The Expectations and Development of Trans-musical and Bi-temporal Competence for Musician-teachers: An Autoethnographic Perspective

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Abstract

This autoethnographic article begins with a brief survey of some cross-cultural perspective based on diverse but collaborative authorial backgrounds in musical education from Africa and the United States, respectively. They describe their music teaching experiences and the changes they have made in their knowledge, skills, and preferences in music cultures and teaching methodology to succeed in their respective teaching positions. Their paper argues for keeping children at the heart of debates linked to their development. Towards this end, they contend that, instead of students adapting automatically to their teachers' music culture, music educators expand their knowledge, skills and preferences to include the enculturative music preference of their students. Such an approach avoids enculturational discontinuity, particularly disrupting the cultural continuity of lifelong learning in music, as in case of the effects of colonialism and cultural marginalisation have had on educational curricula. In addition, we adjusted our teaching methodology to include more student-centred, participatory, collaborative instruction. This article, therefore, advocates for providing students with opportunities for contributing to research development, gaining experience with issues involving cultural policies and for reinterpreting and recirculating examples of contemporary global forms of music in addition to creating and expanding music-making in their music culture. The article, therefore, recommends for the preparation and certification of trans-musical and bi-temporal music educators.

Keywords:

Tanzania, United States, Enculturative music, Teaching methodology, Music culture, Musician-teachers

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Introduction

Tony (2015) defines autoethnography as a research method that allows an individual to describe and analyse personal experiences aimed to grasp a phenomenon. Such autoethnography does not only admit and accommodate subjectivity but also recognises the influence of the researcher on the research (Tony, 2015). The perspective on musician-teachers we present in this paper and the implications it has for preparing music educators in the twenty-first century mirrors our histories. Each of us, unbeknownst to the other, one in the North and the other in the South, expanded our knowledge, skills and music preferences as well as instructional methods to handle the demands of cultural diversity in our teaching positions in music. Recently, we realised that each of us had undertaken similar journeys, and that not only are there enough similarities in our experiences to suggest a co-authored description of them, but also that many others are involved in similar situations that require substantive changes for musician-teachers to be successful in providing enculturational and cultural bridge-building. What did we learn?

Mapana's Perspective

As a central Tanzanian Wagogo[1] musician, I was traditionally trained from initiation for leadership in participatory music-making.[2] However, to get teacher certification in Tanzania, I had to complete a formal two-year collegiate certification programme in Western music. This curricular requirement in Western music knowledge and skills, which was a direct result of British colonisation (after the German World War I debacle that resulted in their loss of not only Germany East Africa but also other colonies in Africa), has been retained from Tanzania's independence in 1961 to the present.

In my early years at the University of Dar es Salaam during my pursuit of a BA and MA in Music and Ethnomusicology, I encountered a student-

[1] The Gogo ethnic group is found in Tanzania's central region of Dodoma. The Wagogo are people who speak Cigogo. The prefix Wa- indicates plural (Wagogo) and M-indicates singular (Mgogo). The prefix Ci- identifies the language of the Wagogo people or Mgogo person.

[2] In participatory music making one's primary attention is on the activity, on *the doing,* and on other participants, rather than on the product resulting from the activity (Turino 2008).

centred, survey-based study of Sub-Saharan African *Ngoma.* This traditional, multi-arts performance complex are evident in shared characteristics of events involving singing, percussion, dancing and storytelling, with variations specific to the culture of each ethnic group. Tanzania has more than 120 such groups, each with its own version of ngoma.[3] As Nketia (1974) explains, Sub-Saharan African music cultures constitute a "network of distinct yet related traditions which overlap in certain aspects of style, practice, or usage, and share common features of internal pattern, basic procedure and contextual similarities. These related musical traditions constitute a family distinct from those of the West or in their areas of emphasis"(Nketia 1974, p. 4).

The coursework, I encountered featured the ngoma of selected Tanzanian ethnic groups. Since the students from these diverse groups were members of the class, they were charged with teaching others the ngoma-style found in their respective enculturation. It was a life-giving, respectful way of examining similarities and differences, utilising student-centred teaching methods and developing analytical knowledge and skills. The student-centred teaching style required my fellow students and I in this study of multi-arts ngoma performance practice of selected Tanzanian ethnic groups added to my background an expanded, student-centred, and collaborative instructional method. Until that moment, my experience with instruction in Tanzanian schools was principally teacher-centred. This method was not only the major feature of my educational experience and music teaching practice but was also required for my success in the teacher-centred role of a choir conductor. Choirs, even where co-creation is involved, have a replicative function that requires the direction of a musician with exemplary cultural knowledge. The student-centred instructional experience significantly increased my capabilities in music instruction reflecting requirements of African ngoma.

Lundquist's Perspective

As a traditionally-trained Western orchestral and chamber music cellist, changes in the content of my instruction required expansion of my music

[3] Ngoma does not only denote multi-arts participatory performances involving singing, dancing, and playing musical instruments. Ngoma also applies to a type of musical instrument, that is a membranophone, or a drum. In addition, ngoma refers to a social function.

preference (LeBlanc 1982) to include knowledge, skills and experience with Sub-Saharan African roots of African-American music alongside my teaching experience in collaborative, student-centred learning gained with African and African American musicians. These experiences enabled me to succeed in my assignment to teach music successfully and, later, to teach music educators in an ethnically-cosmopolitan public school and university system in the US from the 1960s through the early 2000s.

From 1968, my experiences with fostering African-influenced percussion and dance ensembles for Junior High and Senior High students in the United States kickstarted my transition from relying on the teacher-centred instructional method required by educational goals of authentic replication of music compositions for performance to develop a more student-centred, participatory, and collaborative teaching style. In this regard, improvisation and co-creation are the focus of music-making.

North-South Collaboration

We each chose to make a success of our professional life for the sake of our students not only by expanding our music competencies, knowledge, skills, and our music cultural preferences, but also by adopting student-centred participatory teaching methods. Even though we were a world apart in the years of teaching and experience, geography, ethnicity, age, and gender, we made our decisions to avoid discontinuity in music enculturation, that is, the interruption in the cultural continuity of lifelong learning in music. These disruptive influences include the effects of colonialism and/or of cultural marginalisation in educational curricula. Countering such disruption requires accepting the challenge of becoming, to the extent possible, bi-musical (Hood 1960).

More than seventy years ago, Hood (1960) indicated that bi-musicality, the effect of learning an additional music culture, is based on an individual's aptitude for music, the differentiated training of which is characteristic of diverse music cultures. A musician choosing to learn to make music in another music culture ought to focus on further development of aural perception. Imitative methods culture bearers are employed in involving expansion of initiates' tonal memory and exposure to systems of notation. The art of improvisation requires the internalisation of traditional rules of a music culture as well as the technical ability required to free the musician's musical imagination.

Deschênes (2018) prefers the use the term transmusicality to describe "mastering a music of which one is not native…It involves learning a way of thinking, grasping, making sense of and especially aesthetically *embodying* [emphasis his] a music that may differ in character from that of one's initial training" (p. 276). This raises the issue of cultural appropriation. Kwame Appiah points out, however,

> When the pedigree of a practice is prized, we [may] overplay claims to ancestral resemblances. Yet change is a cultural constant….The very concept of 'cultural appropriation' is misbegotten. As I've previously argued, it wrongly casts cultural practices as something like corporate intellectual property, an issue of ownership. Where there is a real cause for offense, it usually involves not a property crime but something else: disrespect for other peoples…Whatever the source of your ideas,..[if you are] using them reverently…nothing could be more respectful than that (Appiah 2021).

