Midlands State University visiting music students' experiences of using netnography to learn marimba performance

Wonder Maguraushe
Midlands State University, Zimbabwe

How to cite:
Maguraushe, W. (2024). Midlands State University visiting music students' experiences of using netnography to learn marimba performance. *Eastern African Journal of Humanities and Social Sciences, 1*(1), 31-39.
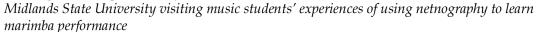
Abstract
This paper builds upon the uptake of digital learning platforms as a method of tutoring visiting music students taking music practical courses. Evaluating the development and spread of netnography, this paper explores the experiences of a new scientific method in disseminating/learning practical musical instrument playing skills from a distance. This qualitative study examines lecturer-student interactions to investigate digital technology mediated interaction as a platform for enhancing visiting music students' marimba performance competencies away from campus. The study employs an Afro-centric framework of Digital *Unhu* (digital humanism) and netnographic accounts of student-lecturer interaction within a resource-constrained African context to enable a more nuanced description of practice. The study demonstrates the central role of netnography in facilitating student-lecturer exchanges in the unique cultural setting of Midlands State University where visiting learners spend a considerable part of the semester away from campus, situated at their home and work environments. Visiting music students were interviewed to solicit their experiences of learning practical subjects online, coupled with observations and document analysis. Findings show that WhatsApp interaction, Google classroom sessions, and video assisted instruction provided a dynamic and highly personal environment in which the lecturer can coach students to play marimba. The experiences reveal thechallenges and prospects of adopting netnography for musical instrument instruction.

Introduction

Digital technology has enabled online classes on platforms like Google Classroom and enhanced learning away from the tertiary institution (Boehm, 2005; Zhang, 2017). Digital technology has the potential to allow a "digital elite" to form personal networks and circumvent the problems associated with distance by brokering information from far away, which can help to transcend geographical and socio-economic disparities to connect learners to their lecturers. The Internet and social media have improved intergroup collaboration among the alienated intellectual elite, the rural poor, and the urban middle class in countries where infrastructural support has been developed. Digital technology has helped to remove the lack of social interaction, which was one of the central obstacles to distance learning in the past. The marimba has risen internationally in places such as America and Europe (Maguraushe, 2017) and in Africa, specifically South Africa (Gordon, 2020). Its presence globally ushers in a critical need to integrate these foreign and local communities in virtual classrooms if no place is to be left behind technically. An online community consists of four aspects. Firstly, some people engage in some form of social interaction to satisfy their needs or perform special roles, such

as teaching and learning in this case. Secondly, these people have a shared purpose, which can be a service, an interest, or a need for information exchange. Thirdly, there ought to be policies that govern or organise people's interaction. Last but not least, computer systems must mediate the participants' communication and interactions (Preece, 2000).

