

Peer-reviewed article**The influence of rurality and its indigenous knowledge on teaching methods in higher education – lessons from *Ukulange Mbusa* of the Bemba people of Zambia**

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Abstract

This study was on the influence of rurality and its Indigenous Knowledge Systems (IKS) with reference to the *Ukulange Mbusa (UM)* ceremony of the Bemba people of the Northern Zambia. Rurality is a demographic and a social category and implies distance from urban centres, sparse population, lack of amenities, infrastructure and sometimes social deprivation. A lot of forms of indigenous knowledge are imparted on learners from rural areas before they join universities and meet other knowledge systems. The study tried to establish if some learning and teaching approaches, methods and techniques used in such traditional ceremonies and settings could influence the teaching and learning in higher learning institutions. Interviews, Focus Group Discussions (FGD), and documents analysis were used to collect data. The sample was drawn from traditional chiefs, women counsellors (*alangizi*) and university students initiated in the *Ukulange Mbusa* ceremony. Findings of the study are that the positive influences of rurality and their forms of indigenous knowledge are often minimised, misunderstood, ignored, viewed as backward, local, native, and therefore not suitable for use in higher learning institutions. However, this study argues that progressive indigenous forms of knowledge must be hybridized with the university ones, save negative ones such as those fuelling early marriages.

Introduction

There are arguments that African Indigenous knowledge systems (AIKS) may not exist as a body of knowledge but such views have been challenged. Arguing from the African world view, Seepe (2000:32) justifies the use of the term AIKS, which houses the Ukulange Mbusa ceremony when he says:

The African Indigenous Knowledge Systems is a counter-hegemonic discourse in the context of African renaissance. This discourse is a reaction against a western, colonial discourse that completely dismissed African indigenous knowledge systems, as they were posited in reductionist terms and relegated to the realm of insignificance.

Emeagwali (2003:57) also supports Seepe, (2000 and Banda, 2012) when she says that:

The African Indigenous Knowledge Systems (AIKS) is a reaction to disinformation embedded in Eurocentric colonial and post-colonial education, including the selective omission of non-European achievements, inventions and technologies, the distortion of data, and several other strategies of colonization and recolonization.

One major reason why there is so much negativity toward AIKS is that the system is so much affiliated to rurality. So the negative connotations attributed to anything rural, traditional, local, native, village also affect the AIKS as it is concentrated in rural Africa, as explained by Emeagwali, (2003:56) below:

Traditional - implies the holding of fixed beliefs handed down from the past, thus contradicting the idea of research. *Native* - locates people in their land of origin and often does not apply to highly mobile people. *Local* - limited to a particular geographical location and could as well limit its scope and use. *Rural* - inferior and uncivilized. *Villager* - not urbanized.

Like a snake, rural students joining universities must remove their rurality 'skins' to put on the new ones of 'modernity' so to put it (Banda, 2008). It is no wonder that a student joining higher education from a rural school, with perfect and proficient local language knowledge, for example, has to change her/his tune, and intonation and start speaking in deliberately broken local languages to be accepted by the new community, least he/she will be deemed to have just come from the village or rural areas full of AIK. Some of the changes these rural students make may include changing their African names sometimes, forgetting that most of the African traditional names are teaching lessons or even 'libraries' given to store information for future reference (Banda, Louise & Gerd, 2012).

To illustrate this point, in the Bemba culture, a child born after twins is called '*chola*' and among the Tonga people a boy or girl child who is born after three girls or boys in line respectively is called '*mutinta*'. Among the Chewa people, a child born when the family has a funeral is called any of these names: *Malilo* (funeral); *Chisoni* (Sorrow); *Misozi* (Tears). Among the Tumbuka people found in Zambia, Tanzania and Malawi, a child born when there is unexplained death in the family would be given names such as, '*Akafwilangachi*' (Why did he have to die?) or '*Akanangachi*' (What wrong did he/she commit to merit death?). When such names are changed in exchange with the so-called western ones, the whole 'library' is lost.

It has also been argued that the course contents covered in universities, in some subject areas, have little to do with the lives of these students. For example, they have to learn about the causes of World War I and II and only from the British point of view and even be forced to memorise the years when such wars took place. In addition, critics of the western oriented education system (Odora, 2004) still insist that learning in the formal education system in schools and universities in Africa is directed at acquiring a body of straightforward empirical information, focusing on memorising facts, definitions of concepts, and the application of formulae to deduce clear answers, descriptions of phenomena, but often not to be analysed and applied to a field of study or life experience.

In fact, the teaching and learning through traditional ceremonies in AIKS are more analytical than mere memorisation of factual data as much knowledge to be acquired is packaged in songs, folktales, proverbs, riddles, figures of speech, practicals and oral literature, to mention but a few. The curriculum is basically task-based and stresses the following:

- Detailed knowledge of physical environment and skills for exploiting it.
- How to live and work with others.
- Roles in networks of kinships and relationships and understanding of rights and obligations.
- Laws, customs, moral principles, obligation to the Chewa people's ancestral spirits, to relatives and to others in the group or tribe (Ngulube, 1989).

We agree with the views expressed above and our argument is that to a large extent, these views show why AIKS is used as an antonym of the Western Knowledge Systems (WKS), so much so that anything that is not European is African. For example, in AIKS, unlike in WKS, knowledge is never owned by an individual but the community or an ethnic group such as a tribe. In AIKS, proverbs, sayings of the wise or even theories are owned by a given community or tribe, while in the WKS, theories are owned by individuals who are quoted once referred to in any academic writing, and therefore respected.

Literature Review

For a better understanding, we focus our literature review on the African Indigenous Knowledge Systems (AIKS) and relate it to the *Ukulange Mbusa* ceremony of the Bemba people.