Respect is, for me, a non-negotiable bottom line. In essence, learning an additional music culture, according to Deschênes (2018) entails" much more than learning musical codes, social and cultural codes of behaviour….[There is] an intentional shift of *identity,* which takes the form of a cultural shift that goes beyond one's self and primary identity. One does not entirely lose one's identity; rather, the new music provides a new vehicle for expressing and even discovering one's identity – which means of expression may be truer to one's identity than one's native music, serving to deepen the experience of his/her own humanity" (p.283). That kind of serious, respectful commitment is what a music educator requires in a culturally-diverse setting. Students both inform and shape their development in addition to contributing commitment to their development. Care for them must be at the heart of debates linked to their development. For the purposes of this article, transmusicality (Deschênes 2018) refers to the goal of expanding music preference to develop knowledge, skills, and music-making experience in an additional music culture.

Temporality is an additional challenge to moving between music cultures. Since Sub-Saharan African music cultures are a centripetal in our lives as musician-teachers, it seemed inappropriate to us in meaning, and inadequate in referent to use the term "African rhythm" (see also Agawu 2003). Temporality is a term that we began to use, not as a reference to the progression of music in time, but to the "time-shape of the music."

Suzannah Clark and Alexander Rehding (2016) point out that, "Not only can music be understood as sounds shaped in time but—more radically—as time shaped in sounds" (ix).

In his chapter on "Temporalities" in *The Oxford Handbook of Critical Concepts in Music Theory*, Scherzinger (2020/2018) goes beyond "simply reflecting on the various modes of time and timing found in music—rhythm, meter, tempo, tactus, subdivision, texture, grouping, form, and so on—[Instead his] argument traverses a vast global terrain, intersecting elements of philosophy, history, and geography with elements of music theory and analysis" (235). In his examination of contradictions related to musical temporality in the West, Scherzinger argues that the current idea of temporality, understood to be linear, and precisely divided is limited in contrast to alternative descriptions of temporality as cyclical. As Scherzinger suggests in his YouTube lectures (2016-2017), examining conceptions of meter and rhythm as they are related to musical practices in Sub-Saharan Africa creates a possibility of thinking about temporality in a way that lies beyond/outside the hegemony of the West related to "time-sequenced phenomena in terms of precisely segmented linear progress" (Scherzinger 2016-2017, p. 236).

In addressing the "vexing interplay of power and knowledge" (Scherzinger 2016-2017, p.236), he suggests the importance of analysis of African musical ephemera in dialogue with Western aspects of musical thought. For Scherzinger, "the distinction between the time a musical piece occupies or takes (usually conceptualized as its real-time or actual duration) and the time it shapes or constructs (variously conceptualized as the time it represents, evokes, and signifies, or as the time of its phenomenological experience or perception) guides a variety of contemporary music-theoretical approaches to musical temporality" (Scherzinger 2020/2018, p.239). Clark and Rheding's (2016, p. ix) description of temporal relations in music as "time shaped in sounds" along with Scherzinger's (2020/2018) perception of the temporality music constructs or shapes, allow us to refer to experiencing music bi-temporally. It also facilitates the discussion of time and music that is not limited to basic, commonly-used, Western durational concepts that mask deeper dimensions of temporal relations in Sub-Saharan music cultures.

Experiences Contributing to Decisions on Expanding Cultural Knowledge and Instructional Practice

Mapana's Educational and Teaching Experiences

Being traditionally raised in ngoma communities of Chamwino including initiation ceremony (i.e., boys' circumcision) during which music serves as a means for teaching moral values (Mapana 2020), I remember two very important people in my life who suggested I study music. In November 1997 at 5:00 pm, I was playing basketball at Korogwe Teachers' College grounds in the Tanga region of Tanzania, preparing for the "Umoja wa Michezo na Sanaa Vyuo vya Ualimu Tanzania" (UMISAVUTA) or Union of Sports and Arts for Teachers' Colleges in Tanzania. A friend of mine informed me that Mwalimu (Teacher) Magesa was asking me to join him in the choir rehearsal. Mwalimu Magesa was a well-trained music teacher at the college and he was coaching its choir that was attending the UMISAVUTA competition.

As I arrived, a choir of about forty people was singing, and without any questions, Mwalimu Magesa said "Kedmon, try to conduct the choir." I straightaway conducted the choir and from that day, Mwalimu Magesa recruited me into the choir. I became a well-known conductor of the college's choir during my two-year teacher certification course in Mathematics. In that year, the choir went to Morogoro Teachers' College for the competition and won first prize under my direction. My ability to conduct the choir was largely shaped by my participation in the church. I used to sing, dance, compose and conduct church choirs. While working with Mwalimu Magesa and the choir, he asked me the following questions: "Do you know how to read notation? Will you be interested in studying music?" I did not know how to read music and I had no idea there was such a thing called "studying music." Nevertheless, I told him I was keen on studying music.

Because of my musical ability, Mwalimu Magesa worked hard to find a college where I could study music upon my graduation in 1998. In 1999, I enrolled at Butimba Teachers' College. Two different situations altered my musical and educational practice by expanding them. Without either of them, I would not be where I am today. I encountered Western music at Butimba Teacher's College to fulfil the requirements of certification to teach music in Tanzania's public schools. Thus, for two years at Butimba, teachers taught us Western music to include harmony, sight singing/reading, composition, piano, and brass instruments. The talent I

had of co-creation of music and community building, and of spirit-filled performance in Wagogo music and *kwaya*[4] that I had learned informally were not applicable to this Western music classwork. I encountered what I call "enculturational discontinuity" (Mapana 2013).

Merriam (1964) defines 'enculturation' as "the process by which the individual learns his or her culture, and it must be emphasised that this is a never-ending process continuing throughout the life span of the individual" (p.146). In this sense, enculturation can mean "lifelong learning." So if people are not exposed to the music of their culture in their music enculturation process, for them, then "their music listening experiences [or musical enculturation] involve cultural noise" (Meyer 1967, pp. 16-17). This is what I claim to be the experience of enculturational discontinuity.

Because the learning of Western music notation was not linked to the music from my community or my history, I had to work hard—so hard—to understand Western notation. A friend of mine, Paul Muneja, who now has a PhD in Information Studies and lectures at the University of Dar es Salaam, helped me. He was a second-year student at Butimba Teachers' College studying music. Sight-reading/singing was a compulsory class that everyone had to take at Butimba. There was no way you could pass the class without learning solfege (sol-fa pitches).[5] Muneja spent time helping me sing solfege. I had no clue about solfege before that time. I worked so hard that I was finally able to master those equal-tempered pitches.

My difficulty in mastering solfege was not so strange. Remember, I was raised in the tradition of participatory music-making among the Wagogo

[4] This word can be defined in many ways. For example, Sanga (2008) defines *kwaya* as popular church music characterised using electric guitars, drum machines and/or electronic keyboards. In addition, Sanga views Choir as art music characterised by four parts which are either unaccompanied or accompanied by organ or electronic keyboard.

[5] Solfege is also called "solfeggio" or "solfa." It is a system involved in decoding the notation of Western music where every notated pitch of a musical scale is given its own unique syllable, which is used to sing that note every time it appears.

people where even the tuning of instruments is "wide." Turino (2008) describes the effect of "wide" tuning thusly: "In addition to issues of texture, the characteristic density of participatory music is created through timbre and related issues of tuning. A typical feature of participatory [music] traditions is that the tuning of instruments and voices on any given pitch tend to be purposely 'wider' than in standard cosmopolitan music" (p. 45). Turino indicates its importance because "the wide tuning of fundamental pitches and resulting richly staggered overtones help produce dense timbres" that the music culture values (p. 45). Turino (2008) further speculates:

> [A] preference for wide tunings actually comes from being socialized in a community where participatory traditions are the mainstay. Because of the range of musical skill included, people's tuning precision will vary somewhat, and wide tuning will become the norm. Musical values and senses of intonation are the result of the sounds people grow up with. Thus there is probably a dialectical relationship between participatory traditions and a preference for wide tuning (p.45).