Music educators and their learners can also build online communities to conduct marimba lessons at a distance, as has happened, for example, in language learning (Kulavuz-Onal, 2015). Since the potential was realised in the late 1990s, the new millennium has witnessed an increasing uptake of web-based communication technologies that can be utilised to build communities for music learning and teaching purposes. Few studies have been conducted specifically on the teaching and learning of marimba performance skills through netnography, and therein lies the lacuna for this current research. Netnography in this paper means teaching and learning musical instrument performance online (Kozinets, 2019) to be applied. Lin's (2020) study focused on educational performing technique and artistic inspiration in marimba playing, investigation of musician's movements and defining characteristics of marimba playing, and development of online instructions with applied Tai Chi approach in marimba playing and evaluation of this approach in marimba education. Katiji et al. (2023, p.211) noted that "Zimbabwean state universities still need to establish uninterrupted Internet connectivity for online studying and sufficient digital media resources in place of the traditional face-to-face education." Before COVID-19 struck internationally, researchers and policymakers were noting an increasing trend of fewer individuals and community organisations being abruptly disconnected from direct contact with each other, threatening in-person, place-based experiences amongst members (Guertin et al., 2020). The COVID-19 pandemic from 2019 to 2022 forced some institutions in developing countries that had not fully incorporated online teaching and learning to embrace it as the only available alternative. Today, there is a growing number of platforms through which music learning and teaching can thrive.
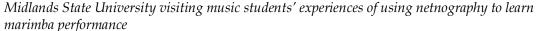
This study focuses on the impact of digital technologies in ushered a paradigm shift from a confined location to an accessible global destination with multiple possibilities in music education. The audience in the new digital location is not restricted to one topographical location because netnography enhances the conduction of classes with students in multiple sites. Cyberspace provides a secure domain with the right of entry 24/7 to users. Students in different locations can participate, listen and experience lectures at the click of a button or touch a smartphone. The paper focuses on Midlands State University visiting music students' experiences of using netnography to learn practical subjects. The specific objectives of this study are: To ascertain how visiting students benefited from using netnography to conduct their studies at Midlands State University and; To find out the challenges experienced by music students during their online classes. The first section presents the theory and method employed in the study. The main section discusses MSU visiting students' experiences of using netnography to learn practicals, beginning with the benefits and following up with the challenges. The conclusion steers a discussion in which it emerges that there is a need for infrastructural and economic improvements if online marimba classes are to realise their full potential.

Method
The study embraces the Technology Acceptance Model (TAM which was started by Fred Davis in 1989 as the theoretical framework of analysis. This theory models how users accept and use a specific technology (Ma Q, 2004; Kamal et al., 2020). The acceptance of technology is determined by two variables. The first is a Perceived Ease of Use (PEOU), and the second is a Perceived Usefulness (PU) of the technology. Ma Q (ibid) further asserts that Perceived Ease of Use is the degree to which a person believes that using a particular system would be free from exertion. This means that the only barrier to using technology lies in its being void of any complications which might affect people's attitude towards using the technology. This implies that the technology in question has to be user-

friendly and manageable to the layperson. Ma Q (2004) states that Perceived Usefulness is the degree to which a person believes using a particular system would enhance their experience. In that regard, the researcher interrogates the attitudes of people in Zimbabwe towards using netnography as cognisant of all hurdles that are associated with the Zimbabwean atmosphere, the data costs and gadgetry, as well as the availability of internet service which comes intermittently in the country.

This qualitative study involved MSU visiting students who were available on online platforms. A request to participate in the online key informant interviews was posted via email to them. The first five who responded and consented were conveniently sampled to participate and provide primary data for this study. Secondary data were collected using observation and literature review to gather authentic information on the students' experiences using netnography to grasp musical instrument performance skills through online teaching and learning. The study adapts netnography, originally used as an online consumer and marketing research method (Kozinets, 1998; 2002; 2010; 2019), to be applied to online musical instrument performance learning and teaching communities. Netnography is a unique approach that can be adapted to analyse visiting students' experiences of learning to play the marimba and get learning materials online through structured data observations. I explored information about visiting students' learning modes by collecting and accessing data from Google Classroom and online key informant interviews, which provided useful information about musical instrument-playing pedagogy. The paper presents how the online interviews were conducted and discusses the benefits and challenges of learning marimba music performance online.

Conducting the key informant interviews online

I conducted the five key informant interviews through Google Meet because none of the participants were familiar with other online platforms like Elluminate, Skype and Zoom. Google Meet could be turned into an open communal meeting that allowed all of them to participate in a focus group discussion to share their experiences interactively and when their appointments coincided. The Google Meet platform I used during the key informant interviews influenced my interviewing practices in many ways. During three of the interviews, the key informants could use the webcam, and we were able to see each other. That means the paralanguage (facial expressions and body reactions) could also be noticed, enriching the communicative process. This also meant that I could not take notes since I had to converse naturally with these key informants. In the other two interviews, we did not use video at the key informants' request, and I was compelled to take notes. The effect of this lack of video cameras was that I had to pay close attention to what these two key informants were saying since we could not benefit from the paralinguistic features that would have helped the communication. To assure these two key informants that I was actively listening to them and following the conversation attentively, I had to constantly voice out some verbal reinforcements to them, such as 'okay', 'uh-huh', 'yes', hmm, and 'I hear you'.