African Indigenous Education Systems (AIKS)

The IKS practised in African countries is commonly known as African Indigenous Knowledge Systems (AIKS). Some authors and researchers especially from the West have argued that AIKS does not exist as individual African countries have unique IKS. Other authors have argued further that no body of knowledge can belong to a tribe and on that basis refute the existence of a homogeneous body of knowledge to all the African countries (Herbert, 1993; Semali, 1999). However, it is common in many African countries and to many African scholars and researchers (Ocitti, 1973; Fafunwa, 1974; Mwanakatwe, 1974; Ngulube, 1989; Serpell, 1993; Odora, 1994; Ajayi *et al*, 1996; Omolewa *et al*, 1998; Kelly; 1999; Omolewa, 2001) to use the term 'African' when they are writing about IKS of different African countries. It is therefore more or less common knowledge in many African countries

that any piece of item, or indeed form of knowledge that is not of European origin or English, is automatically 'African' and does not take the name of an individual country.

Ukulange Mbusa (UM)

AIKS have a number of ceremonies such as the *Ukulange Mbusa* of the Bemba people of Northern Zambia that act as some form of 'school' to train their young for adult life leading to raising their own families (Banda, 2008; 2012). *Ukulange Mbusa* is a Bemba marriage ceremony that takes place both as a marriage formalization ceremony and instructive ceremony. As a marriage ceremony, both girls and boys of age are taught the Bemba worldview which includes the cosmology and origin of the human condition by considering:

1. The human's co-existence with the natural environment.
2. The sacred position of everyone in society.
3. Various aspects of marriage relationships.

In this ceremony, the *Bana Chimbusa* (teacher) is deemed to be full of the traditional understanding of the importance of principles, personal and societal goals, emotions and mood management, decision making, and other social relationships in an institution such as that of a marriage (Banda, 2008). The *UM* denotes a teaching and learning event or ceremony while *Nachimbusa* means a teacher. *Mbusa* on the other hand denotes objects for wisdom used in teaching. This means that the teaching in this ceremony involves many artifacts and rituals where lessons could be drawn for teaching and learning approaches in higher education. Literature has shown that everything about these ceremonies such as the *Ukulange Mbusa*, are teaching points. For example it is widely believed that a number of ceremonies in Africa, are conducted in sensory rich environments meaning that the venues are teaching points on their own (Emeagwali, 2003).

The largest part of Zambia, as in many countries in sub-Saharan Africa, is rural. Students who come from rural areas are deemed to be local, traditional or primitive, often because they exhibit traits of rurality, making them think that the rurality identity is something to be shed off as quickly as they settle into university, instead of using it as a resource for their learning. Such students may have been initiated in a number of ceremonies such as the *Ukulange Mbusa* ceremony.

It is with this background that this study aimed at establishing how rurality and its AIKS expressed through traditional ceremonies, which have always acted as 'schools' in these rural communities, can inform the curricula of higher learning institutions in Zambia, with particular reference to the *Ukulange Mbusa* ceremony of the Bemba people.

The specific objectives of the study aimed at establishing:

1. The science in the *Ukulange Mbusa* ceremony and the teaching tools used in the initiation of the young into adulthood that can be hybridized with those used in higher learning institutions.
2. Challenges students coming from rural areas face with the new teaching approaches, methods and techniques they find being used in higher learning institutions.

3. The substance of the *Ukulange Mbusa* ceremony teaching approaches, methods and techniques with a hope to hybridize them with those used in the higher institutions

It is envisaged that findings of the study would contribute to the knowledge of how attributes from the *Ukulange mbusa* ceremony could be hybridised with the formal education systems of higher education institutions for the benefit of learners.

Methodology

The study followed the qualitative research design and used interviews, Focus Group Discussions (FGD) and document analysis to collect data. Personal experiences, orally obtained through the scheduled interviews and Focus Group Discussions, enriched this study as much of the information gathered is not written but orally shared, as the case is with a lot of local knowledge and AIKS, in general. A purposeful sampling was done to select those respondents considered to be custodians of the *Ukulange Mbusa* ceremony and are believed in the community to be endowed with the African Indigenous knowledge Systems (AIKS). In the sample were 5 university students initiated in the *UM* ceremony, one traditional chief, 2 key women counsellors (*Alangizi*) and two Focus Group Discussions of women counsellors in the *UM*, along with lesson notes from two lecturers teaching cultural ceremonies course at one Zambian university.

The study employed Barnhardt *et al*, (2005) Iceberg Cultural Model (see Figure 1) as theoretical framework in addressing the research questions. This model suggests that indigenous people like the Bemba people of Northern Zambia with their *Ukulange Mbusa* ceremony, could be defined by their culture. Most people outside a given culture recognize certain aspects of the people of that culture. However, it is the surface and folk cultures (the tip of the iceberg) that are easily observed and judged. There is so much deep knowledge embedded in the deep culture, such as the knowledge in *Ukulange Mbusa* ceremony, that is ignored. This model claims that early missionaries and colonial masters in Africa, may have condemned AIKS and its ceremonies based on the surface and folk cultures and ignored the deep cultures. Using this model, this study was able to analyse the information in the *Ukulange Mbusa* ceremony such as the artifacts that are akin to the surface culture, while the deeper meaning that such artifacts portray, are in the deep culture. The findings from the FGD, interviews and documents were able to give meaning to all the various cultural aspects that are done under the *Ukulange Mbusa* ceremony, as respondents gave personal experiences on lessons, morals, character formation and apprenticeship skills emphasised in the various acts involved in the ceremony.

This research, therefore, is an attempt to dig further into the deep culture of AIKS with particular reference to the *Ukulange Mbusa* ceremony to see whether or not there could be some aspects that could be hybridized with the formal curricula of higher education to enhance the achievement of quality education. Barnhardt *et al*, (2005) Iceberg model can be a very effective tool for anybody trying to integrate two systems belonging to two different cultures such as the AIKS and the institution of higher learning that could be said to be western culture oriented.

