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Continuity and Change in Students' Account of Race and Class Relations at a South African University

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Abstract

This article draws from an interview-based study of students at the University of KwaZulu-Natal highlighting the ways in which they give meaning to race. Racist practices at universities in South Africa have received widespread condemnation and universities are at the forefront in confronting and dealing with the persistence of racism. In this context, the article seeks to develop an understanding of the contextually specific ways through which race is given content and the possibilities that they may present for change. The data shows that the specific configurations of race as described by African and Indian students at the university where the study was conducted suggest constrictions and continuities of separateness as they demonstrate change. Rejecting an analysis that is based on fixed meanings of race, the article theorises that race is complicated by broader social structures, and class remains an important variable in race relations. Race continues to be salient in the everyday lives of students but race and student life must be understood through class. The article analyses further the ways in which students point to possibilities to enhance change working creatively within the university to bring about racial mixing. The article concludes with some recommendations for change.

Résumé

Cet article donne les résultats recueillis au cours d'une étude basée sur des entretiens avec des étudiants à l'Université de KwaZulu-Natal en mettant l'accent sur le sens qu'ils donnent à la race. Les pratiques racistes dans les universités en Afrique du Sud ont reçu une condamnation générale et les universités mènent des confrontations et s'occupent de l'obstination au racisme. Dans ce contexte, l'article vise à développer une compréhension

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des façons spécifiques contextuelles à travers lesquelles un contenu est attribué à la race et les possibilités qui peuvent se présenter pour un changement. Les données montrent que les configurations particulières de la race telles que décrites par les étudiants africains et indiens à l'université proposent des restrictions et des continuités sur la séparation lorsqu'ils démontrent le changement. Rejetant une analyse basée sur des significations fixes de la race, l'article montre que la race est compliquée par des structures sociales plus larges et que la classe reste une variable importante dans les relations raciales. La race continue à être saillante dans la vie quotidienne des étudiants, mais la race et la vie des étudiants sont seulement comprises à travers la classe. En plus, le papier analyse la manière dont les élèves s'orientent vers des possibilités qui leur permettent d'améliorer le changement en travaillant de manière créative au sein de l'université pour réussir le mélange des races. L'article se termine par quelques recommandations de changement.

Introduction

Social cohesion and racial integration amongst students are important goals in the transformation in South African higher education and this imperative is rooted in the country's democracy (Department of Education 2008). The political changes premised upon racial equality, has produced a fertile environment for the creation of equitable student social relations. Against the political gains however are accounts of continuities in relations of inequality and separation. The persistence of racial inequalities is best illustrated when in 2007 a few white male students at the University of Free State (UFS) made a video which showed degrading forms of conduct which involved giving African middle-aged female cleaners food mixed with urine. Consequently, race was placed on the forefront of student identities in South Africa leading to widespread condemnation about racist practices. Following the incident, the Department of Education made a call for renewed emphasis on social cohesion and transformation in South African universities. Universities, like all institutions in the country are obliged to enhance democratic ideals and racial justice.

Against this backdrop, this article focuses on the ways in which a selected group of students at the University of KwaZulu-Natal (UKZN) give meaning to race analysing the implications for change. In 2012, 63.9 per cent of students at the university were African, 26.2 per cent Indian, 7.4 per cent white and 2.2 per cent coloured. This compares to 2005 statistics which show that 49.9 per cent of the student population was African compared to 15.23 per cent white, 2.97 per cent coloured and 32.63 per cent Indian. In the last seven years dramatic change in the racial/class profile has been experienced in relation to the number of African students at UKZN. The changing race and class profile of the student body must be seen against the broadening of access to higher education in the country particularly for the African majority who remain poor, despite the growth of middle class elite. In addressing the large number of

students who cannot afford university fees, the South African state has increased loan schemes and bursaries particularly to African students to further their studies. These schemes recognize the continuation of intimate ties between race and class forged through apartheid.

Beyond access however is the question of experience and the development of equitable student relations (Soudien 2008; Pattman 2007). No longer restricted by apartheid, students do have opportunities to mix with each other and develop new forms of relations based on social cohesion although as Pattman (2007) notes, there is no guarantee that such relations can be forged without active interventions. Racial mixing among students is small, and reproduction of race as a marker of identity continues to hold value as students demarcate themselves (Walker 2005; Pattman 2007). Walker's (2005) study of white and black (African) students at a former white Afrikaans university shows that race in student interactions has loosened as a direct consequence of political change in the country whilst noting simultaneously the re-inscriptions of race in maintaining and shaping relations of separation and inequality. By focusing on a group of white and black (African) students Walker's study illuminates the value of doing context specific research in the country with context specific interventions. How students give meaning to race within the broader context of South Africa has local specificity and as such crucial to the development of locally specified interventions. Research that places the value on context and local interventions are important to addressing inequalities of power as they are played out by students at South African higher education institutions.

In placing the meanings that selected students at UKZN give to race, this article aims to analyse the ways in which African and Indian students foreground race and the possibilities for change. In doing so the article highlights the need to examine specific configurations of race within specific higher education locations showing how they might enable and/or restrict equitable social relations. By drawing on a study utilising qualitative methods involving focus group and individual interviews, the article shows not only the ways in which race differentiation is reproduced but also how race changes are inflected through class. The article analyses further the ways in which students point to possibilities to enhance change, rejecting any fixed notion of race and which holds better prospects for equality.

Beyond Essentialist Accounts of Race

The UFS racist incident was important in putting into the spotlight university student life and racial dynamics in South Africa's goal towards social transformation. On the other end however, the incident has produced a context where apartheid style discursive constructions of race are being reproduced in understanding student lives and in dealing with interventions. The report on

the racist incident by the Department of Education (2008) justifiably put racial hierarchies as an important mode of analysis but often disregarding change and the significance of class to changing racial relations. Race, it is argued in this article, remains persistent in marking out the spaces and defining how students 'stick together' however race is not a fixed entity. Rejecting the essentialist accounts of race which purport that there is something unique and biologically predetermined in race differences, this article situates itself within a body of work which race has meaning in relation through the dynamics of power. In alignment with theorisings of racial identities, this article shows that student constructions of race must be held in tension with the broader social context in which class is intertwined within the dynamics of power (Dolby 2001). Race is not a stable category. It shifts and moves and is contingent upon the context in which it is located. Race is about power and the ways in which it is arranged in hierarchical ways and contested. In South Africa race and class have been intimately intertwined with the majority being poor and African illustrating clearly the ways in which structural inequalities have marked the racial landscape. As Dolby (2001) notes, racial identities are not fixed, they constantly change, formed by and expressive of power. This does not mean that race hierarchies do not persist however. Understanding race must necessarily involve the tensions with the broader social structures and as this article argues class complicates a simplistic version of race relations amongst students. Class works itself into race as race works itself into class. Race and change are important to understand. Older versions of apartheid styled race relations do have effects for student identities but they have historical basis, with constantly shifting dynamics. One dynamic that has produced shifting relations is identified by Walker (2005) as the political changes emphasising democracy. Race, it is argued can be divisive but there are spaces of hybridity fuelled by class and which troubles a simplistic understanding of race. A politics of student racial identities that connects to its social rootings can help understand the ways in which race both persists and changes. Whilst race continues to be an important area of inequality, class is coming to play an important role in shifting and changing student identities albeit in a small way particularly as African majority remain economically marginalised despite the growth of a middle class. Understanding race requires then an analysis that looks to broader structural issues which affect and influence students' lives and which includes as Pattman (2010) notes the schooling experience. Some students emerge from mixed race former all white or "model C" schools and thus interaction amongst the races is not uncommon whereas students who have rural or township schooling experience and remain largely poor have not yet interacted with different races and different students. This article contributes to building

the literature and research around student identities and race in South Africa noting that race, change and social class are important dynamics. Students come to university and are not isolated from the broader social and historical context in which they are located. Their meanings as such are loaded with contextual specificities and held in tension with power and class.

Research Methods

This study draws from a project that attempts to understand the ways in which students at UKZN give meaning to race and how intervention might be designed to address and confront the challenge of racism that continues to plague post-apartheid South Africa. The study of student identities at UKZN was given impetus as a consequence of the racist incident reported at UFS and the emphasis on UKZN on transformation and change.

The article focuses on individual interviews conducted with full time black and Indian students conducted with 19 students, aged between 19 and 25 years. Racial categories whilst problematic remain salient in the country with everyday usage of the four apartheid defined racial categories: African, white, Indian and coloured. The participants commonly used black when referring to African and much of the data an analysis uses black African interchangeably. Interviews were conducted with students in Howard College campus and the duration of the interviews was between 60–90 minutes. Students were full time and located both in undergraduate and postgraduate studies and emerged from the South African province of KwaZulu-Natal. The focus in this article is not on individual students but how both Indian and African constituting the majority of the students on campus provided content to race and the contextual specificity of such meanings.

Semi-structured interviews was the staple of this research and students were encouraged to set the direction for discussions around race in the interview on the basis of what they felt was important to raise. Again it must be noted here that the focus is not on individuals but the discursive construction of race. Two positions highlighted here relate to student separation and class tensions and the prospects for changing racial relations. These are discussed in the next section of the article.

Separation not Integration: Reproduction of Race Relations and the Effect of Class

In Walker's (2005) study, a major theme identified was the strategy used by white students to erase race whilst African students strategically ignored or resisted race inequalities within a context where white students remained in the majority. Whilst Walker's study was dominated by the erasure of race, "race is everywhere and nowhere", this was not the case for students at UKZN.

Sticking together

Students both Indians and Africans did not deny racial separation and the perpetuation of divisions:

> ...you see a lot of separation rather than integration and as I have said that they stick to their own race groups. Yes they usually stick to their own race groups but you would find some other groups which are racially mixed but it is not a very common thing on our campus. I don't know what it can take to make them come together, you know. Blacks have their own issue with the whites; the whites have their own issues...

Sticking together was a dominant response to students understanding of race at UKZN. Although racial mixing was evident as stated above it was uncommon. The response above is not surprising given that South Africa's social landscape, both residential and schooling, continues to reflect apartheid styled racial configurations even as middle class and elite Africans move into former white, Indian and coloured residential areas and schools reflecting a degree of racial mixing. The slow pace of change to desegregation has been linked in part to class and the inability of the majority of Africans to afford better housing and schooling, severing interactions with other race groups (Donaldson and Kotze 2006). Market forces have meant that apartheid forms of separation continue to lock out the African majority from housing and schooling in better resourced areas. Where there has been interactions and movement of races, these are restricted to white, Indian and coloured areas and schools. When the student above talks of sticking together, it cannot be analysed without an acute understanding of broader social relations in South Africa. As a working class African male student, he points to race as far more complex than simply what whites do to blacks but notes that both whites and blacks are enmeshed and caught up in their 'own issues' imputing the matrix of separation and the continuation of separation even after apartheid. Despite the end of apartheid over eighteen years ago, the consequences of racial separation in everyday life, in schools, in residential areas continues to have impact on the extent to which people can mix and also who and how class enables mixing:

> Approaching them [other races] is difficult. You don't know how they react. It is difficult because you don't know how they feel about interacting with other races where if you approach a black person I know there is no race thing there you can do whatever. If it's a white guy what if the guy is not into black people?

Separation was fostered through the lack of interactions at all levels of social life. It must be noted here again that students are emerging from school contexts that continue to reflect the apartheid conventions although it is former Indian, coloured and white schools that are now mixing. The mixing however is based on the ability of better off Africans and middle and elite classes of Africans to

send their children to better resourced schools than the township schools reserved under apartheid for Africans (Hunter 2010). African schools in townships continue to remain African (Pattman 2007). Thus, separation is fostered through class differentiations with working class Africans emerging from working class township schools having little or almost no experience of relating to other races. This helps understand why the student above states that it is difficult to approach other races, "you don't know how they react".

Space, Race and Demarcation

The spaces on campus were actively produced by students. Whilst it is true that spaces on the campus are not tightly knit according to race albeit with some movement, the racialisation of space and the demarcation of students in racial ways was a dominant theme:

> The mere fact is when we sit around on campus we demarcate each other you would find by the cafeteria and the library there is a large amount of black students and when you come to the park near the vendors you will find a few Indian and coloureds and maybe white students mostly internationals but if you were looking for the white students who are full time students you will find them at the upper caf next to Humanities or around TB Davis...if a person looks at it other than saying people are just scattered around because it is where their friends are, if you look at it from a perspective of race it might in a way say something because if you gate it around your specific race you become comfortable and then your identity is shaped by the people that you are around and some of the views that those people share might come into you and you might want to outplay those views so that you want to be accepted in that group.

Space is racialised on the campus with limited opportunities presented for integration. Whilst it will be shown later that opportunities to mix involve class, the point raised above is the overwhelming persistence of racial boundaries within specific spaces identified on the campus. Key to understanding racialised spacing on the campus is the continuation of race and class boundaries in South Africa which prevent mixing in the first instance. As explained earlier, interactions with different races at the school level is facilitated as Hunter (2010) notes by middle class and elite who can afford the school fees but also by Africans who continue to reside in townships but can afford to send their children to better resourced Indian, white and coloured schools. There has been limited contact with the majority of students who emerge from rural and township schools with people of other races. "Being comfortable" by being with people of your own race is the effect of separation in all instances of social life in South Africa.

> ...if you came from a multiracial school it is a common thing you are probably most likely to mix with other race groups when you get to varsity cos you

> used to it, is not an uncommon thing to you rather than a person...from a rural school only where there is just only that race group, it is going to be a very hard adjustment for them to move in with other race groups even though they don't have any hard feelings or anything but it is going to be hard....if you come from a rural area you schooled here you are only used to this race group of your own and then you move to varsity maybe you are even used to speaking your own language now you have to change when you are with your friends and another race group you have to all understand each other so maybe sometimes language could be the barrier…

To assume that university life will automatically cease such separation is simplistic. The spatialised boundaries reflect the continuation of racialised residential and schooling spaces in South Africa as well as language differences. Whilst the spaces on campus as will be seen are not neatly defined as there is movement of students, the point here is that the racialised boundaries in student relations reflect the class divisions and continual separation of people within the broader South African context.

The coffee shop received widespread attention in student's account of race. The coffee shop was regarded as elite and a source of anger and resentment for many students who could not afford the high costs for food. The food here was far more expensive than the cafeteria where mainly Africans congregated but even in the space of the coffee shop and despite middle class similarities amongst Indians, Africans and whites racial separation continued:

> Coffee shop is the common one. If you look at the coffee shop, I mostly see Indians and whites there. At the cafe you see the black people. We don't even know why the distinction, like you see this majority here and that majority there. The students socialise themselves in that manner, it's not the cafe or the setting that asks for certain races to go to certain places but it's the way the students socialise themselves and they put themselves in that position. It's like birds of the same feathers flocking together. We once had this discussion in a tutorial, where they said why is it in this place we have majority black and all, and they said people actually refer to these places as the Workshop and Musgrave...

Inseparable from understanding the coffee shop and the cafe is the fault lines of class inequalities which produce "birds of the same feathers flocking together". Race and class continue to be intimately tied creating and reinforcing geographical separation as described as Workshop (where majority working class African congregate for transport and shopping) and Musgrave (a middle/elite class and formerly white only shopping and residential area). Connecting race to its social/ class formations can help explain why students separate in ways that depict apartheid styled relations. But such depictions as students attest to are not static:

> In the eating areas most especially if you go to the cafeteria the Italian eating place the 'coffee shop' there is an element of class. The ones who went to model C schools they got this English they talk like the white people they

> integrate much more easily with the white people but its people of a certain class people from the rural areas cannot fit into that company because they feel they are too backward…backward in the sense of they are just not modern enough. They have nothing to offer in such spaces.

Class produces racial flexibility-denouncing the sole significance of race in student lives. The ones who went to "model C" refers to African students, who are better off than rural Africans and who have been schooled in former white schools. The latter have acquired social and cultural capital and the language of class so that they are better integrated within the university environment where English acquisition is important in teaching and learning. What the student above details is an accentuation of class differences which marginalise the African poor who are regarded as backward, with insufficient English accumulation and without the social and cultural capital to insert within the predominantly Indian and white elite coffee shop space.

Race, Social and Economic Capital

Students made deep connections between race and the broader historical context through which racialised capital was produced entrenching social and economic hierarchies between whites and Africans:

> I was applying for articles since I am finishing and…I'm thinking gosh being a black person sucks, I don't think a white person looks for a job like how we looking and no one is even replying to your CV. So I'm thinking I don't think a white person actually sends out a CV or a white person even knows how to write a CV. They have a friend, or their father is a lawyer or their father has a friend who is a lawyer so it's just sorted them…

Even having a qualification is not a secure prospect for getting employment. Whilst much has been done in the country in relation to employment equity and affirmative action, the student above notes that whites are historically privileged and such privilege is embedded within a social and economic network that reproduces capital and privilege. Despite the existence of policies in South Africa that provide opportunities for blacks in relation to employment equity, historical privilege and continuation of economic capital amongst white reproduces the notion that "being a black person sucks".

When students spoke of relationships with people of a different race, class was often cited as an obstacle:

> …someone who is disadvantaged they don't know how to take somebody out because of the expense and because of the way you do it. But a student who is even if they are black or white or Indian whose from an upper class residence they know a language that says "let's go out get to know each other" and all the other things that follow.

Class dynamics work themselves into understandings of race and relationships with students of other races are framed by 'lack' of cultural and social requirements that frame middle class lives. Of importance here is the extent to which class, and social and cultural accumulation related to middle class transgresses racial boundaries. The similar language of class fosters relationships with other races. Shifts in class formations as Dolby's (2001) study shows produce spaces of hybridity and boundary crossings that trouble the simplistic notion of race. Consistent with Dolby, the student above shows how racial alliances are crossing class and whilst race persists in the creation of hierarchies and separation changing racial relations involve changing class dynamics.

Shifting class dynamics influence the configuration of race as stated below:

> I attended...an ex model C school and I am what is termed as a coconut an oreo…I was used to interacting with everyone so I think another point on campus when you do associate with other groups the whole stigma of being a coconut… like why are you hanging out with white people or other people so you are seen as a hybrid because you are not conforming to you being a Zulu or a black person or something...I intentionally went out and got an English accent when I in Grade 5. I think when I was 11 years old… I liked the English accent and I mimicked it until I somewhat got it. So I think it was an active thing on my part to acquire an English accent.

Being a coconut or oreo, was a form of hybridised identity. Such an identity with class privilege allowed one to hang out with white people and others and with English language acquisition enabled further the insertion within middle class white and Indian social values. Such an identity however was criticised by other Africans as noted above as non-conforming to stereotypical accounts of being Zulu or black. Important above is the strategy adopted to accumulate social and cultural values of the middle class which included developing deliberately an English accent. The emphasis on accent was important in that it identified with white and Indian middle class students, separating from working class African students and in doing so accentuating class differences and hybridity.

Changing Relations: Getting to Learn about Each Other

The lack of integration requires interventions that bring students together (Pattman 2007). How this might be achieved has not often been the focus of research attention in South Africa simply than stating that integration must be worked upon in universities (Walker 2005). In this section, I argue that whilst students located race with persistent forms of separation, complicated by class, the possibilities to engender better racial relations existed at UKZN. The flexibility of meanings that students themselves raised, troubles again the simplistic assumption that race is fixed and stable and it is argued here that the ways in which students point to change facilitates a broadening, rather than reinscription

of race thinking. Whilst students recognizing the broader structural issues which impede the development of equitable relations, the point made in this section shows students' capacities for critical reflection must be harnessed in working towards transformation at UKZN. The section will focus on how sport, music, drama are suggested as sources of togetherness and the specific ways in which lecturers might work in lecture rooms to include people as well as in university admission and orientation processes.

Race matters had to be attended confirming students' knowledge of inequitable relationships that separated students:

> The importance of integrating and getting to know each other because if we don't even the next generation will be polluted with the race issues so we should spend more time learning about each other. I think it is necessary and also people should be aware rather than ignoring the issue.

Race should not be erased or ignored. Understanding race through a framework of justice and equality was an important step in broadening race categorisations which as the student above states has polluting effects. This is in contrast to white students in Walker's (2005) study who dismissed and denied the existence of race inequalities. In transforming UKZN's racialised contexts bringing students together in the creation of social and sporting activities was an important suggestion and in line with other research suggesting the university's role in bringing people of different races together (Pattman 2007).

Challenging fixed notions of race, students suggested that the creation of activities can help racial mixing:

> …if we could create a situation where we have activities or events that bring students together that make them socialize or make them mix together in that interaction we will have a quite different situation…

Noting the racialised separation at the university, the student above provides compelling evidence of what UKZN should be doing to address and support racial mixing. Sport was advanced in support of mixing:

> I think we have to learn about other people…we can have like games or sports so that you get every race to mingle with everyone so that you get to learn about each other because they is a stereotype that white people are racist but if you get to know then, get to talk to them you see that OK, I don't see any element of racism here. When I was doing first year we used to call Afrikaners racist because of the history and everything but that didn't mean that person was a racist...

The student above shows the capacities of critical reflection which allow people to work on stereotypes and alter their mindsets in relation to other races. In learning about each other through coming together in games and sport the possibility thus existed to break down relations of power and address historical

inequities based on apartheid's framing breaking down assumptions that associate Afrikaners (whites who controlled the apartheid government) with racism. Key strategies suggested by students reinforced sport, music and drama to bring students together:

> Integrate sport which will bring white students with other races…encourage sport which is the biggest thing…encourage drama and acting in which the majority black students mix together….

> From the stuff I heard most student like music…get different artists that cater for different groups. Have a spring break bash or something so have different artists who cater for different student's not just one for the night cos that will only draw the hip hop crowd if it is slicker so have varied entertainment for different students that will attract students to the same venue and hopefully they will mingle because of the commonality of the music…Tasha Becker and Locnville for the white students so have a varied ray of entertainment so they will all be there but they will be in the same space and venue and they will interact.

Taking account of contextual factors and the specific ways in which students give meaning to culture, interests (see Dolby 2001) there is recognition of the effects of apartheid which produced confinement in relation to music for example. Whilst crossover and interests in the tastes are mediated through class, the above statement recognises that in creating activities they should respond and include different interests.

> Yes I do socialize with students from different races when I first got here I joined the UKZN debating team which to a large extent is a mix of races so those people that I made friends with in that society are still my friends now and other than them I do have others from different races that I consider as my friends also acquaintances in class or people I would have had a heated discussion with people in class on various topics then we end up knowing each other on a first name basis so I never really had a problem with it like I said before I studied in an environment where there is a mix of races I studied like in my primary years and a bit of high school I studied in a multi-racial school so I never had a problem of interacting with people of different races ya I have quite a lot of friends some to them who I knew when I was in primary school.

Above, it is noted that the ability to debate and mix has deeper race and class context. Here, the student notes that race mixing was evident even in the primary school and that the integration in the university was fostered and enabled through such history. At the same time however, it is noted here that, in the main, it is mixing that occurs amongst Africans whose families were able to afford the fees to attend 'multi-racial' schools – race and class are thus linked to student mixing.

Students come into universities with history of schooling that are quite specific and this has effects on how they see each other, a point noted by Pattman (2010), illustrated and confirmed below:

> I think at orientation and admission level there should be more of race interaction where all students are there and there are activities to engage all students as well as I don't know if they can maybe in theatres when there is teaching going on encourage students to interact more because I think sometimes when students do that it is not because they have problems with other students but because they don't know. It just happens because maybe when you came to varsity you were friends with your friends from back home whom you interact with you don't think but maybe if there is a programme making students interact and making friends somehow or programmes instead of programmes that segregate students or something like that.

Separation is acknowledged as an experience before coming to university and configured friendships and race relations. The university here becomes the central point at admissions and orientation level to bring students together. This requires an understanding of race separations and histories of South African students. Of clear importance is the recognition that students congregate in ways that in the main reflect broader social relations that work to construct and maintain race and class separation and differences (Durrheim et al. 2004). Where there is flexibility this involves class and historical relations which enables mixing in the primary and high school level. This does not mean that race relations are fixed but they do account for why separation persists and how class complicates this substantially.

The anger and resentment that students felt about the class and race differentiations and power imbalances evident in the coffee shop and cafeteria distinction led to suggestions of a common eating place. This suggestion must be seen in the context where the majority of students (working class African and working class Indian) cannot afford the costs of food in the coffee shop and through which race was imputed:

> For one, I think we should have one common cafeteria, seriously, I think if we had one common eating or social space, we are all forced to go there and sit there and eat together, I think that might reduce the levels of, if there is any racism.

Within the lecture room students noted as Pattman (2007) study that active intervention is required within the lecture room to put students together:

> …they can't force people you know to move, every time in class you can't be told don't sit here today sit there. But I think group discussions normally they do, I think they are improving the situation, because if a lecturer comes in and she decides ok I got group discussion I want four groups to discuss this topic and this topic and this topic, and instead of us telling the students group yourselves into four groups or whatever you say ok, I will group you by giving you numbers, you're integrating not sticking to own kind, that maybe enables the situation to change a bit.

> There is no culture of integration there isn't any cultural things to do as well. Like in the beginning when I did socio 101 in the tut we had to do for the assignment an interview with another race group so that is really interesting and because it was for marks, students were really serious about it. And it opened peoples' mind. We can have a forum or something so it could also be a bit destructive because some people are vocal about their issues but maybe it will be good to release it and work it out.

The students above provide creative ways in which lecturers might facilitate a learning environment that brings students together understanding that the default position is one where students congregate together in terms of their histories and races. Recognising the social processes which has effects for how students relate in the lecture room, has consequences for the reproduction of and investment in race separation. In group work, lecturers could use numbers to put students together and working on race (particularly as the sociology class permits) where marks are involved 'forces' students to come together and get to know each other. In challenging and transforming the lecture room environment, the students illustrate the importance of lecturer intervention in the transformational agenda. By fracturing the separation in the lecture room, the inevitability of 'sticking together' reduces its power to hold current racial relation in place and opens up new possibilities in coming together. Not only do students understand how racial separation persists but they also show how it can be challenged and transformed.

Whilst students pointed to the actions of UKZN and the initiatives required by lecturers they also showed critical reflection on student complicity and transformation of thinking within the student body:

> …I think we also need to change our mind-set, because we are still stuck at mind-set you know, that if you are white, you've got different interests, you've got different likings you've got your own way of doing things, and I think I'm also different from you so I need to stick with my own kind. I think that's, it's going to take time, but I think we need to start moving forward as students, because we are all here for one purpose, to learn, so if you're learning, you don't only learn from your own kind, you need to learn from different groups of people. So integrating ourselves within other groups, in a way, it is hard but I think that could help the situation.

> I don't know why they behave in that manner. I think it's all based on the whole idea about what your parents teach you about what black is and what white is…I think everybody has their own little part to play…I always say to people when they come to university through this gate you are coming to bubble because this entire university is a world on its own and if you compare it to the rest of Durban, we are much more integrated racially here than outside…

Integration is necessary for learning and whilst there are many students who resist and continually separate within narrow racial confines, students are explicitly targeted above with capacity to change the current conditions at

UKZN. Of importance in the above discussion are the deep social roots given to race. UKZN, it is argued reflects a more progressive racial environment than the city of Durban in which it is situated. Paying attention to the broader social structures and historical processes that frame the city (and the country), the discussion above suggests that social processes drive race relations at UKZN even as UKZN is seen as more advanced racially than the city of Durban.

> I'd say it is so linked to where we come from because at the end of the day we go back to your rest room at the end of term you go back to your home and the perceptions that you have in your home space are still there and they get reiterated and re-emphasized every time you are at home and then you come back to the university background so these are not just something that can be done on the university front but it goes back to home. Yeah and it's a long shot I think we do have a long way to go.

Whilst students noted how dominant racial positions can be disrupted and re-examined in the university and through changing student mindsets, the point above is that more attention needs to be paid to changing structural and social positions within the broader context of the country—a strong dialect and tension exists between reproduction and change within the university and is best illustrated in the quote above. Social processes and past inequalities, hierarchies and residential make-up have effects on how students continually relate to each other even as there is evidence of change. These dynamics intersect to produce reiterations and reinforcement of racial divisions. Race and class hierarchies are legitimated as they are broken down within the broader structures of South African social life and are repeated, although not without interruption, at UKZN Changing race involves addressing the broader structural inequalities that continually separate races. There is no quick-fix to solutions but there are in the short-term changes that students themselves illustrate are possible within the university.

Conclusion

The aim of this article was to show how students give meaning to race and the deep connection with class. Simplistic assumptions based on race as a fixed category of meaning cannot do justice to the actual evidence presented here by students as they complicate race with class and broader contextual issues in South Africa. Contextual specific accounts of students in different universities matter to how race is given content (Walker 2005). On the one hand the article demonstrates the continuation of racial separation but racial separation cannot be viewed without understandings its connection to class. Class inequalities are accentuated at the university as they weave through race. This has historical specificity. Class inequalities and race in South Africa correlate even as there is evidence of changing middle racial dynamics which are altering and accentuating

class differences amongst Africans. At UKZN, the majority of African students are poor and this perhaps best explains why the university is constantly in the media showing at times violent student protests related to fees and finance. Race and class issues go beyond the university and potentially stymie greater flexibility and movement of students as the majority of African and African students at UKZN remain working class and poor. As Ozler (2007) notes the poverty rate in rural South Africa is 63 per cent with living standards closely linked to class. There are many poor whites, Indians and coloureds in South Africa but poverty is concentrated among blacks. Ozler adds that Africans and coloureds experience high rates of poverty than amongst Indians and white South Africans. The experience of race at UKZN as students illustrate cannot be understood without continual focus on histories and structures which shape and mark how students separate and come together. Given how class has effects on race and the continuation of class inequalities in the country, it is not surprising that race is constructed in the ways that show resentment for those inhabiting the coffee shop and the persistent of separation.

Notwithstanding the stark social inequalities, the article shows how students demonstrate critical reflective practices in exploring and thinking through options for change (Durrheim *et al*. 2011). Within the university however and beyond the structural inequalities that constrain social relations much more can be done to creatively work to bring students together. Recognising the different social histories, the effects of apartheid and the often limited contact that students have growing up and in school is important to realise in advancing racial mixing. Attempts to bring students together require active work on the part of the university through sport and cultural activities, in admissions and orientation programmes, in the lecture rooms requiring deliberate interventions by lecturers as well as changing students mindsets about other races. In the context of the UFS incident in South Africa and in light of enduring patterns of racial and class inequalities that continue to malign working class African students, efforts to work towards change remain critical (Department of Education 2008). What students have to say moves beyond simply recognising their experiences of race and knowledge of separation imputing class and broader histories in South Africa's hierarchical society but the critical ways in which students talked about change suggest the potential to transform relations to create racial mixing and integration to reflect the transformative agendas of the country.

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Funding Higher Education in Africa: State, Trends and Perspectives

Damtew Teferra*

Abstract

This article discusses and analyzes the state of funding higher education in Sub-Saharan Africa (SSA). The article, based on nine case study countries, examines the cost of higher education, current and potential funding sources and policy discourses that shaped funding trends in the region. The study further explores policies, trends and factors that hindered, as well as promoted, funding the sector in SSA and the role of external players in doing so. It also articulates poorly tapped and potential sources of funding for the higher education system. It concludes by providing some policy recommendations, taking into account the mounting challenges of expansion which are pushing the cost of higher education to unsustainable levels.

Résumé

Cet article discute et analyse la situation du financement de l'enseignement supérieur en Afrique subsaharienne (ASS). L'article, dont le champ s'étend sur neuf pays couverts par l'étude, examine le coût de l'enseignement supérieur, les sources de financement actuels et potentiels et les discours politiques qui ont façonné les tendances en matière de financement dans la région. L'étude explore plus en détails les politiques, les tendances et les facteurs qui ont entravé et favorisé le financement du secteur en Afrique subsaharienne et la contribution des acteurs externes. Elle énonce également les sources de financement insuffisamment exploitées ou le potentiel de financement qui s'offre au secteur de l'enseignement supérieur. Elle conclut en formulant quelques recommandations de politiques, en tenant compte des défis croissants liés à l'expansion desdits établissements qui contribuent à accroître le coût de l'enseignement supérieur à des seuils à peine supportables.

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Introduction

With increasing national and international commitments and support to education since the Millennium Development Goals Summit and the World Education Forum in 2000, primary education enrolment increased worldwide from 86.7 million in 2000 to 128.6 million in 2008, and gross enrolment rates are now over 100 per cent. Over the same period, enrolment in secondary education increased globally from 22 million to 36.3 million, and enrolment in higher education from 1.8 million to 4.5 million. While the quantitative expansion is impressive, the education system in the SSA region must cope with numerous obstacles. Because of repetition and dropout, many countries are still far from achieving the universal primary education (UPE) goal by 2015. Equally important, the quality of education in the region is recognized as being far below the rest of the world. With increased social pressure for the expansion of post-primary education, governments face a challenge – how to expand educational opportunities, improve quality and increase equity with limited and inadequate financial resources (UNESCO 2011).

Higher education institutions in SSA are the most financially challenged in the world (Teferra 2005a). Academe everywhere, even in wealthy industrialized nations, faces fiscal problems, but the magnitude of these problems is far greater in Africa than anywhere else. According to Teferra and Altbach (2003) the causes include: 1) the pressures of expansion and 'massification' that characterizes most African academic institutions and systems; 2) the economic problems facing most African countries that make it difficult, if not impossible, to provide increased funding for higher education; 3) a changed fiscal climate and policy direction induced by multilateral lending agencies such as the World Bank and the International Monetary Fund; 4) the pressure of other social and health issues such as HIV-AIDS on government budgets; 5)the inability of students to afford the tuition rates needed for fiscal stability; and 6) misallocation of available financial resources, such as the provision of free or highly subsidized accommodation and food for students.

More than any other factors that affected higher education funding in Africa, the policy pursued by major development institutions, notably the World Bank, has been the most prominent. Psacharopoulos (1985), an influential economist at the World Bank, and his colleagues (1994), erroneously concluded that the rate of return on higher education in Africa is lower than the lower education sub-sector. Their studies purported to have proved that returns on investments in education are positive but decrease at the higher level of education; and as such investments in primary education should be emphasized at the expense of higher education. In the face of several subsequent studies that produced results on the contrary – that returns on investments in education increase at the higher level of education (Manda and Bigsten 1998; Liu 1998, in Amin and

Awung 2005), the World Bank view persisted shaping the African higher education policy and its financing landscape for several decades. It was this observation which prompted Leslie (1990) to conclude that over the past 30 years, studies of rates of return on higher education probably have impacted higher education financing policy more than any other information produced by researchers.

Because of a belief that primary and secondary schooling are more important for poverty reduction than tertiary education, the international development community has encouraged African governments' relative neglect of higher education. For example, from 1985 to 1989, 17 per cent of the World Bank's worldwide education-sector spending was on higher education. But from 1995 to 1999, the proportion allotted to higher education declined to just 7 per cent (Bloom, Canning and Chan 2006).

The World Bank study had three immediate impacts on higher education development on the continent as it (a) immediately affected other lending institutions directly, (b) constrained other (bilateral) development partners, and, moreover, (c) prevented individual countries from supporting their own institutions and systems (Teferra 2005b, 2009a).

It was only after the publication of several major policy papers, some by the World Bank itself, that the heavy cloud hanging over the importance of higher education has started to slowly whittle away. In *Constructing Knowledge Societies,* the World Bank (2002:xvii) announced that 'the role of tertiary education in the construction of knowledge economies and democratic societies is more influential than ever. Indeed, tertiary education is central to the creation of the intellectual capacity on which knowledge production and utilization depend and the promotion of the lifelong-learning practices necessary to update individual knowledge and skills'.

In this seminal piece, the Bank first declared that it 'has actively supported tertiary education reform efforts in a number of countries' presumably to water down a prevailing view and added, 'Nevertheless, there is a perception that the Bank has not been fully responsive to the growing demand by clients for tertiary education interventions and that, especially in the poorest countries, lending for the subsector has not matched the importance of tertiary education systems for economic and social development'.

It went on to say that

> The Bank is commonly viewed as supporting only basic education; systematically advocating the reallocation of public expenditures from tertiary to basic education; promoting cost recovery and private sector expansion; and discouraging low-income countries from considering any investment in advanced human capital.

Without any comments towards these outstanding and widely recognized criticisms, it said, 'Given these perceptions, the rapid changes taking place in

the global environment, and the persistence of the traditional problems of tertiary education in developing and transition countries, reexamining the World Bank's policies and experiences in tertiary education has become a matter of urgency'.

In *Accelerating Catch Up* (2009), the Bank further affirmed the importance of higher education in econometric terms. It stated, 'Growth in gross domestic product (GDP) in Sub-Saharan Africa (SSA) has accelerated from an average annual rate of 2.0 percent during the 1990s to over 6.0 percent during 2002-07.… if this growth surge is to evolve into a virtuous spiral that stimulates even higher and sustained growth rates in a substantial number of African countries, a significant increase in investment in physical and human capital is needed over an extended period'.

The Bank continued to stress that there was 'urgent need for countries in SSA to acquire the capabilities that will spawn new industries that create more productive jobs, multiple linkages, and a wider range of exports. The desired capabilities derive from investment in physical assets, such as infrastructure and productive facilities, as well as in institutions and human capital. We have stressed human capital…, because in the context of SSA, it is arguably the stepping-stone to a viable and growth-promoting industrial system'.

One may wonder why considerable emphasis is given to the World Bank with regard to funding higher education in Africa in the light of other development players and respective responsible governments. True to the affirmation by the former President of the Bank, James Wolfensohn regarding the importance of knowledge in development in 2003 (World Bank 2003), the power of the 'knowledge bank' has been instrumental in domineering the policy forum unlike any other and hence its impact on the policy development in African higher education.