Turino's perspective here illuminates on my struggles in learning equal-tempered Western solfege pitches that appear accepted now, if not always utilised, by most of the world's musicians.

If you meet most Western musicians and share your experience of learning Western music, what comes to mind would be that you have listened to music by great composers from the West, such as Beethoven, Bach, Mozart, Brahms, and Wagner and others. When I was studying Western music at Butimba Teachers' College, I was not enculturated into Western art music through listening.

As I think about learning Western music notation, I thought it was to enable me to perform specific composed, musical examples. However, I did not hear the music examples that were notated except when other students or I sight-sang them. I heard my own and other students' replication of the musical examples that we sight-sang, even rehearsed, but few songs or compositions of Western composers. We used books of exercises created by theorists or musicologists. we did learn the choral section of the "Hallelujah Chorus" from Handel's "Messiah" using solfege, for example, but without the orchestral or keyboard accompaniment. My experience focuses on sight-reading as symbol-reading—as decoding symbols—without awareness of the performance

experience which would have taught me, by illustration, the aesthetic values and stylistic characteristics that were required in their performance in the West. I believe the notated musical examples helped to learn to decode the notation and to employ notation in part-writing and song transcriptions.

I also learned some keyboard skills, and I learned to play the trumpet at Butimba. The keyboard and the trumpet were confined to the Music Building, so time for practice was limited. However, there were no recordings of symphonies or chamber music with trumpet solos, or British marches or royal, heraldic trumpet players. No jazz "charts" were involved in my study of Western music, just notated songs written for beginning trumpet players' exercises and sight-singing. I was fascinated by the harmonies I heard reproduced in the theoretical harmonic studies, some of which I even heard in beginning band arrangements. Most often, however, that included simple but harmonically interesting arrangements of familiar songs and hymns.

I am thankful for what I learned. Even though I am a musician from a so-called "participatory music" culture, I had an opportunity to learn Western solfege which I use today in my own Cigogo music transcription. In my approach to the transcription of Cigogo songs, I always start by finding the pitches, followed by the rhythm; then notate them using staff notation. It is not easy to get all the pitches, but I can tell you that transcribing Cigogo music and teaching the songs to people are some of the very best competencies I have.

The second situation I encountered, which expanded my knowledge on the British, was direct/lecture way of teaching inclusive of participatory/ student-centred instructional methodology was located at the University of Dar es Salaam, Department of Creative Arts in Music Room 5 in September 2002. As freshmen starting a BA in Fine and Performing Arts majoring in Music, my classmates and I were curious about how music lessons would be taught at the university level. Mwalimu Dionese Mbilinyi appeared in a class with a syllabus of a course titled, "African Music Ensemble." As we were eagerly awaited for the content, it was an "Aha" moment for me when Mwalimu Mbilinyi mentioned that not only were we going to learn about multi-arts "ngoma," but, as student-teachers, we were also required to recall ngoma from our respective ethnic groups and teach and share our knowledge and experiences.

This situation raised so many questions: Are students allowed to sing and dance ngoma only at the University level? Why was that not the case when I was pursuing my two-year certificate at the Butimba teachers' Training College? Why do music students in Tanzania's schools/colleges spend instructional time learning Western music notation, including sight-reading? In short, why focus on the music theory dealing with harmonic practices through Western Classical music history including chord creation, progressions, part-writing and formal analysis, with pencil and paper, but without including listening experiences with the sound of the performance of the notated examples? Why are we limited to sight-singing and keyboard classroom performance of notated exercises? And what about our own music cultures with their emphasis on aural learning? When I was growing up, music filled the environment. In other words, music was an integral part of the people's daily activities. Implicitly, you always heard music performed on the roads, at farms, at markets, in church, in schools, at local bars, at festivals, and at home. Hearing music all the time developed my ear training.

The questions I had about the study of music encouraged me to fully participate in the University ngoma class. The class not only made sense to me, but it also was fun because I was born and raised in the village of Chamwino Ikulu Dodoma where traditional multi-arts performances of ngoma was and is still an integral part of community activities. In this sense, I knew many Cigogo songs that I construct each my fellow students. I recall the first song I notated and taught them. It was "Sahani Yangu Hedukila."

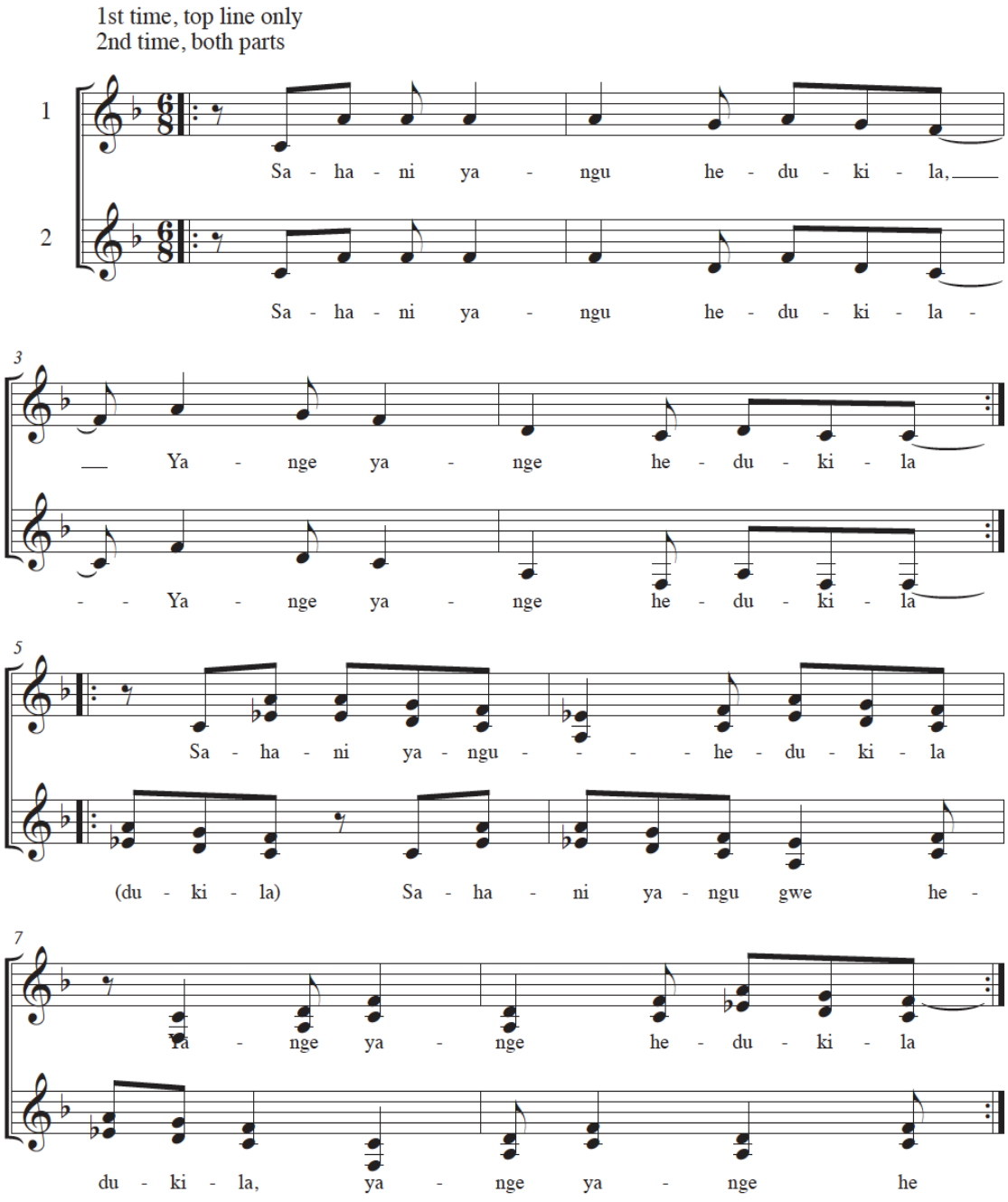

Figure 1: Sahani Yangu Hedukila (Wagogo Initiation Song)

Things I loved about this class were not only learning ngoma traditions of Tanzania but also the instructional strategies Mwalimu Mbilinyi used. The strategies were not only more participatory, more "hands on;" but also had enculturational continuity for me. It utilised the way I initially learned Cigogo ngoma.