The interview with the two key informants was interrupted thrice due to a power changeover from generator to electricity power supply on my side and bad internet connectivity. This experience interrupted the interview flow, but we had to pick up the conversation from where we had been cut off and forge our way into the next part of the discussion. I was the moderator who allowed all key informants to share their experiences of teaching practical marimba performance skills online. Everyone had to wait to speak, turn on their microphone, narrate their challenges and benefits, and switch it off. If more than two microphones were turned on simultaneously, there would be irritating feedback, and I would have to ask them to switch them off. Sometimes, a key informant talked with their microphone off, and I had to request them to turn it on and repeat themselves. This meant that during the interview, there was linear talk. Additionally, participants raised their hands and awaited a chance to be allocated to them to make comments or relate to others' experiences. They could also respond via the chat window as well. I either alluded to the chat comments or asked them to expand

on the points that they had raised. The interviews ranged from 60 to 90 minutes and totalled about five hours. I recorded the Google Meet sessions, later played back and transcribed all the key informant interviews verbatim. They yielded 76 single-spaced typed pages in Times New Roman font twelve.

Through a netnographic approach based on online interviews and field-note taking, I gained insights into a lurker's perspective by purposefully acting like one (Kulavuz-Onal, 2015). The interviews were unobtrusive (Pollok et al., 2014), involving non-influencing monitoring of the communication and interaction of the visiting students' community to gain practical insights into their grasping of marimba playing skills online. In this regard, netnography directly contrasts with qualitative personal interviews traditionally used to understand behaviour. Netnographic interviews aptly describe the nexus between traditional ethnographic personal interviews and the free behaviour of people on the Internet (De Vault, 2017). This current study tapped into these advantages of online interviews.

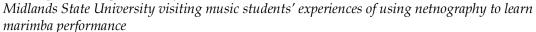### Benefits of learning marimba online

Overall, digital learning platforms offer numerous advantages, including accessibility, diverse resources, interactivity, collaboration, enhanced accessibility and personalisation. It is important to note that the extent to which these benefits are experienced varies depending on the specific university, its resources, and the region where it is located within Zimbabwe. The experiences of students in remote areas will not be the same as those of students in urban areas. In contrast, students in the same areas may access resources differently regarding connectivity and affordability. By leveraging the advantages, students can maximise their learning experiences in the online environment.

The key informants expressed the advantages of learning to play marimba through the digital space. Flexibility emerged as one of the advantages of online learning. Key informant 1 said, "Digital learning platforms offer flexibility in terms of time and place to access course materials and participate in discussions, and this allows me to integrate school with work, family, and other commitments." Key informant 3 said, "Digital platforms can provide me with a flexible, efficient and convenient way to learn to perform on an instrument. Key informant 4 said, "Where traditional classrooms are rigid and fixed, digital learning platforms offer flexibility regarding when and where students can access learning materials. Students with other commitments, such as part-time jobs and family responsibilities, as in my case, will find digital learning platforms particularly beneficial and extremely convenient. Key informant 5 said, "It offers the flexibility to learn from anywhere with an internet connection."