In summary, higher education funding policies and practices in Africa have been effectively and aggressively shaped by multilateral players, particularly the World Bank, for over several decades. The increasing importance of knowledge creation and dissemination – the main business of universities – in the globalized economy has helped jettison the long-standing policy impediments to the development of higher education. It is, however, important to note that while the Bank has played a role in degrading the development of higher education, it continues to shape the discourse – along the lines of the values it embraces.

The Cost of Higher Education

Financing higher education is an expensive enterprise – knowledge creation, knowledge dissemination and innovation do not come cheap. High-end expertise, expensive equipment and instruments, extensive infrastructure (such as laboratories, libraries and halls of residence) and the accompanying requisite

logistics (such as information technology) and a complex academic culture entail that the sector, unlike its younger sister sub-sectors (primary and secondary education) is costly – without comparison (Teferra 2013a). It is *higher* education and it thus costs *more* and is *expensive.* In the light of the preponderance of these basic facts and explicit evidence, it is curious why for so long an argument has been peddled on high unit cost of higher education (in Africa) with severe consequences to the sector in particular and national development in general.

In this section, funding status and trends from different countries in SSA are discussed. One of the countries which have invested in higher education massively in the last decade is Ethiopia. Between 2005/06 and 2009/10, the average higher education budget in Ethiopia was 24 per cent of the education budget (Figure 2). In terms of the gross domestic product (GDP), the education sector in the country has also made a steady progress, growing from 3.1 per cent in 2005/06 to 7 per cent in 2009/10 (Figure 1; Moges 2013). In a decade or so, the Ethiopian higher education system witnessed phenomenal growth – from around 30,000 students in the late 1990s (Wondimu 2003) to more than 400,000 (Figure 3; MOE 2011).

Figure 1: Government and Education budget – Ethiopia (in Billion, Birr)
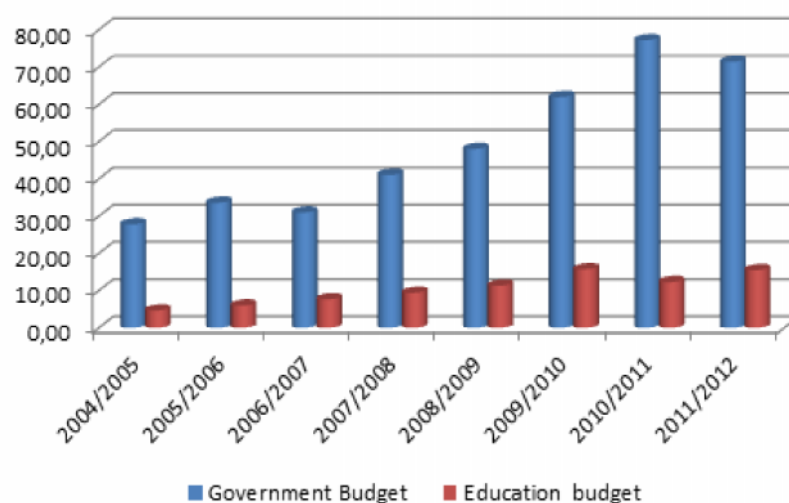
Source: Ministry of Education – Ethiopia, 2011 in Moges 2013.

Figure 2: Percentage of Education Budget – Ethiopia

4,638.9	5,990.6	7,632.5	9,372.9	11,340.7	15,719.3	12,301.6	15,494.3
27,803.8	33,615.9	30,998.2	41,070.9	48,035.2	61,958.9	77,228.0	71,419.2
2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012
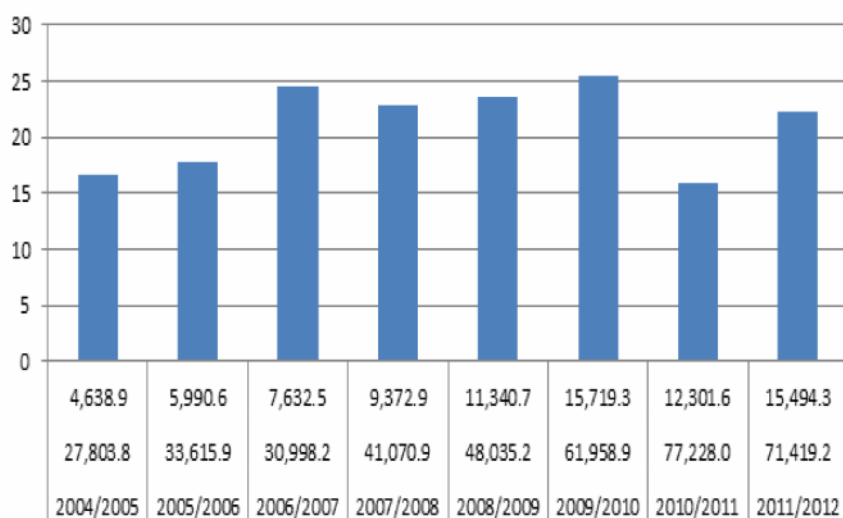
Source: Ministry of Education, Ethiopia in Moges 2013.

Figure 3: Higher Education Enrolment – Ethiopia
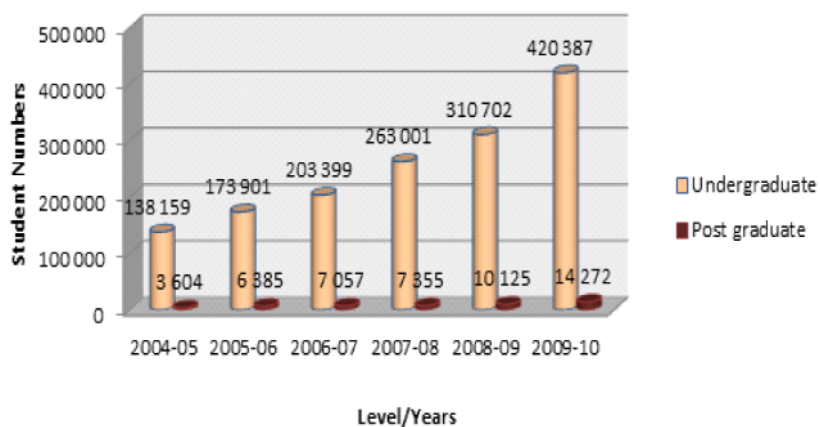
Source: MOE, 2011 in Moges 2013.

In 2007/08 only 7.3 per cent of development expenditure in Kenya went to university education compared to 81.6 per cent for primary and 1.5 per cent to secondary education (Abagi 2010 in Oanda 2013). The general trend has been fluctuating allocations from the government, which has compounded the problems of planning and quality in the institutions. For example, while in 2010/11 the government allocated KSh 48 billion (US$ 564.7 million) to public universities, this amount was reduced to KSh 44 billion (US$ 517.6 million) in 2011/12 (GOK 2011 in Oanda 2013). The symptoms of fluctuation are apparent as Kenya just increased funding for higher education by 30 per cent for the financial year beginning in July 2013, as it seeks to bankroll 15 new public universities. According to the Ministry of Finance, the funding for the Ministry of Higher Education, Science and Technology would increase from KSh 61 billion (US$ 717 million) during the current year to KSh 80 billion (US$ 941 million) in the coming year. According to an unpublished report (2013), the University of Nairobi gets 32 per cent of its revenue from the Government of Kenya, 40 per cent from tuition fees, 16 per cent from external grants and the remaining balance from accommodation, rent, endowment fund, and other income-generating units. Kenya's universities currently enrol 183,500 students, and admissions in the new universities are expected to help push enrolments to the 200,000 mark by the end of 2013 (Nganga 2013).

In Uganda, government funding for tertiary education has been declining over the years. In 2004/05, higher education received only about 10 per cent of the total education budget, or USh 619.93 billion (MoES 2005 in Oboko 2013). This rate has remained constant since the mid-1990s despite the great increase in enrolment (Figure 6). At Makerere University (Figures 4 & 5), the country's flagship institution, revenue from dual-track tuition policy have increased each academic year; in 2000, it generated more than 30 per cent of the university's internal revenue compared to almost complete financial dependence on government funding ten years earlier (Carrol 2004 in Oboko 2013). In 2009/10, however, these revenues increased to as much as 80 per cent (Oboko 2013). This phenomenal transformation was described as the "Makerere Miracle" in the early 2000s, but many remain critical of the implications of this miracle on the quality of teaching, learning and research (Sawyerr 2002).

Figure 4: Makerere University Funding Sources–2000-2009
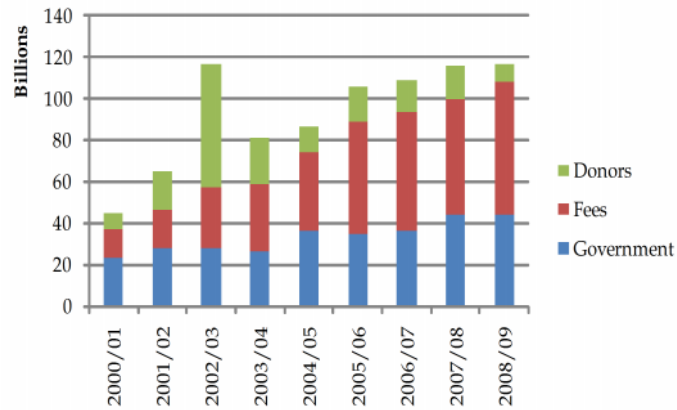
Source: Ssepweba *et al*. 2013.

Figure 5: Makerere University's Income and Expenditure
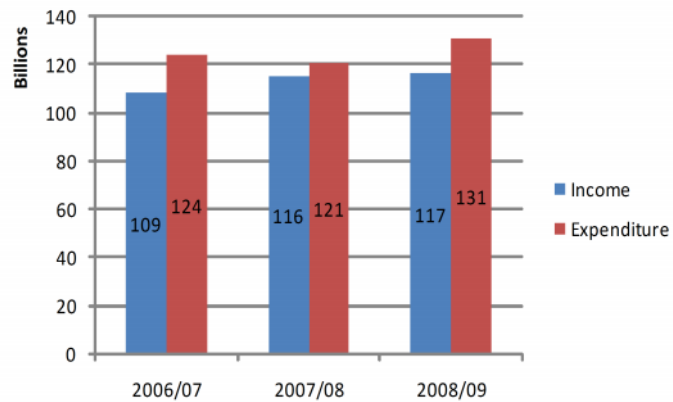
Source: Makerere University, 2010.

Figure 6: Student Enrolment in Uganda
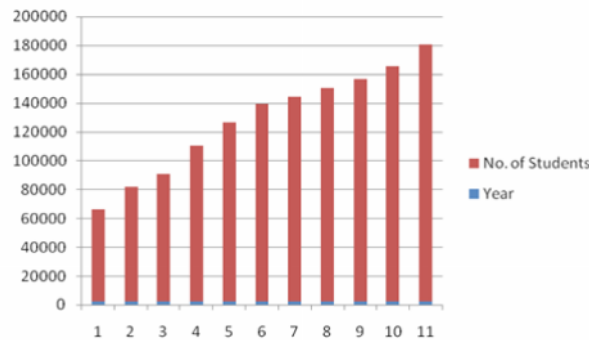
Source: Oboko 2013

In Zambia, the government could only dispense 20 per cent of institutional budgets (Figures 7&8). The funding level remained almost the same for three years, from 2009 to 2011, without regard to major inflation and depreciation of the local currency. For instance, as of January 2010 one US dollar was equivalent to more than 4,000 Zambian Kwacha; in 2012, one dollar was slightly over 5,000 Kwacha. The requirements for public institutions in the country are usually higher than what is estimated based on the expected revenue the government will generate in the given fiscal year. The issue is that government estimates are far below the level needed for sustainable operations and for better remuneration of faculty. What makes Zambia's situation more precarious is the deterioration and devaluation of its currency in relation to other major currencies such as the Euro, the Pound Sterling and the US Dollar (Masaiti 2013).

In Zimbabwe, one of the major problems now facing the universities, according to Mpofu, Chimhenga and Mafa (2013), is under-funding. This is not surprising considering that in recent times, government revenues have reduced sharply, while the national economy itself is in total chaos. The government, which statutorily bears the costs of higher education in the country, now faces tight budget constraints due to the collapse of the Zimbabwean economy, and the need to meet heavy and rising debt service obligations. Education is now a very low priority for the government and funding of universities is declining fast (Mbizvo 2011). In 1980, Zimbabwe had only one state university – the University of Zimbabwe. The country which had some 10,000 students in 2000 (Maunde 2003), now enrols some 90,000 students (Mpofu, Chimhenga and Mafa 2013).

Figure 7: Funding Patterns in Zambia Public Universities
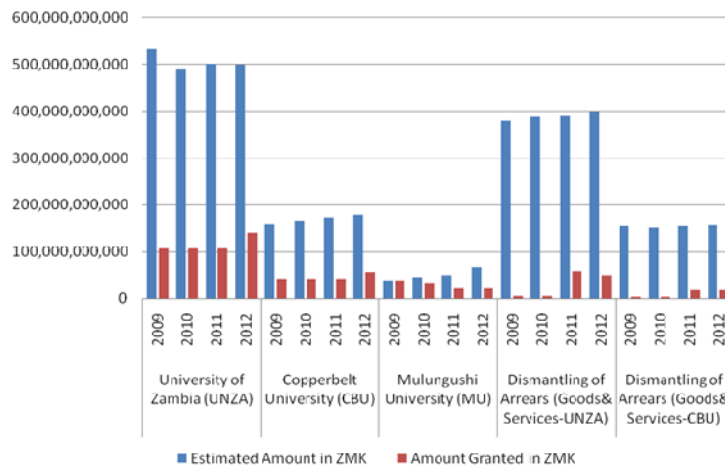
Source: Masaiti, 2013.

Figure 8: Allocation of Budget by Programme – Zambia
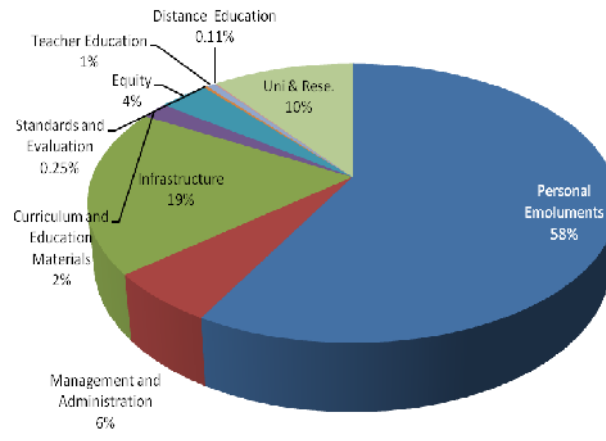
Source: MOE Strategic plan, 2009 in Masaiti, 2013.

In Madagascar, the share of education in public expenditure as part of both the recurrent budget and investment budget slightly increased in 2007 compared to the rates in 2003, from 20.5 per cent to 22.4 per cent, and from 9.3 per cent

to 12.0 per cent respectively (Figures 9&10; Randriamahenintsoa 2013). Examination of the actual allocation of education expenditure across levels of education shows that the share of higher education in the budget of the education sector is just over 12 per cent, while the first cycle of basic education continues to register a substantial increase from 2003 and 2006 (Zaafrane 2008 in Randriamahenintsoa 2013).

Figure 9: Share of Education Expenditures in GDP and the National Budget, Madagascar, 2003-2007
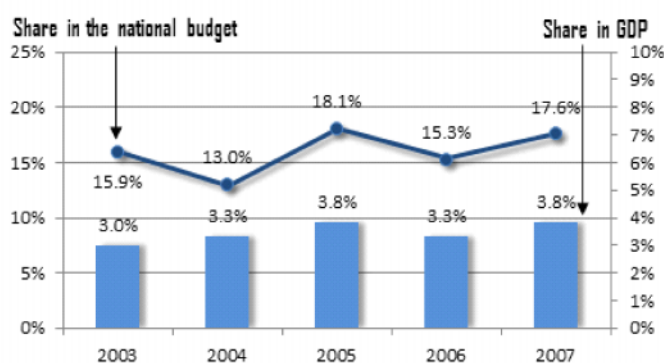
Source: Ministry of Education, Madagascar, 2008, Randriamahenintsoa 2013.

Figure 10: Share of Education in Public Expenditures, Madagascar, 2003-2007
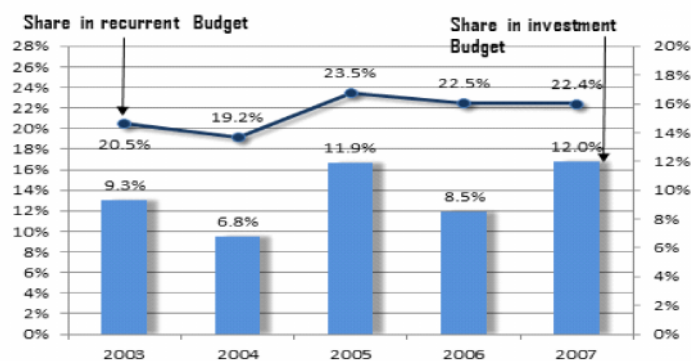
Source: Ministry of Education, 2008, Randriamahenintsoa 2013.

In Malawi, the public recurrent unit cost of university education, in terms of GDP per capita, is the highest in the world. This may be due to the very low GDP per capita in the country, but certainly it is also because the government bears the entire cost of public higher education (Figures 11 & 12). By the calculation in the period 2000 to 2008, the recurrent unit cost stood at 2,147 per cent of GDP per capita, which is seven times more than the Sub-Saharan African average (World Bank 2010).

Figure 11: Budget Allocation to the University of Malawi (UNIMA) and Mzuzu University (Mzuni), 2000-2011
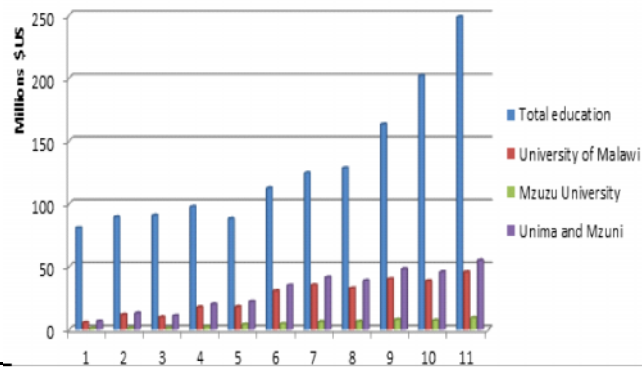
Source: Ministry of Education budget documents, Malawi, 2000-2011 from Dunga 2013.

Figure 12: Funding Patterns in Malawi
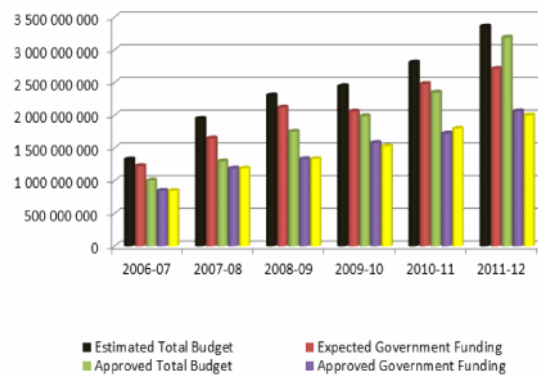
Source: Dunga 2013.

The bigger share of the cost was consumed by emoluments leaving a very small percentage dedicated to teaching and learning, which means that the very high unit cost does not necessarily entail better quality. Malawi's higher education system, which has the lowest enrolment even by SSA standard, has more than doubled in over half-a-decade in excess of 10,000 (Figure 13; Dunga 2013) putting even more pressure on the sector.

Figure 13: Student Enrollment in Malawi
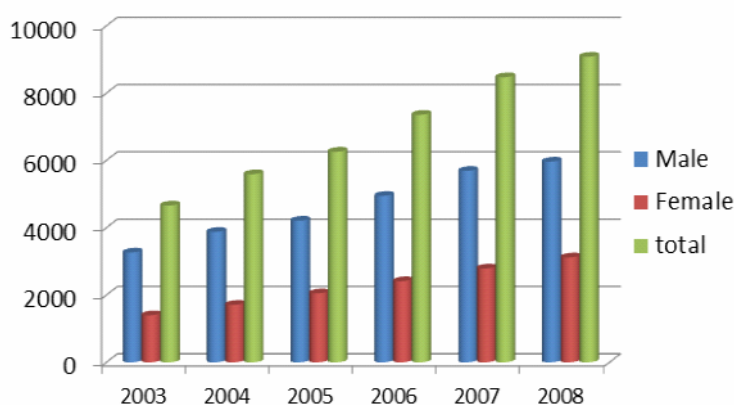
Source: Dunga 2013.

In Tanzania, a country with a population of 43.6 million, as of 2010, eleven public universities and university colleges enrol 104,130 students (graduate and undergraduate, including non-degree students) while 20 private universities and university colleges enrol 37,509 students (27.7 %). As in Uganda's Makerere, while budgetary requests made by the University of Dar es Salaam, the country's flagship, increased from TSh 26.97 billion (USD 50.62 million) in 2000/01 to TSh 131.9 billion (USD 222.82 million) in 2009/10 – an increase of 79.5 per cent – government approval rates declined from 82.6 to 37 per cent during the same period (Ishengoma 2013). It should, however, be noted that despite the decline in government subvention to higher education, the absolute figures, as stated earlier, have shown growth (Figure 14).

Figure 14: Budget Approval Trend in Tanzania
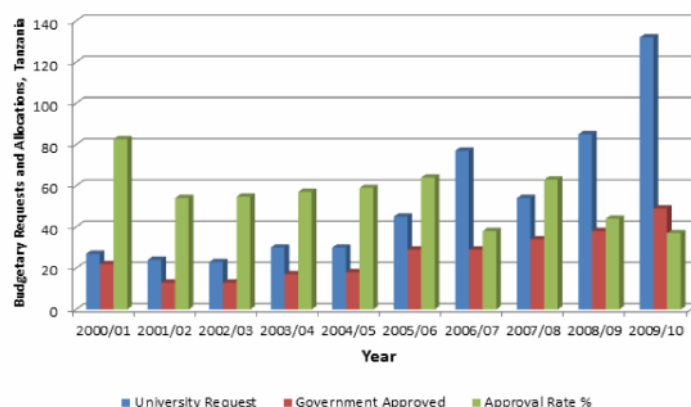
Source: Ishengoma 2013

In Botswana, one of the few Sub-Saharan African countries that have attained middle-income status, the higher education system is funded through the traditional ad hoc method based on incremental budgeting where allocations are based mainly on economic growth, government revenues, inflation rates and the previous year's budget. This system, which claims close to 20 per cent enrolment rates – one of the highest in the region – fails to take into consideration important issues such as the student enrolment figures, academic programmes on offer at the various institutions, and institutional performance. The allocated amounts often depend on how well institutions are able to lobby. Based on the projected enrolment rates to hit 20 per cent, the government would need to spend an average of close to 5 per cent of GDP per year on tertiary education financing between 2010 and 2016. The annual share of the government's budget allocations for education amounted to 21 per cent in 2005 and 16.2 per cent in 2009, while 5.8 per cent and 6.7 per cent of GDP was devoted to tertiary education in 2007 and 2009 respectively (Damani and Molutsi 2013).

The Botswana higher education system is generally inefficient as there are too many overlaps in programme offerings and institutions' accountability to various government bodies. The government does not only finance public tertiary education institutions through subventions to cover both their annual recurrent and capital development budgets, but it also finances tuition and student support costs. The number of students who pay their way through tertiary education

is very small; the private sector's contribution is also insignificant, leaving the burden of tertiary education financing almost entirely on the government. Recent tertiary education demands combined with declining public revenues show clearly that the government-dominated tertiary education financing system is unsustainable in the medium to long term. The need to adopt rigorous financial management reforms in terms of financial diversification for sustainability cannot be over-emphasized (Damani and Molutsi 2013).

The chronic shortfall of higher education funding in African institutions is systemic even in countries where major higher education growth and transformation has taken place. The cases in Tanzania and Zambia, as we saw earlier, are excellent examples of this persistent trend. In the case of the University of Dar-es-Salaam, the university's budget approval for the ten-year period of 2000/01 to 2009/10 has on average stayed at 50 per cent (Figure 10). It may not be an exaggeration that the mismatch between funding support and government approval may be unparalleled in Zambia than elsewhere in Africa. Between 2009 and 2012, the only two major universities – the Universities of Zambia and Copperbelt – were only granted 20 per cent of requested operational budget.

Funding Trends

Until recently, the African higher education landscape had been predominantly a public domain. The post-independence development movement, which started off with fervent commitment, energy and determination, placed higher education at a central location of national and regional progress. As a consequence, nations provided dedicated support and unmitigated leadership to higher education development.

Higher education institutions were fully funded: classrooms, laboratories and dormitories were well furnished; academics well paid; students received attractive allowances. Support from external sources – bilateral, multilateral and foundations – as well as governments, flowed readily. Those were the golden days of African higher education.

The enthusiasm and consequently support to higher education did not last long. The political, economic and social upheavals of the 1970s and 80s however drained much of that enthusiasm and support. Critical voices in higher education institutions challenging leaders of the independence struggle meant that governments regarded institutions as irrelevant ivory towers whose costs were not fully justified – a veiled reference to the flawed higher education policy discourse at the time. This probably could be marked as the lowest point in the history of African higher education.

The situation for African higher education system had not effectively changed until knowledge was officially declared as 'a key driver of growth and development' and investing in institutions of knowledge domain considered

paramount to development (World Bank 2002). African tertiary education institutions and policy makers were urged to ensure that the workforce acquires the skills to compete, innovate and respond to complex social, environmental and economic situations. African higher education got liberated from the yokes of flawed policy that reigned on the African higher education landscape for decades (Teferra 2009b).

As higher education was declared vital to development and competitiveness and the rate of return study was declared irrelevant, several developments took place concurrently. The liberalization of the global economy, the General Agreement on Trade and Services, the expansion of private higher education providers, among others, has taken centre stage, affecting higher education funding directly. One of the critical elements that emerged from the aforementioned developments was the public versus private benefits (of higher education), which in turn introduced the cost-sharing practice to the policy floor. The dialogue and practice from one source of higher education funding to multiple sources has received much traction in recent times.

While the policy dilemma seems to have been resolved and African higher education is dubbed liberated (Teferra 2009d), the flow of resources has not been commensurate with the spirit of the liberation. As a matter of fact, in some countries the flow has actually precipitously declined – as in the cases of Tanzania and Uganda – prompting massive efforts of resource mobilization by respective institutions.

As African higher education got a 'blessing' from major development institutions – which had been critical of it – it was hit by a wave of 'massive' expansions that have taken off in a short span of time – with great implications on funding the sector. In many countries, the expansions have been taking place without commensurate financial, logistical and academic provisions with direct implications on the quality of higher education.

The discussion on trends in funding higher education would be bland without alluding to the economic trajectories of the different countries. Though many countries have made considerable and meaningful support to the higher education system, inflation, and in some countries hyperinflation, made that support rather ineffective. For instance, the massive inflation that hit 'Francophone Africa' had great implications for the funding of universities as its currency was sanctioned to float against the French Franc in the 1990s. Thus the external forces – both in policy discourse and monetary regimes – as well as the internal factors, characterized by social upheavals and economic slumps, have been instrumental in influencing the state and trend of funding African universities.

Who is Paying?

Until recently, African higher education had been an exclusive pasture of public domain – in form of free higher education. In essence, although social services such as education, health, housing or security are declared 'free' or 'public', some entity pays for them. In this regard, therefore, 'free' higher education is not free – it is a public investment of nations on citizens to advance national development through resources generated internally and externally.

The liberalization of the global economy and the shifting socio-economic paradigms are such that generating funds from sources other than the public purse have become acceptable – and even required. Institutions overwhelmed by sheer student numbers, dilapidated infrastructure and underpaid academics have started to generate own resources through a variety of forms – from instituting fee-based programmes to establishing private limited companies, to doing away with free perks and services.

The reality of this trend is nowhere more dramatic than in Makerere University, Uganda's premier institution. At the university, the number of fee-paying students have catapulted, as noted above, to such an extent that it increased its revenue from 30 per cent in 2000 (Musisi and Muwanga 2003) to more than 65 per cent in 2009-10 to as much as 80 per cent recently (Oboko 2013).

Generally, the cost of higher education is fast shifting from public spheres to private domains in many countries, largely spurred by constantly declining government subventions as well as institutional desire to fill the chronic financial shortfalls and increasingly shifting global socio-economic paradigms. Cost sharing was ushered into the lexicon of African higher education in the midst of shifting global economic dynamics and the proliferation of full fee-based private providers in the continent.

In a few countries new approaches to funding public higher education have been instituted: Ghana has introduced a Trust Fund; Zimbabwe a Cadet Scheme. Tanzania has also pledged to raise its commitment to research and development to one per cent of GDP. Kenya in early 2013 committed major funding increases to its higher education system – largely an outcome of political exigencies of election manifestos.

Funding research in African higher education is vastly dependent on foreign sources. In most higher education institutions, funding for research is pretty negligible, if at all. A good number of African universities are eternally dependent on external sources, notably the Scandinavian and other European countries, as well as US-based foundations. Tanzania, for example, has received some 750 million Norwegian Kroner from Norway since Norway got involved in supporting the higher education system of the country for over four decades (Teferra 2011). Regardless of the exorbitant costs of research, it is

incomprehensible, and rather befuddling, that African governments would spend quite a substantial amount of public money to teaching and learning but dangerously ignore support to research and innovation.

Finally, while governments now encourage institutions to take a proactive role in generating resources on their own, many of them are, however, known to carefully regulate them. It is, therefore, not a 'free market' for institutions to levy fees – even when it is warranted. In Uganda, where the 'privatization of public institutions' is actively taking place, the executive and the legislature of the country are known to have overturned decisions regarding fee hikes by institutions – thus directly interfering with the autonomy of institutions.

Resource Mobilization

Universities and other tertiary education institutions in most of Africa are often under severe financial straits. While governmental revenues are absolutely critical and not to be minimized – the education institutions are limited in their capacity to be able to generate enough additional revenue to provide both the quality and the level of participation that the countries of Africa demand and deserve (Johnstone and Teferra 2004). As a result, institutions are increasingly engaging in a host of resource mobilization schemes in their quest to improve the academic and professional environment.

The change in the modality of financing higher education has spawned a variety of resource mobilization approaches under the mantra of cost-sharing schemes that straddle governments, students, staff and university administrations. The efficacy of cost sharing in many countries, however, largely depends on the allocation of dedicated funds by governments – as well as effective management. In Zimbabwe, for instance, the Cadetship Programme, a cost-sharing model, has had to struggle due to low funding for the scheme every year (Sylod *et al*. 2013). In 2012, only 10,000 students benefitted from the Cadetship scheme while more than 40,000 failed to access these funds. The government was reported as owing all state universities and colleges US$64 million in unpaid Cadetship grants (Nemukuyu 2013).

In countries where cost sharing has had a longer track record and thus gained recognition and acceptance, as in Kenya and Uganda for instance, the loan schemes for particularly Track II students, who are fee-paying, have been paramount. Even in South Africa where a robust higher education loan scheme exists, the resources are not unlimited. This potentially major resource mobilization effort has been stifled by numerous factors that include ineffective and poorly equipped management, non-committal executives, unenforceable policies, ineffective collecting mechanisms, poor employment environment, high inflation and devaluation.

At the institutional level, a host of resource generation activities has been launched. The most common and visible form of resource mobilization has been the deployment of private programmes in public universities. In what is articulated by Altbach as 'the privatization of public universities', programmes for 'private' students have become actively operational under 'Track1-Track 2', 'Mode I-Mode II' regimes. In this arrangement, students who cannot make it to the tuition-free regular programmes enrol as fee-paying in the parallel programmes. In some countries, the number of slots for the regular students, the Track I or Mode I ones, has over the years been shrinking while the fee-paying, Track II or Mode II, has been increasing considerably (Teferra 2013b). For instance, the contribution of Module II income to the total university income rose from about 3.8 per cent in 1997/98 to 33 per cent in 2002/03 at the University of Nairobi. At Kenyatta University, tuition fees from Mode II students accounted for 48 per cent of the university's revenues by 2009 (Oanda 2013). More dramatically, as we witnessed earlier, Makerere University has increased its income from 30 per cent to 80 per cent recently.

Many institutions have also been establishing businesses both as part as well independent entities of the universities. Universities now commonly operate such schemes as book stores, cafeterias, farms, and facility rentals on commercial basis. In other more advanced cases, as in Kenya, for example, Moi University has a registered limited private company independent of the institution run by a CEO.

Once the taboo of privatizing the public higher education system has been dismantled, institutions have also imposed new fee regimes on a variety of services including registration, exam, ID card, library, and IT fees. Institutions have found these internal resource generation approaches as less controversial than imposing hefty tuition fees, often a point of stiff resistance that draws undue attention of external stakeholders such as politicians, governments and the media.

To sum up, the foremost approach to raising resources in African institutions has been the introduction of fee-paying students and fee-based programmes in public institutions. While, other forms of resource mobilization are growing in number, they are still largely in their infancy.

The Scope of Private Higher Education

The dialogue on funding higher education often ignores the private institutions. And yet their importance in their share of enrolment in the region has reached 25 per cent – hence the need to undertake a closer look at the funding dynamics governing private institutions in Africa.

The state of private higher learning institutions in Africa is precarious due to both financial and policy predicaments. Policy issues aside, the financial sources of African private institutions are as much individual as they are institutional.

Quite a large number of private institutions in Africa are faith-based and their establishment (and running) is attributed to funding from religious organizations. In Tanzania, for instance, nearly 80 per cent of the private institutions are church-affiliated (Table 1; Ishengoma2013). In Zimbabwe, the government has approved charters that have led to the establishment of the following faith-affiliated universities: Solusi University run by the Seventh Day Adventist Church; Catholic University; Africa University, run by the American Methodist Church; The Reformed Church University run by the Dutch Reformed Church (Mpofu, Chimhenga and Mafa 2013).

Table 1: Ownership of Private Institutions in Tanzania

Group	%
Evangelical Lutheran Church of Tanzania	38.0
Roman Catholic	19.0
Other Christian religious denominations	19.0
Muslim	14.3
Other non-Christian and Muslim religious denominations	4.8
Non-religious	4.8

Source: Ishengoma, 2010.

In only a few countries in Africa, such as Liberia, and recently Kenya, do governments support private institutions by indirectly providing support to students in those institutions through, among other avenues, the provision of student loans. Many private institutions are now making strong arguments seeking support from public funding sources in consideration of the institutions' contribution to national development.

The External Resources

Africa still largely depends on external sources to develop its capacity and excellence in higher education–specially research. One of the popular approaches to revitalize higher education in Africa, and particularly promote research, has been through what is now a buzz word of the sector–Partnerships–namely: Regional Partnerships, South-South Partnerships, North-South Partnerships, North-South-South Partnerships, and North-North-South-South Partnerships.

In effect, higher education in Africa has always been an international affair owing to its history and trajectory and as such this development may not appear that surprising. Be that as it may, the magnitude of high-profile international partnership initiatives, specifically in higher education, has recently extended and strengthened.

As part of the broader geopolitical reality of the day, higher education in the region has also re-ignited increased interest around the world including the European Union and its member states, the United States, Canada, and new players like Brazil, China, India and South Korea (Teferra 2011). The snapshots of some of these partnerships are outlined below.

Africa-US Higher Education Initiative

In July 2007, a group of universities based in the United States and Africa came together to launch an initiative with intent to strengthen the capacity of African higher education through partnerships between African and US higher education institutions. The initiative was intended to facilitate more effective partnerships between African and US institutions of higher education to contribute in priority areas for development. The 2010 Omnibus Appropriations Bill, which includes Foreign Operations funding, was signed into law on 16 December 2009. The bill provides USD200 million for higher education programmes in developing countries, of which USD25 million was committed for programmes in Africa. Of this, USD15 million was allocated for partnerships between African and US institutions of higher education (http://www.aplu.org).

Canada-Africa Higher Education Partnership

The Association of African Universities (AAU) has formed a partnership with the Association of Universities and Colleges of Canada (AUCC) to strengthen higher education stakeholder relations in Africa. The initiative, 'Strengthening Higher Education Stakeholder Relations in Africa', had three components: Strengthening African University Outreach, University-Industry Linkages, and, Strengthening AAU Stakeholder Relations working in partnership with AUCC. While directly targeting a total of 27 African universities, the project was to lead to the development of a strategic plan and advocacy tools for all 250 AAU member institutions in 44 African countries (http://www.aau.org).

Southern Africa-Nordic Partnerships (SANORD)

University cooperation between Southern African countries and Nordic countries, otherwise known as SANORD, is a partnership of 25 research-led higher education institutions from Denmark, Finland, Iceland, Norway Sweden and institutions in Malawi, South Africa and Zambia. SANORD aims to advance multilateral academic collaboration between institutions in the Nordic countries and the Southern African regions, as they seek to address new local and global challenges of innovation and development. SANORD intends to bring together the leadership of Nordic and Southern African institutions of higher education and research for discussion, planning and joint endeavours. It also provides opportunities for academics to convene around issues and develop strategic

cooperation projects while helping to build relevant relationships with the donor community, commerce, industry and the media (http://sanord.uwc.ac.za/).

European Union-African Union Partnership in Higher Education (EDULINK)

The objective of the EDULINK Programme is to foster capacity building and regional integration in the field of higher education through institutional networking. EDULINK represents a harmonized approach for the implementation of European Commission funded programs in the African Caribbean and Pacific countries (ACP) with a view to improving the effectiveness, management and impact of ACP-EU co-operation in the field of higher education. The support for higher education has changed with the introduction of new EC initiatives such as the 'ACP Science and Technology Programme', 'Erasmus Mundus' and the launching of the 'Intra-ACP Mobility Scheme', which is now called the Nyerere Consolidated Scholarship. This scholarship just got launched with a commitment of 35 million Euros (http://www.acp-edulink.eu/).