I discovered, during my doctoral studies in the US, what Michael Prince and Richard Felder (2007) called "the many faces of inductive teaching and learning" (p..14). Some of these are inquiry-based learning, collaborative teaching, participatory teaching, student-centred teaching, problem-based learning, and discovery learning. All these labels are based on a simple realisation that students should be involved in the process of learning and the teacher should function as a facilitator. This approach is now well-known globally, and many countries, including Tanzania, attempt to utilise it, hence shifting away from the traditional way of teaching involving only the lecture/direct method where a teacher is the source of knowledge, and his/her work is to feed students the information that students are to absorb. These inquiry/inductive-based teaching strategies provide for the enculturational continuity we support throughout our collaborative work. Using a learning strategy focusing on enculturational continuity made students mostly go through the process suggested by Dell'Olio and Donk (2007), Marzano, Marzano and Pickering (2003), and Felder and Prince (2007): Generating hypotheses, collecting data, analysing data, presenting results and formulating conclusions. What follows is how I utilised this process in teaching.

Generating Hypotheses. In this process, students are involved in the conceptualisations such as music vs. ngoma. As teaching the music of Tanzania is complicated by Tanzania having more than 120 ethnic groups, each with its own music culture, with traditional musical forms, with its own musical values and standards of performance**.** Students normally utilise and define terms based on their experience or prior knowledge. Problems in defining terms include the possibility of institutionalising ignorance. Moreover, the reality is that all the Tanzanians speak an indigenous language until they begin elementary School, which is taught in KiSwahili, the Bantu-based language of the east coast of Africa, a language whose use is complicated by its variations based on its geographical location. Kenya's KiSwahili differs Tanzania's KiSwahili. Secondary school and college and university offer education in English,

so specific meanings and how terms are labelled in the three languages present challenges for us and for our students.

Data Collection. In this process, students are normally divided into groups depending on the number of students in the class. In their groups, each student is required to provide one song from his or her own ethnic group. After each song's ethnicity has been identified in groups, students are asked to review the literature and carry out a small survey to discover more details concerning their songs. Through their own experience as they read the literature and interview people, students can gather additional data. The students' age/stage affects the viability of this activity.

Data Analysis. In this process, each student in each group of students does its own analysis and produces synthesised information on song titles, genre, instruments, costumes, performance and contexts. Sometimes, one dedicated student produces the whole "report" so that collaboration does not really happen.

Presenting Results: a) Presenting findings to the class with discussion involves developing critical questions. Most often these are asked to see what the findings mean. This process is what Dell'Olio and Donk (2007, p.332) call an intellectual activity because it moves students into higher levels of Bloom's cognitive taxonomy (Anderson & Krathwohl 2000). Educators widely use Bloom's hierarchical models to identify and categorise learning objectives in terms of specificity and complexity. The learning objectives are the cognitive, affective and sensory domains.

b) Creative processing involves each student teaching songs to others in the group based on what he/she knows from his/her ethnic group. They rehearse the songs and communicate their findings. As part of this process, groups perform and evaluate each other to determine the first presentation in their data analysis is really happening in their performances. Students ask questions and give each other suggestions for making further improvement of the performances.

Formulating Conclusions: As the culminating event, students present a final musical performance in a big concert. The whole university community and people from the city are invited to attend to communicate to other people what the students have learned through this

inquiry/inductive process, an action that encourages the retention of what they have learned and motivation for continuing this strategy.

Some Implications

This instructional approach engages students in the learning process. Doing so gives students an opportunity to demonstrate their creativity, better understand concepts and acquire critical thinking skills. In my case, I enjoyed this course, and later I was had an opportunity to teach it. I was given the opportunity to demonstrate and develop what I knew from my own enculturation. The result is that I did very well, and I was recruited as a Tutorial Assistant in the Department of Creative Arts of the University of Dar es Salaam. Without this opportunity, I would not be here today. In addition, I was exposed to the *ngoma* of other ethnic groups in Tanzania and was involved in the learning process of analysis utilised in each of the different music cultures; and noting the suggestions for improving performance in terms of student presentation on the dimensions upon which the ngoma is evaluated in that cultural context. This situation had the effect of expanding my awareness of cultural differences in preference and formulation in my mind, hence increasing the value for diversity in musical expression and an expanded palette for making musical judgments.

Lundquist's Educational and Teaching Experiences

The classroom experience I had in my first year as a General Music and Social Studies teacher at Edmond S. Meany Junior High School on Capitol Hill in Seattle, Washington in September 1959 indicated to me that I needed to revise drastically my approach to teaching, especially in music classes. The rural and small-town students with whom I had worked when I was learning to teach in Montana culturally differed from the African-American students I first met in my classroom in 1959. Both, however, had firm, enculturated allegiance to the music cultures in which they were raised. I had little awareness of the level of cultural incongruence of the European music culture I was committed to teaching.

The assumptions from which I suffered included the thought that I was well-prepared for the teaching position. It was beyond my ability to understand why I was having such serious student behavioural problems, especially in music classes. With my background, how could I be failing as a music teacher? I had a B. Mus. in Performance from the University of Wisconsin and had just arrived in Seattle in August after completing my

Master's degree in Music and World History at Montana State University in Bozeman. In addition, I had successfully fulfilled the coursework required for a Teaching Certificate. I wondered how much I was the problem and how much the societal melt-down was the problem. It was 1959, three years after Rosa Parks sat down in the front of the bus in Montgomery, Alabama, launching the Civil Rights era in the US. There were outbursts of various kinds among the students related to the developing Civil Rights Movement. There were fires set in bins, protests in the lunchroom, and student hall walk-abouts banging locker doors.

Clearly, I was unprepared for the classroom management skills the times demanded. My sociocultural and musical background were incongruent with the expectations of the African-American students I was teaching or the social context of the school. I did not have the life experience, knowledge and skills necessary to instruct the students anything about the music of their heritage. The enculturational discontinuity I represented contributed to an almost insurmountable schism between the students and I. Students who refuse to co-operate with courses of study of little or no value to them not only provide evidence of how they inform and shape their development but also provide strong clues for building bridges across such schisms if their teachers utilise the opportunity.

I had received a teaching certificate not only without the necessary experience, knowledge and skills to be successful in an urban setting; I was trained from what was to me a global perspective. Some forms of music are valued as 'high culture' and others are left outside of the classroom being seen as 'low-culture.' I was not aware that I was thinking of my students' African-American musical heritage as having little value aesthetically or of being less worthy of study. I realised that the entire system in which I was situated was racist. The systemic racism provided me with "White privilege," that is, a cushion of unawareness that normally shielded me from consciousness of failure. As the months passed by—too slowly for my students—I realised that there was a route to cultural boundary-crossing in the very art I was teaching. The route that provided a lifeline for me was that I was an avid listener, a musician who does not only love music, but who is also exceptionally successful at listening to music analytically. There is a reason for that. At age thirteen, I contracted both rheumatic fever and chorea, or St. Vitus' dance, a neurological disease, at the same time, well before the discovery of

antibiotics, but after the doctors were aware of the healing potential of being immobilised for weeks to protect my heart.
In their attempt to care for me, my parents bought the 78rpm recording of Gabriel Fauré's "Requiem" in its 1893 version, which is about thirty-five minutes long. I was allowed to hear it once a day to interrupt the silence of my room. I got to know the Requiem so well that even the tiniest expressive change in timbre, pitch or dynamics became, for me, a dramatic event. It is my belief that I became such a focused listener, such an ardent observer of musical texture, that my ear became habituated to minute monitoring of musical developments as they unfold in performance.