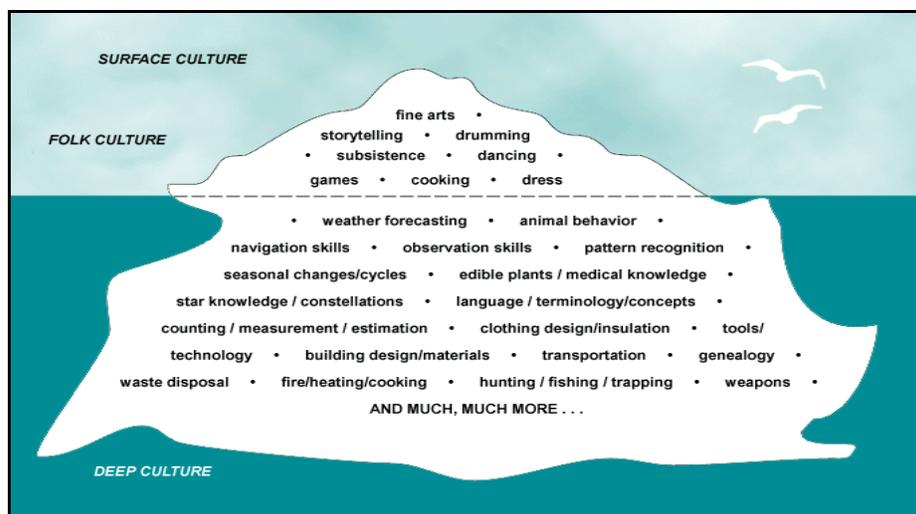


Figure 1: The Iceberg cultural model (Barnhardt *et al*, 2005)

The Culturally Based Curriculum Model discussed by Barnhardt *et al*, (2005) climaxes into another stage of Barnhardt *et al*, (2005) journey (see Figure 2). This model shows the interdependence that can exist between western science and indigenous knowledge systems such as AIKS. In this model, what are identified as ‘attractors’ are the common grounds (Barnhardt *et al*, 2005) which draw the two separate educational systems together and make them work interdependently. The model shows that AIKS and formal schools and higher education can negotiate a curriculum adaptable to local circumstances and needs. This is by focusing on similarities and common objectives, while considering differences as motivators rather than dividers. This means that both learners and teachers must make the connection between the formal curriculum of higher education and that of indigenous traditional ceremonies in Africa learnt largely through ceremonies acting as learning institutions.

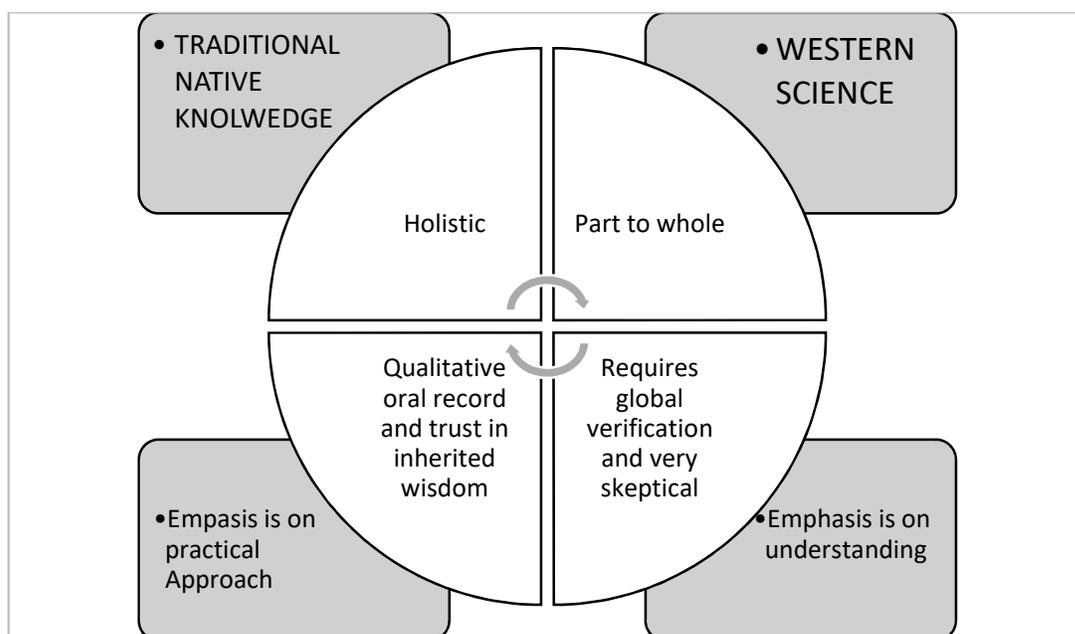


Figure 2: Culturally-Based Curriculum Model adapted from Barnhardt *et al* (2005:32)

Findings

The findings are presented here using the aforementioned objectives, along with themes generated from them.

Objective 1: To establish the science in the *Ukulange Mbusa* ceremony teaching and learning tools used in the initiation of the young into adulthood that can be lessons used by those teaching in higher learning institutions.

The study established that the terms used to describe the *Ukulange Mbusa* ceremony are teaching methods in themselves. The teaching is closely attached to the tools used in the teaching unlike the way teaching is done in higher learning institutions. One counsellor (*alangizi*) of the *Ukulange Mbusa* interviewed echoed the following:

The western form of knowledge delivered through the school system regardless of the level, divorces the learners from their world and pushes them into the world they will never fit, thereby making the rural child fail to adjust and eventually fail even in areas where s/he was excelling before. Many challenges learners from rural school learners face when they join higher education and universities are methodological in nature. There is a general tendency by many academicians with Eurocentric ideas not to acknowledge and appreciate other forms of knowledge and reasoning and the way that knowledge is to be shared. (Woman counsellor of the *UM*)

These views are supported by data collected from documents analysis that say that there is a general thinking that alternative knowledge to the western knowledge offered in schools and universities is ignorance, just as alternative medicine to western medicine is often described as witchcraft (Banda, 2012). Generally, western forms of knowledge and their languages are taken to be the only vehicles for higher learning institutions' globalization and development and therefore progressive, documented and beneficial to mankind (Banda *et al*, 2012). Yet, AIKS forms, together with their 'primitive' languages and ceremonies such as the *Ukulange Mbusa*, are deemed retrogressive, undocumented and therefore detrimental to civilization and development. Some respondents felt that the modern education offered in schools is judged based on its success while indigenous knowledge covered in ceremonies such as the *Ukulange Mbusa* with their ways of sharing it is judged based on their failures (Classen, 1999; Emeagwali, 2003).