Scandinavian Partnerships

Partnership between Scandinavian and African universities is probably one of the most sustained and impressive forms of cooperation. Norway and Sweden in particular committed a large amount of funds for several decades, even when support for higher education in Africa was low. For instance, at a 'National Seminar on Norwegian Support to Higher Education in Tanzania' that took place in Dar es Salaam in November 2010, it was disclosed that NORAD committed NOK750 million to the sector for over four decades. The impact of this long-term commitment and support to capacity building, not simply institutionally but also nationally, has been rather impressive. Another similar impressive support is SAREC/SIDA's support to higher education research and development in Ethiopia for more than three decades.

The 'Historical' Partners

Guided by a variety of objectives and interests, numerous university cooperation arrangements between Africa and its 'historical' partners have been going for a while. These include the Austrian Partnership Programme in Higher Education and Research for Development (APPEAR), University Commission for Cooperation with Developing Countries (CUD, Belgium), Flemish Interuniversity Council (VLIR),German Academic Exchange Service (DAAD), Irish African Partnership for Research Capacity Building (IAP), Netherlands Organization for International Cooperation in Higher Education (NUFFIC) and United Kingdom's Education Partnerships for Africa (EPA). It should be noted that

the impact, contributions and effectiveness of these eclectic partnerships vary considerably and many do not streamline their processes along the agreed terms of aid effectiveness in the Paris Declaration and the Accra Accord (though these agreements were not intended to address such partnerships).

The Emerging Partners

Emerging economic and political powers such as China, India, Brazil and South Korea are also engaged in a host of university development support programmes, as well as capacity building efforts in Africa. While, for instance, China has been involved in building infrastructure, and in certain cases as in Mozambique a major university library, and in Ethiopia, a fully-fledged technical college, the modalities of the support and partnerships are yet to be clear. Russia and other former Eastern bloc countries are also throwing themselves into the action, after two decades of absence from educational engagement in the region.

The Foundations

Overseas-based foundations have been known to play an important role in African higher education development. In 2000, several major US-based foundations had formed a consortium, known as Partnership for Higher Education in Africa, to revitalize the higher education sector in the region. This partnership that effectively culminated in 2010 supported institutions in nine African countries spending a total of USD350 million. The partnership supported 49 universities in these countries with 22 of them receiving 'significant funding for systematic transformation of the university as a whole'. The partnership countries were Egypt, Ghana, Kenya, Madagascar, Mozambique, Nigeria, South Africa, Tanzania and Uganda (http://www.foundationpartnership.org/index.php?id=9).

Players of Centre of Excellence

One of the most prominent centres of excellence initiatives currently underway is the Pan-African University. The intent of this initiative is to establish five hubs in five regions of the continent, each specializing in different fields. This major initiative conceived by Africans is largely dependent on consolidated funding from funders in Germany, Japan and India, among others. The African Development Bank has also expressed interest in supporting it, 'envisaging USD45 million for the first phase' (African Union 2012).

The World Bank has also announced a parallel Africa Centres of Excellence initiative in June 2013. The project targets strengthening seven to 10 higher education institutions in West and Central Africa, where 10 to 15 centres of excellence will be selected to focus on training and applied research in areas of relevance such as water, infrastructure, hospitality industries, banking, and

information and communication technology. The World Bank will commit USD129 million, and eligible institutions could apply for funding of up to USD8 million per centre of excellence. The project is intended to promote regional specialization among participating universities and strengthen their ability to deliver quality training and research (Tongai 2013).

Yet, while the contribution of external sources to higher education in Africa is instrumental, it is miniscule compared to what respective countries invest in. It should be said that while the figures are miniscule, most of the external funding tends to target centrally on research, innovation and discourse platforms.

Samoff and Caroll (2003), hold that foreign aid to education in Africa is a small animal with a loud roar. For nearly all African countries, the major source of funds for education is the national treasury. With a few exceptions, foreign funding is a very small portion of total spending on education. Its attraction is that it is not, often may not be, allocated to education's recurrent costs. Government education spending pays teachers' salaries. To a lesser extent, it builds and maintains buildings, purchases textbooks and, where residential education is important, supports students' accommodation and board. Very little of it buys chalk or wall maps or copying machines or other supplies and equipment. Hardly any is available for innovation, experimentation and reform. There lies foreign aid's powerful roar. Its leverage is not its total volume but rather that educators with exhausted budgets can use it to expand, to alter priorities, to modify practices and, more generally, to respond to their own and others' sense of what needs to be done.

The Untapped Resources

This section explores some potential sources of funding and resources that have not been or have been barely tapped so far.

Diaspora

Africa's intellectual Diaspora represents an enormous but underutilized opportunity for African universities to connect to the global knowledge community. Numerous Diaspora groups are engaged in diverse academic; research, business and non-profit activities in their native countries, albeit largely on an ad hoc basis (Teferra 2010b).

In recognition of this, the African Scientific Institute and UNESCO organized a conference in 2009 on the theme, 'The African Diaspora scientific community mobilization for Africa'. The conference explored how African scientific and technical experts, and their international colleagues and partners, could help to address development issues in Africa (Adiascom 2009). The Association for the Development of Education in Africa (ADEA) has also recently established a body to pursue the mobilization of the scientific Diaspora community.

At the national level, countries including Ethiopia, Kenya and Senegal have established their own Diaspora organizations to promote national development including higher education. The Kenya Diaspora Network, for example, aims to align the resources and knowledge of Kenyan Diaspora organizations with the government's economic recovery plan and with the donors' country assistance plans. The network was formed in 2004 at the request of the Kenyan government, the World Bank Institute and the Western Hemisphere African Diaspora Network (WHADN), as an initiative of the African Union (Teferra 2010b).

Senegal has established a new Ministry for Diaspora Affairs, headed by a former member of the Diaspora. Ethiopia has had two Diaspora-related offices: one at the Ministry of Foreign Affairs and the other at the now defunct Ministry of Capacity Building. The South African Network of Skills Abroad (SANSA) was established to link highly skilled South Africans living overseas. In Nigeria, the National Universities Commission established the Nigerian Experts and Academics in the Diaspora Scheme (NEADS) to encourage Nigerian academics overseas to spend some time at Nigerian universities (Jibril and Obaje 2008).

The efforts to mobilize the African Diaspora are at different stages of development. Initiatives to systematically explore opportunities to tap alumni and the intellectual Diaspora communities in generating resources appear to be a long way off. But considerable lessons could be drawn from the Israeli and Chinese experience (see below).

Multinational Corporations

Prompted by massive raw material reserves and burgeoning business and economic opportunities, multinational corporations are expanding fast in Africa. These corporations often commit sizeable resources to institution building in their respective 'home' countries as part of their corporate responsibility to social and economic advancement (Teferra 2013b).

Multinational corporations should be persuaded to do the same in 'host' countries, which are potential markets, as well as potential pools of expertise to expand operations – and ultimately increase profits. The primary step of this effort begins with the identification of multinational corporations and major businesses in the respective countries followed by presentations with concrete, pragmatic and business-responsive proposals (Teferra 2009c).

Endowments and Foundations

Higher education institutions in the United States routinely and actively establish and build endowments. Some of the leading universities in the United States, such as Harvard, Princeton and MIT maintain multibillion-dollar endowments from which they reap multimillions in interest annually. It is certainly the affluence of the society, its unique tax system, the culture of charitable donation,

and the strength of the economy that continue to drive the expansion of philanthropic practices in the United States (Teferra 2000).

The American and Canadian Friends of the Hebrew and Tel Aviv Universities actively generate resources and build endowments for the advancement of higher education in Israel. For instance, the American Friends of the Hebrew University was gearing up to raise US $1 billion after it raised more than US $600 million in 2000 (Teferra 2005a).

It is true that Africa has not pursued economic and financial incentives that nurture such a culture, but the practice of establishing endowments and foundations could be effectively promoted in the light of increasing economic progress and business opportunities in the continent. At a regional level, the Africa Science and Technology Endowment Fund, established by Africa-based multilateral agencies in 2010, is a good beginning (Teferra 2010a). At the country level, South Africa is more advanced in private philanthropy-endowing universities. For example, in 2000, the Development Office of the University of Cape Town (UCT) reported generating Rand 107 million (about USD10 million) from donors – a 14 per cent increase from the previous year. The overseas partners – the UCT Fund (US) and the UCT Trust (UK) – were central to achieving this goal, although 60 per cent of the campaign funds were raised in South Africa. Through the significant endowment funds that were raised, the university was able to start or continue building endowments for four chairs: the Nelson Mandela Chair of the Humanities, the Lesley Hill Chair of Plant Biology, the Pasvolsky Chair of Conservation Biology, and the Discovery Chair of Exercise and Sports Science (Teferra 2007).

Alumni Chapters/Associations

Tapping the extensive resources of alumni is one major issue that is overlooked in the development of higher education in Africa. African universities are not known to deploy their alumni in the pursuit of resources – financial, human and networking, among others. If such bodies, as alumni chapters exist and are known, they are often around foreign scholarship schemes, such as the Ford Foundation International Fellowships Programme and the DAAD Fellowship Alumni in respective countries.

The importance of alumni associations in capacitating African higher education need not be limited to human resource contribution and financial augmentation. Alumni associations, if effectively deployed, could help lobby governments for favourable higher education policies. As yet, African institutions have not taken the establishment and nurturing of alumni associations seriously.

University-industry Partnerships

A dialogue in university-industry linkages – for generating resources, promoting research or enhancing relevance – often attracts the simplistic argument of paucity of industries in the continent, hence the purported insignificance of such a scheme. This is probably because the definition of industry is narrowly stated as entities with large machineries that produce 'tangible and commercialized' products en masse. If, however, this understanding is broadened to service-providing industries and also growing multinational corporations, whose interests span from oil to mineral extractions, from personal electronic gadgets to auto industries, the numbers, and consequently their significance, will be considerable.

Regardless, the rhetoric around university-industry partnership in Africa abounds; though this has not taken off so far, due to a host of reasons, including the fledgling and fragile state of universities which failed to meet the needs of industry. With increasingly growing interest in Africa, the universities need to carve their competitive niche proactively so as to generate resources as well as consolidate research and teaching. For instance, more than 55 per cent of research in South Africa takes place in the 'business sector' and only 20 per cent happens in the universities (HESA 2012) – a sharp contrast to the rest of Africa.

Conclusion

Financing African higher education has undergone multiple phases of 'waxing and waning' (Ilon 2003). African higher education has been at the 'waxing' phase with major forces of development focusing on overhauling it. One only hopes that the current overhauling process to address these pressing issues will consider referring to 'alternative manuals' and 'alternative paradigms' (Teferra 2005b).

Even, after the rate of return study that shaped the higher education policy for decades was debunked over a decade ago, the discourse still looms large in many corners. It is not uncommon to hear in the corridors of power and high-level meetings presided over by politicians that higher education is costly and competes unfairly with other educational sub-sectors, particularly primary education. The scars of the flawed policy are yet to fully disappear from the minds of many who had read from the script. For the contemporary views to hold strong roots and for favourable higher education policies to be sustained, the Bank must endeavour to effectively dump its pervading views of the past, which are still widespread among development partners and recipient countries (Teferra 2009).

While the impact of destructive external factors will continue to linger around for some time, some obstructive internal policies need to also be addressed. For instance, in many countries, ministry of finance rules dictate that institutions return unutilized or self-generated resources, though this is changing, albeit slowly. These policies have had considerable impact on the resourcefulness and imagination of many public institutions. In another worrying scenario, after governments have allowed institutions to generate own resources, they have also withdrawn their support precipitously. In Uganda, for instance, the government subvention for the university of Makerere has dangerously declined to 30 per cent, leaving the institution to scramble to fill the gap by expanding its enrolment 'massively', thus creating numerous unintended consequences.

Furthermore, major development regimes, including the all-too-important Millennium Development Goals, do not directly and explicitly address higher education as a priority area, though all the elements of the development goals articulated need capacities generated from higher education institutions. Explicitly articulating higher education in the next developmental regimes, as MDGs, post-2015, may have direct implications on funding.

The expansion of the financial resource base for African higher education has to be actively, selectively and carefully undertaken. To offer a caveat: any 'solutions' may harbour their own unintended 'intrinsic artifacts' and 'defects' as witnessed in the case of Makerere University. Thus local, national, regional, and international realities need to be closely interrogated prior to espousing new modalities of resource mobilization. Academic institutions must be prudent in balancing their academic duties with entrepreneurship. There is little doubt that taking up these initiatives and actively engaging all the stakeholders require a conscious, qualified, and concerned university management (Teferra 1999).

The preceding discussion has shown that Africa deprives requisite funding to its higher education sector at its own peril. The competitive global world that deploys knowledge and innovation as its currency warrants investing – and strategically managing – the funding of African higher education. At the same time, the paradox of an ever-growing expansion of higher education against an already overstretched government resource may continue to pose serious challenge on the funding prospect of higher education in Africa.

A more complex challenge in the region will be to design and implement appropriate policies for financing secondary, vocational/technical and higher education. As increasing numbers of children complete primary education, they will have an expectation to enter secondary education, and graduates of secondary education will naturally have the wish to enter tertiary education. Policies of expanding upper levels of education must be considered in terms of balancing resource requirements and availability, social demands and economic needs for a more highly skilled workforce. Policy makers should also consider

to what extent the government is responsible for providing educational services to meet all the needs from society (UNESCO 2011). This is particularly so for higher education financing as its cost rises at rates considerably in excess of the corresponding rates of increase of available revenues, especially those revenues that are dependent on taxation (Johnstone 2009). In this regard, the resources of some countries known to (have their nationals) spend a fortune overseas – as in Nigeria which is reported to spend N80 billion or US\$ 500million in the UK alone and N1.5 trillion globally (Onyechere 2012) – could be effectively deployed in expanding and consolidating higher education nationally – and regionally. The same could be said of Botswana where the government invests heavily on higher education, but on ad hoc basis (Damane and Molutsi 2013).

In conclusion, many countries are already committing quite a large sum of their national budget to education – and a sizeable (disproportionate) amount of this to higher education. In others where the threshold has reached the optimum level, other means of generating alternative resources are simply mandatory. In countries where public funding is regressing in the hope of the system resourcing itself, dangerous consequences loom around the corner. Strategic and prudent choices, unadulterated by popular view and partisan interest, need to be made in funding higher education to help deploy it as a key instrument for the socio-economic development of nations.

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Towards Evaluating a Higher Education Residence Environment that is Conducive to Learning, Development and Success

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Abstract

The higher education residence environment has traditionally been perceived as mere buildings that provide accommodation to students, especially in Africa. However, for more than a decade now, research on Living Learning programmes has shown how residence-based programmes can create inclusive communities where the academic project of institutions is successfully integrated with the living environment of students. This integration creates an environment that is conducive to learning, development, and success. The aim of this article is to analyse some of the latest empirical research on Living Learning programmes and then make a comparison with the theory on student learning and development, in order to enable practitioners to evaluate their own residence environments to become more conducive to learning, development, and success. Ten questions are generated through this comparative analysis and it is recommended that practitioners in Africa use it as an evaluative framework within their institution's residence environment.

Résumé

Les résidences estudiantines dans les établissements d'enseignement supérieur ont toujours été perçues comme de simples lieux d'hébergement pour les étudiants, plus particulièrement en Afrique. Cependant, depuis plus d'une décennie maintenant, la recherche sur les programmes d'apprentissage de la vie a démontré la façon dont les programmes basés sur la résidence peuvent créer des communautés inclusives où le projet académique des institutions est intégré avec succès dans le cadre de vie des étudiants. Cette

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intégration crée un environnement propice à l'apprentissage, au développement et à la réussite. Le but de cet article est d'analyser certaines des dernières recherches empiriques sur les Programmes d'apprentissage de la Vie et ensuite de faire une comparaison avec la théorie sur l'apprentissage et l'épanouissement des étudiants, afin de permettre aux praticiens d'évaluer leurs propres cadre de vie pour pouvoir le rendre plus propice à l'apprentissage, à l'épanouissement et au succès. Dans le cadre de cette analyse comparative, une liste de dix questions a été générée et il est recommandé que les praticiens en Afrique s'en servent comme un cadre d'évaluation de l'environnement de résidences estudiantines au sein de leurs institutions.

Introduction

During the past five years the Department of Higher Education and Training in South Africa has released two ministerial reports that underline the important role of a higher education residence environment in the learning, development and success of students (Department of Education 2008; Department of Higher Education and Training 2011). Both these reports consequently emphasise that residence environments should be inclusive, welcoming and safe on the one hand, and on the other hand should also facilitate the integration of the academic context and social context of the student (Department of Education 2008:118-119; Department of Higher Education and Training 2011: xv-xvi, 141-142).

The notion of inclusive communities that integrate the academic project of institutions with the living environment of students has been endorsed by Living Learning (L/L) programmes since 1999 (Inkelas, Zeller, Murphy & Hummel 2006:11-12; Schein 2005:83-88). These residential communities have become known for their residence-based programmes which aim to improve student learning, development and success at higher education institutions all over the world.

However, traditionally, residences at higher education institutions in Africa have only been perceived as buildings that provide accommodation, and many of these institutions have not yet implemented the principles that support a residence environment that is conducive to learning, development and success (De la Rey 2010; Swartz 2010). It is therefore crucial that practitioners, especially in Africa, understand how to evaluate whether a given residence environment supports student success in the best way possible (De la Rey 2010; Swartz 2010). The question at the hub of this research paper is: 'In which ways can the residence environment become more conducive to student learning, development and success?'

The aim of this research article is to analyse some of the latest empirical research on L/L programmes and then to compare them with the theory on student learning and development. This will enable practitioners to evaluate

their own residence environments in a new way. Documents that will be used in this regard are those of Inkelas, Soldner, Longerbeam and Leonard (2008) and the National Study of Living Learning Programs (NSLLP 2007), because they contain some of the latest empirical data analyses on L/L programmes. The interpretation of this L/L programme document analysis will then mainly, but not exclusively, be compared to the theory of student learning and development of Chickering and Reisser (1993) and Keeling (2004). This comparative analysis will serve as a point of reference against which the residence environment at institutions of higher learning can be compared.

The type of study which will be undertaken to provide acceptable answers to the overarching research question is a qualitative research study from an interpretivist perspective; thus a non-interactive analytical research study. This qualitative research will focus on an in-depth and contextual understanding of L/L programmes which may provide valuable knowledge for future evaluations of residence environments.

The underlying assumption of this study is that there are strong similarities between the methods utilised in L/L programmes and a healthy residence life system which combines an inclusive and welcoming atmosphere with student development and success. It is therefore a research project to determine which aspects of L/L programmes are likely to contribute to the development of an evaluation framework for higher education residence environments.

The design can be defined as a conceptual study with a comparative element. This implies that this article has a strong element of concept analysis and document analysis to penetrate the deeper meaning of concepts related to residence life. A critical comparison with current practice and models will illuminate the conditions under which a holistic formation in residence life takes place. A theory-based purposeful sampling process will be used as method to gather data.

The viewpoint of this research is that residence life in higher education can be improved to create an environment that is inclusive, welcome and safe, as well as one that is conducive to learning, development and success. Methods and practices deployed in L/L programmes can greatly assist to make these two aspects of a residential environment come together.

Development of the Living Learning Concept

L/L programmes developed as a distinctive category within the broader framework of learning communities since 1999. During the past decade a number of different L/L typologies were identified of which the structural L/L types of Inkelas *et al.*, (2008) are the latest and most empirically grounded. A comparison of these structural L/L types with certain student developmental outcomes yielded significant statistical differences which are relevant to the

objective of this article, namely to establish residence environments that are conducive to learning, development and success.

The National Study for Living Learning Programs (NSLLP 2007:1-2) defined L/L programmes for the purposes of its study in 2007 'as programs in which undergraduate students live together in a discrete portion of a residence hall (or the entire hall) and participate in academic and/or extra-curricular programming designed especially for them'. In the same vein, Inkelas *et al.*, (2006:11) argue that most L/L programmes have the following common characteristics: 'Participants (1) live together on campus, (2) take part in a shared academic endeavour, (3) use resources in their residences environment that were designed specifically for them, and (4) have structured social activities in their residential environment that stress academics'. In summary: L/L programmes are an intentional residence environment which facilitates purposeful collaborative learning experiences between the academic and social contexts of residence students.

L/L programmes can be placed within *the larger framework of learning communities*. Inkelas *et al.*, (2008:495-498) give an appropriate summary of how the initial initiative in higher education, to improve student learning, development and success through learning communities,[1] has evolved into the subset of L/L programmes. Although a variety of typologies exists, learning communities in general are conceptually based on bringing learning to the centre of the student's campus experience. Learning communities 'create small group interaction among participants, provide networks of support, promote curricular integration, offer a vehicle for academic and social integration, and intentionally cultivate key learning outcomes' (Inkelas *et al.*, 2008:496).

Shapiro and Levine (1999), together with Lenning and Ebbers (1999), were the first to separate L/L communities as a distinctive category in the broader framework of learning communities (Inkelas *et al.*, 2008:495-498). Although similarities exist between L/L communities and their counterpart, curriculum-learning communities, several distinctive differences separate them. Curriculum-learning communities integrate student learning through 'student enrolment in clustered courses, team teaching, student cohort-based learning, and similar arrangements', but they do not require students to stay together (Inkelas *et al.*, 2006:11). Students in L/L communities do not only have a shared academic experience, but also live together in campus residences (Inkelas *et al.*, 2006:11). In L/L communities students live together and learn together. Although Shapiro and Levine (1999) and Lenning and Ebbers (1999) identified L/L communities as a separate type of learning community, neither of them went further to list the different kinds of L/L programmes within the L/L cluster (Inkelas *et al.*, 2008:495-498).

Typologies of L/L communities became more explanatory when Zeller, James and Klippenstein (2002) subdivided L/L communities on grounds of their structural features and outcomes into residential colleges, living-learning centres, residential learning communities, academic residential programmes, theme housing programmes, and first-year experience programmes (Inkelas *et al.*, 2008:495-498). Two years later Laufgraben and Shapiro (2004) used the level of academic and co-curricular integration as a measure to subdivide L/L communities into residential colleges, residential learning communities, and residential education programmes (Inkelas *et al.*, 2008:495-498). The National Study of Living Learning Programs of 2004 (NSLLP 2004) identified 26 different thematic typologies of L/L programmes, a number that increased to 36 in the study of 2007 (NSLLP 2007).

However, using structural features, outcomes and the level of academic and co-curricular integration as ways to build L/L typologies can be problematic and confusing. Inkelas *et al.*, (2008:497) argue that the formal structures provide the most rational way of categorising L/L types; 'the ways in which they are organized and maintained can be largely comparable' (Inkelas *et al.*, 2008:508). This data analysis[2] was the first to link empirical data with the descriptive nature of previous L/L literature. Out of almost 300 L/L programmes, Inkelas *et al.*, (2008:497) identified three structural L/L types:

- Small, limited resourced, primary residential life programmes (cluster 1). These programmes have an average of 48 students, are administered by residence administration ('residence life') and have a primarily programmatic focus, although L/L programme activities are limited. Little collaboration with academic affairs, and correspondingly little academic resources, exist. Institutions with this type of L/L programme are most likely to be classified as Research-High institutions, according to the Carnegie Classification.[3]

- Medium, moderately resourced, student affairs/academic affairs combination programmes (cluster 2). These programmes have an average of 100 students and demonstrate greater collaboration between student affairs and academic affairs. Activities in these L/L programmes are more consistent and revolve around team building, multicultural programming, community service and career workshops. Institutions with this type of L/L programme are most likely to be classified as Research-Very High institutions, according to the Carnegie Classification.

- Large, comprehensively resourced student affairs/academic affairs combination programmes (cluster 3). These programmes have an average of 343 students who have a variety of resources in their residence environments that are designed specifically for them (study spaces,

faculty offices in the residence, etc.). Programmes and courses are fully integrated with academic affairs with a large number of courses and affiliated faculty. Institutions with this type of L/L programme are most likely to be classified as Research-Very High institutions, according to the Carnegie Classification.[3]

More important for this article is that Inkelas *et al.*, (2008:500) compared these structural L/L types with three desired learning outcomes, namely: *growth in critical thinking,*[4] *overall cognitive complexity,*[5] *and appreciation for liberal learning.*[6] This comparison yielded significant statistical differences (Inkelas *et al.*, 2008:506-507). This result is important for the purpose of this study.

Students in larger, student affairs/academic affairs collaborations (cluster 3) outperformed students in small residential life programmes (cluster 1) and medium, student affairs/academic affairs combination programmes (cluster 2) in all three categories of learning outcomes (Inkelas *et al.*, 2008:503-507). Although no significant differences occurred between students in cluster 1 and cluster 2 with regard to critical thinking skills, students in small, residential life programmes (cluster 1) were found to achieve higher scores in the areas of overall cognitive complexity and the appreciation for liberal learning (Inkelas *et al.*, 2008:503-507). What is more interesting is that no significant differences occurred between students in cluster 1 and cluster 3 with regard to scores in overall cognitive complexity and the appreciation for liberal learning (Inkelas *et al.*, 2008:503-507).

These comparisons are important for this article in two ways. The data analysis showed, firstly, that bigger, well resourced L/L programmes are not necessarily better than smaller, modestly resourced programmes; success is not determined by size or money (Inkelas *et al.*, 2008:508). Secondly, cluster 3 strongly coordinated partnerships between student affairs and academic affairs and in doing so yielded the strongest learning outcomes (Inkelas *et al.*, 2008:508). This provides valuable evidence of the value of partnerships between practitioners in student affairs and academic affairs (Inkelas *et al.*, 2008:508-509). The L/L programme in residences is the environment for building these partnerships. It is important, however, to keep in mind that only a loose affiliation between student affairs and academic affairs, combined with larger groups and moderate resources, yielded the weakest results with regard to learning outcomes (Inkelas *et al.*, 2008:508). In such a case it is better to have a small intimate group with a residence life focus (Inkelas *et al.*, 2008:508).

In summary: L/L communities are a distinctive category in a larger framework of learning communities, aiming to improve student learning and development through academic and social integration where purposeful group interaction cultivates key learning outcomes. Since 1999 different categories and typologies of L/L programmes developed, of which the structural L/L

types of Inkelas *et al.*, (2008) are the latest and most empirically grounded. Of the three structural L/L types, the large, comprehensively resourced student affairs/academic affairs combination programmes (cluster 3) yielded the strongest learning outcomes and the medium, moderately resourced, student affairs/academic affairs combination programmes (cluster 2) yielded the worst. Small, limited resourced, primary residential life programmes (cluster 1) lagged slightly behind cluster 3 but did substantially higher in two learning outcomes than cluster 2. These results point towards the fact that the success of an L/L programme is not determined by its size. Collaboration between student affairs and academic affairs proves to be important for cultivating learning outcomes.

But how do these empirical results relate with the theory on student development and success?

Student Development: Chickering and Reisser, and Keeling

These statistical results from Inkelas *et al.*, (2008) become even clearer if compared to Chickering and Reisser's (1993:265-281) key influences on student development. Chickering and Reisser (1993:265) argue 'that educational environments do exist and can be created that influence students in powerful ways'. What they mean hereby is that institutions have the ability (and responsibility) to create an environment that is conducive to learning, development and success. Chickering and Reisser (1993:165) list the following seven key ingredients of such environments: institutional objectives; institutional size; student-faculty relationships; curriculum; teaching; friendships and student communities; and student development programmes and services.

Although all seven influences are valuable, four (institutional objectives; institutional size; student-faculty relationships; friendships and student communities) are significantly important and relevant to the purpose of this article, namely to establish residence environments that are conducive to learning, development and success.

Clear and Consistent Objectives

'Impact [on student learning and development] increases as institutional objectives are clear and taken seriously and as the diverse elements of the institution and its programs are internally consistent in the service of the objectives' (Chickering & Reisser 1993:266).

This argument about internal consistency despite diversity, and the positive impact it has on student learning and development (Chickering & Reisser 1993:266), is emphasized by Keeling (2004:1-2). He makes a case for learning and development to be reconsidered as elements that are intertwined with a campus-wide focus on the whole student experience. Learning, according to Keeling (2004:1-2), is holistic and should be transformative. Transformative

learning considers that learning and development is an ongoing process, where
the academic context,[7] institutional context[8] and social context[9] are constantly,
simultaneously and in an infinite number of ways interacting with one another
and with the student (Keeling 2004:10-16). The student takes centre stage in
this learning process, leading to the construction of knowledge, the construction
of meaning and the construction of self in society (Keeling 2004:14-16).
Through this argument Keeling not only reveals the varied elements of the
institution and its programmes, but also the importance of internal consistency
to reach clearly defined objectives. Keeling (2004:19-22) offers one of the best
outlines of what the goals and outcomes of transformative education should
be, and Biggs and Tang (2007) provide the best explanation on how to integrate
these learning outcomes into quality learning and development.

The study of Inkelas *et al.*, (2008) indicated that students in larger, student
affairs/academic affairs collaborations (cluster 3) outperformed students of
the other two clusters in all three learning outcomes. From our previous
arguments it is clear that the cluster 3 L/L type had the strongest alignment,
through partnerships and collaborations, with academic affairs. The integration
of different contexts into one L/L programme yielded very positive results.
Inkelas *et al.*, (2008:508-509) emphasised in the interpretation of their data
analysis the importance of collaboration between student affairs and academic
affairs. This is a confirmation of the arguments of Chickering and Reisser
(1993:266-267) and Keeling (2004) about the importance of clarity and
consistency in learning and developmental outcomes. Institutional learning
outcomes should be clearly defined, and consistently pursued by student affairs
and academic affairs alike; collaborating as two equals pulling toward one goal.

In order to assess whether the residence environment is conducive to
learning, development and success, the following important questions may
be asked:

- In which ways is it ensured that there are clearly defined learning and
developmental outcomes for the L/L programme in the residence?
- In which ways are the L/L programme outcomes consistent with the
institutional outcomes?
- In which ways does the L/L programme in the residence partner with
academic affairs to reach institutional outcomes?

Institutional Size

Chickering and Reisser (1993:268) connect institutional size with redundancy
and argue that the development of student ability, healthy interpersonal
relationships, identity development, and integrity decreases as redundancy
increases; size influences impact. Redundancy is here defined as 'the situation

where the number of persons for a given setting exceeds the opportunities for active participation and satisfying experiences' (Chickering & Reisser 1993:268).

This line of argument about redundancy confirms the results of Inkelas *et al.*, (2008). Their study revealed that medium, student affairs/academic affairs combination programmes (cluster 2), which had an average number of 100 participants, lagged behind in their scores on learning outcomes compared to small residential life programmes (cluster 1) with an average of 48 students. The number of persons in the small residential life programmes (cluster 1) was naturally on par with opportunities for active participation and rewarding experiences. It can also be argued that the redundancy effect that hit cluster 2, due to its size, was reversed in cluster 3 (larger, student affairs/academic affairs collaborations with an average of 343 students) by an intense focus on facilitating participative and collaborative learning opportunities and experiences; something which required many and varied resources.

Active participative learning was one of the initial key focuses in creating learning communities. But when these communities, like L/L programs in cluster 2 (Inkelas *et al.*, 2008), become too large, and there is no real institutional commitment with human and capital resources, redundancy sets in and defies the whole objective of the L/L programme.

The goal of this study is to determine whether the residence environment is conducive to learning, development and success. One important influence on student development is institutional size. The following questions might lead to the improvement of a residence environment that is more conducive to learning, development and success:

- In which ways can it be ensured that the number of students in the residence does not exceed the opportunities for active participation and satisfying experiences?
- In which ways does the L/L programme facilitate opportunities for active participation and satisfying experiences so that redundancy does not set in?

Student-Faculty Relationships

Chickering and Reisser (1993:269) argue that an environment that is conducive to student learning, development and success facilitates regular and pleasant interaction between students and academics within various settings which makes room for diverse roles and relations. In their argument, Chickering and Reisser (1993:269) refer back to their seven vectors that provide an overall direction for student development.[10] One of these vectors is 'moving through autonomy toward interdependence' (Chickering & Reisser 1993:38), in which healthy and open interaction with other adults develops students away from emotional dependence, poor self-direction and rebellious independence toward relationships of mutual respect within the larger context of society (Chickering

& Reisser 1993:38). In the same vein, Keeling (2004:10) emphasises that 'learning, development and identity formation can no longer be considered as separate from each other, but rather that they are interactive and shape each other as they evolve' (2004:10). Keeling (2004:11) continues that student affairs (and thus the residence environment) become integral to this kind of learning process. The L/L programme can become the intersection where different contexts interact.

Important for this study is that a correlation exists between the statistical results of Inkelas *et al.*, (2008) and the importance that Chickering and Reisser (1993:69) place on student-faculty interaction. The data analysis of Inkelas *et al.*, (2008:508) specifically indicated that large, comprehensively resourced student affairs/academic affairs combination programmes (cluster 3) had fully integrated programmes and courses with faculty. This environment of student-faculty interaction yielded the strongest learning outcomes in all three areas (Inkelas *et al.*, 2008:508).

One such an L/L programme is Unit One, housed in Allen Residence Hall on the University of Illinois, Urbana-Champaign campus (Shein 2005). Established in 1972, Unit One has developed to be one of the best examples where an L/L programme creates an environment of interaction between students and faculty (Shein 2005:73-74). Shein (2005:83-84) refers to the following comments[11] made by academic affairs personnel involved in Unit One:

> Really knowing your students, having lunch with students, knowing their names, knowing what they want and [what] their personal and professional goals are, establishing meaningful relationships with students, more opportunities to guide or suggest other classes or courses, ability to develop comfortable relationships [… Unit One] protects the notion of a liberal arts community where teachers and students can engage in meaningful dialogue and reap benefits of intellectual, personal, and professional growth ... The larger University context does not easily allow for or promote opportunities for meaningful and comfortable relationships with students to be established or nurtured.

> I lectured on civil rights to a mixed, diverse group and I couldn't shut them up. Unit One builds a sense of community.

> The interaction with the students is better than I have experienced elsewhere so far. They are ready to discuss, interrupt me to ask questions, and also indicate issues they wish to know more about. We always have discussions and everyone talks.

> Students at Unit One know each other and feel comfortable in sharing ideas and are very willing to engage in discussion ... students speak up and are not afraid to ask questions ... Student engagement, interactive classrooms and open dialogue allow for the exchange of ideas and critical thinking.

These comments make it clear that L/L programmes create in a unique way an environment where student-faculty interaction can take place. This kind of learning environment challenges students toward engagement and commitment; to become active learners (Shein 2005:83).

In order to assess if the residence environment is conducive to learning, development and success, the question may be asked about which ways the L/L programme facilitates student-faculty relationships.

With regard to friendships and student communities, one of the recommendations Shein (2005:14-15) makes to improve undergraduate education through L/L programmes is to foster a sense of community among students. According to Chickering and Reisser (1993:275) 'when students are encouraged to form friendships and to participate in communities that become meaningful subcultures, and when diversity of backgrounds and attitudes as well as significant interchanges and shared interests exist, development along all seven vectors is fostered'.

Chickering and Reisser (1993) hereby emphasise the importance of a meaningful cultural environment that facilitates interaction, not only between students and faculty (as previously argued), but also among students themselves. This kind of interactive environment influences students in a powerful way.

The reason for this influence, according to Chickering and Reisser (1993:275), is because students tend to identify with a particular group. If this identification is supportive of the individual's goals, and as previous identification attachments slacken, this new community becomes both an anchor and point of reference that influences thinking and behavioural patterns in a powerful way (Chickering & Reisser 1993:275). This influence extends further towards identity formation and purpose: 'When friendships and the intimate exchanges that accompany them are valued and promoted, identity and purpose becomes clearer' (Chickering & Reisser 1993:176).

Secondly, Chickering and Reisser (1993:275), as well as Shein (2005:14-15) emphasise that interaction amongst students should entail a 'diversity of backgrounds and attitudes'. This exposure to a variety of people and experiences, combined with observation, reflection and purposeful feedback, helps students to carve out a sense of self within the broader society (Chickering & Reisser 1993:276). If the residence culture does not facilitate a diverse array of personal interactions, 'or assigns second-class citizenship to certain types of students or relationships, stereotypes are reinforced', and the residence environment becomes non-conducive for learning, development and success (Chickering & Reisser 1993:276).

Thirdly, Chickering and Reisser (1993:275) emphasise the 'significant interchanges and shared interests' that must happen within student friendships and communities. In this they suggest that students should work and engage together in interdisciplinary topics or linked courses around common themes.

The idea is to balance 'separate knowing (objective analysis, debating positions, weighing evidence)' with 'connected knowing (honouring feelings, personal experiences, and subjectivity)' (Chickering & Reisser 1993:276).

Chickering and Reisser (1993:276-277) conclude their argument about the influence of friendships and student communities on student development by listing five vital characteristics for these communities in order to facilitate optimum student development:

(i)   It encourages regular interactions between students and provides a foundation for ongoing friendships.

(ii) It offers opportunities for collaboration – for engaging in meaningful activities and facing common problems together.

(iii) It is small enough so that no one feels superfluous.

(iv) It includes people from diverse backgrounds.

(v)   It serves as a reference group, where there are boundaries in terms of who is 'in' and who is 'out'. It has norms that inform those with different roles, behaviours, and status that they are 'good' members or that what they are doing is unacceptable.