Having the ability to listen with that intense focus allowed me to study recordings of Gospel and Rhythm & Blues of my students' enculturation. And, as I expanded my knowledge of the music they loved and included it in their instruction, their appreciation of me grew. I became tenacious not only because I needed the position to survive, but also because I was enjoying the students and the richness of the learning experiences in my classroom for both myself and my students. I persevered until I developed a teacher-directed instructional style with which both the students and I were comfortable, and the negative pressure of their behaviour lessened. I started feeling confident, effective, and, finally, successful. I reached the point where my classes did not only operate well but were also fun for all of us. My life as a teacher became not only challenging and absorbing but also completely entertaining.

By the Fall of 1963, I had carved a sixty-voice, four- and/or five-part choir out of Meany's student population by shamelessly recruiting basses in the hallways. Meany was a Junior High, so there were ninth grade boys whose voices had changed to bass/baritone, providing the fundamental sonic stability for a solid, four- or five-part choral sound. I introduced the choir to the concluding chorus of Heinrich Schutz' (1660) Christmas Oratorio, published as the "The Historia Der Geburt Jesu Christi" ("The Story of the Birth of Jesus"). I was, by then, an effective rote teacher. We had the notation, but I drilled the parts into the students' memory by rote. Although we could sing through the piece several times, as Christmas approached, I knew it needed more time. There was a city-wide choral festival in March in which our performance as a choir would be assessed. Despite its Christmas theme, the Schutz chorus perfectly exemplified for the occasion, so we went to work on it after the New Year eve.

One morning, as the festival approached, that sixty-member choir sang the Schutz chorus as if there were angels in the room. It was astounding! They realized it, too. At the end, we stood there with that flush of aesthetic thrill that performers feel when music has taken wings and become itself – spiriting us into another world. I told them that "you have brought the music of your ancestors alive in this room this morning. Congratulations!" I clearly remember the flash of insight I had as I looked at them! At least three-fourths of the choir were African-American. Indeed, I believe that the musical monuments of the great composers of Western Classical or concert music belong to all my students, whatever their ethnicity, but I had no idea of the music of their *African* ancestors and too little knowledge of the music of their *African-American* ancestors! I had learned to handle effectively the junior high students' behavioural challenges without completely altering the content of the curriculum.

I realised that I had no idea of the cost for their expressive creative energy, of taking on the process of developing the performance expectations required to replicate a Western composer's musical expression. The teacher-directed instructional methodology necessary to bring a composer's work alive, to replicate a sonic creation, was not congruent with music-making in the music cultures of the largest percentage of my students. Their African-American music culture, including Gospel and ubiquitous singing and dancing with a variety of Black popular music styles largely characterised their participatory, co-created community-building musical expression which fulfilled their expectation of creative, enthusiastic participation.
In that moment I realised that I was originally contracted to teach European art music not American music. In the course of that instruction, I was expected to identify and "educate" people who could either perform or appreciate—thus become potential supporting patrons of European Classical or concert music. I had an overwhelming, deeply profound revelation of the whole paradoxical situation: The positive, thrilling opportunities that we had realised, and its profound socio-cultural, educational incongruence and injustice!

What was really going on? What was the cost to African-American students to be trapped in that situation? I wanted the study of music to be an advantage to them! I intended it to be. What do musician-teachers need to know to value Sub-Saharan African music cultures (using Nketia's [1974] perspective of their relatedness rather than that of Nannyonga-

Tamasuza's [2012] focus on their uniqueness) along with Western music genres as shared roots of Black music? What would I need to know to make Black music more central in their curriculum? How long would it take? I decided to find out.
The process through which I went to expand my music preference to include Sub-Saharan African music cultures took decades of experiences during which I shared what I was learning with music students and pre-service and in-service music educators in clinics and conference presentations. By 1968, I was utilising Sub-Saharan African, as well as African-American musical examples in my instruction, reflecting the increasing knowledge I acquired in listening. My success as a performer of African and Black musical examples was very limited and periodic as it was constrained by time and opportunity as part of my university classwork or class-related performance during concurrent doctoral studies in Ethnomusicology and Music Education at the University of Washington from 1970 to 1973. My performance experiences were buttressed by lessons and music-making during trips to Africa (i.e., Senegal/Gambia, Malawi, Mozambique, Kenya, South Africa, and Tanzania) for reasons related to my professional life as a music educator in the 1980s and 1990s.

Fifty years later, in 2018, I experienced success in improvising for two or three minutes in a five-minute performance opportunity with two traditional African percussionists, each of us playing a djembe-shaped drum. Kofi Anang, a Ga musician from Accra, Ghana and Kedmon Mapana, a Mgogo from Dodoma, Tanzania allowed me to begin. During the performance, I was suddenly aware that I was improvising. Because I happened to be looking at them from the side, I saw their faces suddenly turn toward me as I felt myself freed from the cultural barrier that had stopped me from including improvisation when performing on a drum. It only took me fifty-six years of listening and study, but I got there. I know where "there" is.

Since then I have grown to understand and communicate how I expanded my music preference to include Sub-Saharan African music cultures in terms described in the music preference research of Albert LeBlanc (1982). His model identifies variables involved in making changes in music preference, so it provides me with a framework for briefly describing the variables I utilised as I expanded my music preference to include Sub-Saharan African music cultures. LeBlanc's model also provides a structure to use in identifying variables I believe

had a strong influence on the success of my progress toward perceptual transmusicality and bi-temporality that his model does not seem to include.

LeBlanc (1982) summarises the process of changing music preference by stating that changes need to occur in four major areas: 1) change something about the music; 2) change something about the cultural environment; 3) change something about the listener; and 4) change something about the way the listener processes the information that comes in from the music and/or the cultural environment. Each of these areas of change were involved in my life as I undertook the journey across music cultural boundaries. This is a re-drawing of LeBlanc's (1982) model:

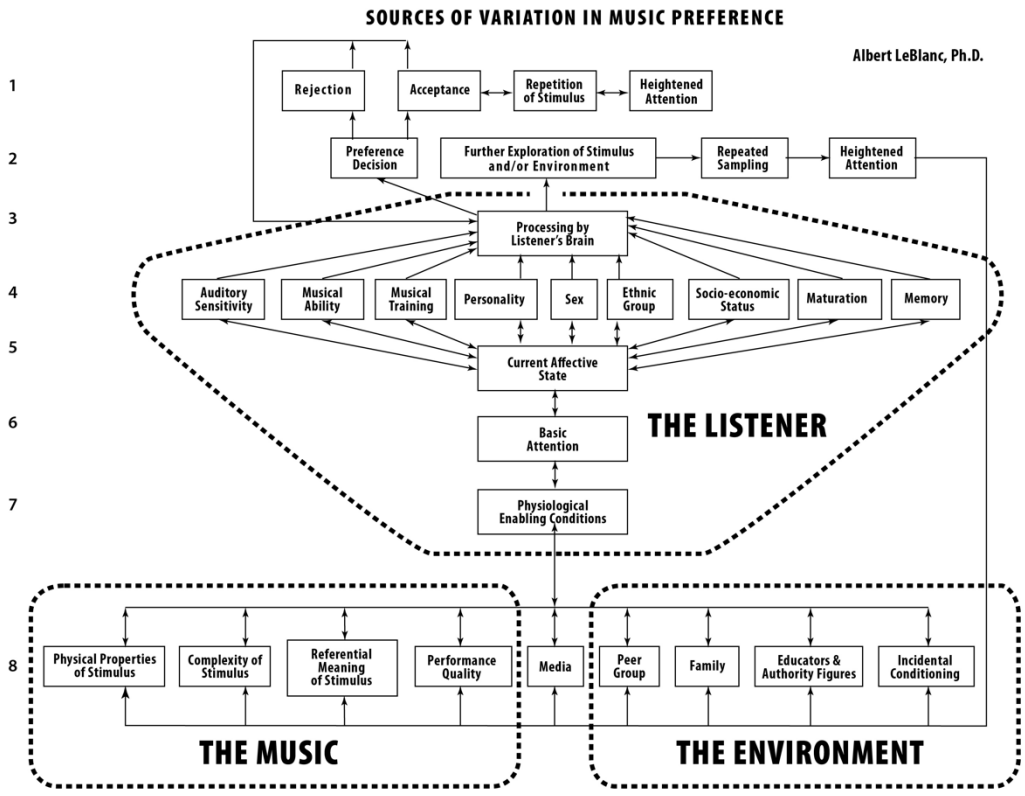

Figure 2: Re-Drawn Model of Sources of Variation in Musical Preference (LeBlanc, 1982)

The most critical of these variables, from my perspective, are the changes that I made in myself. Chief among these was my *basic attention*. It is the perceptual gateway through which music passes. I listened to the Sub-Saharan African music examples available to me. In my experience, it takes only a few seconds of a musical example from an unfamiliar music culture to be heard and judged by a listener to be not only unfamiliar but also not aesthetically valuable, resulting in a shift of attention away from the sound. Awareness of that fact had everything to do with the success of my selection of musical examples for my secondary school and university music classes. I became very skilled at picking examples that would hold my students' interest long enough for them to hear something I intended for them to listen for; examples that piqued their interest enough to increase the length of their full attention on the music. It is there that the cross-cultural learning can occur, an opening where new, underappreciated differences can hold awareness and offer continuing interest and learning.

The quality of *perseverance* that LeBlanc includes in his model is one that I honoured in my long-term, tenacious focus on the goal I had set. My *musical training* was of use to me, as well, especially in terms of transcription skills, and opportunities to increase my ethnomusicological experience with analysis of unknown or less known musical examples. On the other hand, *physiological enabling conditions, auditory sensitivity, musical ability,* and *maturation* provided the enabling conditions for me to be open to an expansion of my music preference.

Five of LeBlanc's variables*: current affective state, gender, ethnic group, socio-ethnic status* and *memory* each had effects on my ability to succeed in expanding my music preference. As an example related to *current affective state*, I chose to focus more intently on my professional life during a time when family relationships were difficult, providing badly-needed balance and encouragement in my life. Not surprisingly, *gender* was an issue throughout the whole process ranged from barriers of inconvenience to accessibility through privilege.

LeBlanc did not include "White privilege" in his model, but it has, without a doubt, placed me in both favourable and unfavourable positions. In the beginning, people that I thought might help me by becoming my mentors

did not work out. For example, I attended a choral rehearsal with a well-respected African--American gospel choir director. When I observed how she maintained order in her student group, involving a group of parents as enforcers, I realised that I had boundaries I needed to maintain in the process of encountering another culture. On another occasion, an African-American gospel choir director whom I greatly value as a person and a musician told me that she had been asked not to share any aspect of the gospel tradition with a White person. That was understandable, but it meant that I had to rely only on recorded music until I encountered people willing to be my teachers who were African or African-American.

At several points, I experienced situations where my integrity related to issues involving racism were called into question. In believe it was in the 1970s in Muncie, Indiana that representatives from Ball State's Black Student Union came to my workshop, for music teachers focused on using Sub-Saharan African music in music education. The fact that I was White, meant that they could not allow me to appropriate music cultures that were not my own without pushback. I requested that they allow me to continue the workshop, welcoming any clarification or comments they made when they believed I was saying something false or inappropriate. They were able to add comments that expressed not only the authenticity of their positive reaction to what I was sharing, but also added personal reflections about it. Most important was the humour that they often injected with their comments, so it was more fun! They would come and go as their class schedules and work allowed, and the interaction between all of us became very natural and positive. My memory of that experience together not only expanded positive intercultural-interracial relations in one group of people in a conservative region of the USA, but also created a remarkable change in the music teachers' acceptance, if not preference for African and African-influenced Black music.

My appearance at San Francisco State was another occasion. The African-American audience, after a hostile, dismissive beginning in reaction to the initial shock of my ethnicity, let me go ahead with my presentation, and work with the Black elementary school-age students (including their percussion instruments) they had brought with them. As it happens, the kids loved the chance to perform and improvise and liked the kind of exercises I did with them (e.g., Notes; Lundquist 1973). The systemic issue of racism affects everything in the US. Therefore, it has to be dealt with constantly.

The burden of racism has been born by people of colour, not by my ethnic cohort, so occasionally people of colour needed me to know that they were troubled not only by my "White privilege" but even more, by my cultural appropriation. It is historically established that White musicians have imitated Black musicians and subsumed African-American musicians' cultural contributions as their own over four centuries. The music of Black string music ensembles becoming "bluegrass" is only one example of this appropriation, as is blues, jazz, rap and hip hop. In fact, it seems possible that rock may be the American genre to which every ethnic community in the US, including Indigenous cultures (e.g., "Rumble" by Shawnee Link Wray), has made salient initial and continuing contributions.

There were financial issues, as well. From the beginning, I remember being very clear about money involved for clinics and workshops, for which I was paid. Invitations for me to share information followed the success of the Junior High performance of African traditional music in the MENC Host Night Concert in 1968, more about which is below (Mark & Gary, 2007, p. 430). I was being paid for my time and access to my experience, not for the music transcriptions, because the music and its utilisation in improvisation did not belong to me. Others used some of my "In the Style of" classroom percussion exercises (Lundquist 1973) in various other ways without my permission, sometimes involving money, but I received no money for them. However, the influence of the five LeBlanc variables being discussed pales in comparison to the positive effect of my tenacious *basic attention* and *perseverance* in the expansion of my music preference.

Changes in the way I process information is another example of alterations I chose to make (LeBlanc 1982, p. 35). I rarely, if ever, allowed myself to reject any example. And that was very hard! Occasionally, I would listen to an example again and again, sometimes over a long period, to try to determine why I was unwilling to focus on it. The lack of rejection I insisted upon had the effect of increasing the strength of my focus on growing in knowledge and expanding my perception to accept examples that were not immediately appealing to me. My increasing *acceptance* encouraged me to look for musical strengths of each example. Almost every time I was able to find some aspect of a musical example that I learned from or grew to appreciate. My acceptance made room for further exploration. *Repeated sampling* and *heightened attention* always followed, increasing my rate of progress.

There were ingredients that I believe contributed to my success in expanding my music preference that do not seem to appear in LeBlanc's model. In terms of the environment, for example, on national, regional and local levels, Martin Luther King, Jr. and the Civil Rights Movement focused on African American culture in such a way and with such powerful, courageously substantive words and profound commitment in action that I felt my acceptance as a musician-teacher of the multi-ethnic, diverse character of our country was supported. Because of my work with curricular programs, I developed expanded, collegial relations of greater diversity. In fact, there is a relationship that, for me, is deeper than the "*peer group*" that appears in LeBlanc's model. Could one name it "cohort"?

Musical abilities developed in the expansion of my music preference includes percussion skills, playing by ear and some improvising absent from my previous training as a cellist. *Musical training* was affected on many levels, of course. *Personal attributes, motivation and respect* for Africans and African Americans resulting from life experiences supported my commitment to become a better teacher by expanding my music preference.