A diverse and vast array of resources was also noted. Key informant 1 said, "Online platforms often provide diverse multimedia resources, including video demonstrations of marimba lines, interactive simulations, and digital textbooks. These enhance understanding and cater for different learning styles." Key informant 2: "Another advantage is that learning material such as guitar chord progressions, mbira song tablature notation, and video demonstrations is posted on the Google Classroom platform where I can either log on or download to use at home." Key informant 3 said, "Also, they make it easier for me to access and engage with various resources such as images, videos, and audio recordings from which I can emulate the virtuosity of seasoned performers at my convenience. Key informant 4 said, "Digital learning platforms have features that facilitate peer-to-peer, as well as lecturer-student interaction, collaboration and communication at a distance. Online discussion forums, video conferencing, and messaging tools can foster interaction and knowledge sharing. Digital learning platforms incorporate adaptive learning technologies that can tailor educational content to suit individual students' needs and pace of learning, allowing for a more personalised learning experience. Key informant 5 said, "Digital learning platforms have features that

facilitate peer-to-peer, as well as lecturer-student interaction, collaboration and communication at a distance. Online discussion forums, video conferencing, and messaging tools can foster interaction and knowledge sharing. Digital learning platforms incorporate adaptive learning technologies that can tailor educational content to suit individual students' needs and pace of learning, allowing for a more personalised learning experience." Key informant 5 added, "These digital platforms offer interactive learning experiences through multimedia elements, such as videos, quizzes, and simulations, which enhance student engagement and understanding of the subject matter."

Visiting students applauded online learning for cutting costs by removing the need to travel and saving time. Key informant 1 said, "It saves me money by eliminating the need to travel about three hundred and thirty kilometres from Chitungwiza to Gweru. The digital learning platform helps me save money I used to spend on transportation and buying course materials." Key informant 2 said, "I can now learn online in the comfort of my home. Studying is now a one-stop shop, and there might be no need to drive to the library since information can be verified easily. My lecturers and I can hold practical demonstrations, conferences, panel discussions, focus group discussions, and classes from wherever we can connect. Key informant 3 said, "They can make it easier for visiting students to communicate with lecturers even if they are not physically present. This effectively reduces travelling costs and makes learning from any part of the country possible as I do not necessarily have to be where the lecturer is physically."

The use of hard copies becomes unnecessary when visiting students learn online. Key informant 1 said, "There are no hard copy textbooks that used to hold me hostage in the library with due dates to return." Key informant 4 said, "The use of digital learning platforms reduces the need for physical resources like paper, thus contributing to sustainability efforts and minimising the environmental impact of traditional teaching methods."
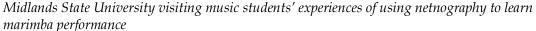
Accessibility is another advantage. Key informant 1 said, "Online learning is also more accessible to students with disabilities or those living in remote areas because it removes barriers related to physical location and offers accommodation such as screen readers and captioning." Key informant 2 said, "Learning to play marimba online has advantages such as easy and quick access to information, and the sharing of information and resources becomes a possibility with the use of technology since I will have the world at my fingertips." Key informant 4 said, "Digital learning platforms beat the traditional classroom settings due to their capacity to provide students with access to a vast array of educational resources such as e-books, videos, and interactive learning materials."

Collaboration is enhanced as well. Key informant 1 said, "Despite the lack of face-to-face interaction, digital platforms facilitate collaboration through features like discussion forums, group projects, and virtual study sessions, enabling students to engage with peers and instructors asynchronously." Key informant 5 said, "Digital learning platforms have features that facilitate peer-to-peer, as well as lecturer-student interaction, collaboration and communication at a distance. Online discussion forums, video conferencing, and messaging tools can foster interaction and knowledge sharing." Key informant 5 said, "Collaboration through incorporating communication tools, discussion boards, and collaboration features enables students to interact with peers and instructors easily. This facilitates group projects, peer learning and online discussions."

Digital learning caters for individual needs. Key informant 3 said, "Digital platforms can adapt to my needs, providing personalised learning pathways and recommendations based on my progress and performance. This individualisation helps me focus on areas I find challenging and progress at my own pace." Key informant 5 said, "Digital learning platforms make learning accessible since they provide a wealth of educational resources. They allow us students to study at our own pace and convenience." Key informant 4 said, "Digital learning platforms incorporate adaptive learning

technologies that can tailor educational content to suit individual students' needs and pace of learning, allowing for a more personalised learning experience." These benefits allow students to embrace digital technology and study in a global village. This has become the new normal; hence, I notice that institutions which teach music practicals ought to embrace and promote online teaching and learning communities of practice. Flexibility, adaptability, accessibility and collaboration are strengths that must be further tapped.