This argumentation of Chickering and Reisser (1993:275-277) confirms the study of Inkelas *et al.*, (2008) in a unique way. Small residential life programmes (cluster 1) outperformed the medium, student affairs/academic affairs combination programmes (cluster 2) in the areas of overall cognitive complexity and the appreciation for liberal learning (Inkelas *et al.*, 2008:503-507). This could point toward two important interpretations. The small number of students in cluster 1 (an average of 48) made everybody feel needed and involved, while in cluster 2 the combination of a larger group (average of 100) with a loose affiliation between student affairs and academic affairs made some students feel superfluous. This effect in cluster 2 was altered in the larger, student affairs/academic affairs collaborations (cluster 3) by an intense focus on programmes and courses that facilitated peer interaction. The partnership between student affairs and academic affairs in cluster 3 proves to be vital in order to establish opportunities for collaboration where students could engage in significant and common activities. Cluster 3, where these collaborative activities were purposefully facilitated, yielded the highest scores in all three learning outcomes (Inkelas *et al.*, 2008:508-509).

In order to assess if the residence environment is conducive to learning, development and success, the following important questions may be asked:

• In which ways does the residence environment facilitate positive interaction between students?

- In which ways does the L/L programme facilitate collaborative meaningful engagement and joint problem solving?
- In which ways does the L/L programme ensure that participants are from diverse backgrounds?
- In which ways does the L/L programme define itself to become a reference group for participants?

It thus becomes clear in comparing the argument of Chickering and Reisser (1993) about four key influences on student development with the study of Inkelas *et al.*, (2008) that L/L communities can create a residence environment that is conducive to student learning, development and success. L/L programmes do so by facilitating meaningful interaction, not only between students, but also between students and faculty. It is important is to have clear and consistent objectives that are aligned with those of the institution and to ensure that the size of the L/L programme does not create redundancy. Meaningful interaction becomes vital for the formation and existence of the learning community.

But who must take responsibility to make any L/L programme work? Schein (2005:87-88), argues that learning, development and success does not happen automatically in L/L programmes. The success of an L/L programme hinges on two important factors, namely: the students need to buy into 'the concept that intellectual growth and the lively exchange of ideas are important', but it also comes from staff members who foster this community (Schein 2005:87-88). Schein (2005) therefore shows that residential learning does not happen by itself, but has to be nurtured and fostered by students and staff members. Careful planning, the design of activities and of group demographics are of vital importance for learning and development to take place.

The responsibility to buy into, foster and carefully plan L/L programmes is highlighted by the study of Inkelas *et al.*, (2008). The fact that medium, student affairs/academic affairs combination programmes (cluster 2) lagged behind in the results on all three learning outcomes, confirms Shein's (2005:87-88) argument that residential learning does not happen by itself. Programmes in cluster 2 reflected weak affiliation between student affairs and academic affairs and moderate resources were used to address the needs of their larger groups.

Recommendations

The purpose of this article is to make a contribution towards the establishment of residence environments that are conducive to learning, development and success. The comparative analysis of this study laid out a framework for such a learning and developmental residence environment. This framework forms an evaluative tool for the future assessment of higher education residence environments.

It is recommended that current residence environments should be evaluated in the following ways:

- Firstly, the structural L/L type of a residences environment should be determined according to the classification of Inkelas *et al.* (2008). This evaluation should reveal, on grounds of the study performed by Inkelas *et al.*, (2008), what the efficacy of a given residence environment is in terms of the three learning outcomes defined by these authors.

- Secondly, it is recommended that a specific residence environment is evaluated in the light of the ten questions generated through the arguments of Chickering and Reisser (1993) and Keeling (2004) on student development.

- Lastly, it is recommended that the evaluation of residence environments should reflect on student learning and development within a diverse African context. Although the authorities and literature used in this study are extremely valuable in understanding learning, development and success and the role the residence environment must play in this process, all of these studies were performed in non-African contexts. Future studies need thus to focus on the contextualisation of the evaluation of residence environments.

Conclusion

The purpose of this research article was to analyse some of the latest empirical research on L/L programmes and then to make a comparison with the theory on student learning and development, in order to enable practitioners to evaluate their own residence environments to become more conducive to learning, development, and success. Consequently the following ten questions emerged as an evaluative framework:

(i) In which ways is it ensured that there are clearly defined learning and developmental outcomes for the L/L programme in the residence?

(ii) In which ways are L/L programme outcomes consistent with the institutional outcomes?

(iii) In which ways does the L/L programme in the residence partner with academic affairs to reach institutional outcomes?

(iv) In which ways is it ensured that the number of students in the residence does not exceed the opportunities for active participation and satisfying experiences?

(v) In which ways does the L/L programme facilitate opportunities for active participation and satisfying experiences so that redundancy does not set in?

(vi) In which ways does the L/L programme facilitate student-faculty relationships?

(vii) In which ways does the residence environment facilitate positive interaction between students?

(viii) In which ways does the L/L programme facilitate collaborative meaningful engagement and joint problem solving?

(ix) In which ways does the L/L programme ensure that participants are from diverse backgrounds?

(x) In which ways does the L/L programme define itself to become a reference group for participants?

It is recommended that the findings of this article are applied and contextualised in higher education institutions in Africa. If practitioners understand how to evaluate correctly residence environments, they can optimally position these settings to be conducive to student learning, development and success. The evaluative framework developed in this article can become a power instrument in the hands of practitioners that are committed to the success of their students, especially in Africa.

Notes

1. For more information on this discourse see Lenning and Ebbers (1999), and Shapiro and Levine (1999), as well as Gabelnick, F., MacGregor, J., Matthews, R. S. and Smith, B. L., eds, 1990, 'Learning communities: Creating connections among students, faculty, and disciplines', *New Directions for Teaching and Learning*, (41), San Francisco, CA: Jossey-Bass, Tinto, V., 2000, 'What have we learned about the impact of learning communities on students?', *Assessment Update*, 12(2): 1-2, 12.

2. This 'analysis considered a number of structural building blocks that prior literature had identified as possibly important, including: (a) program size, (b) budget source, (c) the number of program faculty, (d) courses offered by the program, (e) the administrative affiliation of the program's director, (f) special resources offered by the program, and (g) co-curricular activities offered by the program' (Inkelas *et al.*, 2008:501).

3. For more information see http://www.carnegiefoundation.org/index.asp.

4. This refers to 'students' perceptions of their critical questioning and reflection abilities'.

5. This refers to 'students' self-reported abilities in using critical thinking to pursue new ideas and applications of their knowledge'.

6. This refers to 'students' openness to multiple perspectives and appreciation of diverse social and cultural viewpoints'.

7. The academic context refers to the following: 'Opportunities for reflective judgement and critical thinking; Constructivist classroom teaching methods; Brain based learning; Interdisciplinary courses; Experiential learning; Integrative conversations with faculty in all domains' (Keeling 2004:15).

8. The institutional context refers to the following: 'Opportunity/reward structure-leadership roles, work study positions, teaching and laboratory assistantships, off-campus connections to service and learning; Campus culture-ethical codes, judicial processes; norms of behaviour; annual rituals and celebrations, geographic and economic location' (Keeling 2004:15).

9. The social context refers to the following: 'Personal relationships; Group memberships; Inter-group connections' (Keeling 2004:15).

10. These vectors are: developing competence; managing emotions; moving through autonomy toward interdependence; developing mature interpersonal relationships; establishing identity; developing purpose; and developing integrity (Chickering & Reisser 1993:38-39).

11. Shein (2005) makes use of data in the following unpublished source: Grayson, T. E., 'Evaluation of Living and Learning Communities, University of Illinois at Urbana-Champaign', Unpublished paper, Urbana: University of Illinois at Urbana-Champaign, Office of the Vice-Chancellor for Student Affairs, 2003.

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Reengineering Postgraduate Curricula and its Mode of Delivery: Graduate Students' Views of Modular Course Delivery at Addis Ababa University

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Abstract

The purpose of this study was to examine the graduate students' views regarding the modular course delivery of the master's programme in Addis Ababa University. It attempted to answer four basic questions: what are the attitudes of the graduate students towards the modular curricula and block teaching mode of delivery? Is there any difference in students' preference for modular delivery across different colleges/subjects/disciplines? What are the major strengths and weaknesses of modular course delivery as perceived by graduate students? And what are the outstanding academic and administrative problems encountered by the modular course delivery? The study used the survey method supported by qualitative data collection procedures. Questionnaire was employed to collect data from 732 first year graduate students. However, analysis was made on properly completed and returned 724 questionnaires. Besides six focus group discussions were held. The quantitative data were analyzed by using percentages, means and composite scores, standard deviations and analysis of variance and Tukey HSD. The results showed that graduate students' overall attitude toward the modular programme is positive. The modular delivery was also perceived favorably. However, significant differences were observed between students of different colleges with regard to attitude towards the modular programme, modular delivery and availability and accessibility of module related materials.

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Résumé

Le but de cette étude était d'examiner les opinions des étudiants des cycles supérieurs au sujet de l'enseignement du programme de master par le système modulaire à l'Université d'Addis-Abeba. Elle a tenté de répondre à quatre questions fondamentales: quelles sont les attitudes des étudiants de cycles supérieurs envers l'enseignement par le système modulaire et le mode d'enseignement en bloc ? Existe-t-il une différence dans la préférence des étudiants en matière d'enseignement modulaire dans différents établissements/matières/disciplines ? Quelles sont les principales forces et faiblesses de l'enseignement modulaires perçues par les étudiants des cycles supérieurs ? Et quels sont les principaux problèmes académiques et administratifs relatifs à l'enseignement modulaire? L'étude a utilisé la méthode d'enquête basée des procédures de collecte de données qualitatives. Un questionnaire a permis de collecter les données auprès de 732 étudiants de première année de second cycle. Cependant, 724 questionnaires dument remplis et retournés ont fait l'objet d'une analyse. En outre, six discussions de groupes ont été organisées. Les données quantitatives ont été analysées à l'aide de pourcentages, des scores médians et composites, des écarts-types, et d'une analyse de la variance et du test HSD de Tukey. Les résultats ont montré que de façon générale les étudiants des cycles supérieurs ont une attitude positive envers le programme d'enseignement modulaire. L'enseignement par système modulaire a également été bien accueilli. Cependant, des différences significatives ont été observées entre les élèves de différents établissements en ce qui concerne leur attitude envers le programme modulaire, l'enseignement modulaire et la disponibilité et l'accessibilité des documentations relatives aux modules.

Introduction

As a component part of the Business Process Reengineering (BPR) programme, Addis Ababa University had embarked on a modular course delivery for its masters programmes as of 2010 academic year. The major objective of this delivery mode is to make an effective use of students and faculty time and enhance quality through intense, continuous and focused engagement of students.

The BPR document stipulates that the module shall be divided into three general parts to provide for interactive teaching and learning, self-learning by the student and collaborative learning among students. The interactive teaching and learning is accorded 40 percent of the time (6 days of block teaching 3 to 4 hours/day) and the instructor is expected to meet the students and introduce the module, its objectives, anticipated outcomes, approaches to the course, student and instructor responsibilities, available resources, etc. The instructor then sets up the major topics, identifies major issues, highlights major findings, arguments or theories and discusses the current state of knowledge on the subject matter. The instructor is further expected to encourage and provoke student involvement and inquisitiveness and provide them with topics and guidelines

for self-learning along with assignments and activities and any other appropriate tasks that can help students to meet their learning goals.

The independent–learning (self-learning) is given another 40 percent of the time (6 days of blocked teaching 3-4 hours/day). In this part, students are expected to learn independently, complete their assignments and tasks, submit their work and/or make presentations of their work in the classroom. At this stage the instructors are expected to assess the submissions of each student, identify where students have difficulties and provide feedback.

The third part, collaborative learning consists of 20 percent of the time (3 days blocked session 3-4 hours/day). In this part the expectations are that students meet the instructors in small groups to undertake group discussions based on the topics of the course and assignments, dialogues/debates, paper presentations or book reviews following a purposeful guideline provided. Instructors may pose relevant questions and problems for discussion that help students understand what they have learnt. Instructors also facilitate and moderate the discussion in ways that would clarify difficult concepts and lead towards the learning goals. At the end of delivery of all courses in a module; students meet their advisors and discuss the relevance and contribution of the modules to their learning goals.

This approach is a drastic change from what AAU had been practicing for decades. As such it contains opportunities as well as challenges and problems. Examining the strengths, weaknesses, misunderstandings, outstanding problems and areas of improvement is thus of utmost importance. The primary stake holders in this endeavor are instructors and students. An earlier article by the same authors (Solomon *et al.*:2011) has examined instructors' views. The current article ponders over students perspectives.

Statement of the Problem

Although there are a plethora of uses of the concept in literature, a module can be described as an independent educational unit of limited scope provided with a series of educational and learning activities, which lead to a well described final level (Klingstedt 1971). It is seen as a useful programming unit with a predetermined scope and duration. The implementation of modular instruction or modularization is a radical change in the existing educational setting, which has consequences for the educational programme, the study materials, the teachers, the students and the organization as a whole. A successful modularization requires intervention in all of these aspects.

A modular system of higher education curriculum is largely a response to the very fast growing sectors of business, industry and consumers choice in general. It emphasizes more elaborate outcomes in relation to each small part of the Degree, rather than the more broadly defined 'Course' in general. As

opposed to most traditional curriculum designs, modular design gives greater student autonomy in constructing the programmes and greater range of entry gates and exit points. Virtually a modular curriculum had its origin in the USA during the nineteenth century Theodossin (1996:5).

Modularization can have advantages or disadvantages to students. The advantages include that it allows everybody to proceed at his/her own pace, gives opportunity to choose one's own learning mode (Burns 1971) and allows students to identify their strengths and weaknesses (Kelingstedt 1971). Moreover in the modular approach students do not have to restudy large amount of subject content since they can be tested immediately after completion (Goldschmid and Goldschmid 1973).

The intensive teaching format (Block teaching) is known to have several advantages for the students. According to research results elsewhere, students tend to prepare better for intensive teaching if they get their materials early on (Burton et.al 2002); students' time management skills improve (Grant 2001), and students feel increased motivation, commitment, and engagement during programmes conducted in intensive formats. Scott, P.A. (1995) indicated that under favourable conditions (i.e., taught well by a competent, skilled instructor), intensive course learning experience can be a rewarding and powerful experience. He further argues that intensive format courses can create a more focused, collegial, relaxed, motivating, concentrated, memorable and continuous learning experience compared with semester length format courses. He however warns that under unfavourable conditions, intensive course learning experiences can be quite negative.

Daniel, E.L. (2000) also dwells on the advantages of intensive teaching for students. He points out that better student concentration is achieved and students participate in a more in-depth manner. Concentration is fostered because programme is conducted on a few long but intense days. Scott, P.A. and Conrad, C. (1991) also assert that students perceive experience in intensive programmes as more real, more efficient, more integrated, more challenging, and certainly more enjoyable.

On the other hand self-discipline has to be demonstrated in pursuing independent study. The shift from the lecture method (passive) to modular instruction (active) might be difficult for some students. Moreover the block teaching can cause some fatigue, stress and nervousness among some students (Petrowsky 1996).Unless early access is given to material, students have to move on to new material without having time to review or reread old material (Henebry 1997). Scott and Conrad (1991) also found out that students complain that there is far too much work and material in intensive programmes. As a result of long stay in class, students may face difficulty in remaining attentive (Henebry 1997). Furthermore the same author also identifies key disadvantages

such as lack of opportunity for extensive coverage; too rapid assimilation; fatigue; lack of time to digest concepts all of which have an impact on student learning. Dochy and others (1989) also indicate that modular instruction requires greater administrative resources needed to track students and operate multiple modules.

Generally, Scott and Conrad (1991), in their critique of intensive courses make the following conclusions:

- Intensive courses have been found to yield equivalent and sometimes superior learning outcomes in comparison to traditional length courses.
- All courses, regardless of discipline, can use intensive course designs without diminishing educational outcomes.
- Students are generally supportive of intensive courses and appreciate their convenience and efficiency, but the price is student stress and fatigue.
- Faculty attitudes are the most significant obstacles to intensive courses. Faculty say they are labour intensive, but they want to accommodate student schedules as much as possible.

As briefly shown in the preceding paragraphs, the modular approach has its advantages and disadvantages. The purpose of this evaluative study is therefore to identify the strengths, weakness, and misunderstandings and outstanding problems in the modular course delivery as perceived by first year graduate students who are the primary stake holders. As such it tries to answer the following basic questions:

1) What are the attitudes of the graduate students towards the modular curricula and block teaching mode of delivery?
2) Is there any difference in students' preference for modular delivery across different colleges/subjects/disciplines?
3) What are the major strengths and weaknesses of modular course delivery as perceived by graduate students?
4) What are the outstanding academic and administrative problems encountered by the modular course delivery?

Methodology

The study is evaluative in its nature aimed at the determination of the merit/ worth or the demerits of the graduate programme with modular course delivery system. The study employed the survey method supported by qualitative data collection procedures. The study generated both quantitative and qualitative data.

Data Source

The data for this study was gathered after two years of the implementation of the modular curricula and block teaching mode of delivery in 2012 academic

year. The implementation of the programme has been going on since 2010 and has now expanded to all graduate programmes and even to some of the undergraduate programmes. Accordingly the data used for the current study potentially reflects the current context and reality as well. That is, nothing has been changed since then other than some ups and downs in the implementation process. Primary and secondary data sources were consulted. The primary data sources were first year graduate students. Relevant literature, university documents on modular delivery and selected modular syllabi prepared by the colleges served as secondary data sources.

Sampling Techniques

All colleges, faculties and institutions running masters programmes in all campuses of Addis Ababa University were covered in the study. An attempt was made to classify all colleges, faculties, institutes and school with graduate programmes in six categories only for the sake of convenience. The number of first year graduate students were obtained for each category to determine the number of individuals who would be included in the sample. Table 1 presents the categories created, the number of graduate students and the corresponding sample size determined for each category.

Table 1: The Size of the Students' Population in Each Category & the Determination of Sample Size

No.	Categories Created	N	n
1	College of Social Sciences and Humanities and College of Development Studies	584	89
2	Faculty of Management Information and Economic Sciences	145	83
3	College of Natural Sciences	444	120
4	College of Education and Behavioral Studies	698	212
5	College of Health Sciences	417	114
6	All Schools and Institutes	243	114
Total		**2941**	**732**

N = Size of the Population; n =Size of the sample.

This number was further broken down into different departments and programme units. Nearly 25 percent of first year graduate students were selected using systematic random sampling technique after the sampling frame has been prepared for each department and programme unit.

Data Collection Instruments

Two types of data collection instruments viz. quantitative and qualitative were prepared and used for the purpose. The instruments used were the following:

Focus Group Discussion Guide

The researchers prepared focus group discussion guide for collecting additional qualitative data from the perspective of students who participated in the focus group discussion.

Students' Questionnaire

A questionnaire consisting of 88 questions that deal with (i) background information about the first year master's students; (ii) the recently developed modular curriculum; (iii) modular delivery of graduate courses; (iv) materials, aids and resources made available for smoothly running graduate courses; (v) assessment of students' learning; and (vi) issues concerning the outcomes of the modular delivery of graduate courses was developed and used. The questionnaire was pretested for its appropriateness, readability and comprehensibility.

Data Collection Procedure

The questionnaire was administered to first year graduate students by selected research assistants. The researchers briefed the research assistants about the purpose of the study and asked them to go through the questionnaire for further clarification. .The collection of data from the students' sample was done solely by the research assistants. However, the focus group discussions with students was conducted by the researchers. A total of six focus group discussions, one each in all the college categories, were conducted with selected students. The qualitative data collected was used to triangulate the main findings of the quantitative survey and provided an additional angle to explain the results of the survey.

Data Analysis

The data obtained from the focus group discussions were analyzed based on the themes identified and used to elaborate the results of the survey. After collection, all the questionnaires were coded using SPSS. Then the survey data were analyzed and frequency distributions and percentages were used to describe the general information of the study participants and to discuss the meaning of individual items included in the survey tools. Means and Composite scores or indexes were determined for the various attitude and perceptions items. Standard deviations were calculated and proportions were used to explain the numbers of individuals who have favourable attitude toward various issues being explored. Analysis of variance and Tukey HSD were determined to see whether there is group difference in terms of the overall attitude toward the modular curricula among students of different colleges and schools. Analysis

of variance and Tukey HSD were also calculated to explore whether there is statistically significant difference among students of various colleges and schools in terms of attitude toward the curriculum, modular delivery of graduate courses and on other sub-scales.

Results and Discussion

The analysis of the data collected uncovered the following quantitative and qualitative findings.

Overall Attitude toward Modular Curricula

The attitude of students toward a modular approach has its bearing on the successful adoption of the approach to teaching – learning process. In line with this, an attempt was made to explore the way students view the modular approach. A single index that shows students' overall attitude toward the modular curriculum was determined. The minimum possible score was 19, which represents unfavourable perception of the curriculum, maximum possible score 95, which represents the most favourable reaction and 57 represents neutral reaction to the modular curriculum. The mean was found to be 61.53 with standard deviation of 13.51. The mean was greater than the score, which represents neutral position (57). Further analysis revealed that large proportion (53.21 %) of graduate students who participated in this study obtained a total score greater than 61.53. If 57 is taken as a mean, this proportion will raise to 63.06 percent. The results generally show that graduate students' overall attitude toward the modular programme is positive.

An attempt was also made to see whether there is attitude difference among students of different colleges and schools. One-way analysis of variance (F = 5.983, p < 000) revealed statistically significant difference among students of different colleges and schools. Pair wise mean comparison was made after significant analysis of variance in order to identify which pairs of means are significantly different.

Table 2: Results of Tukey HSD

Colleges and Schools	Mean	SD	1	2	3	4	5	6
1. College of Social Sciences and Humanities	60.15	13.66						
2. College of Natural Sciences	56.95	13.79			*			*
3. College of Education and Behavioral Studies	64.60	13.21					*	
4. College of Management Information and Economic Sciences	61.39	13.55						
5. College of Health Sciences	60.08	12.61						
6. All Schools	63.53	13.02						

* Significant difference á = 0.05

As Table 2 depicts a statistically significant differences were observed only between students of College of Natural Sciences and College of Educational and Behavioral Studies, College of Natural Sciences and All Schools, and College of Education and Behavioral Studies and College of Health Sciences. From the data, one can tell that, relatively speaking, students of College of Education and Behavioral Studies have more favourable reaction toward modular curricula than students from other schools. Actually this reform seems to have been more warmly accepted by students and the teaching staff of the college of education and behavioral studies than all the other five categories. One way to explain this is because modular curricula have been implemented without interruption in this college since 2010 as stipulated by the BPR document.

Further analyses of the responses by items also revealed similar results. As shown in Table 2, on the average more than 50 percent of the study participants indicated that they agreed to all items included in the questionnaire. The majority (69.61 %) of the respondents indicated that modular curriculum helps students to concentrate on one course at a time and get in-depth knowledge on the subject matter. The results of focus group discussions held with students also support this finding. For example, one of the participants in the focus group discussions said *…one of the strengths of the modular programme is that it enhances students' concentration and maximizes our effort to learn a specific module by minimizing wastage of learning time.* Another participant of the FGD supported this point and said: *…students are not supposed to take many courses at a time. Modular programming gives students the opportunity for a detailed treatment and understanding of a course for a blocked period without any other intervention.*

Table 3: The Responses of Students to Items Measuring the Perception of Modular Curricula

No	Item	Response Categories					
		Agree		Uncertain		Disagree	
		N	%	N	%	N	%
1	The current modular curriculum encourages a move away from task based and highly segmented arrangement of work to a process - based and integrated arrangement	356	50.14	175	24.65	179	25.21
2	The current masters programmes are more specialized and focused	358	49.72	160	22.22	202	28.06
3	Modular curricula facilitate a more coherent organization of content of the subject matter	355	49.93	182	25.60	174	24.47
4	Given the current national priority, the current masters programmes are preparing learners for a career of tertiary level teaching and research	421	58.31	160	22.16	141	19.53
5	Modular curriculum helps students get to concentrate on one course at a time so that in-depth learning of a course is possible	504	69.61	100	13.81	120	16.57

As shown in Table 3, only 28.06 percent of the study participants considered the current masters programmes as less specialized and focused. On the contrary, 49.72 percent of the students considered the current masters programmes as more specialized and focused.

Modules should be organized in such a way that they enhance independent, self-contained and collaborative learning. Well-organized modules provide systematically organized learning opportunities with clearly defined goals and purposes. Students were asked to indicate their agreement or disagreement to items that measure the organization of modular curricula in their respective departments or programmes units. As presented in Table 4, 53.87 percent of the students who participated in this study agreed that the modular programmes are more purposeful and more efficiently organized to produce more value with less time and resources.

Table 4: The Organization of Modular Curricula as Perceived by Students

No	Item	Response Categories					
		Agree		Uncertain		Disagree	
		N	%	N	%	N	%
1	Modular masters programmes are more purposeful and more efficiently organized to produce more value with less time and resources (less is more)	390	53.87	122	16.85	212	29.28
2	The organization of modular curriculum stimulates and engages students actively in the teaching learning process	440	61.20	133	18.50	146	20.31
3	There is logical and meaningful arrangement of different modular courses that will provide an invaluable student learning experience	296	41.23	178	24.79	244	33.98
4	The choice of contents for most of modular courses has been made carefully to provide an opportunity for application of course concepts through self-study and exploration	367	50.90	161	22.33	193	26.77
5	The organization of modular courses may negatively affect the continuity of learning and fails to integrate knowledge that can be obtained from various modular courses	323	43.59	190	25.64	228	30.77
6	The organization of modular programme enables you to have control over your own learning and accept greater responsibility for learning	473	65.60	128	17.75	120	16.64
7	The organization of modular curriculum makes the transition between different modular courses easy	317	44.84	211	29.84	179	25.32

Nearly 66 percent of the study participants have the belief that the organization of modular programme enabled them to have control over their own learning and encouraged them to accept greater responsibility for their learning. As the data in table 4 shows, it appears that students have concerns regarding the arrangement of different modular courses. For example, 41.23 percent of the study participants indicated that there is logical and meaningful arrangement of different modular courses whereas 33.98 percent of them disagreed with the notion. Related to this, the majority (43.59 %) of the student respondents indicated their agreement to the statement which says that the organization of

modular courses may negatively affect the continuity of learning and fails to integrate knowledge that can be obtained from various modular courses. These responses are indicators of the problem associated with the organization and arrangement of modular courses in a meaningful manner. Otherwise, the majority of the study participants consider modular masters programme as more purposeful and efficiently organized (53.87 %) and capable of stimulating and engaging students actively in the teaching-learning process (61.2 %).

With regard to the adequacy of time allotted for the graduate modular curricula, the findings of this study in general are affirmative. As depicted in Table 5, the majority of the study participants (58.95 %) reported that 18 months is adequate to produce quality graduates of the masters programme.

Table 5: The Adequacy of Time Allotted for Graduate Modular Curricula

No	Item	Response Categories					
		Agree		Uncertain		Disagree	
		N	%	N	%	N	%
1	A maximum period of 18 months is adequate to produce quality graduates of the masters programmes who fit for the purpose by way of modular curricula block teaching	428	58.95	123	16.94	175	24.10
2	The length of course work and time allocated for research has no clear bearing upon the capacity of graduates to teach or to conduct research	207	29.03	175	24.54	331	46.42

However, the qualitative data gathered through focus group discussions revealed different results. For example, one of the participants in the focus group discussions stated as follows:

> …since modules are virtually a collection of some courses or parts of different courses, they are bigger in size than individual courses in the semester based system. Accordingly, these modules need more time to complete. It is practically difficult to complete each of these modules within one-month time.

Another participant added to this point and said that:

> …the time allotted to complete the programme seems to be too short. I do not think 18 months will suffice to prepare competent veterinarian. Now we are forced to complete all of the courses in only six months and do our researches in the remaining one-year time. It is very difficult to complete a master's level course work in a period of six months.

Natural science students like their instructors are less comfortable to the modular curricula and its mode of delivery. Earlier study by the same authors (Solomon et al 2011) reveled that natural science teaching staff have strongly resisted the modular curricula and block teaching and argued that this approach does not work for natural science courses. Actually this programme is being implemented

in science programmes with many irregularities and even mixed with the previous non modular curricula.

The study also explored students' perception of the assessment procedures involved in the modular curricula. Table 6 presents the details of the responses. As clearly shown in Table 6, about 50.41 percent of the students think that modular curriculum creates opportunity for valid assessment and evaluation of students' performance and achievement. Furthermore, the majority (65.05 %) of the students who participated in the study suggested that completion of thesis or project work should be part of the requirement for the award of MA or MSC degree. On the contrary, 24.83 percent of them indicated that graduate students should not necessarily do theses or projects as requirement for graduation.

Table 6: Issues Related to Student Assessment in Modular Curriculum

No	Item	Agree		Uncertain		Disagree	
		N	%	N	%	N	%
1	Modular curriculum creates opportunity for valid assessment and evaluation of students' performance and achievement	366	50.41	170	23.42	190	26.17
2	Masters students should not necessarily do thesis or project as requirement for graduation	179	24.83	73	10.12	469	65.05
3	It is appropriate to leave the decision whether students should work on thesis or not to academic units, or programmes or departments	289	40.76	105	14.81	315	44.43
4	Passing comprehensive exam or preparing PhD proposal as a requirement for graduation is being practiced in some departments or academic units.	373	52.76	156	22.07	178	25.18
5	Students' assessment in the current modular masters programmes must include assessing their skills and knowledge necessary for teaching	504	69.71	110	15.21	109	15.08

Related to this, 44.43 percent of the study participants reported that it is not appropriate to leave the decision on whether students should work on theses or not to academic units, or programmes or departments. However, 40.76 percent of these students supported the idea that the decision should be left to academic units, or programmes or departments. There is also a view held by large percentage (69.71 %) of the study participants that the assessment procedure in the current modular graduate programme should include the assessment of skills and knowledge necessary for teaching.

Attitude toward Modular Delivery

The BPR recommended the introduction of modular curriculum with the intention of improving the quality of graduate education and thereby the quality of the graduates. Modular delivery minimizes or limits the role of a teacher and introduces student-centred style of teaching and learning. Since this method

deviates from the traditional semester based classroom situation, which students were familiar with, the proper organization and delivery of the modular programme has had an impact on the quality of the teaching – learning process.

This study assessed students' view toward the delivery of the modular curriculum in their respective institutions. The total score was determined to get an overall view of students toward the delivery of the modular programme. Higher scores indicate favourable reaction whereas lower scores indicate unfavourable reaction to the delivery of the modular programme. For this scale, the maximum possible score is 85 (if any student marks "strongly agree" to all items) and the minimum possible score is 17 (if any student marks "strongly disagree" to all items). The neutral score for this scale is 51. The mean for the total score was found to be 53.99 with standard deviation of 10.53. The mean is above the neutral score, which indicates that there is a tendency among students to perceive the delivery of the modular programme favourably. Nearly half of the study participants (50.9 %) scored higher than the mean score. This proportion increases to 57.95 percent if the neutral score has been considered as a cut of point for favourable and unfavourable reactions toward the delivery of modular courses.

The other line of investigation focused on the possibility of variation in the attitude toward modular delivery of courses across colleges and schools. One-way analysis of variance has proven that there is a statistically significant variation ($F = 12.195$, $p < 0.000$). A further test of multiple comparisons – Tukey HSD – singled out the directions of the variations as presented in Table 7 below.

Table 7: Results of Tukey HSD

Colleges and Schools	Mean	SD	1	2	3	4	5	6
1. College of Social Sciences and Humanities	52.17	9.825			*			*
2. College of Natural Sciences	48.64	9.141			*	*	*	*
3. College of Education and Behavioral Studies	56.22	9.915						
4. College of Management Information and Economic Sciences	54.74	9.469						
5. College of Health Sciences	52.86	11.384						*
6. All Schools	57.48	10.898						

* Significant difference á = 0.05

As can be read from Table 7, statistically significant difference was observed, for example, between students of College of Social Sciences and Humanities and College of Education and Behavioral Studies and students of College of Social Sciences and Humanities and that of all schools. Generally, the above data show that, relatively speaking, students of College of Natural Sciences tended to have unfavourable attitude toward the delivery of modular courses than students of other colleges and schools. There are good numbers of teaching staff as well who are in favor of modular curricula but against block teaching. On the other hand, there are more negative views and attitudes towards the

modularized curricula in general and block teaching in particular among students as well as teaching staff of the college of natural science than in all other colleges and schools (Ayalew *et al.* 2010).

An attempt was also made to analyze the scale by splitting it into four subscales viz. Advantages of modular delivery, planning and preparedness needed to deliver modular courses, the appropriateness of modular delivery and the disadvantages of modular delivery. The analysis of the data collected revealed similar results.

The Advantage of Modular Delivery

About eight items were used to assess students' perception of the advantages of modular delivery. In this sub-scale, the minimum and maximum possible scores are 8 and 40 respectively. The neutral score is 24. The mean for this sub-scale is found to be 27.53 with standard deviation of 6.45. The proportion of students who scored above the mean is 54.7 percent. When the neutral score is considered as a cut off point, the proportion of students who scored above the neutral scores increases to 70.17 percent. This data tell us that the majority of the study participants have positively perceived the advantages of the modular delivery. The analysis of individual items also supports the above finding. Table 8 deals with the advantages of modular delivery.

Table 8: Students' Perception of the Advantages of Modular Delivery

No	Item	Agree		Uncertain		Disagree	
		N	%	N	%	N	%
1	The delivery of the modular curriculum enhances interactive teaching – learning, self-learning and collaborative learning among students	497	68.46	113	15.56	116	15.98
2	The involvement of a team of instructors in delivering a single modular course is one of the changes introduced with modular curricula	392	54.44	150	20.83	178	24.72
3	The delivery of current modular curriculum has moved away from task-based and highly segmented arrangement of work to process-based and integrated arrangement	332	46.96	209	29.56	166	23.48
4	The delivery of modular curriculum enhances an efficient use of time and resources	466	65.36	123	17.25	124	17.39
5	Modular delivery has introduced a mechanism to check whether courses are properly delivered or not.	296	41.40	195	27.27	224	31.33
6	Block teaching yields equivalent and sometimes superior learning outcomes in comparison to semester based delivery of courses.	289	40.65	211	29.68	211	29.68
7	Modular course delivery promotes self-learning through seminars, discussions, and presentations	515	71.63	101	14.05	103	14.33
8	The delivery of modular courses facilitates face-to-face and blended learning	452	63.22	157	21.96	106	14.83

A large percentage (68.46 %) of the study participants believe that "the delivery of the modular curriculum enhances interactive teaching – learning, self-learning and collaborative learning among students." While the remaining 15.56 percent

and 15.98 percent of the students hold neutral position and negative attitude toward the delivery of the modular curriculum, respectively. Related to this, 71.63 percent of the study participants agreed that modular course delivery promotes self-learning through seminars, discussions, and presentations. In addition, 65.36 percent of students expressed the view that the delivery of modular curriculum enhances an efficient use of time and resources.

In addition, 63.22 percent of the respondents indicate that the delivery of modular courses facilitates face-to-face and blended learning. Still, a relatively large percentage (40.65 %) of these students agreed that block teaching yields equivalent and sometimes superior learning outcomes in comparison to semester-based delivery of courses. On the other hand, 29.68 percent of the study participants disagreed with the statement that block teaching is superior to the traditional classroom-based instruction.

Planning and Preparedness Needed to Deliver Modular Courses

Three items were used to assess the degree of preparation and planning needed in the delivery of modular courses. The minimum and maximum scores are 3 and 15, respectively. The neutral score for the sub-scale is nine. The mean and standard deviation for this sub-scale are 9.77 and 2.37, respectively. The proportion of students who scored above the mean and the neutral score is 54.92 percent. The proportion indicates that more than half of the study participants favorably assessed the planning and preparedness that went into the delivery of modular courses.

Table 9 contains items that measure the degree of planning, preparation needed on the part of instructors to deliver modular courses and the level of planning, and preparations involved in the delivery of modular curriculum. In general, the data show that the students' perception of the level of planning involved in delivering modular courses is favourable. For instance, 85.51 percent of the study participants against 8.44 percent indicated their level of agreement to the item that the delivery of modular curriculum requires careful planning and strong commitment from the part of instructors.

Table 9: Planning and Preparations Needed for Delivering Modular Courses

No	Item	Response Categories					
		Agree		Uncertain		Disagree	
		N	%	N	%	N	%
1	While delivering modular courses instructors in your department, school or institute are well prepared to use various methods of course delivery	319	43.88	161	22.15	247	33.98
2	The delivery of modular curriculum requires careful planning and strong commitment from the part of instructors	608	85.51	43	6.05	60	8.44
3	The delivery of modular curriculum seems to lack careful planning and preparation	188	26.37	97	13.60	428	60.03

Similarly, 60.03 percent of the same respondents favorably perceived the level of careful planning and preparation involved in the delivery of modular curriculum. On the other hand, 26.37 percent of the students reported that the delivery of modular curriculum seems to lack careful planning and preparation. The data obtained from qualitative approach seem to be different from what the quantitative data revealed. Participants of the FGDs held with students for example said:

> …the problem observed in relation to the delivery of modular courses is not related to the idea of modularization, but rather to lack of preparation for the programme as well as shortage of resources. Most problems are related to implementation of the modular programme than to the inherent characteristics of modularization.

With regard to instructors' preparedness to deliver modular courses, the quantitative data have revealed both positive and negative reactions in almost similar manner. That is, 43.88 percent of the study participants said that instructors are well prepared to use various methods of course delivery whereas 33.98 percent of the study participants suggested to the contrary. Instructors are not prepared adequately to use various methods to deliver modular courses. Focus group discussions held with students revealed qualitative data, which argue that there is lack of preparedness and commitment from the part of instructors in delivering modular courses. Some of the points raised in relation to lack of preparation and commitment on the part of instructors during the FGDs held include the following:

> The negative attitude of some of the teaching staff seems to be one of the challenges that the delivery of modular courses encounters. The staff should have been convinced to accept the change. There are some staff in some departments who are extremely hostile and blindly resist the reform. I think some teachers are not clear with the concept of modularization and mode of delivery. They are not willing even to learn about modular programme and adjust themselves to the changes taking place in the delivery of graduate courses. For instance, one of our instructors uses his old lecture notes and materials he prepared for the semester-based course. … I think there is a clear gap between some instructors' perceptions of modular delivery of courses and the intent of the actual modularized programmes. …the big problem I observed is the lack of proper awareness on the part of our instructors. A series of orientation programmes should have been organized to sensitize the instructors about the mode of delivery of modular courses. … Our instructors seem to lack clear understanding of modular approach. I am sure if teachers are willing and committed to develop a sense of ownership to do their level best, this programme will have a very high chance of success.