The study also established that there is a general belief that AIKS and ceremonies followed in this system of education are not in line with modern science, and that there is no scientific knowledge that could be used in higher education, in profound academic and research discourses. They claim that many scientific thoughts and ideas have found no room in AIKS and its ceremonies used as vehicles for disseminating knowledge. The argument is that they lack empirical evidence generated in modern science laboratories. However, such a belief has been refuted by some traditional counsellors who claim that what is taught in ceremonies such as *Ukulange Mbusa* agree with some scientific knowledge in many instances. This view has interestingly been supported by some scholars who have argued that:

The further we go back into the origins of the world, and the more closely we study 'primitive' peoples, [and their ceremonies] the more often we discover that their traditional secrets coincide with scientific research (Pepper, 1970:30).

It could be such thoughts that have attracted comments from other authors with long experience with rural way of living like Serpell (1987) who has highlighted the challenges facing education platforms in Africa and the need for these platforms to adapt education, and the way of delivering it, to the needs and aspirations of the post-colonial African state. He argues that education should afford students the opportunity to test formal western theories against an African reality and prepare them for the challenges they will face after the completion of the school system. That is to say, students should be invited to compare and integrate academic theories and perspectives with indigenous interpretations of experience.

Pepper (1970) expresses concern for the vertical programmes that present a top-down, one-way transfer of knowledge, ideas, values and practices from developed to developing societies. He describes this as a form of cultural colonisation and asserts that the developed world continues to produce and market knowledge and technology to developing societies, while the latter remain mere consumers of these western ideas and technology. The final product is irrelevant to the needs of the local populations and does not achieve the elimination of poverty, improve literacy rates or enhance development (Sternberg et al, (1993); Scott, (2015).

Eyong (2007) and Owusu-Ansah et al, (2003) expand this argument by saying that African indigenous frameworks for education are ignored because, like the people who promote them, they also belong to the category of marginalised knowledge full of rurality. The result of this is the creation of African elites, as mentioned by Banda, (2008) who speak like the '*mzungu*' (white person). These are the people whose views and lifestyles are like their middle-class western mentors and different from those of their own (traditional) societies. An African worldview does not mean that every member of a culture must subscribe to it, in the same way as not every European subscribes to an individualistic way of life. Few studies have explored the link between education systems and the inclusion of the indigenous knowledge system within the higher education system with the goal of facilitating development in rural areas. Warren *et al* (1995), Semali, (1999), Bicker *et al* (2004) and Mqgwashu, (2016) seem to support the notion that people's indigenous knowledge and their rurality and ceremonies are packaged in their languages and therefore denotes their way of life guided by the local knowledge they have tested and practiced over time and have seen it working. Coverage of the AIKS can be packaged into three components leading to vocational skills to prepare the young for life (Banda, 2008; Mji, 2012), See Figure 3.

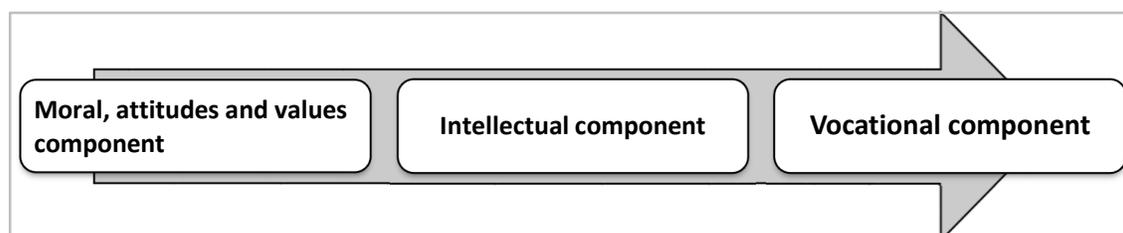


Figure 3: Three components leading to vocational skills (Source: Authors).

Findings are in line with Osuji et al (19198) who argues that if the three were to be hybridised in the higher education system, the product of such an education system would add more value to their society than the current scenario were learning outcomes are hardly seen in some of those who go through the schooling system. The hybridisation of western and African education systems is what Barnhardt (2004; 2005) argues for as illustrated in the case of western science and traditional native knowledge systems shown in his Culturally-Based Curriculum Model (Barnhardt *et al*, 2005)

The current study findings seem to agree with Barnhardt's (2004) intersection – as the centre of focus - where forms of knowledge and practices from the two education systems intersect and support and benefit from one another as also supported by Walker et al, (2013). This study seem to suggest that if those varieties of the Bemba *Ukulange Mbusa* ceremony that come in form of activities conducted when the girl child is of age (*Chisungu*) and shortly before such a girl is given in marriage, for example, could be in the intersection or common ground in Barnhardt *et al's* (2005) cultural model, or indeed in the deep culture section of the Ice berg cultural model, for them to find room in teaching methods in higher education institutions as alternative ways of explaining things to learners especially those from rural areas already familiar to such techniques of teachings.

Objective 2: To establish the challenges students coming from rural areas face with the new teaching approaches, methods and techniques they find being used in higher learning institutions.

Challenges a rural student faces after joining higher learning institutions are more on teaching and learning techniques than otherwise as illustrated by Khera (2004:23) below where he discusses the concept of broad-base education and what it is:

Some animals in a forest decided to start a school. The students included a bird, a squirrel, a fish, a dog, a rabbit and a mentally retarded (sic) eel. A board was formed, and it was decided that flying, tree climbing, swimming and burrowing would be part of the curriculum in order to give a broad-based education. All animals were required to take all subjects. The bird was excellent at flying and was getting A's but when it came to burrow, it kept breaking its beak and wings and started failing. Pretty soon, it started making C's in flying and of course in tree climbing and swimming it was getting F's. The Squirrel was great at tree climbing and was getting A's but failing in swimming. The fish was the best swimmer but couldn't get out of water and got F's in everything else. The dog did not join the school, stopped paying taxes and kept fighting with the administration to include barking as part of the curriculum. The rabbit got A's in burrowing but tree climbing was a real problem. It kept falling and landing on its head, suffered brain damage, and soon couldn't even burrow properly and got C's in that too. The mentally retarded (sic) eel, who did everything half as well, became the valedictorian of the class. The board was happy because everybody was getting a broad-based education (Khera, 2004:23).