Challenges faced when learning marimba online
Visiting students enrolled with Midlands State University encounter several challenges when using digital platforms to learn to play marimba. The challenges that emerge from all the key informants are lack of infrastructure, bad connectivity, unaffordability, lack of face-to-face interaction, lack of motivation, technical issues, lack of self-discipline, and limited hands-on learning, time management issues, lack of knowledge about how to navigate through the digital platforms, and technical terminology.

The lack of adequate and reliable infrastructure presents challenges to virtual learning in Zimbabwe and a lack of exposure to digital platforms for some visiting students. Key informant 4 indicated, "Many educational institutions in Zimbabwe, including tertiary institutions such as Midlands State University which offer music, lack the necessary technology infrastructure, such as computers, tablets, and reliable power supply to support the conduct of marimba classes on digital learning platforms." This is coupled with his lack of knowledge and exposure; "I face difficulties in navigating and effectively using the digital learning platform because I have limited exposure to technology and lack some of the necessary technical skills." Key informant three also has similar challenges: "As a Visiting student, I had trouble fully engaging with the facilitators for mbira, marimba, guitar, keyboard and voice due to navigation challenges. Understanding concepts was thus a challenge during learning to play through digital platforms. This limited my ability to develop a deep understanding and appreciation of what was being taught."

Connectivity is also a major challenge for MSU visiting students and all the ley informants identified. Key informant 1 said, "I also experience technical glitches that digital learning platforms are prone to, including slow internet connectivity, system crashes, or device compatibility issues." Key informant 2 echoed the same sentiments thus:
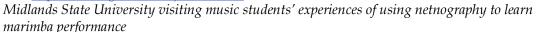
> Many people in third-world countries are not yet available online or only partially available, making online learning elitist. Data is also very expensive. We in the villages and some even in the towns face this predicament. Internet connectivity itself may be a problem; it can be intermittent, bandwidth may be small, and electricity power cuts for many hours during the day in Zimbabwe. This either frustrates or makes online teaching and learning a nightmare.

Key informant 3 said, "The ability to connect between the facilitator and the students was limited." Key informant four also lamented, "In Zimbabwe, we face challenges regarding internet infrastructure and connectivity, especially in rural areas. This limits our access to digital learning platforms for students in such regions." Key informant five also said, "One of the main problems I encountered with digital learning platforms is the reliance on technology. Technical glitches, internet connectivity issues, or platform malfunctions can disrupt the learning experience and frustrate me."
The other main challenge is affordability, where informants said that technological devices and data costs are high. Key informant 1 noted, "The main concern is that I do not have access to all the necessary technology or gadgets required to learn to play marimba via digital platforms, which creates disparities in learning opportunities." Key informant 2 said, "One needs to keep updating their gadget to keep up with changes, which may be costly. You may easily lose information if your gadget crushes because there are lots of viruses. Hacking may affect research." Key informant four also indicates this

challenge when he says, "The cost of accessing digital learning platforms, including internet data packages and devices, is a barrier for me because I come from an economically disadvantaged background."