From the above interview one can safely and logically deduce that students have more positive perception and readiness than their instructors to implement the modular curricula and block teaching.

The Appropriateness of Modular Approach to all Courses

Another area of investigation was assessing the appropriateness of using modular delivery of courses for various fields of study. Three items were used in this sub-scale. The minimum and maximum possible scores that indicate unfavourable and favourable perceptions of students are 3 and 15, respectively. The neutral score for this sub-scale is nine. The mean score of the sub-scale is found to be 8.24 with standard deviation of 2.62. The proportion of students who scored above the mean is 44.44 percent. This proportion decreases to 30.97 percent if we take the neutral score as a cut of point. Compared to the above sub-scales, the proportion of students who scored above the mean in this sub-scale is much lower. In general, these results show relatively speaking unfavourable reactions of students to items included in the sub-scale. This means most graduate students who participated in this study believe that modular curricula and block teaching mode of delivery are not equally appropriate to all field of studies and courses. They believe that this approach is more appropriate to social sciences and humanities and education courses than for any other.

The analysis of individual items also revealed similar results. For example, 41.22 percent of the study participants agreed to the statement that, the division of the delivery of the modular curriculum in terms of interactive teaching-learning, self-learning and collaborative learning does not take into account the nature of the course. On the other hand, 34.16 percent of the study participants argued to the contrary indicating that the division of the curriculum has taken into account the nature of the course. Only 41.98 percent of the students who participated in this study positively reacted to the item "block teaching is not appropriate for quantitative courses like quantitative analysis and courses in natural sciences." According to these respondents, block teaching is appropriate for numerical courses. On the contrary, 23.64 percent of the study participants said that block teaching is not appropriate for courses that involve numerals. Similarly, 24.96 percent of the study participants against 51.06 percent of the sample included in the study said that time allotted for interactive teaching has failed to take into account the nature of the course.

Furthermore, the qualitative data gathered also supported the findings that modular curriculum failed to take into account the nature of the course. For example, one of the participants of the FGDs held with science students pronounced that:

> I do not think that modular approach is suitable for science fields. Although the modular approach in general is good, it seems unrealistic to deliver science courses through block teaching. It is difficult to develop critical thinking and skills of problem solving in advanced and highly scientific and mathematical courses in only a month.

This view held by most science students concur with the views of their instructors. Most academic staff at the Addis Ababa University did not believe that modular curricula in general and block teaching in particular should be applied to all courses of graduate programmes across the board (Solomon et al 2011).

Table 10: The Appropriateness of Modular Delivery of Courses to Various Fields of Study

No	Item	Response Categories					
		Agree		Uncertain		Disagree	
		N	%	N	%	N	%
1	The division of the delivery of the modular curriculum in terms of interactive teaching – learning, self-learning and collaborative learning does not take into account the nature of the course	298	41.22	178	24.62	247	34.16
2	Block teaching is not appropriate for quantitative courses like quantitative analysis and courses in natural sciences	165	23.64	240	34.38	293	41.98
3	The time allotted for interactive teaching has failed to take into account the nature of the course	177	24.96	170	23.98	362	51.06

The Disadvantages of Modular Delivery of Courses

Like the above three sub-scales, three items were used to assess the weaknesses of modular delivery of courses. The mean score for the sub-scale is found to be 8.48 with standard deviation of 3.17. The proportion of students who scored above the mean is 47.16 percent. This proportion decreases to 35.96 percent if we take the neutral score as a cut of point. In general, these results show relatively speaking unfavourable reactions of students to items that measure students' perception of the weaknesses of modular delivery of graduate courses. The table below presents the responses of study participants to items that elicit information on the weaknesses of the modular delivery of graduate courses.

Table 11: Students' Perception of the Weaknesses of Modular Curriculum

No	Item	Response Categories					
		Agree		Uncertain		Disagree	
		N	%	N	%	N	%
1	Block teaching results in too much information overloading within short period of time and lead to lesser learning	207	28.87	127	17.71	383	53.42
2	Block teaching causes greater amounts of pressure and stress among students and hence not useful	266	36.94	142	19.72	312	43.33
3	The number of modular courses students are expected to take per semester is too much	279	38.86	171	23.82	268	37.33

As depicted in table 11, 28.87 percent of the study participants have agreed with the statement that block-teaching results in too much overloading with short period of time and lead to lesser learning. However, 53.42 percent of them maintained that it does not cause too much overload or stress among students. On the other hand, 36.94 percent of the study participants said that block teaching causes greater amount of pressure and stress among student and hence not useful. About 43.33 percent of the study participants reported that block teaching does not cause greater amount of pressure and stress on the part of students. In line with this participants of the FGDs held with students stated:

> …well the implementation of the modular approach is really going smoothly except the fact that we are highly overloaded and we have time constraints to finish what is expected from us on time. We are too much busy and overloaded. We feel that there is shortage of time for students as well as for teachers.

About 38.86 percent of the study participants have indicated that the number of modular courses students are expected to take per semester is too much. Nearly the same percent (37.33 %) of the study participants indicated that the number of modular courses they take per semester is not that much high. Hence, it could be asserted that there are some students who feel that they are overloaded and perhaps prefer the traditional semester based programme.

Materials, Aids and Resources

The success of modular delivery depends much on the availability of modular materials, aids and other resources. In this study, an attempt was made to explore students' perception of the availability and use of resources to deliver modular courses. Seven items were included in the scale to measure the views of students toward the accessibility of materials and educational resources. The scale used is a three-point scale where study participants were asked to respond by marking Yes, or Undecided or No to items included in the scale. The minimum and maximum possible scores are 7 and 21, respectively. The score that represents the neutral position is fourteen. The average score for students' reactions to the availability and accessibility of materials, aids and resources is found to be 14.49 with a standard deviation of 2.30. The mean score is almost the same as the neutral score. The proportion of students who scored above the mean is 45.24 percent.

An attempt was also made to investigate whether there is variation in the attitude toward the availability and accessibility of module related materials and other resources across colleges and schools. One-way analysis of variance has proven that there is a statistically significant difference (F = 4.264, á = 0.05) among students of the various colleges and schools. A further test of multiple comparisons – Tukey HSD – singled out the directions of the variations as presented below in a matrix.

Table 12: Results of Tukey HSD

Colleges and Schools	Mean	SD	1	2	3	4	5	6
1. College of Social Sciences and Humanities	14.38	2.405						*
2. College of Natural Sciences	14.09	2.326						*
3. College of Education and Behavioral Studies	14.44	2.094						*
4. College of Management Information and Economic Sciences	14.41	2.093						
5. College of Health Sciences	14.24	1.978						*
6. All Schools	15.37	2.771						

* Significant difference á = 0.05

As Table 12 shows significant difference was observed between students of all schools as a category with students of all colleges except College of Management Information and Economic Sciences. The result shows that the mean score of '*All Schools'* is greater than that of other colleges. The implication of this result is that students in this category have evaluated the efforts exerted to make module – related materials available and accessible in a positive manner than that of other colleges. One of the reasons could be most of the schools included in this category, e.g., School of Journalism and Institute of Peace and Security Studies, make reading materials and other facilities ready for their students.

At this point, it is not difficult to understand that the implementation of modular curricula and block teaching started without adequate preparation. The BPR document stipulates that module instructors should develop content materials for the modules and upload the materials on the webpage of the department a month before starting the course. However, none of the colleges other than few schools had the opportunity and ability to carry out such preparations. Actually the status of such absence of preparation remained unchanged even after three years of the implementation of modular curricula.

The responses of students to individual items were also analyzed by splitting the scale into two viz. items that focus on the availability and accessibility of modular materials and items that deal with the organization, availability and accessibility of other supportive resources.

Attitude toward the Availability and Accessibility of Module-Related Materials

Three items were used to assess the attitude of students toward the availability and accessibility of module-related materials. The minimum and maximum scores for the scale are three and nine, respectively. The mean score for this sub-scale is determined to be 6.23 with standard deviation of 1.25. The proportion of students who scored above the mean is 35.43 percent. The result implies that only about 35 percent of the students who participated in the study tended to have favourable attitude toward the availability and accessibility

of module related materials. The responses given to individual items were analyzed. Table 13 presents the responses of students who participated in the study to individual items.

Table 13: Attitude toward the Availability and Accessibility of Module-Related Materials

No	Item	Response Categories					
		Yes		Undecided		No	
		N	%	N	%	N	%
1	Module-related reading materials are available and easily accessible	155	22.96	438	64.89	82	12.15
2	Modular material is prepared for every course so that students can use in the learning process	115	17.04	494	73.19	66	9.78
3	Modular material is produced in such a way that it provides opportunities for efficient use of time	200	29.59	363	53.70	113	16.72

Consistent with the results discussed earlier, most of the study participants maintained a neutral position with regard to the availability and accessibility of module related materials. For example, only 22.96 percent of the study participants responded favorably to the item which states that module-related reading materials are available and easily accessible. On the other hand, 64.89 percent and 12.15 percent of the study participants responded to the same item by marking undecided and no, respectively. With regard to the preparation of modular material for every course, only 17.04 percent of the study participants reacted positively. The majority (73.19 %) of the study participants were undecided.

Radical changes such as modular approach to course delivery require a major transformation. Institutions need to be provided with commensurate resources and appropriate guideline for operationalizing the newly introduced activities. Such absence of preparation and resource for implementing radical reforms could be connected with what Teferra and Altbach (2004:21) mentioned about the African continent at large. They said "The fact that African universities currently function in very difficult circumstances, both in terms of the social, economic, and political problems facing the continent and in the context of globalization, and the road to future success will not be an easy one". The case of Ethiopian public universities in general and that of the Addis Ababa university under discussion in particular is not immune from this continent wide problem Teffera and Altbach (2004) mentioned.

Students' Perceptions of the Availability and Accessibility of Instructional Resources and Facilities

Another variable studied in this research was students' reactions toward the accessibility of instructional facilities, teaching aids, and other resources. Four items were used in this scale. The minimum and maximum scores for the

scale are 4 and 12, respectively. The mean score for the scale was found to be 8.28 with standard deviation 1.49. Since, the standard deviation is small; it is possible to say that the mean score is almost the same as the neutral score (8) for the sub-scale. The proportion of the study participants who scored above the mean score is 40.88 percent. Like the sub-scale for the Availability and Accessibility of Module-Related Materials, the perception of the study participants tended to incline toward the neutral position.

Table 14: Perceptions toward the Availability and Accessibility of Instructional Resources and Facilities

No	Item	Response Categories					
		Yes		Undecided		No	
		N	%	N	%	N	%
1	Instructional resources and aids are available to enrich the provision of the module(s)	148	21.93	427	63.26	100	14.81
2	Guest lecturers and other experts are invited to share their experiences on specialized topics	196	29.04	408	60.44	71	10.52
3	Field visits, student practical and other teaching strategies are integrated into the modular course	194	28.53	378	55.59	108	15.88
4	All the necessary technical and didactic infrastructures are prepared for delivering modular courses	86	12.72	474	70.12	116	17.16

As Table 14 shows, only 21.93 percent of the study participants said that there are instructional resources and aids that enrich the provision of modular courses. On the other hand, the majority (63.26 %) of the study participants were not certain about the availability of instructional resources. In addition, only 12.72 percent of the study participants said that all the necessary technical and didactic infrastructures are made ready for delivering modular courses. The study also uncovered that 28.53 percent of the study participants reported the integration of field visits, students' practical and other teaching strategies into the modular courses. Likewise, 29.04 percent of the respondents said that guest lecturers and other experts are invited to share their experiences on specialized topics. In general, the above data revealed that the effort that has been exerted to support the delivery of modular courses with the use of technical and didactic facilities is less visible to the majority of the study participants. This again indicates implementation without preparation. As Solomon (2010) mentioned there has been a growing mismatch between the expansion of higher education and availability of resources and facilities, leading to declining standards in quality teaching and learning in Ethiopian public universities at large.

Assessment of Students' Learning

Assessment is a central element in the overall quality of teaching and learning in higher education. Well-designed assessment procedures set clear expectations,

establish a reasonable workload, and provide opportunities for students to self-monitor, rehearse, practice and receive feedback. Learning outcomes that have been indicated in the modules should be assessed using applicable and appropriate assessment procedures so that the outcomes provide evidence of mastery of the desired learning outcomes. The assessment procedures employed with modular programmes should contribute to the overall quality of teaching and learning. Generally, a modular curriculum design encourages revolutionary methods of assessment directly linked to the learning outcomes identified within the module (Betts and Smith 1998).

The study assessed students' perception of the assessment procedures employed with modular delivery of graduate courses. Ten questions were included in the scale to get the views of students about the nature of the assessment procedures and other issues related to the assessment of students' learning through modular delivery of graduate courses. Total score was determined to get students' general view or perception of the assessment procedures. The minimum and maximum possible scores were 10 and 50 respectively. The lower score indicates unfavourable views whereas the higher score indicates favourable views about the procedures employed. The neutral score for this scale is 30.

Table 15: The Mean and Standard Deviation of the Total Scores by Groups

No.	Groups	N	Mean	SD
1	College of Social Sciences and Humanities	80	28.20	7.136
2	College of Natural Sciences	109	27.08	6.856
3	College of Education and Behavioral Studies	203	29.10	7.450
4	College of Management Information and Economic Sciences	75	30.56	7.675
5	College of Health Sciences	102	27.68	7.012
6	All Schools	108	29.04	7.885

The total scores obtained for each study participant were analyzed and the average score was found to be 28.61 with standard deviation of 7.398. The average score is a little bit lower than the neutral score 30. This shows that the total perception of the assessment procedures employed in the delivery of modular programme is found to be neither positive nor negative. The overall view of the students about assessment of students learning is something between the two. The proportion of students who scored above the mean is 49.04 percent. This proportion decreases to 45.94 percent if the neutral score is considered as a cut of point to indicate either of the two views (favourable and unfavourable). That is, nearly 46 percent of the students who participated in

this study have a total score greater than the neutral score. Further analysis of the data by categories revealed the following results.

One-way analysis of variance revealed a statistically significant difference (F = 2. 629, á = 0.05) among groups. Pair wise mean comparison (Tukey HSD) revealed that statistically significant difference was observed only between students of College of Natural Sciences and College of Management Information and Economic Sciences. No statistically significant difference was observed in any other pairs of means.

In addition, individual items included in the scale were analyzed. For the sake of maintaining homogeneity, the items included in the scale were grouped into two. The results of the analysis are presented in the following tables.

Table 16: Students Perception of the Nature of the Assessment Procedures

No	Item	Response Categories					
		Agree		Uncertain		Disagree	
		N	%	N	%	N	%
1	The evaluative process simultaneously assesses knowledge, attitudes, and skills	346	51.34	130	19.29	198	29.38
2	The assessment period becomes too short to provide opportunity for instructors to know the students	174	26.01	104	15.55	391	58.44
3	Students have a stake in the evaluation process	228	35.35	190	29.46	227	35.19
4	The evaluation process helps learners to develop better understanding about their learning progress	287	42.64	136	20.21	250	37.15
5	Teacher-student conflicts are minimal particularly relating to grading	295	44.43	171	25.75	198	29.82

The assessment procedures are expected to assess what students should know or accomplish based on the contents of the curriculum. Participants of the study were asked if the assessment procedure employed assessed knowledge, attitudes and skills in an integrated manner. About 51.34 percent of the study participants responded affirmatively whereas 29.38 percent of them reacted negatively. According to the latter group, the assessment procedures employed did not address the measurement of these behaviors in an integrated fashion. Approximately equal percentages (35.35 % and 35.19 %) of the study participants expressed their level of agreement and disagreement, respectively to the statement that states students have a stake in the evaluation process.

With regard to the benefit of the evaluative process, 42.64 percent of the respondents agreed that the evaluation process helps learners to develop better understanding about their learning progress. On the other hand, 37.15 percent of the same study participants expressed their disagreement about the benefit of the evaluation procedure employed in the delivery of modular curriculum. About 44.43 percent of the study participants against 29.82 percent indicated that teacher-student conflicts related to the assessment results are minimal.

Table 17: Students Perception of the Psychometric Qualities of the Assessment Procedures Employed

No	Item	Response Categories					
		Agree		Uncertain		Disagree	
		N	%	N	%	N	%
1	The evaluative process suffers from lack of validity because no mechanism has been introduced for assessing collaborative learning	203	30.53	147	22.11	315	47.37
2	Students get proper feedback about their learning	210	32.0	109	16.62	337	51.3
3	Evaluation process employed by instructors involved in modular curriculum is objective	242	36.17	167	24.96	260	38.86
4	The evaluation process is transparent	252	38.3	150	22.83	255	38.8
5	Better accountability in grading is the characteristics of modular curriculum	256	37.67	208	31.09	205	30.64

As shown in Table 17, it appears that the assessment procedures employed during the delivery of modular programmes have a number of limitations. For example, 51.37 percent of the study participants have indicated that students do not get proper feedback about their learning. Knowledge of result plays significant role in motivating and maintaining students actively into the teaching-learning process. However, the data tell us that the majority of students are not getting proper feedback about their learning accomplishment. Besides, 36.17 percent of the study participants agreed that the assessment procedures employed by instructors are objective whereas 38.86 percent of them argued to the contrary. For the latter group of students, the evaluation procedures employed by instructors involved in modular curriculum suffer from lack of objectivity. Similarly, 38.81 percent of the study participants considered the evaluation process as less transparent. On the other hand, 38.36 percent of these respondents agreed that the evaluation process is transparent. Although Addis Ababa University is struggling to transform its mode of assessment towards continuous assessment, there is still a lot to be done to the satisfaction of the beneficiaries.

Students' Perceptions of the Outcomes of Modular Programme

As explained in the introductory part of this paper, modular approach of delivering graduate courses has a number of benefits. Students tend to develop the ability of independent learning and gain knowledge and skills in line with their interests and abilities in uninterrupted form. The study explored how graduate students perceive the outcomes of the modular delivery of graduate courses. Eight items were used to explore such perception. Students who participated in the study responded to a five point scale that ranges between strongly agree to strongly disagree. The aggregate score was determined for every participant of the study to get an idea about an overall perception of each study participant about the outcomes of the modular programme. The minimum and maximum scores for this scale were eight and forty, respectively. The

neutral score, which represents neither a positive nor a negative view, is 24. The average of the aggregate scores was determined to be 26.4 with standard deviation 7.39. The mean score is found to be greater than the neutral score. This indicates that the overall perception of students about the outcomes of modular programme is favourable. The proportion of study participants who scored above the mean is 51.04 percent. If the neutral score is taken as a cut of point for favourable and unfavourable views of the study participants, the proportion of study participants with favourable view will increase to 60.15 percent. These proportions indicate that large numbers of study participants have favorably perceived the outcomes of modular programme. Students' perception of the outcome of the modular programme is different from their instructors' perceptions. In the earlier study by the same authors (Ayalew et al. 2010) it was found that the majority of the teaching staffs teaching in the graduate programmes were not sure whether or not the implementation of the modular system will be successful. In fact good numbers of them are not convinced still after three years of the implementation of the programme that the modular system could really achieve the aspired learning outcomes.

Further analysis of data by groups also revealed significant difference (F = 4.967, á = 0.000) among groups. Pair wise mean comparison (Tukey HSD) was computed to see the direction of variation.

Table 18: Results of Tukey HSD

Colleges and Schools	Mean	SD	1	2	3	4	5	6
1. College of Social Sciences and Humanities	25.60	8.057						
2. College of Natural Sciences	24.26	7.128			*			*
3. College of Education and Behavioral Studies	27.57	7.047						
4. College of Management Information and Economic Sciences	26.25	7.688						
5. College of Health Sciences	25.25	6.929						*
6. All Schools	28.32	7.865						

As depicted in Table 18, significant difference was observed between students of College of Natural Sciences and College of Education and Behavioral Studies; between College of Natural Sciences and All Schools, and between College of Health Sciences and All Schools. Again, consistent with the previous findings students of College of Natural Sciences obtained mean score that appears to be very close to the neutral score. The analysis of the responses of study participants to individual items also revealed results that support the above findings. The details of the responses are given in Table 19.

Table 19: Students Perception of the Outcomes of Modular Delivery of Courses

No	Item Modular approach :	Response Categories					
		Agree		Uncertain		Disagree	
		N	%	N	%	N	%
1	Helps to meet the intended learning outcomes	306	45.8	188	28.19	173	25.9
2	Promotes concomitant learning	304	47.5	209	32.66	127	19.8
3	Improves student's academic performance	357	54.0	125	18.91	179	27.0
4	Enables efficient use of aids, resources, & time	319	47.9	132	19.85	214	32.1
5	Improves quality and student performance	322	48.5	145	21.87	196	29.5
6	Encourages life-long learning	309	46.8	164	24.89	186	28.2
7	Fosters more in-depth discussions and classroom participation	382	57.4	128	19.25	155	23.3
8	Improves students' class attendance	463	69.5	96	14.41	107	16.0

The data in Table 19 show that modular approach to graduate education has a number of positive outcomes. For example, 57.44 percent of the study participants said that modular learning fosters more in-depth discussions and classroom participation and 69.52 percent of the study participants argued that modular approach improves student' class attendance. About 54 percent of these respondents also said that modular approach to graduate education improves students' academic performance. In general, participants of this evaluative study (post graduate students) favorably perceived the outcomes of modular programme.

Conclusion

The quality of teaching and learning is directly related to institutional autonomy, academic freedom and resource. This is particularly so for an institution that focuses on expansion without at the expense of quality (Radhakrishan 2008; Solomon 2011). African higher learning institutions should not operate under too many waves of politically driven top down reforms in general and without creating the necessary human as well as material resources in particular. Higher learning institutions in Africa may benefit from modular curricula if programmes are born within the felt needs and interest of the specific institution. Any radical reform like reengineering post graduate curricula should not be prescribed from top like a vaccine to all programmes and courses evenly. Any such reform need to be contextualized prior to its implementation.

To this end, Graduate students' overall attitude toward the modular programme *is positive*. The modular delivery was also perceived favorably. However, significant differences were observed between students of different colleges with regard to attitude towards the modular programme, modular delivery and availability and accessibility of module related materials. Relatively

higher favourable attitudes among students of the *College of Education and Behavioral Studies* followed by *Students of all Schools* were observed.

The majority of the students indicated that the modular curriculum helps students to concentrate on one course at a time and get in-depth knowledge on the subject matter. The modular programmes was also seen as more purposeful and more efficiently organized to produce more value with less time and resources. The study participants have the belief that the organization of modular programme enabled them to have control over their own learning and encouraged them to accept greater responsibility for their learning. The majority of the study participants consider modular masters programme as an approach that enhances interactive teaching-learning, augments efficient use of time and other resources, promotes self-learning and facilitates face to face blended learning.

As opposed to the teaching staff, the overall perception of students about the outcomes of modular programme is also favourable. The majority of the study participants said that modular learning fosters more in-depth discussions, encourages classroom participation, improves student' class attendance and ultimately helps improve students' academic performance. In general, participants of this evaluative study favorably perceived the outcomes of modular programme.

On the negative said, whereas a modular curriculum requires careful planning and commitment on the part of the instructors, most of the respondents observed reluctance on the part of their instructors. A good proportion of the study participants also reflected that the division of the delivery of the modular curriculum in terms of interactive teaching-learning, self-learning and collaborative learning does not take into account the nature of the course. The qualitative data gathered also supported the findings that modular curriculum failed to take into account the nature of the course. There is a big variation among colleges and schools in the implementation of the modular curricle and block teaching to the extent that the reform is relinquishing in the fields of natural sciences.

It appears that the assessment procedures employed during the delivery of modular programmes have a number of limitations. The majority of the study participants have indicated that they do not get proper feedback about their learning. Knowledge of result plays significant role in motivating and maintaining students actively into the teaching-learning process. However, the data tell us that the majority of students are not getting proper feedback about their learning accomplishment. Another weakness observed was with regard to provision of resources. Availability of materials, aids and other resources is decisive to the success of modular delivery. The student reactions on this point are not pleasing. The exceptions are students in the category of "all schools" (i.e. School of Journalism, Institute of Peace and Security, Federalism) where resources seem relatively abundant and materials are available and accessible before commencement of class.

Currently tension has been created between the university's top officials' political desire to modularize all curricula and sustain their implementation on one hand and the desire of the postgraduate teaching staff tending towards course base and semester mode of delivery on the other hand. Accordingly, it can safely and logically be asserted that the quality of teaching and learning is at risk.

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Massive Open Online Courses (MOOCs) and Green Economy Transition: Feasibility Assessment for African Higher Education

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Abstract

Massive Open Online Courses (MOOCs) are a new phenomenon globally and in Africa. MOOCS have attracted student registration in hundreds of thousands per course in certain instances, as well as gaining acceptance across different societies. MOOCs present opportunities for learning in general and specifically learning towards green economy transition in Africa. Many MOOCs are currently hosted by institutions of higher education in the USA, with the first MOOC breakthrough entitled "Artificial Intelligence" having 'exploded' at Stanford University in California (USA) in summer 2011. The "Artificial Intelligence" enrolled 160,000 students, 23,000 of which graduated after 10 weeks. The question then is: are MOOCs feasible in educating African masses in the field of green economy transition? Born in 2008 and popularised throughout the years following the global financial crisis, world leaders confirmed from Rio+20 that green economy transition is the way to go if humanity is to remain sustainable on planet earth. This paper presents MOOCs as an emerging area with opportunities to enhance learning for green economy transition in general and specifically for Africa. The twin phenomena under discussion require massive roll outs of: firstly, learning management systems like MOOCs, and, secondly, the dissemination of massive appropriate content, knowledge and skills related to green economy transition that current formal education systems will not manage given the demand and urgency. The answer to the question raised is therefore a qualified 'yes' mainly due to limited e-readiness in the continent.

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Résumé

Les Formations en Ligne Ouvertes à Tous (MOOC)/ [FLOT] sont un nouveau phénomène en Afrique et dans le monde. Dans certains cas, des centaines de milliers d'étudiants se sont inscrits à des MOOC qui sont de plus en plus acceptées à travers le monde. En général, les MOOC offrent des opportunités d'apprentissage et des formations spécifiquement axées sur la transition vers l'économie verte en Afrique. Aujourd'hui, de nombreuses institutions d'enseignement supérieur aux Etats-Unis d'Amérique abritent des MOOC, et la première MOOC intitulée « Intelligence Artificielle » a connu une avancée remarquable après son « explosion » à l'Université de Stanford en Californie (Etats-Unis d'Amérique) à l'été 2011. Cent soixante mille (160 000) étudiants se sont inscrits au cours d'« Intelligence Artificielle », parmi lesquels 23 000 ont obtenu leurs diplômes après 10 semaines de formation. Il convient alors de se poser la question suivante : les MOOC permettront-elles de contribuer à l'éducation des masses populaires africaines dans le domaine de la transition vers l'économie verte ? Créée en 2008 et vulgarisée dans les années qui ont suivi la crise financière mondiale, lors du sommet Rio+20 les dirigeants du monde ont confirmé que la transition vers l'économie verte est la voie à suivre, si tant est que l'humanité entend vivre de façon durable sur la planète terre. Cet article présente les MOOC comme un domaine émergent porteur d'opportunités pour améliorer l'enseignement dans le domaine de la transition vers l'économie verte en général et en particulier pour l'Afrique. Le double-phénomène objet de notre analyse dans cet article nécessite des déploiements massifs, d'une part, de systèmes de gestion de l'apprentissage tels que les MOOC et, d'autre part, la diffusion de l'immense contenu, des connaissances et compétences appropriés relatifs à la transition vers l'économie verte que les systèmes d'éducation formelle actuels ne parviendront pas à réaliser en vase clos, compte tenu de la demande et de l'urgence. Il est donc de bon aloi de répondre par l'affirmative à la question posée, principalement en raison du faible niveau de cyber-préparation du continent.

Introduction

Although it may share in some of the conventions of an ordinary course, such as a predefined timeline and weekly topics for consideration, a MOOC generally carries no fees, no prerequisites other than Internet access and interest, no predefined expectations for participation, and no formal accreditation (McAuley *et al.* 2010:4).

Since the advent of MOOCs in late 2011, a number of service providers have emerged including Coursera, MIT's MITx and Havard's edX (Martin 2012). Martin concludes that there has been a significant impact from MOOCs, particularly their positive and likely future use in technical majors like computer science within universities. This observation gives Africa hope with regards to having massive rollouts in green economy transition learning. Although the first known MOOCs came into life in 2008 (Fini 2009; Mahraj 2012) the bubble burst came in 2012. George Siemens of the Canadian Open University,

Athabasca and a colleague, Stephen Downes from the National Research Council of Canada broke the ground with their course entitled "Connectivism and Connective Knowledge – CCK08 (Welsh and Dragusin 2013). Pappanao (2012) wrote in the New York Times that 2012 was the 'The Year of the MOOC'. Figures of 370,000 students were reported enrolled in the edX with Coursera established in January 2011, reaching 1.7 million registered students by October 2012, and thereafter rising to over 3 million in February 2013 according to Welsh and Dragusin (2013). The authors emphasise that through this landmark, Coursera grew faster than Facebook. A timeline for MOOCs is presented in Figure 1.

Figure 1: 2012 MOOCs timeline
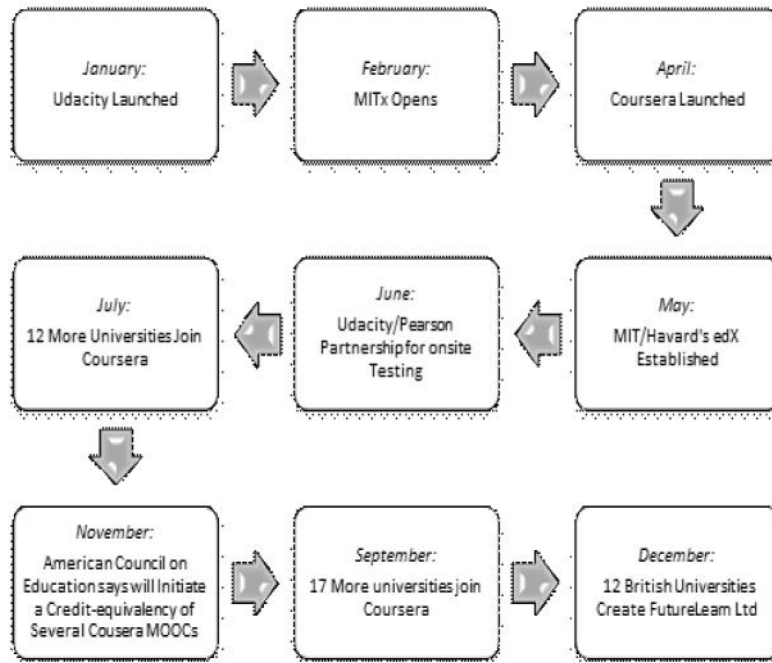
Source: Author (data from Watters, http://hackeducation.com/2012/12/03/top-ed-tech-trends-of-2012-moocs/ - 10 September 2013)

Russell *et al.* (2013) maintain that MOOCs will become the next generation education technology. They arrive at this conclusion by drawing lessons from past education technological breakthroughs that have failed to fulfill their promises. In addressing the question: will MOOCs make a difference in education

technology, the authors answered 'yes', especially given the context that a wide range of topics are addressed. In fact, Boven (2013) posits that MOOCs are the next game changer in education technology. Although not yet widespread in terms of universities offering MOOCs, Gaebel (2013) records an increasing trend with a 2012 US survey showing 2.6 per cent of universities having a MOOC whilst 9.4 per cent were reported as having MOOCs in planning stages.

Boven (2013) traces the origin of MOOCs from the open distance and e-learning movements of the late twentieth Century. In the same vein, MOOCs are viewed as opening up the education space for all as this is a "low-cost, meritocratic way to educate many people who have previously been left out" (Ibid:5). In a world that has identified green economy transition as one of the platforms for attaining sustainable development and poverty reduction, opportunities are awash to educate global citizens, particularly those in Africa through MOOCs. Although new, MOOCs are a model calling for action from policy makers and other related stakeholders. Nhamo (2013), presents a green economy growth readiness framework made up of six linked stages, among them: institutional and individual capacity building; high level leadership (political buy in and championing); as well as research, development and innovation. All these areas could be enhanced through the emerging and growing MOOCs. Nhamo further proclaims that at the centre of green economy transition are challenges of climate change, energy security, water security, wars and rumors of wars, overconsumption, poverty, inequality, joblessness and lack of skills, ill health and many more issues that remain thorns in Africa's fresh.

In as much as this paper is auditing the feasibility of a possible marriage between MOOCs and green economy transition, the research findings revealed that the marriage could have happened already even if that marriage is still young. Some 15 green economy related MOOCs were identified from a total of 435 available from the most popular MOOCs platform, the Coursera.

This paper has seven major parts, beginning with the introduction. Section 2, which is the next section focuses on the methodology of data collection. Section 3 looks at theoretical underpinnings on MOOCs and Section 4 deliberates on green economy transition. Section 5 discusses MOOCs and the green economy in African higher education, while Section 6 highlights policy issues on the subject matter. The last section is the concluding part of the paper.

Methodological Orientation

The field of MOOCs is almost brand new, having been popularised only in 2012. To this end, many research questions are emerging and will still continue to emerge. For this paper, the author asks and attempts to address the question: are MOOCs feasible in educating African masses in the field of green economy transition? Based on the said question, twin objectives are spelt out namely: (1) to determine the extent to which MOOCs are being embraced globally and possibly

in Africa and (2) to establish the potential of existing MOOCs in addressing knowledge, skills and content gaps regarding another relatively new phenomenon, the green economy transition agenda both globally and, more specifically, in Africa. The second objective compelled the researcher to visit some of the MOOCs platforms and examine the existence and/or offerings on green economy transition related courses including those on general ecology and environmental issues, population growth, climate change, low carbon development, good governance and corruption, energy efficiency and security, water, biodiversity, sustainable development and other topics related to the subject matter.

As part of the methodology, a number of MOOCs service providers including Coursera that is run for profit purposes (https://www.coursera.org/), MIT's MITx (http://www.mitx.org/) and Havard's edX, not for profit purposes (https://www.edx.org/), Udacity that is run for profit (https://www.udacity.com) were visited drawing from Martin's (2012) list. The Futurelearn (http://www.futurelearn.com/about/careers/) from the United Kingdom is a direct response to USA MOOC platforms. Other MOOC platforms include OpenUpEd (www.openuped.eu) of the Pan European MOOC Initiative and the Open2Study (https://www.open2study.com) an Australian MOOC platform. The author was interested in viewing the availability of green economy transition related course. Coursera is the most common MOOC platform running a partnership with 66 universities and business schools (Coursera 2013a). The number of courses recorded on some of the MOOCs platforms were as follows: Coursera (435 courses), OpenupEd (71), edX (67), Udacity (28) and Open2Study (27).

Following searches on selected MOOCs platforms, a host of green economy transition related courses emerged. A visit to the Coursera website was done (www.coursera.org/courses – 8 September 2013). The website hosts 435 MOOCs in seven languages, including English which had the majority of courses with 402 out of the 435. This was followed by Spanish with 12 courses, French with 11 courses, Chinese with 6 courses, German with 2 courses and both Arabic and Italian with a course each. All the 435 courses available were audited to determine their suitability to be placed under the green economy category with the environment-ecology interface being a dominant selection criterion. Details of the audit are presented in the findings section.

Theoretical Underpinnings of Moocs

It will be difficult to discuss MOOCs without considering 'e-', digital and networked readiness. As early as in 2003, the World Economic Forum and the Africa Union had become worried about the low levels of e-readiness in Africa (McPhie 2003). This was 8 years before the first MOOC emerged at Stanford University in California (USA). To address this concern, a project to assess the continent's e-readiness was implemented with three categories (1, 2 and 3) created to place countries according to their readiness based on certain criteria.
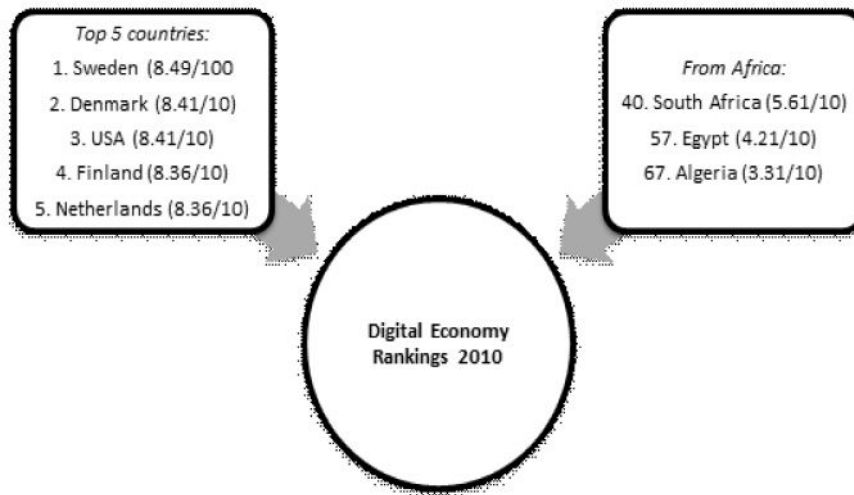
Those countries falling under category '1' were much advanced relative to their African peers and those in '2' and '3' also reflected their levels of readiness. Seven key criteria were set namely: "(1) Human Development Index (HDI) Score and related socio-economic factors, (2) Teledensity (fixed and mobile), (3) Level of telecom deregulation and state of progress, (4) Internet penetration, bandwidth availability, and cost, (5) Conducive legal, regulatory, and fiscal frameworks, (6) Infrastructure (communications and others), and (7) Economic development" (Ibid 11). A summary of the ranking is presented in Table 1. The three e-readiness categories are not fixed. A country can move up or down depending on progress (or lack of it). Out of the 54 countries studied, only five fell in the first category while 19 countries fell in the middle category.