This illustration may elucidate the challenges students from disadvantaged rural areas face once they enter universities where they are put in the same box with the rest and are expected to compete with the others for success. When students from the rural schools come to higher education, they discover that in this new culture, the spirit of competition is worse than even in the secondary schools they come from. They discover that in this new culture, doing better than the others is success while in the rural set up such a spirit of competition is evil as one's success must not depend on another person's failure and so is the case in the teaching through the *Ukulange Mbusa* ceremony.

Students from a rural area who were interviewed had a number of issues they raised which point to the challenges they faced when joining a university education and not just from a rural area, but because of being endowed in AIKS:

We joined the university as students from the rural setting and we were given scholarships in line with the rural affirmative policy that allows the university to recruit a certain number from the rural areas. I noticed that once enrolled, we were treated as normal as any other student. Some of us could not even contribute in class because of we were often treated as though we know very little as compared from those from urban town who would be identified with the language they would use especially if they were speaking in local languages (Student 1).

We are not supported to ask any question and we have a challenge to ask any question in class because it looks like everybody thinks once you are from a rural secondary school, you know very little. Worse still when you answer a question based on the local knowledge you came with, it's worse. So, a good number of us chose to keep quiet (Student 3 from rural school).

Objective 3: To establish the substance of the *Ukulange Mbusa* ceremony teaching approaches, methods and techniques with a hope to hybridize them with those used in the higher institutions.

The study established that the *Ukulange Mbusa* ceremony uses a variety of teaching approaches, methods and techniques and varying these is key in the teaching. There are techniques that are employed just to increase the attention and focus of the learner while other techniques are employed to instil the new knowledge acquired.

These techniques seem to be supported by Marchand (2010) who holds that educational delivery must be flexible and must follow what seems to be less stressing to the learner. He makes a comparison between modern school and its curriculum and the traditional way of learning, as exemplified by *Ukulange Mbusa* ceremony. He argues that in the modern education system as done in universities, learning is directed at acquiring a body of straightforward empirical information, focusing on memorizing facts, definitions of concepts, and the application of formulae to deduce clear answers, descriptions of phenomena, and analysing all these things and applying them to a field of study or life experience. Educational delivery formats in *Ukulange Mbusa* ceremony (Odora, 2004; Eyong, (2007); Marchand, 2010) is something to learn from. In order to improve the learning experience of the learners, the teachers in the *Ukulange Mbusa* ceremony use:

- Behavioural and attitudinal skills sets.
- Abstracts and tangible concepts.
- Social norms and life skills.
- Values and attitude principals and beliefs.

The learning in *Ukulange Mbusa* fashion uses the whole body as a teaching aid (Marchand, 2010). This methodology considers the human body as a flexible biological structure of complicated neural and physical systems that can effectively turn some sensory experience into learning. It is these sensory

experiences that are turned into learning tools, meaning that both the learner's physiological and psychological body are used.

This is not the case with learning in many higher learning institutions. It is true that values and skills are also taught but mostly as cross-cutting issues and are somehow treated as separate from the learner's physiological and psychological being, and sometimes do not even form part of the assessment items. In *Ukulange Mbusa* teaching, the learning process is not treated as separate from the physiology and psychology of the learner, and this is where we begin to understand the *Ukulange Mbusa* ceremony as a comprehensible and informative science (African Elders et, al, (1949); Marchand, 2010).

It uses the mind-body connection in the teaching. Here the traditional teachers' understanding of the mind-body-brain connection enables these 'teachers' to interface the psycho-physiological makeup of the human body with their teaching methods. In this case there is a full utilisation of the mind-body alliance in achieving learning as all body parts are used to teach and pass on knowledge (African Elders et, al, (1949: 15).

This kind of approach would benefit teaching and learning in higher education, as using all the senses to teach allows the learner to be present, to be physical, to experience the immediate moment, to acknowledge and absorb what they are learning and for what purpose. This type of learning results in 'I know this because I felt it, rather than I know this because I read, saw or heard it' (Marchand ,2010).

The use of the 'Situation Approach' of lecturing would bring out the use of several aspects outlined here as it brings out various situations that evokes the various senses and motivates learners (Schunk, 2009). To me, these senses cannot be evoked with audio-lingual (listening and speaking) teaching which is the typical method used in many universities where all the lecturer does is to read out notes to dozing or bored learners. Describing what goes on in the *UM* ceremony as a teaching vehicle one chief had this to say:

In the Bemba tradition, like in many African societies, marriage is an institution that has long been the foundation and glue that creates and holds together all other relationships and the society at large. Therefore, the institution of marriage and the skills and behaviours and principles, norms and beliefs that supported it are considered so important that the subject of marriage as a subject of education is mandatory for every member of society. Those who fail to enter the marriage institution and have children of their own are considered as failures in life and this is regardless of the secular education they may have (Traditional chief).

However, the emphasis of marriage is something that must not be ignored. In the African context, marriage forms the epitome of one's life. One may be highly educated but if one is not in marriage, one is a failure in life. This may explain the issue of early marriages that have made many children from rural areas where AIKS is still well established, fail to go far in secular education. These are some of the negative aspects of AIKS that must be taken into account as we make reflections on various forms of education.

This does not overlook the importance of lessons we get from *Ukulange Mbusa* ceremony teachings. One traditional chief had this to say about the *Ukulange Mbusa* ceremony and its teaching methods:

The *Ukulange Mbusa* teaching is conducted in a round hut, which is an extremely effective acoustic and visual chamber. The *Mbusa* (teacher) figurines are arranged in a prescribed format on the floor of the hut, and the wall and floor. Paintings are drawn in a sequence on the walls and floor of the hut. The colours used are white, red, and black and these colours have a special meaning and happen to stimulate a specific sensory response. In this way, the traditional teacher makes full use of as many senses as possible (more than the five senses) (Traditional chief).

