic Vision for Nigeria 2030. Federal Ministry of Information and National Orientation. <https://fmino.gov.ng/federal-government-unveils-unodc-strategic-vision-for-nigeria-2030/>
- Bank-Olemoh, O. (2016). Lagos State: Education Partnership Opportunities. Lagos State Government.
- Bates, V. C. (2018). Faith, hope, and music education. *Action, Criticism, and Theory for Music Education*, 17(2), 1–21.
- Bauer, W. I. (2014). Resonant resilience: Towards a rhythm of life in digital ecosystems. In L. Dirckinck-Holmfeld, V. Hodgson, & D. McConnell (Eds.), *The theory and practice of technology-enhanced learning* (pp. 51–72). Aalborg University Press.
- Bradley, D. (2012). Good for what, good for whom?: Decolonising music education philosophies. In W. D. Bowman & A. L. Frega (Eds.), *The Oxford Handbook of Philosophy in Music Education* (pp. 409–433). Oxford University Press.
- Campbell, P. S. (2018). *Music, education, and diversity: Bridging cultures and communities*. Teachers College Press.
- Campbell, P. S. (2018). *Music, education, and diversity: Bridging cultures and communities*. Teachers College Press.
- Crawford, R. (2017). Rethinking teaching and learning pedagogy for education in the twenty-first century: Blended learning in music education. *Music Education Research*, 19(2), 195–213. <https://doi.org/10.1080/14613808.2016.1202223>

- Euba, A. (1989). Yoruba drumming: The Dundun tradition. Ardsley House Publishers.
- Gandonu, S. P., Kafaru, A. B., Savage, O. G., & Suluka, A. B. (2020). Art-Teacher Education and the Realisation of 2030 Education Agenda: Nexus for Sustainable Development in Nigeria. *International Journal of Innovative Research & Development*, 9(11), 125-129.
- Hallam, S. (2010). The power of music: Its impact on the intellectual, social and personal development of children and young people. *International Journal of Music Education*, 28(3), 269–289. <https://doi.org/10.1177/0255761410370658>
- Hess, J. (2015). Decolonising music education: Moving beyond tokenism. *International Journal of Music Education*, 33(3), 336–347.
- Hinzen, H., & Schmitt, S. (2016). Advancing EFA and MDGs to Goal 4 in the Sustainable Development Goals: Will there be wider benefits for adult education and learning in sustainable development? In H. Hinzen & S. Schmitt (Eds.), *Agenda 2030 – Education and Lifelong Learning in the Sustainable Development Goals* (pp. 8-15). DVV International.
- <https://guardian.ng/opinion/towards-achieving-95-digital-literacy-by-2030/>
- Juslin, P. N., & Sloboda, J. A. (2001). *Music and emotion: Theory and research*. Oxford University Press.
- Kokotsaki, D., & Hallam, S. (2007). Higher education music students' perceptions of the benefits of participative music making. *Music Education Research*, 9(1), 93-109. <https://doi.org/10.1080/14613800601127577>
- LASISI, K. O., & ADETUNJI, J. (2020). An appraisal of public schools' facilities in Ikeja, Lagos State, Nigeria. *International Journal of Environmental Design & Construction Management*, 19(4), 343. Published by Cambridge Research and Publications. ISSN-2325-9884 (Print).
- Mans, M. (2009). Living in world music: A view from the classroom. *SAMUS*, 29, 39–52.
- Mans, M. (2009). *Living in worlds of music: A view of education and values*. Springer.
- Nzewi, M. (1999). Strategies for music education in Africa: Towards a meaningful progression from tradition to modern. *International Journal of Music Education*, 33(1), 72–87.
- Nzewi, M. (2003). Acquiring knowledge of the musical arts in traditional society. In A. Herbst, M. Nzewi, & K. Agawu (Eds.), *Musical arts in Africa: Theory, practice and education* (pp. 13–37). UNISA Press.

- OECD. (2018). The future of education and skills Education 2030. Directorate for Education and Skills-OECD.
- Offorma, G. C. (2013). Nigeria in 2030. Commonwealth Education Partnerships, 2013, 95-99.
- Okafor, R. C. (1992). Music in Nigerian education. *African Music*, 7(2), 5-12.
- Okafor, R. C. (2005). Music in Nigerian society. New Generation Books.
- Okafor, R. C., & Ng'andu, J. (2007). Music education in Nigeria: Challenges and solutions. In C. C. Igboke (Ed.), *Issues and problems in Nigerian music education* (pp. 41-54). Enugu State University of Science and Technology Press.
- Omibiyi-Obidike, M. A. (2002). The place of music in Nigerian education. *Journal of the Association of Nigerian Musicologists*, 1(1), 1-9.
- Omojola, B. (1995). Nigerian art music. Ibadan University Press.
- Omojola, O. (2010). The status of music education in Nigeria. *International Journal of Music Education*, 28(2), 166–180. <https://doi.org/10.1177/0255761410362937>
- Onyeji, E., & Onyeji, C. (2023). Formal music education in contemporary Nigeria: Current state, challenges and strategies for sustainable development. *Abraka Humanities Review*, 13(1), 38-47.
- Saether, E. (2010). Music education and the other. *Finnish Journal of Music Education*, 13(1), 45–60.
- Schellenberg, E. G. (2004). Music lessons enhance IQ. *Psychological Science*, 15(8), 511-514. <https://doi.org/10.1111/j.0956-7976.2004.00711.x>
- Schippers, H. (2010). Facing the music: Shaping music education from a global perspective. Oxford University Press.
- Sutela, K., Juntunen, M. L., & Ojala, J. (2021). Music education, health and wellbeing: Promising interconnections. *Finnish Journal of Music Education*, 24(1), 103-119.
- Tawil, S. (2016). Education and the 2030 Agenda for Sustainable Development. In H. Hinzen & S. Schmitt (Eds.), *Agenda 2030 – Education and Lifelong Learning in the Sustainable Development Goals* (pp. 16–24). DVV International.
- Uduku, O., Lawanson, T., & Ogo, O. (2021). Lagos: City Scoping Study. African Cities Research Consortium.

UNESCO. (2014). Master plan for visual arts development towards 2020, vision 2030.

UNESCO. (2019). Every Child Learns- UNESCO Education Strategy 2019 - 2030. UNICEF.

United Nations. (2015). Transforming our world: The 2030 Agenda for Sustainable Development. <https://sdgs.un.org/2030agenda>

Vaughn, K. (2000). Music and mathematics: Modest support for the oft-claimed relationship. *Journal of Aesthetic Education*, 34(3/4), 149–166. <https://doi.org/10.2307/3333641>

Verspoor, A. M. (2008). At the crossroads: Choices for secondary education in Sub-Saharan Africa. World Bank Publications.

Walling, D., & Davis, J. (2020). Art Education: School, Preparation of Teachers. State University.

Wise, S., Greenwood, J., & Davis, N. (2011). Teachers' use of digital technology in secondary music education: Illustrations of changing classrooms. *British Journal of Music Education*, 28(2), 117–134. <https://doi.org/10.1017/S0265051711000039>