Table 1: African Countries E-readiness Ratings and Categories

Category	Countries	Total
One (1)	Botswana, Egypt, Mauritius, South Africa and Tunisia.	5
Two (2)	Algeria, Cameroun, Ivory Coast, Ethiopia, Gabon, Ghana, Kenya, Libya, Malawi, Morocco, Mozambique, Namibia, Senegal, Seychelles, Nigeria, Tanzania, Uganda, Zambia and Zimbabwe.	19
Three (3)	Angola, Benin, Burkina Faso, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Congo Republic, DRC, Djibouti, Equatorial Guinea, Eritrea, Gambia, Guinea, Guinea-Bissau, Lesotho, Liberia, Madagascar, Mali, Mauritania, Niger, Rwanda, Sao Tome and Principe, Sierra Leone, Somalia, Sudan[1], Swaziland, Togo, and Western Sahara.	30
Total		54

Source: Author (data from McPhie 2003:12)

In 2011, *The Economist* published a report entitled "Digital economy rankings 2010: Beyond e-readiness" (*The Economist* 2011). The digital economy was measured through six (6) weighted parameters namely: (1) connectivity and technology infrastructure (weighted 20%); business environment (15%); social and cultural environment (15%); legal environment (10%); government policy and vision (15%) and consumer and business adoption (25%). A total of 70 countries carried over from the 2009 survey were involved. Figure 2 presents a re-analysis of the rankings. What is striking from Figure 3 is the gap between Africa's purported best with the world's best. South Africa, the highest ranked, comes in at number 40 globally with a score of 5.61 out of 10 compared to the world's best (Sweden) with a score of 8.49 out of 10. This implies that in the digital economy, the continent still lags far behind and needs to play catch up.

**Figure 2:** Digital Economy Rankings and Scores (out of 10)

Top 5 countries:
1. Sweden (8.49/100
2. Denmark (8.41/10)
3. USA (8.41/10)
4. Finland (8.36/10)
5. Netherlands (8.36/10)

From Africa:
40. South Africa (5.61/10)
57. Egypt (4.21/10)
67. Algeria (3.31/10)

Digital Economy Rankings 2010

Source: Author (data from *The Economist* 2011:4)

A 2013 report on "The Global Information Technology Report 2013: Growth and Jobs in Hyperconnected World" by Bilbao-Osori et al (2013) reveals much more. In the report, the authors use The Networked Readiness Index Ranking applied to 144 countries worldwide. The Networked Readiness Index Framework identifies an environment made up of readiness and usage factors (drivers) on one hand, and the impacts on the environment on the other hand. The environment is made up of the political and regulatory environment as well as the business and innovation surroundings. The readiness parameters include infrastructure, affordability and skills. All these parameters have a strong bearing on the application of MOOCs in the green (economy) growth transition. From the impacts perspectives, the relationship and outcomes addressing economic and social sides are looked at.

According to The Networked Readiness Index 2013 (Bilbao-Osori at el 2013) the top five countries are: Finland (1st), Singapore (2nd), Sweden (3rd), Netherlands (4th) and Norway (5th). From Africa, the top five countries include: South Africa which is ranked 1st (but 70th globally), Seychelles (2nd) and 79th globally, Egypt (3rd) and 80th globally, Cape Verde (4th) and 81st globally, and Rwanda (5th) yet, 88th globally. What is even more depressing is that of the bottom half countries (72 of them), Africa represent 50 per cent (36 countries) with only one country (South Africa) in the top half.

In answering the question: What is a MOOC, Gaebel (2013) finds himself listing the features and/or characteristics of MOOCs. Five characteristics emerged namely: they are online, with no formal entry requirements, no participation limit, they are free of charge and lastly, they do not earn credits. Even though no credits are awarded for completing a MOOC, a number of universities issue statements of accomplishment or a certificate of successful completion. Although 2012 is heralded as the birth year for MOOCs, multiple tipping points having been happening since 2008 in order to provide more learning opportunities and improve the quality of educational experience. From Gaebel's description, MOOCs fits very well into a framework that addresses blended learning (Figure 3).

Figure 3: MOOC's in blended learning environment
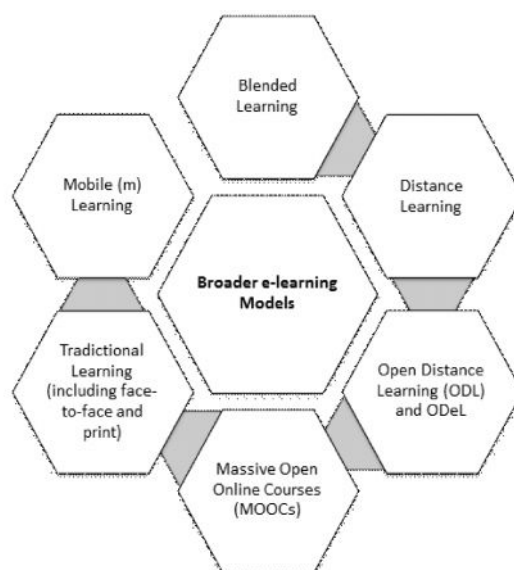
Source: Author.

Siemens (cited in Gaebel 2013:4) identifies two MOOCs models namely: the cMOOC and xMOOC. From the explanations, the 'c' stands for connectivity. In this model therefore, emphasis is placed on "creation, creativity, autonomy and social networking learning and focus on knowledge creation and generation". On the other side, the 'xMOOC' places more emphasis on traditional face to face (F2F) learning models that embed video presentations and short quizzes and tests. xMOOCs also look at knowledge duplication. Partnerships between

either for profit or not for profit companies and universities delineate responsibility as follows: universities or individual academics develop content and the companies do the production and technical facilitation.

Assessing MOOCs opportunities and risks

MOOCs present a number of opportunities and risks, among them, issues to do with technology, numbers and the collapsing of boundaries. In his study at Stanford University, Martin (2012) observed that MOOCs present real risks in F2F. From the Artificial Intelligence course, he noted that F2F attendance dropped drastically during the fall from 200 registered students to only 30 after a few weeks. The shift, Martins reckons, could be linked to carefully designed online courses. Table 2 highlights additional opportunities and risks associated with MOOCs that African higher education should take note of in the interest of engaging the green economy agenda moving forward.

Table 2: Opportunities and risks associated with MOOCs

MOOCs Opportunities	*MOOCs Risks*
• Remarkable ability to attract large numbers of students to a vigorous online learning community. • Easily transcend national boundaries, with many MOOCs drawing students from 100 – 200 countries at a time. • Available anywhere/anytime in small digestible components that allow students to learn easily and under a wide variety of places, times, and situations. • Successful MOOCS have engaged and socially active communities of students that pose problems, resolve questions, add additional material to the class, and support other students' learning. • Brings the notion of educational freedom – no structural authority for MOOCs.	• Have potential to put 3rd tier universities out of business. Third tier universities are those ranked last in a three cohort/tier system. Usually there are first (elitist), second (middle) and third tier (lowest ranked) universities. • Since MOOCS are a relatively new kind of online learning, there are relatively few studies written about them. • Massive online cheating (remedial measures now including an online code of ethics prior to taking classes). • Countries and organisations with low e-readiness will find it difficult to participate, particularly those in sub-Saharan Africa. • Africa still has issues with electricity availability and e-learning in general is difficult. • Other hinterlands of Africa are still not covered with network providers. • Peace and stability still remains a challenge with countries like Egypt, Libya and several in the Arab window still recovering from the Arab Spring (wave of political uprising). • Profit motives that lead to education being expensive and exclusive to the rich. • Generic in nature, not addressing a particular issue from a region or country.

Source: Author based on Russell *et al.* (2013:2396), Boven (2013) and Welsh and Dragusin 2013:57).

Selected MOOCs case studies

Although a new phenomenon, MOOCs have taken the world by storm. One of the commonly cited breakthroughs in MOOCs is the Artificial Intelligence (AI) course offered by Stanford University of California in summer of 2011 by two lecturers: Sebastian Thrun and Peter Norvig (Martin 2012). The AI course attracted 160,000 student registrations, out of which 23,000 graduated in the 10 weeks long course. This course took 10 weeks with two or three, 45 minute topics per week. The delivery methods included 15 to 20 short videos that had embedded questions, mainly multiple choice or fill-in-the-value. The success rate regarding graduated students was 14.4 per cent.

The high numbers in MOOCs enrolments is not common only in the USA. The numbers at Edinburgh University, United Kingdom show similar trends. Data recorded by Almpanis (2013) from the MOOCs at Edinburgh on Coursera platform revealed a total of 165,158 participants at peak enrolment. These figures covered six MOOCs. The data reveals that 54 percent of the participants were engaged in conversations. The course Equine Nutrition had the highest participation rate at 81 per cent and Critical Thinking recorded the lowest participation rate at 46 per cent. The remaining courses recorded conversation rates of between 52-54 per cent. Technologies including Facebook, the student Google+, tweets, blogs and Coursera forums all contributed to the mix (Almpanis 2013).

In deliberating further on MOOCs and the sustainability agenda, Almpanis (2013) observed that offering MOOCs for free was not sustainable for the future. The conclusion was reached based on the fact that there are costs associated with managing the platform, course designs and delivery. If MOOCs are planning to provide academic credits in the future, the ball game might have to change altogether. Almpanis ended by raising the following questions in line with MOOCs in the United Kingdom universities: What are the aims of engaging with MOOCs? What organisational change do new online models of education require? Further rhetoric questions were recorded from the MOOCs themselves. These include the following, among others: (1) How can learning in MOOCs be measured and/or quality assured? (2) Can we trust the future of higher education to venture capitalists? (3) Are employers globally going to become interested in MOOCs statements of completion? (4) If recorded video lectures are as effective as F2F lectures, how is that going to affect learning on campuses? (5) Will MOOCs have an impact on the paid for, generic, online distance learning courses? (Ibid).

MOOCs funding and nature of participants

Whether they are 'free' or for profit, MOOCs require substantial financial investments. Paul Fain (cited in Gaebel 2013: 6) makes a case for funding. He indicates that MOOCs production requires large teams. Some of the costs

related to Coursera are presented in Box 1. It was estimated that the few months from January to September 2013 witnessed amount of up to $100 million. Coursera is estimated to have attracted $22 million in venture capital. Harvard and MIT have pumped in $60 million (on 50/50 basis) into edX.

Box 1: Coursera related costs (business strategy)

- certification (students pay for a badge or certificate)
- secure assessments (students pay to have their examinations invigilated, i.e. proctored)
- employee recruitment (companies pay for access to student performance records)
- applicant screening (employers/universities pay for access to records to screen applicants)
- human tutoring (as opposed to automated) or assignment marking (for which students pay)
- selling the MOOC platform to enterprises to use in their own training courses
- sponsorships (third-party sponsors of courses)
- tuition fees.

Source: Gaebel 2013:7

Gaebel (2013) mentions that half of MOOCs participants are working professionals that are also enrolled elsewhere for education. School pupils and the unemployed comprised a small number. Up to 40 per cent of the participants signed up due to curiosity, whilst 30 per cent wanted to enhance their skills in a specific subject matter. Only 18 per cent wanted to move to a better job or post. In terms of geographic location, Coursera has up to 74 per cent of its participants residing outside the USA. edX highlights that at one stage, its 150,000 participants were from more than 160 countries. Companies including Google, Facebook and others have vested interests in MOOCs, and questions are always raised regarding their motives and motivation.

Advent of the Green Economy

The advent of modern day green economy has its roots in the need to address multiple global crises. However, at the centre of green economy transition is: financial, general environmental, climate change, energy, water, loss of biodiversity and other global crises. From the emerging work addressing green economy transition (UNEP 2011; UNCSD 2012; UNDP 2012; UNECA 2012; Nhamo 2013), I will summarise the main components of green economy to include the following key issues: the need to conserve the environment as life supporting rather than for economic development and growth, quest for renewable energy and energy efficiency, bringing all stakeholders to the table, wealth creation and poverty eradication, natural resources conservation, building climate resilient cities and infrastructure, involvement with climate smart agriculture, inclusiveness regarding all societal classes and countries, greening the mining sector and other energy intensive sectors, reducing the emission of harmful greenhouse gases that cause global warming which, in turn, leads to

climate change, understanding the needs of the weak at national and individual levels, working towards holistic sustainable development goals by 2016, and many more. In addition, the green economy transition is viewed as a supporting platform whereby global and local leaders can implement the sustainable development concept in different areas of governance such as, economic, social and the environment. To this end, it will be difficult to think of green economy as a product that is generic and that could easily be sold to everybody. Different nations and individuals relate differently to the green economy transition agenda. All nations should have the same understanding with regards to the fact that we are pressed to save our ecosystems. Given the challenge at hand, it is my conviction that MOOCs present yet another opportunity to educate masses 'freely' as I strongly believe that sustainability education (inclusive of green economy transition) must be offered free of charge irrespective of the costs involved in generating and delivering content. Therefore, if MOOCs can truly manage to give this green economy transition education for free, the world will be on the right path to global, national and local environmental and ecosystems recovery.

Moocs And Green Economy In African Higher Education

A total of 16 courses closely linked to the green (economy) growth transition agenda were retrieved from the auditing process as described under the methodology section. The details are further presented in Table 3. Some selected courses reflected interesting insights regarding the course content. For example, the Introduction to Sustainability course offered at University of Illinois at Urbana-Champaign is made up of the following fundamental green economy transition topics: population; ecosystems, extinction and tragedy of the commons; climate change; energy; agriculture and water; environmental economics and policy; and lastly measuring sustainability ethics and culture (Tomkin 2013). The Climate Literacy course offered at the University of British Columbia (Burch and Harris 2013) address the following major topics in the discipline: climate in the public sphere; introduction to the climate system; earth's energy budget; the carbon cycle; climate models; future climate; climate change impacts; climate change mitigation; climate change adaptation; policy tools for mitigation and adaptation.

Critical questions arise in this paper. For example, what is the role of education in promoting green economy? Is it knowledge generation, skills development or changing values? I argue that for now, it may be knowledge generation. However, in the long run, the other aspects of education covering skills development and changes in values could also be realised. This implies a combination of all the three facets of education highlighted herein. This may need further research after three or more years of MOOCs implementation.

Table 3: Green (economy) growth related courses from Coursera

Institution	Course	Resource Person(s)	Month, Year and Duration
University of Illinois at Urbana-Champaign	Introduction to Sustainability	Jonathan Tomkin	August 2013: 8 weeks
University of North Carolina at Chape Hill	Introduction to Environmental Law	Don Hornstein	September 2013: 6 weeks
University of British Columbia	Climate Literacy: Navigating climate Change	Sarah Burch and Sara Harris	September 2013: 10 weeks
University of Florida	Sustainable Agricultural Land Management	Goerge J. Hochmuth	October 2013: 9 weeks
University of Pennsylvania	Designing cities	Gary Hack, Jonathan Barnett and Stefan Al	October 2013: 10weeks
Pennsylvania State University	Energy, the Environment and Our Future	Richard B. Alley	January 2014: 8 weeks
Technion – Israel Institute of Technology	Nanotechnology and Nanosensors	Hossam Haik	January 2014: 10 weeks
The University of Edinburgh	Critical Thinking in Global Challenges	Mayank Dunia and Celine Caquineau	January 2014: 5 weeks
University of Wisconsin - Madison	Human Evolution: Past and Future	John Hawks	January 2014: 10 weeks
University of Florida	Global sustainable Energy: Past, Present and Future	Wendell A. Porter	March 2013: 15 weeks
University of Melbourne	Climate Change	Jon Barnett, John Freebairn, David Jamieson, Maurio Toscano, Rachel Webster and David Karoly	August 2013: 13 weeks
University of Illinois at Urbana-Champaign	Planet Earth	Stephen Marshak	Completed
Georgea Institute of Technology	Energy 101	Sam Shelton	Completed
University of Minnesota	Sustainability of Food Systems: A Global Life Cycle Perspectives	Jason Hill	Completed
Northwest University	How Green is that Product? An Introduction to Environmental Life Cycle Assessment	Eric Masanet	Completed
The University of Chicago	Global Warming: Understanding the Forecast	Paul D. Miller	Completed

Source: Author (data from Coursera 2013b)

From edX MOOCs platform, there were 67 courses reported (edX 2013). Of the 67 MOOCs, the seven closely linked to the green (economy) growth agenda included: Energy 101 (also available on Coursera), Solar Energy, Introduction to Water Treatment, Introduction to Human Evolution, Our Energetic Earth, Human Health and Global Environmental Change, and Challenges of Global Poverty. Udacity MOOCs platform was also visited and out of the 28 MOOCs, none addressed the green (economy) growth transition. OpenUpEd (2013)

had 71 MOOCs. Of the 71 courses, only one was identified as addressing the green (economy) growth. It is entitled: Climate Change – Context of Life Experiences. From the Open2Study (2013) MOOCs platform, 27 courses were available and only one addressed the green (economy) growth transition field entitled "Climate Change".

From the work presented herein, there is no doubt that MOOCs are for big (at times exclusive) universities and partners. Whether for and not for profit, big capital outlays are needed as well as big partnerships. MOOCs require high levels of e-readiness, digital upkeep and networked technologies. Questions then arise. Who are the big universities and potential private, donor and public funding partners in Africa? Which countries on the continent have high levels of e-readiness and associated digital and networked technologies?

Suggestions for Policy Makers and Higher Education

A number of policy pointers can be identified based on the emerging findings from this research and in line with the original question presented: are MOOCs feasible in educating African masses in the field of green economy transition? The answer is qualified 'yes'. I present and briefly discuss six policy suggestions namely: (1) the need for Green MOOCs; (2) MOOCs as corporate social responsibility; (3) MOOCs as community engagement/engaged scholarship; (4) Better performance compared to traditional face-to-face; (5) access to MOOCs infrastructure (both soft and hardware); and (6) Open questions for the future.

Towards Green MOOCs: The emerging findings reveal some compatibility between MOOCs and the green economy agenda (Figure 4) that could result in what I call Green MOOCs. However, Africa still needs to be aware that MOOCs may promote yet another economy contrary to the green economy that may result in yet further environmental decay as global governments face challenges in terms of employment creation and stagnation in growth. Hence for policy makers, business, higher education, NGOs, donors and other stakeholders, I proclaim a message for a Green MOOCs business case that requires a precautionary approach. The two areas under deliberation in this paper have a lot of similarities, among them: the fact that they are new areas (having both been popularised more in 2012); require massive resource investment; require learning, knowledge generation, innovation and skills development; involve huge volumes of people and materials; and the fact that the global population is learning by doing. We are going to be all learners and educators in the process as we shape, The Future We Want.

Figure 4: Towards Green MOOCs
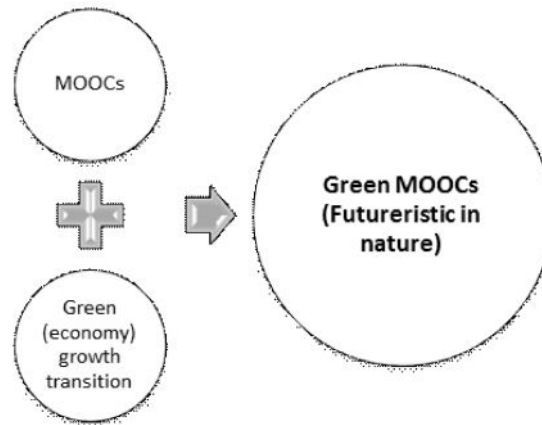
Source: Author

MOOCs as corporate social responsibility: The arguments for corporate social responsibility (including responsible investment) are overwhelming. Companies are moving from common spaces of social responsibility like sponsoring anything that kicks the ball, to education, infrastructure, health and environmental stewardship (Nhamo and Swart 2012). In this case MOOCs and, specifically, Green MOOCs could be a vehicle where the corporate world can make this required difference and save our planet. The corporate world could partner with African universities and assist them to design and set-up learning platforms that can host MOOCS courses. This could probably present a win-win (rather satisfy-satisfy) scenario to the partners from both the university and corporate perspectives.

MOOCs as community engagement/engaged scholarship: The point highlighting the win-win scenario between the corporate sector and institutions of higher learning is best embedded in community engagement. Universities the world over are battling with issues relating to community engagement (Nhamo 2012). In other words, having universities whose research and innovation as well as teaching and learning agenda is informed by what communities (our stakeholders) wish, want and need is both desirable and helpful. A classic example could be having universities address national development visions, many of which now incorporate the green (economy) growth transition agenda.

Better performance compared to traditional face-to-face: A 'Meta-Analysis and Review of Online Learning Studies' done by the USA Department of Education in 2010 concluded that "students learning online performed, on average, modestly better than those learning the same material through traditional face-to-face instruction, further enhancing online learning development" (Welsh and Dragusin 2013:54). However, the face-to-face approach is also on the rise in Africa. This should be taken on-board as a positive for green economy especially drawing from the fact that many African countries are still not e-ready. Hence for Africa, pushing both MOOCs and face-to-face education approaches remain fundamental.

Access to MOOCs infrastructure (both soft and hardware): It is common knowledge that many African countries suffer from basic MOOCs readiness components deficits including lack of adequate and reliable: electricity, internet service providers, cell phone network providers, modern computers, buildings and other necessities. E-readiness therefore is a key game changer in the manner in which African countries migrate to the proposed Green MOOCs.

Open questions for the future: Gaebel (2013) teases out the idea of what to learn from MOOCs. He then raises a number of questions that need further clarity into the future, particularly as they relate to African higher education. Are MOOCs a new model? Why have MOOCs been successful in the USA, but not elsewhere? What about language diversity? Are MOOCs signalling the death of universities? Are MOOCs paving the way for new means of knowledge dissemination? Can any university have a MOOC?

I will not attempt to address all the pointers presented by Gaebel when he responded to the questions raised but only two points will be addressed: one referring to the potential death of universities, and the other on whether it is possible for any university to offer MOOCs. Citing some responses from Professor Clayton Christensen of the Harvard Business School and Sebastian Thrun, Gaebel (2013:12) pointed out the possible indication of "wholesome bankruptcies" in the next decade among standard universities and highlights the possibility that we may have not more than a dozen universities by the year 2063. On the latter question, Gaebel (Ibid) notes that not every university may be in a position to offer MOOCs. He points out that current MOOCs are being offered by top notch and exclusive global universities and institutions like Harvard and MIT. Welsh and Dragusin (2013) concur with the challenges raised through the questions adding that with decreasing budgets; (lowly ranked) universities need to fine tune their online and classroom based education strategies, particularly those in developing countries such as those in Africa.

Apart from the questions raised herein, there are further issues concerning foreign versus domestic services and course providers. History has taught us

that in Africa, foreign interests usually come first in many deals. Hence there will be a need for further research in terms of the content and services being provided by these MOOCs and the manner in which African interests will be addressed.

Conclusion

There is no doubt that MOOCs are by their nature revolutionary. In a revolution there are certainly causalities, but before such a war, no one really knows the causalities. With the massive figures being cited (more than 3 million for Coursera alone) and the ever increasing MOOCs platforms and courses, the writing on the wall is becoming clearer daily that change can be expected, in terms of the traditional face-to-face, distance learning and e-learning platforms. MOOCs present both risks and opportunities for Africa, and in the context of this paper, Africa's green economy transition agenda. The audit informing this paper shows that there are already more than two dozen MOOCs focusing on green economy transition. The common MOOCs in this space are those addressing climate change, sustainability, energy and water issues. As time moves forward, there is no doubt that more courses in this space will emerge presenting further learning opportunities for Africa. Even though MOOCs are not yet accredited for degree and other awards, there is a global movement towards addressing this, particularly from the American Council of Education. There are big players sponsoring MOOCs, with investments of more than $80 million having been invested into the system from only three hosts (Coursera, MIT and Harvard). As the big university players get into the space as well as big corporates like Microsoft and Facebook, the future is unpredictable because the journey is still long.. This is apparently the time for Africa to join the MOOCs revolution. The future we want demands a knowledge economy highway focusing on multiple challenges facing the earth today, among them climate change, poverty, environmental and ecosystems degradation, loss of biodiversity, energy insecurity, water crisis, financial meltdown etc. Who knows, the MOOCs might just present Africa with that needed space for freedom in education. The questions we need to continue asking, however are, who will pay for the services? Where are the hidden costs? What about Africa's e-readiness? We want to be there!

Acknowledgements

Note

1. Now two countries (Sudan and South Sudan)

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The History of Makerere Institute of Social Research (MISR) and her Place in the Study of the Social Sciences in Africa

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Abstract

Following the research steps of the Rhodes-Livingstone Institute which started in 1937, three new research institutes were formed in the British Empire viz. The East African Institute of Social Research (later re-named Makerere Institute of Social Research [MISR]); The West African Institute of Social Research (WAISER) and the West Indies Institute of Social Research (WIISR). This expansion in knowledge production had its own logic and history as well as links to the deepening studies in social sciences, especially anthropology. Over the years, the Institute at Makerere has continued with a fledgling relationship with Makerere University with which it shares a history since 1948. We attempt to place the institute within a history; a history of social science knowledge production; a history of an endogenous institute attempting to attain indigeneity and space.

Résumé

Pour emboiter le pas en matière de recherche à l'Institut Rhodes-Livingstone qui a vu le jour en 1937, trois nouveaux instituts de recherche ont été créés dans l'empire britannique. Il s'agit de l'Institut Est-africain de recherche en sciences sociales (plus tard rebaptisé l'Institut de Recherche en Sciences Sociales de l'Université Makerere [MISR]); L'Institut ouest-africain de recherche en sciences sociales (WAISER) et de l'Institut des Antilles pour la recherche en sciences sociales (WIISR). Cette expansion de la production de la connaissance a sa propre logique et sa propre histoire et contribue à l'approfondissement des études en sciences sociales, en particulier l'anthropologie. Au fil des ans, l'Institut Makerere a continué à entretenir un

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début de relations avec l'Université Makerere avec laquelle il vit une histoire commune depuis 1948. Nous essayons de placer l'institut au cœur d'une histoire : une histoire de production de connaissances en sciences sociales ; l'histoire d'un institut local en quête d'indigénéité et d'espace.

Introduction

Social Science research appeared in Africa around the same time as colonial rule and often, the earliest amateur researcher who documented African custom and community life were either traders, explorers or colonial rulers. The research landscape remained disorganized until the founding of the Rhodes-Livingstone Institute of Social Research (RLI) [now the Zambia Institute of Social Research]. The RLI became a model of research success and influenced the Colonial Social Sciences Research Council to push for more of such institutes across the waning British Empire (in East Africa, West Africa and the West Indies) eleven years after the founding of the RLI. On the Makerere hill, just on the outskirts of Kampala, a research institute, dealing with social sciences, was started in 1948. The hill was also the site of Makerere College (yet to become a University College in 1950 and later University College for East Africa in 1963 [after Independence] and finally Makerere University in 1970). Thus, MISR shared the same geographical as well as academic space with Makerere University but with the latter educating Africans at home while the former provided space for 'expatriate' researchers whose products were less consumed in Africa than in the metropoles. We sought to interrogate whether the institute was really African by merely being located in Africa or whether it measured (through its history) to the gold standard in research. That the institute weathered independence and its attendant Africanisation rhetoric as well as the post-independence upheavals [such as Idi Amin) makes MISR an important area of study on its own merit. Besides, current efforts at MISR to resuscitate its life underlines the impetus of social research as it negotiates away from non-conventional cultures of research. However, the changing political situation in East Africa also affected the institutes' changing fortunes and posed constant challenges to its progress and existence. We therefore undertake a review of the institute's existence since 1948.

Observations and Reflections: A Research Institute/Institution as a Space

After World War II, social science research institutes emerged in the colonial world (Schumaker 2001; Werbner 1984) possibly as a gamble in the refiguring of the empire. The spectacle that sparked off the development of research institutes as a 'fashion' and African studies programmes within African universities and the west was occasioned by the spontaneous need for in-depth research and the desire to spur higher education in colonial territories (Onwauwa 1993). There ensued a discourse on the depth of engagement of

the institutes in both teaching and research; two core elements that define a university. The role of the university in newly independent African states (Sicherman 2005; Wandira 1977; Yesufu 1973) became debatable as well. This article seeks to examine the history of the institute within the ambit of its relationship with Makerere University in the light of research work and the extent of its relationship with the state (colonial and neo-colonial) [Mills, 2006]. An argument can be posed over attempts by MISR to claim autonomy from Makerere and the desire to control the 'shrinking' geography where field sites were located; sites that had no contact with the university. The challenges that affected Makerere affected the 'marginal' MISR (Macpherson 1964; Mamdani 2007) over the mutuality of identity and intellectual territory such as the formation of the University College of East Africa and, its subsequent break-up in 1970. The paper also interrogates the category of 'African' and argues that research institutes in Africa as well as universities carry this tag based on an archaic colonial stereotype. We shall argue, using MISR as a case study, that the critical space of the research institute in African Universities is often a misconceived and ambiguously [mis]understood allowing such institutes to remain starved of critical support from donors leading ultimately to low productivity and an eventual collapse into the knowledge-irrelevant sphere of consultancies.

After months of research at Makerere Institute of Social Research (MISR), I started to question the location of a research institute in an 'African' University. The term 'African University' has become dominant in the postcolonial intellectual discourse and, in simple terms, refers to a University that has increasingly become sensitive to the needs of the individual state [at least in Africa], the African nation and also the African 'community'; hence nothing more than a nationalistic entity. This meaning could also refer to a *quality*, synonymous with Africa that in Europe and America could mean 'inferior in global standards'. Authors were quick to point out the sense of pride associated with an African university (Wandira 1977; Yesufu 1973), more as a champion of the African cause (liberation, promotion of African culture, Africanisation of western knowledge systems etc.) but less to the furtherance of African knowledge systems and achieving parity with universities elsewhere. The University in Africa had played heavily in promoting what Ibrahim Abdullah has termed 'silences' over African knowledge systems (Depelchin 2004, preface). The question therefore is whether there is an 'African University' as a distinct category with a unique and a typical knowledge system that, without its frailties, measures against a global system and therefore renders pride to this term. Taken in the light of what Sicherman (2005) has referred to as 'Becoming an African University' referring to Makerere's development over the decades and yet making peripheral mention of MISR, I examine the question of 'African' in the light of the principal pillar of the University as a knowledge

producing space and therefore premised on *research* with a research institute as the pivot of research efforts. Research can be contained within a broader University curriculum (theses and dissertations, occasional papers, publications in peer-reviewed journals, public lectures, seminars, workshops, dissemination lectures, journals, books, publishing, colloquia etc) or be a specialized field, located within a research institute such as Makerere Institute of Social Research where a cohort of specialized researchers (visiting professors, readers, fellows, affiliates, associates etc.) work on topical and thematic fields with less encumbrance of constant teaching occasioned by mainstream university work.

It is the former that has shrouded the later due to the ever changing national aspirations and the shifting interpretations over the roles of universities in addition to the politicization of knowledge production in the postcolonial state (Government of Uganda 1970). Consideration of research at Universities has been largely confined to the main line of curriculum embedded research without due thought about it as a distinct professional field, replete with an institution, a space where research knowledge is assembled, produced and disseminated. This has relegated the products to nothing more than plagiarized pieces with little originality. Of course, the information is collected from the field and therefore the institute has to have a field (Schumaker 2001) with isolated entities and informants that are basically the source of knowledge (often considered as raw data) and, besides a library for purposes of referencing, bibliographic research, corroboration and a reserve for researches conducted earlier on. The institute/centre provides a space for critical thinking, stimulating debates in sharing research experiences, dissemination of organized knowledge and planning further research into territories hitherto unknown or needing new interrogation or correcting and filling up gaps in earlier researches. These institutes also become repositories for the knowledge gathered and also as bases for affiliated researchers with intentions to carry out deep research and produce monographs or theses to complete their advanced degrees. Why do they appear as silent spaces in the discourse of the University in Africa?

The current African landscape is related to every university having a research centre, albeit weak, in one or more of the disciplines, be it social sciences, natural sciences or pure sciences etc that has become a checklist for contemporariness. The visibility of the university is currently related to how much output, in knowledge terms, a University sends out. For instance, the 2010 Webometrics ranking provided a space for pride as well as self-reflection for universities in Africa. Apart from being on the marginal fringes of knowledge production, a ranking that put African universities at a distance from their Western counterparts, the rankings showed where in Africa knowledge was a serious consideration; South Africa and Egypt. The university's 2009 African rank of 15th caused celebration at Makerere with such poignant claims of 'the

Harvard of Africa' (http://www.jamiiforums.com/jukwaa-la-elimu-education-forum/52886-makerere-university-goes-top-in-the-region.html 09 Sep., 2011), which alludes to the shadow image, low, palpable and remote ranking African universities have had to accept. The ranking, based on internet visibility of publications, became euphoric when in 2010; the ranking improved to eighth position with questions such as 'how has your unit helped Makerere to achieve the lofty rank?' (http://newvision.co.ug/D/8/13/751088, 09 Sep., 2011). This brings us to another question, whether the concept of 'African University' does mean competitiveness in terms of global standards that will finally see an African university ranked better than most of her western counterparts or with African or national counterparts. The survey ranked 500 African universities and globally, Makerere positioned 2,685[th] out of 8,000 universities ranked! In exploring the university, it is without question that the earliest universities were located in Africa. Earlier African knowledge systems still awe many scholars but the modern university is and remains a colonial project, not the continuation or renaissance of the ancient 'golden age' of Timbuktu (Jeppie and Diagne 2004).

Makerere Institute of Social Research

Makerere University Institute of Social Research (MISR) in Uganda started as the East African Institute of Social Research (EAISR) in 1948. This name was changed to Makerere Institute of Social Research in 1967/8 (Makerere Institute of Social Research 1968). It was the second colonial research institute in sub-Saharan Africa after the Rhodes-Livingstone Institute in Northern Rhodesia. This emphasized the deep desire for social research and its impetus to the colonial authorities (Worthington 1968:40). In subsequent years numerous other institutes have been established in Africa, including the West African Institute of Social and Economic Research (WAISER) at Ibadan and the West Indies Institute for Social and Economic Research at George University in the Caribbean which has since closed plus other institutes at various universities formed after decolonization.[2] In recent years in particular there have been a growing number of social research institutes established at universities all over Africa. Similarly, centres and institutes of African Studies have become hallmarks of major universities in the Europe and America dealing with African studies. It remains interesting to understand why Africa continues to form an important subject of study, a field from which 'raw' data is collected and 'analysed' in 'research' centres located in the west. In effect, Africa constitutes the field and the west the research and knowledge producing centre. The position of the African university as well as the research centres is therefore space for mere knowledge outposts for the west.

The East African Institute of Social Research/Makerere Institute of Social Research was the pioneer in the institutionalising of social research in sub-

Saharan Africa and was graced by prominent social and political scientists as well as historians such as Audrey Isabel Richards, (Ardener 1992; La Fontaine et al.1972), Lloyd A. Fallers, Aidan Southall, Derek Stenning, and Ali Mazrui, etc.[3] The attainment of independence in East Africa critically occasioned a divide moment between the 'golden' and ebbing phases of the institute in terms of research productivity. The presence or absence and the role of such an institute in a postcolonial dispensation formed a not so important question for former colonial territories as research was not a national priority, especially the social type indulging in disciplines such as anthropology. Kuper (1999:143) has rightly observed that such institutions underwent cataclysmic transformations upon the attainment of what Sicherman (2005, preface) has termed 'flag' independence by new nations. Kuper's observation stresses the changes that came with the dawn of independence, but these were not the only changes as the entry of American financing of social research with a cohort of American anthropologists had already marked an important scholarly and disciplinary shift during the late colonial period (Goody 1995:26-52; Mills 2006:94; Shumaker 2001:28). These changes have largely been neglected in narratives of African scholarship.

The vision of starting the institute remained an ambiguity to many. Already, the Rhodes-Livingstone Institute in Northern Rhodesia (Zambia) was having complications related to the post-war dynamics when Turner, the Principal of Makerere suggested that the University needed a social studies research institute to cater for both the pedagogical needs of the college, and to provide the much needed information about the different cultures spread all over East Africa. Besides, the Colonial Social Sciences Research Council became interested in institutes in a post-war colonial project in which the empire was at stake given the decline of Britain and emergence of the USA as a super power (Nwauwa 1993). The colonial system desired an alternative think-tank to provide and generate ideas on how best to govern and therefore preserve the hegemony over a former empire as a strategic imperative. Colonial research institutes were to provide the missing intellectual gap. Audrey Richards[4] and Max Gluckman[5] visited Makerere College in 1944 and endorsed the starting of the institute, giving it a lifeline of direct funding from the colonial research funds under line R.85 and R.144 within the budgetary allocations for Makerere University (Stanner c.1949). The institute was therefore to develop ambiguously within Makerere University but the research needs and the immediacy thereto aroused questions from Dr. Stanner, the first director who eventually resigned in early 1950: questions that remain of resounding and critical value till date.

Stanner questioned the rationale of having the institute at Makerere rather than Nairobi, with the latter having a more ambient 'pro-white' climate and more so, having a huge regional research consortium to which social science research would be an addition. He exposed the underlying gaps in the proposal

to have an institute at Makerere *vis a vis* the research needs of both the East African territories as well as Makerere University's pedagogical needs, the possibility of having the well trained researchers, the slow development of the institute in tandem with Makerere's development plan, the lack of basic facilities such as accommodation as well as the research needs of the CSSRC which were not at all tenable with the earlier two. The idea of the institute had not been hers but Audrey Richards', who had been denied a directorship at RLI on account of being a woman, became the suitable replacement in 1950.