Motivation is another challenge that emerged from the respondents. Key informant 1 said, "I struggle with self-motivation and time management, leading to procrastination and decreased productivity when taken away from the context of regular in-person classes." Key informant 5 said, "Online learning requires self-discipline and motivation as I must manage my time effectively, stay organised, and remain focused on my studies. It is very challenging for me to maintain a consistent level of motivation without the structure of a physical classroom." Students playing in an ensemble find the groove of marimba music highly appealing. From this exposure, many become motivated to continue the development of their marimba skills for years on end (Campbell and Higgins 2015). Playing whilst detached from bandmates can be a big demotivation. A more effective and motivating scenario would involve the lecturer listening with his/her ensemble to the instrumental parts that can be heard separately and learned aurally from an online exhibit that calls for physical presence. Some of the key informants saw online learning as lacking in personal touch. Key informant 1 said, "Learning online lacks the face-to-face interaction which happens in traditional classrooms, hence some feelings of isolation as well as difficulty in building relationships with peers and instructors." Key informant 3 said, "Online platforms can create a sense of detachment since there is no face-to-face contact, and there is disconnection from both ends." Key informant 5 said, "Digital learning platforms primarily rely on virtual communication, which lacks the personal touch and immediate feedback provided in traditional classroom settings. I struggle with the absence of face-to-face interaction with my instructors and peers." Key informant 5 added, "Practical subjects such as guitar, keyboard, mbira and marimba require hands-on experience, one-on-one sessions, and practical demonstrations. Digital platforms cannot provide the same level of hands-on learning opportunities, limiting my practical understanding of the subject matter."

The key informants also indicated distraction as a barrier to online learning to play the marimba. Key informant 1 said, "Another challenge associated with changing the learning settings from the traditional lecture room to the home or any other venue is that this exposes me to distractions such as family members, household chores, or external noise, making it challenging to maintain focus during classes." Key informant three also said, "When my baby cries for attention, which may be due to discomfort, hunger, or missing the mother's touch, it becomes very difficult to ignore her and keep concentrating on the online lecture. Sometimes the scheduling coincides with certain work tasks that must be completed and distracts me greatly."

Discussion
The benefits of online musical instrument teaching and learning exist in the matrix identified in this paper. Netnography has enhanced the teaching of marimba performance, and I noted several benefits for my understanding of the culture of this MSU visiting students' community. I believe netnography helps to capture the visiting students' lived experiences and thinking from an insider's perspective, which would not be accessible to the researcher using other methods. Netnography, through its online presence, allows the lecturer to establish connections with his community of students at a distance and to follow the marimba events and activities when they happen. Conducting online communities via ethnographic interviews could be considered a more rapid and cost-effective research method (De Valck et al., 2009).

Conducting a netnography of an online community requires the necessary tools of connectivity and accessibility amongst the teaching and learning community members. Learning to perform marimba music online undoubtedly has its challenges because of the nature of infrastructure in Zimbabwe, but

these challenges eventually teach the students and lecturers to be innovative. Adapting and understanding the nature and culture of their online community helps to shape the experiences of its participants who undergo these lived experiences. Higher and tertiary learning institutions in Zimbabwe, which include polytechnics, teacher training colleges, and state universities, should work with stakeholders and Internet service providers to ensure the accessibility of the Internet facilities and required devices to students in the remote parts of Zimbabwe for virtual education to be tenable to all, as also noted by Katiji et al. (2023).

Conclusion

The paper concludes that learning marimba online can be very effective if MSU's connectivity and infrastructure are drastically overhauled. I am very confident that virtually coming together to conduct marimba performances can be an effective way of furthering the educational mission of both ensembles and classes that can be a launching pad for additional innovative formats of future engagement and community building. Learning to play marimba on the virtual platform is a program which needs to be quickly pulled together to enhance collaboration amongst partners with an identified need: the quest to balance work, family and learning through visiting classes, as well as the unforeseen loss of access to the physical space of the traditional classroom. Learners and tutors now need to connect across other marimba-performing communities. For example, marimba ensembles can perform virtually at the International Marimba and Steelpan Festival held annually in South Africa or at the Zimbabwe Music Festival (ZIMFEST) in the United States of America. As the paradigm shift from analogue to digital technology continues to morph with further innovations and new communication platforms, Zimbabwean tertiary institutions should strengthen their dedication to and embrace the new normal. Both students and lecturers stand to benefit from strengthening the dissemination of marimba performance knowledge and skills outside and across the confines of the traditional marimba lecture venue. I invite other researchers to consider using a netnographic approach through online participant observation of the cultures that emerge in online marimba learning and teaching communities and to find out how the online platform mediates knowledge and skills development.