These views seem to be in line with what Tanguy (1949) who studied the Bemba people and the ways they conducted their teachings through ceremonies. They said the teaching in the ceremonies such as the *Ukulange Mbusa* included all the senses, such as senses of:

- sound, smell, proprioception (the ability to tell where your body parts are, relative to other body parts);
- equilibrioception, (the sense that allows you to keep your balance and sense body movement in terms of acceleration and directional changes);
- sight, taste, touch, pressure, itch (this is a distinct sensor system from other touch-related senses);
- tension sensors (ability to monitor muscle tension), nociception (sense of pain) (Tanguy, 1949:35- 40).

The findings from documents analysis from the teaching notes from lecturers teaching in the cultural ceremony course at one university showed that they borrow a lot from that traditional knowledge and ceremonies to enhance their teaching methods as one lecturer interviewed after looking at his working notes had this to say:

Aspects taught using these methods of teaching in the *Ukulange Mbusa* teaching over time and through experience, have become our working tools as they are a growing inventory of the working parts of many traditional arrangements such as marriages, beliefs, attitudes, norms, behaviours, ethics, cooperation, collaboration, analysis and judgement required in a diverse number of marital contexts and situations. We emulate these teaching techniques in our course delivery sometimes because this kind of teaching involves all the needed structures (Lecturer 1).

The issues referred to by the lecturer in the *UM* teaching techniques can be shown diagrammatically as illustrated below in Figure 4:

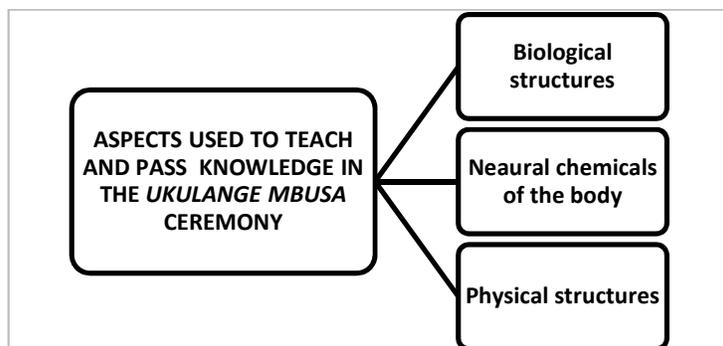


Figure 4: The *UM* structure used in the teaching (Source: Authors).

In summary, there are lessons that lecturers in higher education would emulate from the *Ukulange Mbusa* ceremony teaching techniques for the benefit of all students, especially those with rurality. There is a contrast between informal teaching using *Ukulange Mbusa* ceremony teaching techniques and those commonly used in higher education, as argued by various respondents in this study, showing that there is a lot to be learnt and emulated from the so-called primitive teaching and learning techniques from the AIKS through the *Ukulange Mbusa* ceremony as one respondent had this to say:

Here, the learning process is not treated as separate from the physiology and psychology of the learner, and this is where we begin to understand the *Ukulange Mbusa* ceremony as a comprehensible and informative science. In higher education, for example, although knowledge, values or skills are learned, they are somehow treated as separate from the learner's physiological and psychological being. This show what teaching and learning in higher learning institutions like universities can learn from the learning and teaching in the traditional *Ukulange Mbusa* ceremony of the Bemba people of Zambia (Woman Councillor 2).

One other wealthy aspect adapted from *Ukulange Mbusa* is the integration of the following into ones' lectures: songs; drumming; shaking identified sections of the body; gesturing using some parts of the body; general body movements; clapping; and continuous auditory stimulation.

These are teaching strategies that are employed in *Ukulange Mbusa* ceremony but absent in lecture rooms and classrooms in higher learning institutions. The persuasive teaching and learning techniques of enhancing learning outcomes in traditional teaching practice of *Ukulange Mbusa* ensure that: (a) there is focused attention throughout the rituals, and (b) learners are guided, questioned, instructed, made to participate actively, and always caused to pay attention without reminding them to do so and so by the lecturers as the practice is in lecture rooms in universities. In most higher education institutions like in some universities, the common delivery formats are:

- Lecturer reading or presenting information to the students while constantly reminding them to pay attention as loss of attention is very visible on their faces.
- Class questions on modelled answers and often not out of the lecturer box.
- Giving handouts to be read in search of answers to be reproduced.
- Students presenting (reproducing) in tutorials what was covered in a lecturer (Marchand, (2010).

The aspect argued in this article is that the traditional teachers' understanding of the mind-body-brain connection should not be underrated based on their lack of academic and professional credentials. Ngulube (1989; Dondolo (2005) hold that there is evidence that the supposedly 'uneducated' traditional teachers have scientific knowledge on body knowledge and take it into account that as they teach, an aspect that can be emulated in higher learning institutions. Their understanding of the body knowledge is that if we were to improve the learning experience of our learners, we must teach:

1. Behavioural and attitudinal skill sets;
2. Social norms and life skills;
3. Abstracts and intangible concepts;
4. Principles and beliefs;
5. Values and attitudes.

There are also other teaching rituals such as those for demonstration explained by the traditional leader and the respondents in the FGD and these are the corner stone of the *Ukulange Mbusa* ceremony as seen in see Figure 5 below.