Re-orientation of the Research Landscape

Quick changes emanated from the colonial policies that were closely linked to the global geo-political situation that geared towards decolonisation in the post-World War II years. They were also related to the individual and official dispositions of colonial administrators towards social research generally. The Institute was started under the directorships of active anthropologists such as Audrey Richards and Lloyd Fallers, busy in the field and producing large quantities of hitherto unknown information, remapping the ethnological map of East Africa and running very productive inter-disciplinary and cross-institutional conferences.[6] At the dawn of independence, the institute was made to take up the outlook of the new state, as well as to assume the new role of becoming a beacon of African nationalist political thought, closely allied to political economy and agricultural development plus economics, a circuit referred to as Marxist thought. Six years after independence, African directors took over from their departing white counterparts at MISR and an increasing number of African scholars were sought. The former were not anthropologists but mainly sociologists, political scientists and historians. Scholarship was thus transformed or according to Schumacher (2001:8), 'Africanised'. Along this line, disciplinary outlines/syllabus at Makerere changed from anthropology to sociology, economics and political science, which the MISR fellows offering teaching services were made to adopt (Sathyamurthy 1973:557-579).

There was degeneration in research output that can be approximated to 1967. This development was closely related to geo-political and educational developments in East Africa, a development that had not been envisaged at the start of the Institute. This included but was not limited to individual state philosophies and research needs in which Makerere, which had hitherto been a University of East Africa saw the emergence of former constituent colleges in Nairobi and Dar es Salaam as independent universities seeking to establish their own research agenda and thus their own independent institutes. Besides, sensing that independence may affect research, the British established an alternate British Institute in East Africa that finally settled in Nairobi after stints at the Uganda Museum and at the University of Dar es Salaam from 1958 to 1963. The British Institute in East

Africa's agenda remained at the service of largely European (British) scholars with a deep orientation towards archaeology and not anthropology.

There remains a need to explore the wider fieldwork hinterland and the networks of the Institute and present a deeper history through documenting its rich and productive life.[7] This hinterland diminished with the changes in the regional politics. Over time, fieldwork sites were concentrated, more and more, near the institute. The lesser the concentration of fieldwork in areas distant from the institute the more evident it becme that the original geographical extent which covered much of present East Africa and Nyasaland had been gradually reduced. Rich bi-annual conferences were rotated amongst institutions in the three East African colonies and also benefitted from occasional presentations from IRSAC, a social research institute based in francophone Rwanda.[8] Thus without considering the ambivalence of the other East African colonies (not excluding Uganda and, Makerere University itself) towards the institute, major studies were in the centre of Uganda, closer to the institute. The institute can therefore be considered as more than a mere outpost of colonial social science research, but as an important African knowledge producing institution with social research centrifugally and centripetally arranged around its *topos* location at Makerere.

MISR'S research history did not escape what came to be called 'the South African Paradigm'(Bart-Gewald 2005:460) when, not only fleeing scholars from South Africa found home at the institute, but brought a South African influence in research systems in Africa beyond South Africa.[9] Thus MISR was not only a Makerere space or an East African one but African and global in a sense.

Early Developments

As early as 1943,[10] the idea of starting a social research institute was already being mooted. This coincided with both the increased interest in colonial social science research and the influential bearing of Dr. Audrey Isabel Richards at the Colonial Social Sciences Research Council. Without doubt, her field experience in Northern Rhodesia, of thrusting into a deep field without close supervision; occasioned by the distance between the fieldworker and her mother institution as well as her perceived relevance of anthropological studies to colonial administration were also pivotal factors. Fieldwork was a near-cult Malinowskian anthropological method and its close coordination and supervision through an institute of MISR'S calibre was of immense value. Seen through this, the institute over-concentrated on anthropology as a discipline at the expense of other social sciences.[11]

The Institute's development at different stages was closely linked to the careers of its directors and this relationship remains important in understanding a research institute, especially in setting the research agenda. Take the example

of the career of Audrey Richards, the founding Director, and the memory of her is more vivid than those of subsequent directors. Richards was among the first generation of women graduates from Cambridge and later became a dedicated student of Malinowski in London, becoming a disciple of his functionalist anthropology, first in her own research among the Bemba and then as a lecturer at the University of Witwatersrand and other subsequent works.[12] She was an important member of the 1940s Colonial Social Sciences Research Council (CSSRC), the originator and key brain behind MISR, becoming its second director in 1950. With excellent results at EAISR, she was asked to take up a teaching job at Cambridge where she founded an African studies centre, dedicated to the study of Africa.[13] She is an excellent example of many of the earlier directors and women anthropologists.[14] Richards' directorate at MISR is remembered more than any other largely because of the deep impact she had on shaping the earlier philosophy and trajectory of research that the institute came to undertake.

Beginning in Richards' period of directorship and the 'golden years' that followed, the Institute held conferences and published widely.[15] These often neglected conference papers, correspondences with Makerere and other stakeholders and, publications remain the important sources of information about the field, research methods, and sense of direction and cultures that developed at the institute, as they developed, shifted and changed over time. They constitute the most important source, together with annual reports, from which the history of the institute can be reconstructed. In this case, early research networks, when revisited; the 'field' in which its workers collected the information and organised and re-produced it at the institute serves a very important *memory* on the field cultures, viz the perceptions and observations upon a researcher by the informants who were being observed by the latter. What I argue here is that field observations are usually a multi-directional, multi-dimensional process rather than the assumed observation only from the researcher. When revisited, a memory sense of what knowledge the informants built about the researcher is also recaptured to form a new body of knowledge hitherto unknown. A visit to Lloyd Fallers' field sites in Busoga in March and April 2011 with new interviews with young men whose parents were Fallers' informants revealed rich information about field behaviours of researchers from MISR.[16]

It is fair to treat the connotation of 'Africanisation' primarily as a relational one: an exploration of the contribution of researchers (African or Africanist) and institutional affiliates to research, knowledge production and fieldwork. As earlier noted, the institute had framed three African assistants. Not only were they assistants but they worked on research projects of their own, often mentored by the senior colleagues. By 1952, both A.B. Mukwaya and E. Mulira were gracing EAISR conferences with well written and highly regarded papers

on Buganda. If this was Africanisation of knowledge production, MISR was way ahead of the other sectors of Makerere who were clamouring for Africanisation of the curriculum by 1962 (Sicherman 2005). This trend of 'Africanisation' continued in the life of MISR. Testimonies of fertile 'fields' for anthropological research even during the Buganda crisis (1952-1955) abound.

Later Years

Makerere Institute of Social Research remained a key social research centre at Makerere and in Africa, hosting both local as well as expatriate researchers. However, only partial work at the institute by both early and contemporary researchers is 'archived' and largely remains unstudied grey matter (Mbembe 2002; Stoler 2002:87-109), much of it having been repatriated to researcher's home institutions, denying Makerere the primacy over information collected in what could be regarded as its territory.[17] The history of the institute remains obscure more than the disciplines for which it was committed. It needs be pointed out that the political upheavals that rocked Uganda during the burdensome rule of Idi Amin (1971-1979) and the political turmoil that followed promoted a malaise that led to institutional decay and a downturn in research work whence the institute together with its mother university ebbed (Kajubi 1993).[18]

In 1987, a donor's conference to give a new life to Makerere was convened while by 1994; the university had fully embraced the World Bank's reform programs that turned the University into a virtual 'marketplace' (Mamdani 2007:13). Both events never took cognizance of MISR. The second development has been the incessant staff and student strikes that have rocked the University since the early 1990s, a reaction to the radical reforms emanating from the World Bank sponsored liberalisation programmes. Makerere became both the largest public and private university in Uganda (Muriisa 2010; Muriisa and Bacwayo 2010). Again, the implications this change had on the institute in particular and on social research generally, since the university was more based on private funding, gravitated MISR towards consultancies in order to survive. Consultancy deals were made with both Non-Governmental Organizations as well as government departments for reports that were widely rewarding. MISR researchers were more into wealth rather than knowledge production agents. Research and research centres were of limited priority in the university and '*research-phagy*' was not far off.

Makerere University

Perhaps what is unique about MISR, unlike RLI was its location within the university space. But there was always a desire for autonomy *vis à vis* integration within the Makerere University (Stanner c.1949). While the institute opened its doors in 1948, Makerere university had started in 1921/22 as a technical school well within the general schema of colonial education for the 'natives' in the

territories, which in Africa was called African education. It need be pointed out that following the Orms-Gore Commission of 1924, the Hilton Young Commission of 1927, the de la Warr Commission of 1937 and the Asquith report of 1945, Makerere College, hitherto at a level of a 'secondary school' and without satisfactory numbers of recruits was taking in students from all over East Africa and destined to become a University (Ashby 1964:19). Efforts were made to standardise the curriculum to match the standards in Britain and elsewhere in the British Empire from 1939. By 1949, the institute was in full gear but the College's negotiation with the University of London over the conferment of the latter's degrees at Makerere did not integrate the institute and research as an entity. There was initial acrimony relating to whether MISR was autonomous or part of Makerere University as the institute and research appeared 'marginal'.

The reason for this is clear. MISR neither enrolled students nor conferred any degrees, let alone running academic courses. The culture of research was regarded as a 'colonial trapping' and was not well developed at Makerere. MISR therefore occupied both the geographical and intellectual fringes of the university space. In order to cement this, MISR became a department in the Faculty of Social Sciences, with a Director and a committee selected by senior faculty staff and the earlier excitement and vibrancy was no more there by 1972. Yash Tandon resigned on 21 October 1971 due to the lack of the institute's autonomy just like his predecessor V.F Uchendu had done seven months earlier.[19] The latter had even contemplated buying land and building a new MISR, severing it from Makerere! The resignation was mentioned in a report for USAID authored by John D. Blumgardt in which inter alia he stated that:

> A major consequence of these changes has been the decline of social science research in Uganda. Research activities lost momentum with the loss of a fulltime Director and lost coherence as the programme became discipline–oriented rather than problem-oriented. Research work took on an individualistic character of a part-time activity which faculty members carried out as an adjunct to teaching – almost as a "hobby" as one informant put it. Another consequence was the inability of MISR to continue to attract foreign scholars to work in Uganda to the same extent as before. At the present time, social sciences research at the university is minimal and such economic analyses as are now being conducted are largely centred in the government ministries and in the central bank (ibid).

Blumgardt went on to state that "in East Africa the linkage between research institutions (the producers) and government (the largest consumers) is very close, except in Uganda". This was the premise of constant frustration at Makerere in relation to Makerere Institute of Social Research. Simply put, MISR had no local consumers of academic research products, not even Makerere University, and a new nexus had to be found.

It is important to pick a few lines from Tandon's resignation as it would be erroneous to assume that MISR's relations with Makerere were relaxed. Tandon wrote:

> I am convinced, nonetheless, that the present structure of MISR is completely inadequate to regenerate MISR. MISR's appalling degeneration since about 1967 is a well known fact…. That MISR's institutional structure inhibits its regeneration was known to us long ago….We had thought that the best way for a MISR renaissance was to recreate the pre-1967 structure: an autonomous MISR, independent of Faculty control. However, we didn't think this formula would be acceptable to certain vested interests in the Faculty. Refusal to grant independence to prestigious appendages (even if the prestige lies in the past glory) is not a colonial phenomenon only! …. My predecessor, Dr. Victor Uchendu,… those who know him well will know that by the time he left he felt frustrated that his attempts to regenerate MISR hadn't succeeded (ibid) [emphasis in original]

Thinking the Institute or Marginalizing it?

Writing institutional histories remains a difficult undertaking, especially in view of Uganda's turbulent past as rightly pointed out by Sicherman (2005:xvi), literature on research institutes as well as the 'work cultures' that ground such institutions remains of limited availability. Schumaker's (2001) path-breaking study of the social and intellectual history of the Rhodes-Livingstone Institute, MISR's only predecessor in Africa is exemplary. She examines the agency of both the 'field' and the institute in the production of knowledge with a culture of work interposed in-between. She argues that: 'The field often appears as an important context in social histories of anthropology. Rarely however have scholars taken the field site as the central context for a social history of anthropology.' Just like her study argued for a fieldwork-oriented approach to knowledge production, MISR took a similar approach like RLI. Researchers were pushed into the field at ferocious speed after initial induction in methodology and basics of African custom, followed by supervision by the director or a mentor from the institute. Path-breaking studies were made by MISR in the 1950s and 60s. Thus, the institute cut its own niche in the academy gravitating around fieldwork, fieldwork networks and the central control by the institute itself. The niche was established through increased engagement with a localisation process which Schumaker calls 'Africanization'; and such other processes that took place therein, including the interaction between stakeholders, the link between the institute and its 'publics' and knowledge production processes. Additional factors include the agency of the MISR researchers as well as the connections they made with the field and the close relationship that developed with the research assistants (Werbner 1984:157-185).

In examining the latter (African research assistants, 'culture brokers', informers and guides), it is fair to dig into the relatively narrow history of social science development in East Africa. A sizeable number of scholars had attained high level training overseas by the time MISR started but there was widespread belief that a western curriculum including research was not a suitable activity for 'natives' which permeated Makerere at this time. In retrospect, the elite 'rebelled' against the very disciplines they had trained in and the works they produced (such as Akiki Nyabongo 1936 and also Okot P'Bitek 1972) being epic criticisms of western knowledge systems. Writing in *Africa's Cultural Revolution* (1973:43, 102), P'Bitek made the following critical observation.

I have learnt very little from my literature tutors in school and universities. What they are teaching was irrelevant to my experience – the Shakespeares and the Shelleys…. In the educational section, break down the walls that surround our schools and universities and let the people who know our culture teach our people. Let us Africanise our curriculum in a meaningful manner. Let African culture be the core of our curriculum and foreign culture be at its periphery…

In effect, few East Africans could produce a home grown anthropology using a western rubric. The institute was at crossroads at the wane of the empire and retreat of colonialism. Nationalism and its desired independence attracted scholarly activism that became the basis of much of the literary writing and critique of social science. But it needs be stated that the structure of the institute provided for three African assistants against an unlimited number of European and American researchers or better, 'culture brokers' whose main role was to guide, negotiate acceptability and interpret for the researchers from the local dialect and vice versa. They were also to ensure that the researchers were safe in their field locations, although most researchers stayed at *gombolola* (sub-county) headquarters, rode around on motor cycles and in case the informants were within reach, walking; often clad in Khaki, typical of 'white man's' power, never dined with local people except tea with chiefs and, are fairly remembered for 'recording traditions'.[20]

It is important to better understand Schumaker's insights, especially around the notion of the 'cultures of work' occasioned by not only lengthy fieldwork but also developed in institutional spaces like seminars. The networks and comradeship established around the personality of Max Gluckman, just like Audrey Richards are instructive in demonstrating the importance both of the institute, its directors and the individuals who used it as a springboard for their careers. In this, four ideas drive the argument: 'networks, cultures of research, the coproduction of scientific knowledge, and the field as a negotiated space for the production of knowledge rather than a mere source of data' (Schumaker

227). Audrey Richards pointed out the developing culture of field work around MISR by mapping the active field sites in 1950 spanning the whole length and breadth of East Africa:

> The Jinja survey has started and the Sofers are doing quite well but it takes Batsons social survey people six months to realize that it is a waste of time to do a statistical count of marriage etc until you know something about marriage. I have had to let them follow their training and an interested to watch the doubts now beginning! Elizabeth Colson was here for a week and gives them three months more to realize that the random sample is o use here!.... Fallers arrives at the end of October to start the on the Soga. Taylor is going to do the Zinza in the Biharamulo area. A Chicago lady, Priscilla Copeland is to do the Bahaya. A Dutchman is just coming to do the Ha. And we have very many out-patients. (Taylor among the Toro. Very weak in the field as you prophesied. (When I tell you that his first attempt within the first three weeks was to make all school children write an article on witchcraft and writes to tell me he has now mastered the subject!). Ed Winter and his wife doing well among the Konjo where there is a real tropical stuff – all swinging monkeys, parakeets and a fringe of pigmies along the roads. Southall is finishing up among the Alur. Girling dong a random sample of clan membership from the tax registers among the Acholi. (What things people do!) Middleton rather unhappy among the Lugbara. People can leave their field so easily by car that they never get over their initial depression as we had to.[21]

Africanisation, the African University and the East African/Makerere Institute of Social Research

Sicherman (2005) has defined the process of 'Africanisation' as an exploration of how:

> … to find the best ways for universities in Africa to cope with the immediate and urgent demands made of them for the improvement of African society and at the same time [to] remain loyal to the world standards of higher educational institutions … Africans thought that in order to achieve the purpose of any university – train[ing] individuals for national development and conducting research both of an applied and pure nature – there must be emphasis on African content in course structures and a conscious fashioning of training and research to respond sympathetically as possible to the expressed needs of governments and national populations (Sicherman, p. 2).

Already, such 'Africanisation' processes had been the gist of demanded reforms at and after Uganda's independence in 1962, in the sense of the curriculum, the relevance of the university to the community, the non-cultural alienation of university products and personnel as well as research. Wandira (1977); Yesufu (1973); ESAURP (1982), each dealt with the various roles of an African University and its African functions. In doing so, they failed to realise the ascriptions to primordialism and political penetration that Mugerwa (2002) realised had been the bedrock of inefficiency in delivering service at Makerere

University, just like Mamdani (2007) used the model of a 'marketplace' that Makerere has portended lately. This was the question Ashby (1964) asked as to whether a university in Africa can subscribe to a global role while trying to populate its African (individual state) agenda. Suffice it to state that the African University as a distinct category still has a task to adjust to a global 'gold' standard, let alone defining what is uniquely African. Zeleza and Olukoshi (2004); Alemu, Halvorsen and, Mwiandi (2010 vols. I and II) contend that universities in the Nile Basin need to 'shape' and 'reshape' as to meet the research criteria on which high grade universities are adjudged. Similarly, Musisi and Muwanga (2003) contend that Makerere is in 'transition'. It is this transition that should accommodate the centrality of a research agenda that is both institutionalised and curriculum based.

Although the East African Institute of Social Research was a colonial research facility and was a theoretical midwife of the late colonial system, it adjusted to serve the postcolonial system equally; hence its location within Makerere remained a centre of ambiguity. It was not wholly instrumentalised politically, drawing a distinction between the state and knowledge production, while the state was more concerned with the mainstream university. While Gladstone (1986:338-363) argues that research in Africa enriched knowledge systems in the West and produced new areas of knowledge, MISR became a hive of government activity in the 1950s and 1960s and the Department of Rural Development was entirely dependent on EAISR for the design of community development efforts.[22] However, the EA/MISR remained as an *exotic* piece at Makerere, whose contribution in knowledge production was collapsed in the 'precious baby' of Audrey Richards.[23] MISR was located on the same hill-campus with the University but fluctuated between being part of the University and semi-autonomy, parameters that have dogged it in its history (Mills 2006).

It is fair to state that the early work at the institute not only enriched social sciences where large volumes were produced (Parkin 1990) but also the knowledge about East Africa which formed the basis of the pedagogical knowledge used for teaching and Africanising the curriculum at Makerere and universities elsewhere. Besides, due to increasing lack of qualified staff at Makerere, the rubric for EA/MISR was changed to ask researchers to teach in their respective fields/departments as part of their tenure at the institute. The situation reached critical levels in 1973 when, due to heavy brain drain occasioned by state-inspired insecurity, Pakistanis were brought in as lecturers and the skeletal staff at MISR were pushed to teaching. The relative security offered by the university campus forced what had been researcher's accommodation known as MISR flats to be changed to lecturer's homes till 1994. It is often unimaginable how MISR doubles as a research centre and operates lodge-like flats, which offer accommodation to visiting researchers without leaving a university environment.

Table A: A checklist of directors since 1948 and their disciplinary orientations

	Period	Name	Gender	Discipline
1	1948-1950	W.H. Stanner	Male	Economics
2	1950-1956	Audrey Isabel Richards	Female	Anthropology
3	1956-1957	Lloyd Ashton Fallers	Male	Anthropology
4	1957-1968	Aidan Southall	Male	Anthropology
5	1968	Ali A. Mazrui	Male	Political Science
6	1968	Yoweri Z. Kyesimira	Male	Economics
7.	1968-1969	D.G.R. Belshaw	Male	Agric. Economics
8	1969	J.J. Oloya	Male	Agric. Economics
9	1969-1970	Uchendu	Male	Agric. Economist
10	1970-1971	V.F. Aman	Male	Agric. Economics
11	1971-1972	Yashpal A. Tandon	Male	Political Science
12	1972-1974	Gincyera Pinchwa	Male	Political Science
13	1974-1977	Frank Karugire	Male	History
14	1977-1982	Benon Rugyema	Male	History
15	1982-1992	Benon Muguwa Mudoola	Male	Political Science
16	1992-1996	Appolo R. Nsibambi	Male	Political Science
17	1996-1997	James Katorobo	Male	Political Science
18	1997-1999	J.C. Munene	Male	Psychology
19	1999-2010	Nakanyike B. Musisi	Female	Gender Studies
20	2010-	Mahmood Mamdani	Male	Political Science

Source: http://misr.mak.ac.ug/Past%Directors.html (accessed 10/03/2010).

There is also a case to be made for exploring the work of those who were linked to Makerere and the Institute though not formally employed. In the MISR structure, they were referred to as research associates such as Archie Mafeje whose ideas about knowledge production and anthropology became highly significant in shaping social science debates for several decades.[24] Mafeje's doctoral study was on commercial farmers in Uganda and he was closely linked with the Institute during his fieldwork years (1965-7). Credited for not referring to a 'tribe', the kingpin of anthropological study, Mafeje's work marked a shift in the discourse on African people by African scholars, by rejecting the western disciplinary canon of 'tribe' as the ultimate African condition. Mafeje also taught courses at Makerere during 1967 alongside conducting his doctoral research in Buganda while based at EA/MISR.[25] His

turn to sociology was era-marked as anthropology largely lost agency in the postcolonial landscape as pointed out by Galtung:

> A painting used to hang in the ante-room of former president Kwame Nkrumah. The painting was enormous, and the main figure was Nkrumah himself, fighting, wrestling with the last chains of colonialism. The chains are yielding, there is thunder and lightning in the air, the earth is shaking. Out of all this, three small figures are fleeing, white men, pallid. One of them is the capitalist, he carries a briefcase. Another is the priest, he carries a Bible. The third, a lesser figure, carries a book entitled African Political Systems: he is the anthropologist... (Kuper 1996:94) [emphasis in original]

Although anthropology was 'fleeing', researches continued to flock into East Africa with MISR as a staging post.

Conclusion: The Institute, the University and Social Research

Whereas EAISR/MISR was housed within Makerere College, it has continued to claim a semi-autonomous status; a position which is rather ambiguous and its relations with the Makerere University remained tumultuous (Sicherman 2005:30). All scholarly works on Makerere University give a peripheral treat to the institute (cf. Sicherman 2005; Mugerwa 2002; Mamdani 2007; Macpherson 1964) lending it an isolated 'Ivory Tower' and 'alien' and exotic status. Our argument here is that although Makerere Institute of Social Research is geographically located at and within Makerere University, the study of the institute, reveals greatly how MISR attempted to establish its own research and work culture, chart its own history and attempted to attain autonomy. We have attempted to document the ups and ebbs of an institution and the roles played by key actors using MISR and its often ambiguous location within Makerere University as both a geographical and intellectual space during the formative and later years.

The history of the Institute is deeper than can be completely documented here. Serious attempts are needed in studying the critical role of the institutes of research; assess their roles in shaping the University research; in career development and, in helping universities attain a 'global' value towards attaining centrality in knowledge driven systems. The institute at Makerere started in 1948 but social research had been around since colonial times. Newer institutes appeared in Nairobi and Dar es Salaam as well as a number in Makerere (such as the Economic Policy Research Centre). Later (current) efforts are more aimed at scoring the centrality of the institute and research within Makerere through both developing a new research agenda as well as recovering lost glory.[26]

Notes

1. Material of this article was assembled when I was a Doctoral Fellow at the Centre for Humanities Research, University of the Western Cape (2010-2012). I thank Prof. Premesh Lalu, the Director of the Centre as well as Prof. Andrew Bank, my doctoral supervisor plus all Fellows and colleagues at the Center for the stimulating environment and guidance.

2. An OECD survey in 1972 reported returns from 23 institutes of social and economic research in African Universities where MISR was leading the pack with 111 teaching and research staff plus 12 administrative staff.

3. See Table 1.

4. Secretary for the Colonial Social Science Research Council (CSSRC) known for her forceful nature on her initiatives.

5. Then Director of the Rhodes Livingstone Institute and therefore very experienced in colonial research institutes.

6. The very first conference held 17-23 Dec., 1950 was a marker of academic prosperity of the institute. Lucy Mair reported in *Man* what suggests to be a variety in the research menu: Lloyd Fallers and Mrs. Chave Fallers on Busoga; Dr. Fisher on Kikuyu; Mr. Phillip Gulliver and Mrs Gulliver on Turkana and Karimajong; Prof. E. Hoyt, a Fullbriht Fellow and Dr. Jacques Maquet (IRSAC) on Banyarwanda; Mr. John Middleton on Lugbara; Mr. Mulira on Buganda(Luganda); Mr. Philip Powesland, Mr Cyril and Mrs Rhona Sofers on Jinja; Mr. Aidan Southall on Alur; Mr. Brian Tyalor on Batoro; Mr. J.W. Tyler on the Zinza; Mr Edward and Mrs. Winter on Bamba-Konjo; Mr. Wilfred Whiteley (government anthropologist, Tanganyika) on Makua; Dr. A.N Tucker and Mrs.E.M Chilver (Secretary of the CSSRC); A.I. Richards and J.M. Fortt on Buganda.

7. The subsequent conferences held annually were even richer than the first one till 1968 when matters began to change. The institute had entered the circuits of knowledge production and was the most well known section of the University beyond East Africa, already producing its own Journal, *Nkanga* which circulated widely.

8. Rwandaphones in Uganda became one of the earliest research problems to be examined by the institute.

9. Many South African scholars, wary of the growing influence of political anthropology came to MISR, such as Peter Rigby, Adam Kuper and those who could not carry out fieldwork in South Africa such as Archie Mafeje.

10. J.H. Hutton to Monica Wilson Hunter, 23/12/1943, ref. 27/46, UCT Archives, Box 880, file B. 4.12.

11. There was overconcentration on anthropology and other social sciences received little attention. However, the intensity of field research is evident in a letter by Audrey Richards to Monica Wilson, dated 15.ix.50, Box 880, file 4.12, UCT

Archives, indicating as many as 12 researchers from the institute deployed in various areas of Eastern and Central Africa. In a edited volume, *Social Change in Modern Africa* (London: Oxford University Press, 1961), Aidan Southall richly details the results of an international seminar held by the Institute in 1959.

12. Richards has been described as a woman of deep passion for research. Her work in Nyasaland became a subject for re-research by Henrietta L. Moore and Megan Vaughan in *Cutting Down Trees: Gender, Nutrition, and Agricultural Change in the Northern Province of Zambia, 1890-1990* (Portsmouth, NH: Heinemann; London: James Currey; Lusaka: University of Zambia Press, 1994) where they find the *citemene* shifting cultivation system still alive but are awed by the geographical extent covered by Richards, and therefore ascribe to her path-breaking exploits.

13. Adam Kuper. *Anthropologists and Anthropology: The British School, 1922-1972* (London: Allen Laver, 1973), p. 91.

14. This career can be seen through what Nancy Lutkehaus has described as 'very Cambridge' a cohort of women who graduated from Newnham college and went on to LSE for Malinowski's classes and dominated anthropology.

15. At its golden time, David Mills has pointed out that an institute conferences lasted a week! In the 1966 conference for instance, 50 papers were delivered besides the 33 volumes of the *East African Book Series*. See David Mills, p.95.

16. Interviews with Yosiya Mukupya 72, 27/2/2011, Iganga; Tabingwa 81, 26/02/2011, Naigobya; both children of Fallers' informants. The present status of Busoga, studied by Fallers sixty years ago reveals deep socio-political changes of widespread nature that contrasts with his accounts.

17. The state of the archive did not reflect any academic activity related to its existence and was being 'ordered'. Beyond this, with the exception of Peter Rigby, few significant past associates had deposited their collections here, preferring to deposit them in metropolitan universities. The state of the archives in Uganda reflects what Mbembe has called 'prisons' or 'graveyards' of documents.

18. This period is particularly noted for the fleeing of scholars and the decline in institutional output of publications and annual conferences as well as reports.

19. Yashpal Tandon 'Letter to members of the Faculty of Social Sciences and other interested members of Makerere', 21 Oct., 1971, available at the MISR archives, Makerere University.

20. Interview with Yosiya Mukupya, Busambira, …

21. Audrey Richards to Monica Wilson, 15.IX.50, BC 880, University of Cape Town Manuscripts and Archives.

22. Yusuhu Lule, the Minister of Rural Development in the 1950s came to the institute weekly for meetings over a framework for rural development in Uganda, meetings that were attended by the Director, senior researchers and involved further work for the Department. The case was similar for the Ministry of Education dealing with researchers at the institute in Primary education, dealing with such social problems as 'school drop-out' at primary and secondary levels.

23. Audrey Richards to Monica, 6.VI.54, Box 880, UCT Manuscripts and Archives.

24. Mafeje was a student of Monica Wilson and later Audrey Richards. His doctoral research in East Africa was carried out using the EAISR as base, taught lessons at Makerere University. Many other liberal minded South Africans 'fleeing' the reification of racial difference in South Africa also found home at MISR and, Makerere. Later, Mafeje preferred Dar es salaam to Makerere where he taught sociology.

25. It was in this year that the change from East African Institute of Social Research to Makerere Institute of Social Research was debated.

26. From 2012 for instance, MISR introduced a 5-year doctoral course, re-oriented from the consultancy and NGO culture and aimed at training a new cohort of social science researchers at 'home'.

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The British Model, 'Africanization' of the Curriculum and Other Issues: The Influence of Professor D. W. Ewer (1913-2009) on University Teaching in Ghana and on Biological Education in Africa

Richard Alan Baker*

Abstract

Dennis William Ewer was Professor of Zoology during the formative years of tertiary education in Ghana and served as a distinguished academic in three African universities. In Ghana, he made an outstanding contribution to tropical biology and biology education. This historical account of one man's attempt to improve the teaching of biology to African students is noteworthy for several reasons. He was an enormous influence for change in how and what biology was taught at both secondary and tertiary levels. Anxious for radical change and to break the mould of the Oxbridge tradition, he worked tirelessly to put an end to the British system of teaching biology and alter the course material to make it relevant in an African context. He believed that the transplantation of the British model was inappropriate for Africa. He emphasized the need and importance of training technicians and placed teaching before research in his priorities. In terms of the curriculum, ecology should, in his view, be the central integrating theme in Africa with a preferred slant towards applied biology rather than the pure science courses of the developed world. Ewer was also a prime mover for change at the secondary school level, helping to improve the biology syllabus, editing textbooks, and providing teacher's guides. He was critical of the then current school teaching in biology because it bred passive students with bad work habits and believed there was a need to challenge students intellectually, both at school and university. This led him to clamour for new approaches in both secondary and higher education.

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Résumé

Dennis William Ewer était professeur de zoologie durant les années où l'enseignement supérieur était à l'état embryonnaire au Ghana et a servi comme universitaire de haut rang dans trois universités africaines. Au Ghana, il a apporté une contribution exceptionnelle au domaine de l'enseignement de la biologie et de la biologie tropicale. Ce récit historique de la tentative d'un homme pour améliorer l'enseignement de la biologie aux étudiants africains est remarquable pour diverses raisons. Il y a été pour beaucoup dans le changement apporté au contenu et à la façon dont la biologie est enseignée aux niveaux secondaire et supérieur. Soucieux d'un changement radical et de briser le moule de la tradition d'Oxbridge, il a travaillé sans relâche pour venir à bout du système britannique d'enseignement de la biologie et pour modifier les supports de cours et en améliorer la pertinence dans un contexte africain. Pour lui, il était inapproprié de transposer le modèle britannique en Afrique. Il a souligné la nécessité et l'importance de la formation des techniciens et a prôné la priorité de l'enseignement sur la recherche. En termes de programme, l'écologie devrait, à son avis, être le principal thème intégrateur en Afrique avec un accent particulier sur la biologie appliquée contrairement à l'enseignement des sciences pures dans les pays développés. Ewer a également été une force motrice qui a impulsé le changement au niveau de l'enseignement secondaire, en aidant à améliorer le programme de biologie, l'édition des manuels scolaires, et en fournissant des guides de l'enseignant. Il était critique à l'égard de la façon dont la biologie était enseignée dans les établissements scolaires, car cette approche ne formait que des étudiants passifs ayant de mauvaises habitudes de travail ; de ce fait, il croyait qu'il était nécessaire d'inciter les élèves intellectuellement, tant dans les établissements secondaires qu'universitaires. Cela l'a amené à réclamer l'adoption de nouvelles approches dans l'enseignement secondaire et supérieur.

Introduction

> 'It is primarily on biology that the future of Africa depends; and the same is true of the rest of our tropical possessions' (Huxley 1936).

This paper is based largely on staff files held at Oxford University, on other previously unpublished work and on the personal recollections and reminiscences of former members of staff, who had worked in selected African Commonwealth countries. The Oxford Development Records Project Report, held at the Bodleian Library of Commonwealth and African Studies, University of Oxford, houses documents on higher education in anglophone tropical Africa.[1] In an 'Aide Memoire' sent by the Project staff at Oxford in 1982, former staff were asked to complete a form and encouraged to write more fully about their experiences during this pioneering period of Higher Education in Africa. Amongst these papers are several from university pioneers who, in

addition to their reflections, deposited university documents relating to their time in Africa. Further files were written by Professor Ewer after he returned to the UK in 1974, in which he prepared comprehensive notes about his work during his time in Africa. A departmental brochure by Don Thomas gives details of the Ghanaian department up to the early 1960s: 'University of Ghana, Department of Zoology, retrospect and prospect' (Thomas 1962). The present paper relates to the period from 1948, when the University College of the Gold Coast[2] was founded, to 1973 when Professor Ewer retired.

Tropical African university education based on the British model[3] saw its real beginnings in the late 1940s and early 1950s. It was viewed as the commitment to political advance or as Peel (1984) has described it: 'the local rise of the educated led directly to their assumption of the key role in the movement for national independence' and thus regarded education as a vital move towards colonial self-government. The Elliot and Asquith Commissions[4] laid down the ground rules. Like similar colleges in Nigeria and Uganda, University College, Gold Coast was based on the British model, and had, in the early years, very close links with British universities and a 'Special Relationship' with the University of London. This latter arrangement allowed graduates from these colleges to obtain degrees from the University of London. Firm foundations for higher education had thus already been laid. In Sierra Leone, Fourah Bay College had been established by the Church Missionary Society in 1827 and on the Gold Coast there was Achimota School which formally opened in its new buildings in 1927 (Williams 1962). In Uganda, Makerere was founded as a Technical School in 1922 and Yaba Higher College, Nigeria, opened in 1934.

Virtually all of the early staff in Ghana were expatriates from Britain, filling between 80 and 100 per cent of the posts in Zoology in 1960,[5] and almost all had little or no experience of Africa. The courses in biology, although initially at sub-university standard (Intermediate BSc, or roughly A-level today), were based on the British system, and in zoology included dissection (of dogfish, frog and rabbit or rat), with comparative morphology and anatomy dominating the curriculum. There was virtually no mention of the protection neither of natural resources and the environment, nor of wildlife conservation and management as we have in the curriculum today. When asked about courses in these areas, Ewer commented 'In the time I was at Legon, the ideas were still very vague…Remember I am a laboratory rat and uneasy with the sort of "scientific natural history" which lacked proper controls'.[6] The curriculum gradually became Africanized as it was realised that the 'imitation of imported conventions and models will not do' (Habte & Wagaw 1993), but at first there were few student textbooks and little information was available about the flora and the fauna of the region.

Around the time of Ewer's appointment, movements for the Africanization of the science syllabus in universities was gaining pace and being implemented in some institutions where it was felt that 'the content in particular must be more closely related to the needs of Africa' (Green 1962). Basic training, it was reported, should be 'inspired and guided by local conditions…based on local nature and culture'.[7] There were however huge problems in trying to achieve this. There was an urgent need for scientific journals and scientific supplies; there was a lack of trained technicians, too heavy a teaching load, a shortage of suitable textbooks and limited budgets (Green 1962), as well as the absence of a history and culture of scientific activity. In addition to changes being made in the curriculum, in the early 1960s attempts were made to Africanize the staff, despite 'clumsy intervention' and 'bluster' by politicians and the press (Ashby 1964).

What therefore motivated staff to go to Africa? What experience did they already have? What were their early impressions? What were the facilities like for teaching biology? What attempts were made to develop a syllabus relevant to Africa? These were the questions raised in the above-mentioned Aide Memoire, and this paper will attempt to answer some of them.

From University College, Gold Coast (1948) to the University of Ghana (1961)

The establishment of the first higher education colleges in anglophone tropical Africa took place in 1948 in Ibadan, Nigeria and at Achimota, Gold Coast. The University College of the Gold Coast, as it was then called, was established on the Achimota estate near Accra, and the Department of Zoology was one of the original science departments. The college moved to its present purpose-built campus at Legon in 1960 and became the University of Ghana in 1961. At Achimota the department was housed in a temporary, borrowed, single storey building with one teaching laboratory and some rooms for staff. There was one professor, who was head of the department, and two lecturers or senior lecturers. By the early 1960s the staff had increased to a professor, one senior lecturer, five lecturers and one demonstrator. Apart from the technical staff, many of whom were Ghanaians, the academics were all British.