LeBlanc's (1982) model has been useful for me to communicate changes in my ever-expanding music preference. Further research is needed, however, if it is to be used as a foundation for instruction with this goal. Having a research-based "map" to focus thinking and dialogue on this important dimension is helpful, however, so its continued utilization and refinement are worthy of additional research and instructional goals.

The second situation in my personal story involves the expansion of my teacher-centred style of instruction. Replication of Western art music monuments in performance requires conductors or musical directors who are responsible for bringing a group to expected performance practices of the highest possible quality. Even in music appreciation settings, the teacher knows what tradition requires in the analysis and evaluation of performances replicating Western musical genres and the organising of presentations or performances that make a high quality of analysis and replication possible. This is not the case when co-creation or improvisation is the focus of music-making. Teachers of jazz ensembles, including those that replicate jazz classics, know that, but I did not.

In collaboration with a member of the Washington Junior High School music faculty, Lynne Jessup, I formed a "Sub-Saharan African-style"

percussion ensemble in 1968. This group deliberately included African-American students not all of whom were in the school music program. Almost all had no experience with notation or school performance groups but were selected and intended to be successful as percussionists in the Junior High student performance of examples from Sub-Saharan African music cultures in the Seattle Schools' Host Night Concert in the Seattle Opera House during the National MENC Conference in March 1968 (Mark & Gary 2007, p. 430).

The music selected for the Junior High African percussion ensemble included the "In the style of…nuggets" (Lundquist 1973), mentioned above, that I had transcribed from different recorded examples of the performance of traditional ngoma by percussion ensembles across the network of related ethnic groups in Sub-Saharan Africa described by Nketia (1974). These were improvised upon by the percussion ensemble. Songs in the program were learned by ear by the Junior High School Choirs.

I knew that there were musician-percussionists in West Africa who functioned as leaders of ensembles. Probably the greatest challenge was selecting the lead drummer who was to take my place as the conductor of the ensemble at the performance. It happened later that instead, because students on the three stages involved could not hear each other, I had to "lead" the performance from a platform in the Main Aisle of the Opera House. One of the lead drummers selected during the original group's tenure at Washington Junior High and the following year at Franklin High school was Winston Sims, whose reliability never wavered. His ability to improvise was important, but his effectiveness as a leader was outstanding. Stronger students liked him and gravitated toward him in the semi-circle in which they sat, leaving creative, less-disciplined improvisors as the "book ends" of the group. A Sub-Saharan African-style ensemble in another school had a brilliant improviser as a lead drummer but his ego needs and desire to create were not as disciplined as Winston's. Without the foundation Winston's leadership supplied, that group was not as reliable, the community-building as solid, or the performance as musical. Winston's improvisational style was to respond to ideas he heard, and to give those ideas encouragement to develop. In doing so, he added to the sonic texture they were creating as well as the socio-musical bonding. So, the spirit of the improvisations based on those

"nuggets" was dialogic and the music-making forged a discernible sense of community among the members of the group.

Utilising that musician-centred, collaborative learning strategy, I found that not only did students co-operate nicely with the ensemble's lead drummer acting as student director, but also were happy to work with me as I circulated during rehearsals, clarifying rhythms, timbres, tempos, and dynamics. Instrumental techniques were also discussed and TUBS[6] notation utilised (Koetting 1970; Nettl 2005/1983). This classroom structure worked well and promoted the creative energy of the students. Over the years, I had crucial assistance from African musicians hired for in-school residencies, including Obo Addy and Kofi and Amma Anang, two Ghanaians and an African-American who taught with me for years.

The "nuggets" that were utilised as subjects for improvisation in Junior and, later, Senior High School percussion and dance ensembles, were brief transcribed outlines of the rhythmic texture of specific recorded performances. The musical performances were from cultures both in Africa and diasporic areas in the Western hemisphere, featuring the ethnic groups and/or Western hemispheric musical styles to which they contributed. This included, as examples, influences of Nigerian Yoruba Bata percussion ensembles found in the Santeria genre in Cuba, Salsa in Cuba and Puerto Rico, and the Angolan influence in Capoeira and regional Samba schools in Brazil. These "nuggets" were always labelled as "In the Style of…" so that authenticity was not expected but cultural credit given where it was due. The students improvised on these brief summaries of musical examples, encouraged by the development and utilization of a student-centred, participatory classroom context for music learning. They also learned musical examples from the African culture bearers who were our informants.

As a teacher, I was very comfortable as a consultant-organizer-analyser-encourager, in point of fact, as a coach! My instructional style with these

[6] TUBS (Time Unit Box System) notation was developed in 1962 by Philip Harland at UCLA when he was working with Ghanaian percussionists in the African Study Group, a performing ensemble in the Institute of Ethnomusicology as described by James Koetting (1970) whose article is available on Google.

ensembles created a context that was psychologically relaxed and in which students without a history of expensive music lessons or ability to read Western music notation were co-creators of the music and honoured for their musicianship.

Framework for Bi-Musical/Bi-Temporal Certification of Musician-Teachers States

As a result of our educational and teaching experiences, we realise that it is not the music cultures' timbres, the textures, the dynamics or the forms of music that cause musician-teachers' problems in utilising a breadth of music cultures in music education in Tanzania and the US. It is learning to read and perform—sight-read/sight-sing -- the specific system of Western music notation[7] with its equal-tempered pitches; or the reverse, "playing by ear" of instruments and voices. Both reading notation and "playing by ear" are knowledge and skills necessary in global twenty-first century music-making, so they remain components that must be included in the preparation and certification of musician-teachers.

The temporality or time-shaping of music cultures is foundational (Scherzinger 2020/2018). Problems encountered with the time-shape of Sub-Saharan African and African-American music cultures present far more than only rhythmic challenges for those studying them. The characteristics of the time-shape of the music, the temporality within which the elements of rhythm operate, challenge the initiate.

African-affected temporality is ascendant in global popular music, due to the power of African-American popular music and Western media and technology. African musical temporality has formed the infrastructure of African American/Black music's temporality in the US. The musical effects on the West of the African diaspora also contribute to the roots of American music. Paradoxically, it is Western-influenced globalisation which is also affecting African music-making in both socio-cultural and technological systems. Since the existence of traditional African music provides sustenance to the roots of African-American/Black music

[7] Chinese and Japanese notation systems for specific instruments and ensembles are also important for teachers and students in instructional and performance settings of music cultures utilising those instruments and symbol systems.

temporality, the growing popularity of technology developed in terms of Western linear temporality may negatively affect it, as Scherzinger warns (2020/2018).

As musician-teachers who have transmusical/bi-temporal, bi-cultural musical experiences, we agree on the following common elements of music across diverse cultures that must be reflected in students' music education and appear as expected ingredients of programs in teacher preparation and certification:

1. *Music is transcendent*; it exists beyond the limits of immediate experience both in our memory and in our perception of sound and silence's flow through time. It is primal in its importance to us as a means of human expression and as a means of building and maintaining community in socio-cultural settings. Incorporating music in the education of young people is critical to students' enculturation.
2. *Music is a temporal art*; by this we mean that music affects the way we experience time. We have come to an understanding that "shaping" time may be one of music's defining foundational characteristics. In support of this theory, we note that musicians cognitively internalise and expressively utilise unique, contextually specific, culturally expected "time-shapes." In any cultural context, where there is an event involving music, the musicians' first task is to create, then "set up," the sonic structure of the music's time-space, its temporality. Musicians successively re-create and sustain the temporality that all participants experience as music-makers, dancers and listeners in these contextually specific, culturally-accepted and supported settings. Given the effects of Western technology, it is easy to Westernize temporality in African-influenced music. African temporality is a treasure that must be valued.
3. *Music is participatory*; it is a socio-cultural art, which requires, encourages and facilitates the formation and advancement of community-building in music cultures. It is in "popular" — that is, people-supported — ways that music is shaped in time, music cultures emerge, and traditions develop and change.