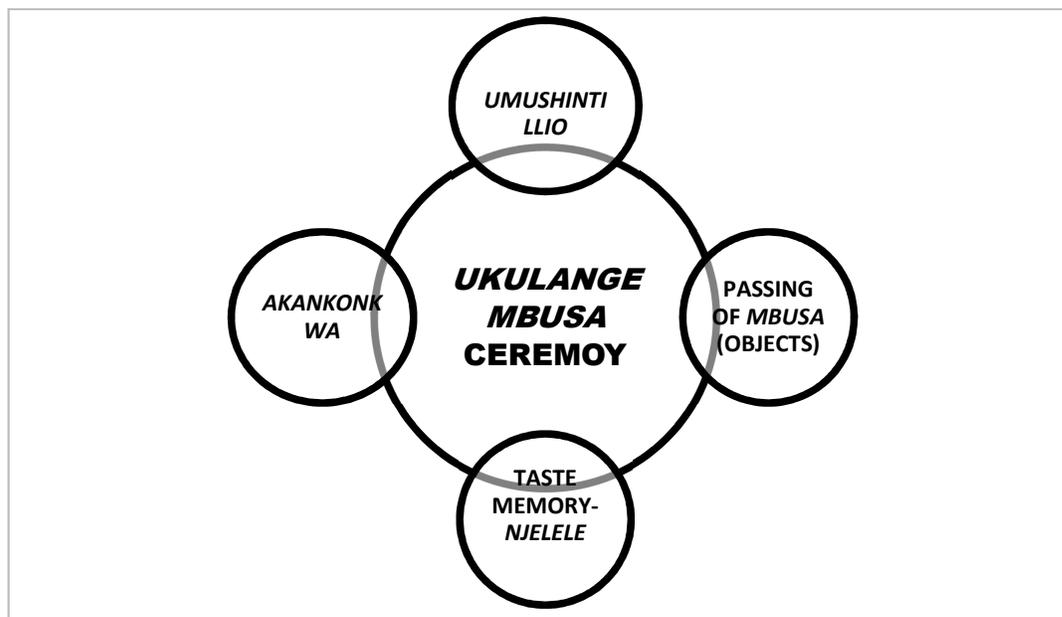


Figure 5: The tools used in the teaching and learning in the *Ukulange Mbusa* (Source: Authors).

Umushintillio

In this ritual, the *Shi Cisungu* (girl in the traditional ritual for marriage) is given a small bow and arrow and asked to stand facing the wall *imbusa*, called *Mushintililo*. The man to marry her is then instructed to aim his bow and hit the target with his arrow, that is, the red circle in the centre of the *mbusa*. He is not to miss and, if he missed the target, he is told ill health would befall his bride and she would sicken and waste away. These rituals are all aimed at helping the learner to be focused. This is one aspect modern day lecturing method used in universities would learn from without focusing on early marriages. It is the rigor of the teaching methods and techniques which are of great interest as they can be analysed with the hope to see how such concentration could apply to the teaching and learning in higher learning institutions.

Passing of *mbusa* (objects)

The study established that several *mbusa* (artifacts) are presented to the couple with the instruction that they are to examine closely, handle and touch the objects as they are being handed to them. Each *mbusa* as it is passed, is accompanied by a song, or even two, which explain the object and the lesson behind it. The *mbusa* that were passed to the young man and woman to look at, touch, handle, and pass to each other has a shape, texture, colour, and some are abstract and others life-like. By requesting the young man and woman to touch, handle, look closely, turn over and pass to each other a *mbusa*, the *Na Cimbusa* is engaging very important neurological processes. By compelling the learners to fix their eyes and examine a *mbusa*, the *Na Cimbusa* is compelling a powerful neurological process, called the 'human gaze behaviour'. By placing the objects in their hands, she is compelling their hands to become engaged in the movement of handling the *mbusa*. By so doing the *Na Cimbusa* is engaging eye-hand coordination and engaging their tactile and visual abilities at once (Marchand, 2010). In this kind of knowledge delivery, the entire body is involved in the learning process.

Akankonkwa

Akankonkwa is made of many small wedges. What the couple is firstly told to do is to stand opposite each other. They place their feet into the wedges, one foot per wedge. Then they are instructed to hold hands across the *mbusa*. They are not to let go of each other for whatever reason. Next instruction is for them to move each foot wedge by wedge in perfect step with each other, until they have navigated the full circle of the *mbusa*, and each is standing in their original starting position. They are forbidden to talk to each other throughout this task. This effectively means that each person cannot move successfully in any direction or for any distance without the help, collaboration and cooperation of the other. The entire exercise is accompanied by song, loud shouts of encouragement or derision if the couple seem to be failing to work as a pair.

According to Dondolo (2005) the skin-to-skin contact affects the neurotransmitters such as oxytocin which affects quite several high-level human behaviours useful for active learning. These aspects, though not necessarily the physical touching¹, if considered could also enhance lecturer delivery in higher learning institutions and would give a break to the monotonous lecture method dominating the teaching in universities. Peer/group/team assignments would trigger this oxytocin and enhance the active participation by students as it is said to foster generosity; crystallises emotional memories; enhances attachment; triggers protective instincts; eases stress; solidifies relationships and improves social skills. Students from rural areas where pair/team/group work in communities are everyday activities may be of great support to other students from the urban areas, typical of individualistic way of doing things (Bandula, (1977); Coughlan, (2006).

Taste memory - *njelele*

The *njelele* is another teaching ritual full of teaching points that can be employed in universities and benefit students from all walks of life. During the *njelele* ritual, the young woman is asked to catch and pick with her mouth from a shallow bowl, a live insect that is seen skimming across the surface of the water at great speed. Once she has caught the insect, she is to spit it into the waiting hands of the

¹ Group/pair work or even peer support could replace the actual touching as this could be offensive in some cultures.

Nachimbusa, who will then check to see that the little insect has been captured alive. The teaching point in this ritual is the need for attention and focus and not necessarily the catching of the little insect. This ritual engages the brain and body of the young woman in several remarkable ways as she must:

- Use her mouth only to catch the moving insect.
- Plan the movements that can ensure capture of the rapidly moving target.
- Listen and move in rhythm to the song (Gilbert, (1997); Eyong, (2007)).

The lessons to lecturers in higher learning institutions are to avoid being didactic all the time but giving cognitive code and communicative approach techniques that would make students think critically on an issue and freely express themselves. A language lecturer teaching structures of reasons, purpose, contrast, or comparisons would give a task to his/her students which would make them express themselves using the structures taught without necessarily asking them to make sentences using the structures taught as teachers do.