References

Boehm, C. (2005). Music technology in higher education. *Probing the Boundaries of Higher Education*, *12*(1), 85-90.

Campbell, P. S., & Higgins, L. (2015). Ideas for Instrumental Music Making. In Engaging Music Practices: A Sourcebook for Instrumental Music. S. L. Burton & A. H. Snell (Eds). Roman and Littlefield Education.

Davis, F. D. (1989). Technology acceptance model: TAM. *Al-Suqri, MN, Al-Aufi, AS: Information Seeking Behaviour and Technology Adoption*, 205-219.

De Valck K., van Bruggen G., Wierenga B. (2009). Virtual communities: A marketing perspective. *Decision Support Systems*, 47, 185–203. doi:10.1016/j.dss.2009.02.008

De Vault, G. 2017. Netnography: Obtaining Social Media Insight. Accessed on 21 March 2023 from https://www.plu.edu/msma/blog/netnography-obtaining-social-media-insight/

Gordon, G. A. (2020). *Marimbas in South African schools: gateway instruments for the indigenous African music curriculum* (Doctoral dissertation, Stellenbosch: Stellenbosch University).

Guertin, L., Theveny, K., & Barber, D. (2021). Virtual Informal Learning and Community Building via Nature-Themed Podcast Discussions. *Bulletin of the Ecological Society of America*, *102*(1), 1-7.

Kamal, S. A., Shafiq, M., & Kakria, P. (2020). Investigating acceptance of telemedicine services through an extended technology acceptance model (TAM). *Technology in Society*, *60*, 101-212.

Katiji, E. W., Muranda, R., Chimbudzi, W., & Chamisa, V. (2023). Students' use of digital online resources in music study at Zimbabwe State Universities in response to COVID-19. *African Media Space and Globalization*, 211-230.

Kozinets, R. V. (1998). On netnography: Initial reflections on consumer research investigations of cyberculture. *Advances in Consumer Research, 25*, 366–371.

Kozinets, R. V. (2002). The field behind the screen: Using netnography for marketing research in online communities. *Journal of Marketing Research, 39* (1), 61-72.

Kozinets, R. V. (2010). *Netnography: Doing ethnographic research online*. Thousand Oaks, CA: SAGE.

Kozinets, R. (2019). Netnography: The essential guide to qualitative social media research.

Kulavuz-Onal, D. (2015). Using netnography to explore the culture of online language teaching communities. *Calico journal, 32*(3), 426-448.

Lin, C. C. (2019). *A study of applied Tai Chi movements in Marimba playing: exploring the relation of physical motion, educational performing technique, and artistic inspiration between Marimba and Tai Chi* (Doctoral dissertation, University of Antwerp).

Maguraushe, W. (2017). *Musicking at Home on the Wood that Sings: Contemporary Marimba Performance Practices in Zimbabwe* (Doctoral dissertation, University of South Africa).

Ma Q, L. L. (2004). The Technology Acceptance Model: A Meta-Analysis of Empirical Findings. *Journal of Organisational and Enduser Computing*.

Pollok P., Lüttgens D. & Piller F. T. (2014). *Leading edge users and latent consumer needs in electromobility: Findings from a nethnographic study of user innovation in high-tech online communities*. RWTH-TIM Working Paper, February 2014: https://ssrn.com/abstract=2412081 or https://doi.org/10.2139/ssrn.2412081

Preece, J. (2000). *Online Communities: Designing usability, supporting sociability*. Wiley.

Zhang, P., & Sui, X. (2017). Application of digital music technology in music pedagogy. *International Journal of Emerging Technologies in Learning (iJET), 12*(12), 4-13.