4. *Change in musical expression in music cultures is constant*; even though the rate and areas of change differ, but music's cultural

presence is sustained in every culture. Therefore, its transmission is a consideration for educational institutions everywhere, especially in aspects concerned with preparing musician-teachers for music education in increasingly culturally diverse educational settings.

Implications for the Preparation and Certification of Transmusical/Bi-temporal Music Educators

In short, then, the government certificated public school musician-teachers in culturally plural societies all over the world, have the responsibility to be able to use Western music notation for sight-reading, transcribing, and analysing Western and non-Western music compositions where appropriate; to be able to play by ear, utilising commonly used Western chord progressions or other foundational options to accompany melodies on the keyboard and/or guitar; to understand temporality in music as a component of music education; and to recognize the musician's role in creating and performing in the musical temporality of specific music cultures; to provide enculturational continuity in music instruction in public schools; to extend the cultural settings in which music students can thrive expressively in the 21st century; and to be able to utilize a range of instructional methodologies required, including both teacher-directed and student-centred methodologies. The latter involves opportunities for students to contribute to research development, to have experience with issues involving cultural policies and for reinterpreting and recirculating examples of contemporary global forms of music as well as creating and expanding music-making in their music culture.

These responsibilities require music educators to move into unfamiliar ways of dealing with music (e.g., music notation, sight-reading, transcription and playing by ear) and instructional or learning settings and ways of "feeling" time; that is, to be able to internalise cognitively and utilise more than one culturally unique, contextually expected "shaping" of musical time, or temporality.

Challenges are many. Musician-teachers' openness to the importance or applicability of Western music notation, to performing accompaniments by ear using common chord progressions, to cultural expansion of their temporal awareness is questionable, especially if they are committed to the cultural practices of their music culture, or to the pitch or rhythmic palette of a single cultural time-space.

Abandonment of a comfortable "feeling" of time to learn to function musically in another requires trust in the possibility of developing the ability to move easily between two (or more) culturally specific pitch continua and time-spaces--to become to some degree bi-temporal, even culturally transmusical (Deschênes 2018)—and still be able to be expressive musically. Becoming transmusical, bi-temporal or musically bi-cultural, expands musician-teachers' socio-cultural awareness and cross-cultural instructional capability, provides enculturational continuity for students, and extends the exposure of students to a variety of cultural settings in which music students can learn, continue to develop and thrive expressively in the twenty-first century.

Conclusion

As this presentation has demonstrated, the crossing of cultural temporal boundaries is problematic, yet we know music-making is happening all over the place between musicians who are increasingly can navigate the aesthetic boundaries of more than one culture. Music from many cultures is not only available globally, but people are also sampling and creating "mash-ups" of music from many regions of the world. Globalization of music has always been underway. In view of cultural plurality, globalisation, and the influence of African and African American, or Black music in media-supported popular music internationally, music education in Tanzania and the USA must now include the preparation of musician-teachers to deal with this cultural complexity; this cultural reality. The time has come for expectation of cross-cultural capability on the part of the musician-teachers who are certificated to teach in public school music classrooms. Perhaps programmes in music teacher certification would be developed more appropriately in departments of Ethnomusicology, the only division of musicology in Western higher education committed to a global perspective on music, and because teachers' cross-cultural knowledge, skills and attitudes are central to instructional success in music education in globalizing, pluralistic societies (Schippers 2010). Subsequently, developing a programme of experiences for teaching or developing bi-temporality, it will be necessary to identify the goals and processes of enculturation, or acculturation (Berry 1997) in a sub-Saharan African and/or African-American, or Black music culture for those who have not had that life experience. Africans and African Americans or appropriate music culture bearers must be the ones to design and undertake that effort.

We have argued that music education in both Tanzania and the US has been focused on European art music culture with its commitment to replication of exemplary examples of composed music. Where replication of composed music is the goal, the teacher's role is dominant, and the students' role as apprentice performers or potential patrons requires development of specific capabilities to sharpen knowledge and skills required to replicate the stylistic aesthetic nuances involved in specific performance practices that are utilised in the evaluation and sustenance of the support of specific cultural performing groups.

Where the goals of music education in Tanzania and the US, that is situated in Sub-Saharan or African diasporic settings, do not involve replication of Western compositional monuments, the knowledge and skills required for musical replication may not continue to be appropriate for music education. Where music is conceived as co-created, composition including improvisation, aural learning and playing by ear are required and become vital ingredients in educational curricula. Where co-creation is the focus, the students' involvement in music-making is reversed, as is the role of the teacher. Such profound adjustments require different instructional capabilities and interactional competence from the teacher. These issues require long overdue, heavy-duty cultural examination.

The Manhattanville Music Curriculum Project and the Contemporary Music Project in the US in the 1970s, along with Yamaha's Music in Education project in the 1980s, as well as such music instructional methods as those found in Suzuki, Orff and Kodaly music methodologies (Campbell 2014; Mark & Gary 2007) supply points of reference and address some curricular and instructional implications of changes in the focus of music education.

Overall, music in the twenty-first century belongs in the public-school curriculum and students need empowering knowledge and skills for them to contribute to the society's music-making. Diverse cultural settings complicate music education but offer options, possibilities and infinite opportunities. Cultural communities are more heavily involved than ever in the transmission of music culture and music educators are finding positions in these settings, sponsored by them as well as by public and private school systems. The presence of diverse music culture bearers is needed, not only as stakeholders, but as colleagues developing and teaching curricula in music education, for authentic contributions to the

preparation of music educators and discussions of criteria for their certification.

Notes

1. This simple exercise demonstrates a repeated pattern of two rotating among patterns of 3, so the listener feels the common pulse, but the uneven rotation of the groups of 2 and 3 which provides a multi-rhythmic sonic framework that changes emphases as it holds the attention of musicians, listeners or observers or, especially, of dancers:
    a. Make a fist and alternate evenly between hitting the palm of your other hand and a tabletop (up-down, up-down, etc.) with the fist.
    b. Have a friend perform that one, while you alternate evenly between clapping twice and striking the tabletop with one or both hands (clap-clap-strike; clap-clap-strike, etc.).
    c. Watch each other's moving hands, noticing the "multi-temporal" or "multi-rhythmic" effect created by the combined patterns and the reaction of your body to it.
    d. Exchange with your friend, so that you are playing the first pattern. Observe the difference in the reaction each of you has to the same combination but playing a different part.
2. A more difficult exercise that allows one to feel the world of difference a West African timeline generates in the reaction of the movement of the body. This is to focus on the character of movement depending upon whether one is reacting to emphasis on a duple or triple grouping, to both at once or moving back and forth between them.

    a. Play: 1 x 3 x 5 6 x 8 x 10 x 12 [In Ghana, this pattern *(Agbadza*) is played on a double bell (*gankogui)* and #1 is played on the lower bell.] It must be repeated endlessly, paying attention to what one is playing. It isn't easy to keep one's mind on it, at first. It is said that it gets to be a way of "being" for those who perform it successfully. We have heard people speak of weeks and months of playing/"being" the timeline as the first stage in becoming a reliable performer.
    b. Walk this pattern while playing the timeline above:
    1 x 3 x 5 x 7 x 8 x 10 x 12 x [Repeat; examine the character of movement and the nature of your body's reaction to it. Do

you feel alert, on top of things, effective, though perhaps a bit rigid, with this embodied experience?]

c. Walk this pattern while you play the timeline: 1x x 4 x x 7 x x 10 x x [Repeat with attention to how your body reacts. Some feel a laid-back dignity in this experience, a loosening of the joints somehow; a deep ease in responding to the pattern. Some speak of relaxing into the pattern of the timeline.

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