Situation: Imagine you were driving a four-seater car and carrying three passengers and passing through a game reserve. You find another car with a breakdown. There are three people including a driver in that car. Among the three people is a pregnant woman and is said to be carrying twins, but her pregnancy is from her immoral behaviour in the community. Another is a head teacher who is looking after three orphans and even pays for their university education, but this head teacher is said to be a witch and two teachers at his school died mysteriously and their death is linked to him. There is also a medical doctor who is about to discover the cure of the deadly HIV/AIDS disease, but this doctor is known for sexually abusing his patients and he even makes some pregnant but terminates those pregnancies in his lab.

Task: Which one of the three people would you give a lift to, knowing very well that the two you will leave behind will be eaten by wild animals?

In this activity, there is no one right answer as the idea is to make students think and justify their preference thereby using all the structural exponents taught.

The examples of the teaching tools and strategies used in the *Ukulange Mbusa* have what Marchand, (2010: 35-36) calls the Significant Meaningful Experiential Teaching (SMET) which includes eleven components from which higher education would benefit from in improving lecturer delivery and even assessing what has been covered. The SMET aims at lesson delivery to focus on the following teaching/lecturing techniques:

1. Quality of whole-person involvement (The lesson delivery must target the whole person's feelings; biological and cognitive aspects must be engaged in the learning event).
2. Sense initiative (The lecturer should know that the impetus or stimulus to learn comes from without, but the learning takes place from within; meaning that care must be given to see how one is stimulating learning for learners to internalise what is being delivered. Not all stimulus techniques produce learning).
3. Teaching/lecturing must be ubiquitous (lecturing/teaching must not be directed towards learning facts to be reproduced later in an examination but towards the behaviour, the attitudes and whole personality of the learner).

4. Lecturing/teaching to focus on the internal locus of judgement (lecturers to focus on increasing the use of situational assessment, evaluation and judgment for the learner).
5. The core of all instruction is meaning (The element of core and social meaning must be built into the whole teaching experience for the learners to be fully involved).
6. Understanding of the individual and the social goals, roles and actions (lesson delivery must be directed at making the learner secure his/her own self- concept in relationships and in the wider world).
7. Teaching/lecturing must be based on real world learning (lectures to use real situations or cognitive problem solving and appreciation).
8. The teaching/lecturing approach must be focused on potentiality (the teaching/lecturing must engage the potentiality of a learner at the time the learner is embarking on a new situation or new phase of life).
9. Teaching/lecturing is based on life-long learning and feedback loops (lifelong revision, effort management and additional learning are embedded individual and societal expectations and motivation.) (Zezeza, 2006).
10. Lecturing/teaching must be multi-disciplinary (lecturing/teaching must use knowledge from both science and arts).
11. Teaching/lecturing is a performance art (the lecturer's role is not neutral but conducted to deliberately heighten learners' attention and make the subject matter come alive in a lecture room).

A good number of these aspects have been talked about by respondents in this study implying that there are aspects in the *UM* ceremony that can be hybridised with those in the formal classroom/lecturers for the provision of quality education.

Discussion

The suggestion from this study shows that students from rural areas exposed to teachings from traditional ceremonies such as the *Ukulange Mbusa* may need time and support in order to understand and engage with learning and teaching approaches that may be alien to them once they join higher education. This study has further, shown that there are differences between the informal way of learning a student from the rural area is exposed to long before coming to higher education. These have long lasting effects on the adjustment of such a student once enrolled into universities. For example, in the *Ukulange Mbusa* ceremony, teaching is based on concrete things and learners are confined to a specific activity while in universities, learning is planned and compartmentalised. In addition, learning in the rural context, is silent and takes place in a society and is task based.

Students with a rural background, therefore, find themselves challenged once in higher learning institutions as learning in these institutions follows a rigid curriculum which is content oriented rather than process or problem oriented. The teaching and learning techniques employed in informal learning are such that a learner acts and reacts to the knowledge being received as a whole person and this is life-long learning where an individual cultivates values, develop skills and acquire knowledge from daily experiences while using resources from one's environment as learning is from family, peers, neighbours, work, community and the environment. This is a kind of learning not hierarchically organised into rigid system of primary, secondary and now university education, but

operates outside the regular structures of the formal education and follows community-based approaches. This kind of education and its delivery are alternative paths to providing life-long education, and education that ensures entrepreneurship and employment. All these practices and skills are performed within cultural context and surroundings of rituals; some of which include songs, dances and fashion and in harmony with nature.

In summary this informal education system brings 'school' to the community and is not always taking people from community to school (Coombs, 1968; 1989, Rogers, 2003). These are the Significant Meaningful Experiential Teaching (SMET) that appears to cover the focus of the *Ukulange Mbusa* teaching and may give a glimpse of what students coming from rural schools to universities are exposed to long before they join the universities and that ignoring such body of knowledge could be detrimental to the effective way of learning by all students.

The findings of this study appeal to lecturers to integrate the so-called modern teaching and learning techniques with those from the traditional African methods of lesson delivery at all levels of education but particularly in higher education. It is on the basis of such findings that this study argues that *Ukulange Mbusa* does provide teaching and learning techniques that if used in higher education would enhance active learning. The current and common rote memory of factual information delivered through lecture methods has brought in examination leakages, a practice formally associated with secondary schools but now found in higher learning institutions as well (Banda, 2008).

Conclusion

This study highlights both the specifics and generalities of the condition as they are experienced by students from rural areas as they enter the corridors of higher learning institutions. The study brings out dimensions of rurality and its indigenous knowledge systems, and explains how these dimensions can, indeed, input and influence the teaching methods used in higher education. Using the *Ukulange Mbusa* teaching methods, the article sheds light on how students from rural areas are full of knowledge and experiences which they learnt in their homes, communities and in rural schools. If allowed, these would subsequently influence their effective learning in higher learning institutions. In summary, this study has not just argued for the inclusion of African Indigenous Knowledge (AIK) teaching methods in higher education, as those in *Ukulange Mbusa* ceremony but has also gone further to highlight some of the negative aspects of the AIKS that must be done away with such as those promoting early marriages and pregnancies among girls of school going age.

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