In 2009 the Zoology Department assumed a new name, Animal Biology and Conservation Science to indicate its changing role, encompassing not only zoology and conservation but other areas in the fields of medicine, agriculture and veterinary science – reflecting those applied and vocational aspects Professor Ewer had been keen to develop almost fifty years earlier. There is also now a Department of Biochemistry, Cell and Molecular Biology and one of Marine and Fisheries Sciences, both staffed by Ghanaians, 'researching the kind of problems Jakes [Ewer] would have approved of'.[8]

The Early Professors and Heads of Zoology

E. E. Edwards (HoD 1948–1960), who obtained a DSc from the University of Wales for his work in entomology, was the first Professor of Zoology. He was an applied entomologist, but had also worked on ticks in Wales. On arriving in Ghana (then still Gold Coast) he began to diversify his research into tropical diseases of domestic animals and humans such as Onchocerciasis ('river blindness') and Trypanosomiasis ('sleeping sickness'). Edwards had been a research student at the University of Wales, later becoming Advisory Zoologist at Harper Adams Agricultural College in Shropshire, and in 1934 was appointed Advisor in Agricultural Zoology and then lecturer in entomology at University College, Cardiff.[9]

Edwards stayed at Legon until 1960 and was replaced by Professor R. D. Purchon (1961–1962), a marine biologist and molluscan specialist who had been Raffles Professor of Zoology in Singapore (1950–1960). Purchon is probably best known for his book on molluscs (Purchon 1968). He stayed in Ghana for only one session before being appointed Head of the Department of Botany and Zoology at the Chelsea College of Science and Technology,[10] and was described as being 'more concerned with moving on than building up'.[11] He died on 17 October 1992 and his obituary is in the *Independent* newspaper dated 26 October 1992. Professor D. W. Ewer arrived to replace him in mid 1963.

Professor D. W. Ewer (1963–1973)

Born in London in 1913, Professor Ewer, known as 'Jakes' Ewer, was educated at University College School, London and Trinity College, Cambridge, where he read Natural Sciences. He then undertook doctoral studies at Birmingham under H. Munro Fox. He gained an MA (Cambridge) followed by a PhD (Birmingham), prior to World War II.

Professor Ewer was an important pioneer in African universities and an innovator in African education. Described as 'an absolutely exceptional scientist and teacher' and an 'important role model at Rhodes University in the 1950s',[12] Professor Ewer's career has been summarised by Hodgson (2009) and Hodgson and Craig (2005). In addition to his organisational abilities, these authors described him as an outstanding lecturer: 'each lecture was a performance, carefully researched and rehearsed' (Hodgson and Craig, 2005). The Ewer papers at Oxford on his time in Ghana are held at the Bodleian library under MSS. Afr.s.

Ewer's Experience in Africa prior to Ghana

Following a distinguished war service, Ewer joined what was then still Natal University College[13] as a lecturer in 1946 and was promoted to Senior Lecturer

in 1948. His research at that time involved the neuro-muscular physiology of invertebrates. His wife 'Griff', also a biologist, taught in the same department and worked mainly on mammalian behaviour and palaeontology. In 1955, Ewer became Professor of Zoology and Entomology at Rhodes University, Grahamstown where he remained until the middle of 1963. His final move was to tropical Africa as Professor and Head of the Zoology Department at Ghana, a department which had by then been in operation for fifteen years. During his time in Africa, Ewer corresponded widely with other zoological colleagues and friends,[14] and was able to keep in touch with developments in the UK on the visits he made there from time to time.

Ewer's time at Rhodes was not without incident. Even before arriving he had noted, as an external examiner, that 'there was no balance to the courses' offered and he was 'determined to modernize the curriculum' after arrival (Hodgson and Craig 2005). He introduced physiology, final year student projects, and a language translation test for students. The research publication record began to increase and diversify and the department established a good reputation in a comparatively short time. Both he and his wife, 'did much to stimulate more rigour in experimental zoology and animal behaviour' (Hodgson and Craig 2005). They left South Africa 'after regular struggles against the University' (Hodgson 2009) both academic, administrative and political, and moved to Ghana.

The Ewer Period in Zoology at Ghana

Professor Ewer's move to West Africa was due in part to the political unrest in South Africa but also because Griff had visited Ghana and the department on her way back to South Africa in 1962, and she influenced him, having liked what she saw. Walter Pople, one of his former students, was already there. Indeed, Griff (Dr R. F. Ewer, née Griffith), played an enormous part in Jakes Ewer's life and work. They had two children, Biddy and Paddy, both of whom eschewed zoology when they went to university, saying that they had had enough of it at home![15] Jakes and Griff had met while they were working under Professor Munro Fox in Birmingham. Griff's academic interests were quite different from Jakes's, being mainly in mammalian palaeontology and animal behaviour, as well as evolutionary genetics. She was a leader in these fields and had published extensively. She also taught these subjects in both South Africa and Ghana.. She was awarded a DSc for her work by Birmingham University. Hodgson and Craig (2005) list her publications and describe several incidents involving her and her animals, both in the department and at home. She was regarded as being 'wonderfully eccentric'. The Ewers' mutual interests also included drama – Jakes was a consummate Shakespearian actor, and

Griff was in charge of the lighting at many university 'dram soc' productions. Together they were a formidable and deeply inspiring pair.

In June 1963, as he was about to leave South Africa, Ewer wrote, 'everything is now packed and Griff and I are waiting…You ask whether I would not really prefer to come home. I think the answer is very definitely no. Africa is very exciting and full of problems which are not zoological but human and political. I have now seen the one side of the picture at great length but it would be failing to finish the story if I did not take the opportunity which offers of looking at the whole thing from the other side. It is my hope that Ghana will prove to be interesting not only zoologically, but above all in terms of making scientists or at least answering the question as to whether one can really train Africans to be good scientists within the outlook of Western European thinking'.[16]

By the time Ewer arrived, the department was well established, housed in a large new building with generous space, equipment and facilities, and with a staff of ten involved in teaching and research. However, at the beginning, in 1948 it had been rather different. Ronald Bassindale was seconded to the department, at the age of 42, in January 1949 from the University of Bristol, where he had spent the previous ten years as a lecturer. He was involved in the initial ordering of equipment, books and journals, preparing schedules and teaching material, planning laboratory space for the new building as well as with the recruitment and training of laboratory staff. There were many initial problems including, for example, material ordered from the UK sometimes taking six months to arrive. In the first year of teaching (1948–1949) at Achimota, there were about 25 students following the Intermediate BSc under the old regulations, but by the second session, six students had embarked on degree work for the London General BSc. In 1961–1962, the year before Ewer arrived; numbers were BSc General 41 and Special 8 (Thomas 1962). The BSc General involved three subjects for one year, followed by zoology and another subject for a further two years.

The early staff were pioneers, but by 1963 everything seemed to be in place. Teaching was in full swing and several staff members were actively involved in research, often based on the 'rich local fauna which offered new and interesting possibilities' (Thomas 1962). Facilities were very good – three teaching laboratories plus a postgraduate laboratory as well as an 'experimental lab' for physiological work, large enough to accommodate 48 students. In addition there were private staff laboratories, two lecture rooms, a departmental library, a dark room, constant temperature rooms, a cold room, a museum, an underground aquarium with circulating freshwater and cooled seawater, and many other facilities, including the use of a field station and game reserve (Thomas 1962).

However, according to Ewer, the reality was quite different, and on arrival he was highly critical of the conditions he found. There had been an 'unthinkable waste of money' (Ewer 1982) and Ewer spent part of his time at Legon 'trimming away grandiosities which could not be maintained' (Ewer undated) – partly because the price of cocoa had slipped badly in 1962. According to Ewer, buildings were badly designed, equipment did not work, an aquarium had been made redundant because of corroded metal pipes, and, because of lack of ventilation, was one of the hottest rooms in the department! Spare parts needed for the CT rooms had not arrived, and the marine aquarium was not working. 'When something stops working you put it back in store and get another… I find that instrument after instrument we possess is broken. It is quite unbelievable' (Ewer undated).There were few if any departmental records. The students had a passive approach to their work and bad work habits. Teaching was of less importance to the academic staff than research, and virtually no training was being given to the technical staff. The academics worked as isolated individuals on their own research. 'The way back to a post lay not in building the Zoology department at Legon, but in publication' (Ewer undated), by which he meant that, in order to return to an equivalent post in the UK, staff realised that they would be judged not on their teaching skills but on their research output, thus research was seen as a stepping stone back to England.

Ewer was not prepared to accept the status quo and wanted change. The main challenge was to create a less casual attitude on the part of staff, whose emphasis had been on the importance of research at the expense of teaching. Ewer also believed in the importance of proper training for the Ghanaian technical staff, a very necessary change as there was 'disinterest on the part of the expat; ignorance and fear on the part of the Ghanaian technical staff' (Ewer undated).

Reflecting on his career when in his 80s, Ewer wrote to the author, 'When I look back, I think how lucky I have been to be so uneasy a person and look with astonishment at some of my Cambridge friends who had hardly moved beyond Cambridge in their lives'.[17]

Students, Teaching and Research

In the late 1940s and early 1950s the teaching staff had to rely on preserved material, sent from England and the United States, for dissection, until suitable alternatives could be identified and captured locally. The staff realised the absurdity of importing the standard European type species, so the dogfish was replaced by small sharks from the market, local toads were collected by the cleaner, and sewer rats from Accra were supplied by corporation workmen and used as the 'type' mammal. Specimens collected locally were preserved in alcohol made from palm wine.

When Ewer arrived, there was a heavy teaching load with no tradition of Ghanaian students assisting with practical classes and it was assumed that the staff would teach only their own discipline. Ewer believed you should use the best teachers for Year 1, 'so he taught a large part of the course and led the practicals'.[18] Ewer also believed that the Oxbridge model or 'mink ideal' (Ewer undated) as he called it, was inappropriate for Ghana, because the students' background, both social and intellectual, was 'quite different – homes where parents were unable to read or write'. The previous system had bred 'passive students with bad work habits'. It was essential to make the teaching relevant, as would be true in any developing country, as well as not to 'marginalise' the students. School reforms were also needed if students were to be successful in higher education or in their subsequent careers (Ewer undated).

At his first staff meeting Ewer insisted that teaching should come first and research second, and that staff should keep to their teaching timetables. There was no scientific tradition in Africa and he saw the need to take teaching seriously[19] and was impatient with poor teaching as well as with rote learning. He later wrote 'The staff have been nurtured upon the British mythology that good research workers make inspiring teachers and that provided one did research, there would be, in some mysterious manner, an intellectual "brush off" which could raise the standard of teaching – a gross oversimplification' (Ewer undated). Initially Africans 'wanted a replica of the British university at its best; the expatriate staff had no other model to offer' (Ashby 1964).

In the early years of the college, virtually all of the staff were expatriates on contracts. They worked in isolation in their teaching and especially in their research; 'Each man was an island', not as preferred, a 'critical mass of people working in a single field' (Ewer 1982). He later wrote that 'With a scientific community in any field as tiny as that in Ghana, the university departments cannot diversify their efforts and still hope to produce viable results. There must be concentration of effort so that, within a circumscribed field, there are several people at work to act as a stimulus to each other' (Ewer 1968). However, he did encourage individuals to do research. Malcolm Edmonds arrived in the department in Ghana in 1963 to teach and carry out research in entomology, and referring to Ewer wrote: 'In my early years he critically read every paper I (and colleagues) submitted for publication, and encouraged any local research…he was not against taxonomy, because he recognised it was necessary in the tropics where so many species were undescribed and unnamed, but he did not support taxonomic studies elsewhere with no relevance to Ghana.' He also encouraged the best students to do their postgraduate work in Ghana, on Ghanaian topics of applied ecological importance such as the insect pests of crops, rather than go abroad to do this.[20]

Ewer's approach was, in several ways, similar to that of Kenneth Baker's as head of Geography at Makerere in that both 'directed the department through many phases of growth with single mindedness and thoroughness' (Baker 2003). To make the institution valuable in a developing country, it was essential, in Ewer's view, to train the students in applied aspects such as entomology, fisheries, and agriculture.[21] He decided, after considerable thought – and rejection of his own speciality (he was a physiologist), – that a common core was required in the teaching and that it should be ecology, but it had to be experimental and 'translated into local terms' (Ewer 1982). They would no longer be teaching 'academic zoology'. The victims of this curriculum purge were the 'classical and perhaps inapplicable' subjects which included embryology, palaeontology, and much taxonomy. But what would be the consequence of throwing out the past, 'lock, stock and dogfish?' (Ewer undated). He saw the role of zoology as 'finding out how animals worked and how we could co-exist',[22] not in describing new species and creating species lists. Ewer saw merit in fine dissection, which formed part of his research, when as Head of Department he was immersed in meetings and administration. He wrote, 'the way forward lay in fine dissection as the preparation would wait until one had done some other chores…I do commend fine dissection as a wonderful tranquiliser after some heated committee meeting'.[23]

Ewer pursued the argument for radical curriculum change in his inaugural address, given six years after he arrived in Ghana: 'Zoology: should it exist?' (Ewer 1970). In it he developed the idea of an integrated ecological approach. He made a powerful argument for change, forecasting also the tremendous growth in the development of cellular and molecular biology. He argued that ecology must be the major area of biological research in Africa, and that the 'classical core of zoology can become a hindrance to advance'. He concluded that the existence of zoology as a distinct discipline was not really justified, and wrote: 'the contemplation of Ghana and her biological problems has broadened my thinking wonderfully. Having once been highly critical of ecology as a scientific discipline, I find myself fully converted to a different outlook', and ended his address with these words: 'Ecology in all its ramifications must be the major area of biological research in Tropical Africa' (Ewer 1970), and from this an integrated approach to teaching would follow.

The experiences of Other Expatriate Zoology Staff in Ghana

Apart from Professor Ewer, other former staff members (Ronald Bassindale and Nicholas Jago) submitted documents to the Oxford Project, and two others, Walter Pople and Malcolm Edmunds, have provided information used by the author. Some of their comments are discussed here.

Unlike many of the Ghana University appointments, Ronald Bassindale (1949–1952) came with a good deal of experience in teaching and research. In his first session at Achimota he taught a class of twenty to thirty students doing Intermediate BSc, but in his second session began the first year of degree work with a mixed class of the previous Intermediate students together with new ones. Bassindale's interest was in marine invertebrates. A sea-going motor boat was ordered, for collecting specimens by trawl and to dredge in deep water, and he later published an important work 'On the Marine Fauna of Ghana' (Bassindale 1961), becoming a specialist on barnacles.

Nicholas David Jago (1959–1965) on the other hand, was a raw recruit, arriving in Ghana as an assistant lecturer, after two years as a doctoral student in London. He came with 'the self-centredness of youth to enjoy travel and the opportunity to carry out research and service through teaching' (Jago 1982). He stayed for six years, coming under the influence of Professor Ewer, to whom he felt 'a debt of gratitude' and whom he described as 'a benign autocrat who taught his staff to master a wide range of disciplines and to hone their course material to its essentials in a Ghanaian context' (Jago 1982). In 1965 he moved to the Department of Zoology at Dar es Salaam, Tanzania (Bodleian library, Oxford MSS.Afr.s. – see Note 1).

While in Africa, Jago developed research interests on the systematics and zoogeography of West African locusts and grasshoppers and had close links with the Anti-Locust Research Centre in London (now the Centre for Overseas Pest Research) and the Desert Locust Control Organization in East Africa. By the time Jago moved to Tanzania he had formulated his own ideas and, influenced by Ewer, was 'especially keen' that terrestrial ecology and conservation should be included in the curriculum (Jago 1982). He wrote, again reflecting the influence of Ewer, that 'African Colleges are better equipped in every way with ecologically centred research' (Jago 1982). His insect collections, many new to science, and his drawings are held at the Natural History Museum, London and his obituary is in *The Telegraph* on line of 19 May 2005.

Malcolm Edmunds arrived in the department in 1963 as an entomologist following an Oxford doctorate, where 'the challenge of a young university and a new tropical country' appealed to him. He and his wife Janet, also a zoologist, 'wanted to experience…[this]… before we were tied down by children'. He had already spent six months at the University College in Jamaica doing research as a postgraduate student and so was looking forward to exploring the natural history of Africa'.[24]

Ewer and the Wider Aspects of Biological Education in Africa

Ewer was at the forefront of changes to biological education in schools and universities in Africa in the 1960s and 1970s. He had worked full time in three

African universities, at Natal, Pietermaritzburg; Rhodes, Grahamstown and at Legon, Ghana, and had visited others as an external examiner. He had not only the necessary wide experience but also the determination and strong will to bring about change. He was a fighter and never one to accept the status quo. He published widely on this theme, wrote standard school textbooks (Ewer and Hall 1972, 1978, 1981; Ewer, Hall and Clerk 1978), practical books (Ewer, Hall and Mitchelmore 1975a, 1975b; Ewer and Hall 1980) and teacher's guides published by Longman (now Pearson Longman), as well as learned papers in educational and scientific journals on these educational matters (Ewer, 1968, 1969, 1974, 1980). He was the driving force in developing a new school biology syllabus based on the needs of West African pupils and was President of the Ghana Science Teachers Association in the mid 1960s. He was also an advocate for science for non-specialist students, 'to equip them more fully to meet those problems of development in whose solution a scientific judgment may play a key role' (Ewer 1968).

Critical of the then current school teaching in biology because 'it bred passive students with bad work habits' (Ewer 1982), Ewer believed there was a need to 'challenge students intellectually', both at school and university, and to 'break down their vision of science as simply a collection of fragments of information' (Ewer n.d.) where biology was viewed only as an accumulation of facts. Radical changes were therefore required, not only in higher education but in the school system, and in teacher training also. Ewer was one of the leaders of a study group on new approaches and techniques in biology teaching in Africa.[25]

In the integrated approach to university teaching in countries like Ghana, where solving practical and social problems was fundamental to success, Ewer asks the question 'what should we be attempting to teach?' (Ewer 1968). He emphasises the importance of the applied and the vocational, rather than the academic science courses of the developed world. According to Jago, Ewer was convinced that the College should have been developed as a technical university and not one dominated by the Arts, and the Oxbridge mentality. He called for 'Relevant Ecology' (Ewer 1980b) which, according to him, had its true roots 'in agriculture and fisheries and not in that singularly tedious work *The Natural History of Selborne*' (Ewer 1980b). Ecology should be the central theme, with autecology, the study of a single species in all its facets. Using the cod as an example, this would introduce the students to food webs, communities, migration, behaviour and nutrition rather than anatomy, morphology, descriptive embryology and other 'dead wood'.

Recognising that the 'type system' in use at the time had serious shortcomings, Ewer was looking for a more rigorous and experimental approach to biology (Ewer 1974). In particular, there were to be guiding principles to

having ecology as the central theme in school biology teaching: the content should be suitable for those whose education would go no further in biology, rather than being a background for further study at university level; emphasis would be placed on experimental investigation in practical work; and there would be a quantitative and analytical approach to the subject rather than a descriptive one (Ewer 1969). He and others began creating a 'new look' syllabus for schools with West African-based textbooks and teacher's guides.

Conclusion

There is little doubt that over the period under consideration, biology teaching was evolving rapidly in the western world and led to curriculum reforms but early efforts at 'Africanization' of the biology curriculum in Africa were at an early stage. Contemporary challenges remain on the design and reform of the curriculum in African universities, and although these issues are not considered here, in order to understand the present situation it is important to look at the subject in an historical context. Ewer's major contribution was in adapting the biology syllabus and style of teaching to meet the needs of Africa. The traditional British system was not the only option and Ewer rejected this as the most appropriate one for Africa. He placed teaching before research and produced a syllabus which would challenge the students intellectually at school and university level. In biology there is now a greater emphasis on ecology and the environment, including nature conservation and on the more applied aspects of the subject relevant to Africa such as fisheries and wildlife management. Ewer was an academic ahead of his time and the fact that these topics are now an important part of the curriculum in Africa is a clear indication of Professor Ewer's astute judgment and innovative thinking.

Notes

1. The Bodleian Library of Commonwealth and African Studies, University of Oxford houses papers which were classified by Penny Tolmie in 1985 under 'Higher Education in Anglophone Tropical Africa, List of documents'. This is part of the Oxford Development Records Project Report 14 and is classified under MSS. Afr.s. 1825. All three files used were received in 1982, the date quoted in the text. Professor D W Ewer's papers are in Box X (32) ffx+1–81, Ronald Bassindale's in Box 111 (5) ffiii+1–30 and Nicholas Jago's in Box XL (60) ffiv+1–42.

2. 'Gold Coast' was the name of the country now called Ghana, from 1874 to 1957.

3. Higher education in the colonies became an increasingly important issue in Britain in the 1940s, and the Asquith and Elliot Commissions (1943–45 and 1945 respectively), together with other reports, were seminal in developing university education in colonial tropical Africa. Members of the Elliot Commission were unable to agree on the way forward and a minority report was accepted by the Secretary of State in 1946, stating that only one college would be created in Nigeria, to be fed by territorial colleges in neighbouring countries. University College was thus established at Ibadan, Nigeria, in 1948. However, national ambitions led to protests in the Gold Coast and the local legislature insisted on the establishment of a separate institution. This was eventually agreed to, and a second college was founded, at Achimota, in 1948, later moving to new buildings on Legon Hill. In East Africa, Makerere had been established as a government Technical School in Kampala, Uganda in 1922, and, as a result of recommendations in the Asquith report, was recognised as a university college in 1949. Thus, by 1950, three higher education colleges had been established in anglophone tropical Africa. In addition, Fourah Bay College in Sierra Leone, established in 1827, became affiliated to the University of Durham in 1876.

4. Report of the Commission on Higher Education in West Africa (known as the Elliot Report), Cmd. 6655, HMSO, London, 1945 and the Report of the Commission on Higher Education in the Colonies (Asquith Report), Cmd. 6647, HMSO, London, 1945.

5. Report of the Commission on University Education, December 1960 – January 1961, Ministry of Education, Accra, 1961.

6. Ewer to author, 8 November, 2000.

7. The teaching of sciences in African universities. *Report of the Seminar on the Teaching of Basic Sciences in African Universities*. Rabat 13–22 December 1962. UNESCO, Paris.

8. Pople to author, 28 May 2013. Walter Pople, who now lives in South Africa, was on the zoology staff in Ghana when Ewer arrived and had been a student of Ewer's at Natal, and subsequently a lecturer there and at Rhodes in Ewer's department. His interests were in marine invertebrates, and Ewer and Pople collaborated on physiological research.

9. University of Wales (UCC/FN/Sal/5'6): Edwards is listed on the 1934'35 and 1946'47 payrolls as an Adviser in Agricultural Zoology, Cardiff. In the University College Cardiff prospectus he is listed as an Adviser from 1936'1937 and 1945'1946 (UCC/R/Pub/Pro/31'40), as previously, and as Lecturer in Entomology. He was also on the Agricultural Advisory Board in Wales, soon to be replaced by the National Agricultural Advisory Service, attending a Special Meeting in December 1946 when the work of the Board came to an end. Information from Caroline Walker, UCC, to author 20 May 2013.

10. Richard Denison Purchon was born in 1916 and died in 1992, aged 76. From 1966 to 1981 he was Professor of Zoology at the University of London and then Emeritus Professor from 1981'1992. He was Zoological Secretary of the Linnaean Society (1970'1973) and President of the Malacological Society of London (1969'1971). He is best known for his book **The Biology of the Mollusca**, first published in 1968. http://www.shelfari.com/authors/a1819414/R-D-Purcon/

11. Ewer to author, 26 September 2000.

12. V. C. Moran to author, 29 August 2000; and to B. Greene (Ewer's daughter), 2 August 2013. Professor Cliff Moran was a student of Ewer's at Rhodes University in the 1950s. He described both Ewers as –brilliant role models and outstanding scientists. Their research was cutting edge stuff ' when no one else's was. Their lectures were fascinating and up-to-the-minute'. Moran was Dean of Science at the University of Cape Town from 1986 to 1999.

13. NUC was granted independent university status in 1949, becoming the University of Natal.

14. For example, the correspondence between Professor D W Ewer and Professor H G –Mick' Callan, Professor of Zoology at St Andrews University, Scotland, held in the Special Collections at St Andrews at ms38367/ H/18/6/1'52. The letters deal, amongst other matters, with a vacancy for a zoologist in the department at Rhodes University; enquiries about obtaining and exchanging specimens for the museum at Rhodes; External Examinership of Professor Callan at Legon, including his examiners report and other topics. Information from Sam Gilchrist at St Andrews University library.

15. B. Greene (Ewer's daughter) to author, 16 July 2013.

16. Ewer to Callan, 27 June 1963. Special Collections at St Andrews University H/18/6/41.

17. Ewer to author, 8 November 2000.

18. Edmunds to author, 23 June 2013. Malcolm Edmunds trained as a zoologist at Oxford University and arrived in Ghana in 1963. He has wide ranging interests in natural history, has worked as a zoologist in many parts of the world and is currently active in wildlife conservation. His wife, also a zoologist, went to Ghana with him.

19. Pople to author, 15 May 2013.

20. Edmunds to author, 23 June 2013.

21. There is clear evidence that this was not Ewer's view earlier and that he was now adapting to the requirements of a developing country. He wrote in 1956 about his teaching, when in South Africa, 'I must spin some fine web to keep my own interests alive – otherwise Zoology becomes fisheries and pest control.' Letter to Callan dated 12 June 1956. Special Collections at St Andrews University H/18/6/27.

22. Pople to author, 15 May 2013.

23. Ewer to author, 27 November 2000.

24. Edmunds to author, 23 June 2013.

25. Progress Report for Permanent National Study Groups dated 1966 (UNESCO/ AVS/DST/66/36(6145/2) – concerning a pilot project on 'New Approaches and Techniques in biology teaching in Africa'. This involved assessing the present state of biology teaching, identifying the problems, assessing the manpower needed, clarifying the objectives, and studying new advances. UNESCO, Paris.

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"…University is ISO 9000:2008 Certified": Neoliberal Echoes, Knowledge Production and Quality Assurance in Kenyan State Universities

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Abstract

In Africa, Quality Assurance (QA) in universities has acquired a sense of urgency owing to the rapid growth of the university sector in the last two decades. The adoption of neoliberal tenets in the development of universities has witnessed the surge in student numbers and types of degree-granting institutions. The decline in budgetary support for higher education, evident in average per-student expenditure decline from US $6,300 to $1,500 by 1990, rising student enrolments coupled with inadequate and outdated teaching and learning resources, alongside massive staff exodus as well as poor governance have raised troubling questions about the quality of education provided. The rising concerns about the quality of the institutions and the graduates have catalyzed national educational authorities and individual institutions to institute quality assurance strategies in order to enhance the quality of education provide. This paper looks at how neoliberalism has undermined faculty validation of learning within the context of QA. Faculty exclusion in knowledge validation via QA is examined from the following themes: national accreditation, ISO certification, internal QA units, internships & attachments, and the deployment of information communication technologies. It is apparent that the development of universities along the neoliberal paradigm has eroded faculty prerogatives in QA as market ideals have triumphed over academic principles.

Résumé

En Afrique, l'Assurance qualité (AQ) dans les universités est empreinte d'un sentiment d'urgence en raison de la croissance rapide qu'a connu le milieu universitaire au cours des deux dernières décennies. L'adoption de principes néolibéraux dans le développement des universités a favorisé la hausse du nombre d'étudiants et des types d'établissements conférant des diplômes universitaires. Le déclin de l'appui budgétaire à l'enseignement

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supérieur, comme le prouve la baisse des dépenses moyennes par tête d'élève de 6300 dollars à 1500 dollars depuis 1990, la hausse des effectifs scolaires, couplée avec l'inadéquation et la désuétude des ressources d'enseignement et d'apprentissage, en marge de l'exode massif du personnel ainsi que la mauvaise gouvernance ont suscité de troublantes questions sur la qualité de l'enseignement dispensé. Les préoccupations croissantes au sujet de la qualité des institutions et des diplômés ont poussé les autorités de l'éducation nationale et les institutions individuelles à instituer des stratégies d'assurance qualité afin d'améliorer la qualité de l'offre de formation. Cet article examine la façon dont le néolibéralisme a sapé la validation de l'apprentissage par le corps professoral dans le contexte de l'AQ. L'exclusion des enseignants du processus de validation des connaissances par l'AQ est examinée à partir des thèmes suivants: accréditation nationale, certification ISO, les unités internes d'assurance qualité, stages et sessions de formation et le déploiement des technologies de communication et de l'information. Il est évident que le développement des universités parallèlement au paradigme néolibéral a entamé les prérogatives du corps professoral en matière d'AQ, d'autant que les visées mercantilistes l'ont emporté sur les principes académiques.

Introduction

Of the many challenges facing universities[1] in the era of marketization and globalization, the validation of knowledge generation and transmission through Quality Assurance (QA) mechanisms ranks in the top tier. Economic-utilitarian arguments espoused in favor of higher education expansion, especially in developing countries, contend that quality higher education is indispensable to economic growth, political development, technological catch up as well as increasing a society's competitiveness in a globalized environment (Bloom, 2004). This discourse on the utility of higher education in national development has been enunciated in policy documents justifying the state involvement in Africa's university sector. Not only are African universities expected to provide high level manpower for the growing public and private administrative institutions (Sifuna 2010), they are also expected to impart graduates with important competencies such as adaptability, teamwork, communication skills along with motivation for continual learning (Materu 2007). Ensuring that universities can rise to these challenges through their curricular programmes is the goal of the various QA mechanisms inherent in higher education.

In Africa, QA in universities has acquired a sense of urgency owing to the rapid growth of the university sector in the last two decades. The adoption of neoliberal tenets in the development of universities has witnessed the surge in student numbers and types of degree-granting institutions. The decline in budgetary support for higher education, evident in average per-student expenditure decline from US $6,300 to $1,500 by 1990 (Munene 2003), rising student enrolment coupled with inadequate and outdated teaching and learning resources, alongside massive staff exodus as well as poor governance has

raised troubling questions about the quality of education provided. The rising concerns about the quality of the institutions and the graduates have catalyzed national educational authorities and individual institutions to institute quality assurance strategies in order to enhance the quality of education provided.[2]

Kenya's QA challenges in higher education have their genesis in the privatization and marketization of university development, the product of neoliberal development policies of the last two decades. As Sifuna (2010) has noted, the massification of public universities has been accompanied by an equally dramatic decline in the quality of education epitomized by student over enrolment, teaching facility shortage, inadequate and dated library resources, insufficient and poorly trained staff and inefficient use of instructional time. Concerns about quality in the institutions have motivated the development of QA strategies in a bid to assuage public reservations about the relevance of the education provided. Due to the centrality of academic faculty in all matters related to the generation and transmission of knowledge, academic values of institutional autonomy and academic freedom dictate that they be actively engaged in the design, development and implementation of all QA mechanisms. However, in Kenya the unfolding university developments along the neoliberal paradigm have eroded faculty prerogatives in QA as market ideals have triumphed over academic principles.

This article looks at how neoliberalism has undermined faculty validation of learning within the context of QA. Quality Assurance here denotes all accountability tools employed, within and without the institution, to ensure educational quality along with the maintenance of core academic standards. Faculty exclusion in knowledge validation via QA is examined from the following themes: national accreditation, ISO certification, internal QA units, internships & attachments, and the deployment of information communication technologies. Though the focus is on all Kenya's public universities, the analysis will give preferential emphasis on the situation obtaining at Kenyatta University (KU) because it pioneered and has been the most prominent in the commercialization and marketization of its activities in tandem with the new dispensation[3]. It is, in a sense, the poster child of neoliberal transformation of state universities in Kenya today.

The Neoliberal Doctrine in Kenya's Higher Education

Neoliberalism, the delimiting of state role in development and accentuating market forces and private resources instead, was codified as the national development mantra in Kenya in the early 1990s when the government declared:

> ….the central thrust of the new policies is to rely on market forces to mobilize resources for growth and development with the role of central government increasingly confined to providing an effective regulatory framework and essential public infrastructure and social services. The government will limit direct participation in many sectors and instead promote private sector activity (Kiamba 2004:55).

This policy edict catalyzed waves of university transformations that have re-shaped the character of public universities in Kenya – from wholly-owned public-financed institutions to public-owned largely privately-financed universities, fully informed by corporate management principles (Munene and Otieno 2007). Universities are now expected to generate their own resources and be self-reliant:

> This is a turning point in the development of our public universities, where they are being called upon to adopt business-like financial management styles. It is also a point in time when universities have to plan well ahead about resources expected to be coming from sources other than the exchequer…Time has come to seriously take account of the universities potential to generate income internally…Income from such sources should be exploited and treated as definite sources of university revenue (Kiamba 2004:55).

In concurrence with Zeleza's (2003) classification, Kenya's university reconfiguration in neoliberal terms has taken the trajectory of the six Cs: 1) corporatization of management (the adoption of business models for the organization and administration of the universities; 2) collectivization of access (growing massification of higher education in the various forms; 3) commercialization of learning (expansion of private programmes in public universities, expansion of private universities, and vocational training); 4) commodification of knowledge (increased production, sponsorship, and dissemination of research by commercial enterprises, applied research and intellectual property norms); 5) computerization of education (incorporation of information technologies into the knowledge activities of teaching, research and publication); and 6) connectivity of institutions (rising emphasis on institutional cooperation and coordination within and across countries. These changes are also prominent in various parts of Africa including South Africa (Ntshoe 2004) and Uganda (Mamdani 2007) among others.

As the poster boy of neoliberal university reconfiguration in Kenya, Kenyatta University's metamorphosis has been mercurial, saving the institution from pecuniary embarrassment. From its first strategic plan, its governance and management structures and its revenue-enhancing strategies, the drumbeats of the neoliberal order have been heard unequivocally. At the pinnacle of the university goals is to meet consumer and market needs (Munene 2008). Accordingly, its first strategic plan binds the university to the following aims:

- Establishment of operational efficiency in the realms of management of academic programmes in order to meet changing markets.
- Formulation and implementation of a system that would facilitate optimal utilisation of human, financial and physical and other resources in the university.
- Enhancement of innovative responses to shifting emphasis towards the development of a Kenyatta University brand.
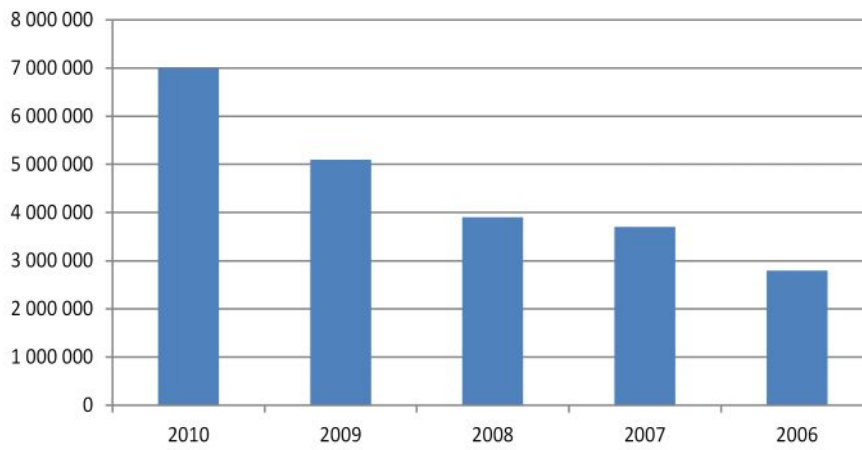
- Enhancement of a system, which will lead to a leaner and more efficient administrative framework (University 2004:3).

Figure 1: Enrolled Students per Mode of Study 2011 / 2012
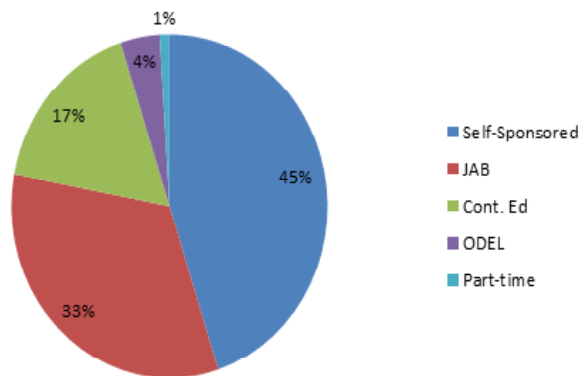
Source: Kenyatta University, 2011, p. 6.

Figure 2: Growth of Total Income-5 Year Trend

Source: Kenyatta University, 2011, p. 8.

The growth in revenue and student enrolment are presented in Figures 1 and 2. It is evident that the revenue growth has been consistent and exponential. The bulk is generated from student tuition fees. The student enrolment data confirms this as the number of privately-sponsored students far supersedes the state-sponsored ones, catalyzed by new programmes in areas hitherto unavailable in public institutions. Different names are used to characterize these students including part-time, SSP (Self-Sponsored Students), continuing education, and ODEL (Online and Distance Education). The revenues have allowed the university to embark on a construction boom of unprecedented proportions. The university is in the mist of constructing a teaching hospital and toying with the idea of a technology park and a university city, a self-contained living community.

The neoliberal order in Kenya's universities typifies the extent to which the ideology has permeated into the entire fabric of society. Without hesitation since mid-1990s, Kenyans have been reminded, in all government documents and official pronouncements, that the market and private enterprise are the central pillars of development. For instance in Vision 2030, the Kenyan government roadmap to turning the country into an industrial nation, the role of the state in achieving the various lofty milestones is mute while the agency of the private sector and individual enterprise is trumpeted. "Governmentality", per Foucault (1983), are modes of actions employed by the state to steer citizens in specific directions, to structure the possible field of action for others. The rapid tolerance of neo-liberal ideology in the Kenyan psyche demonstrates this governmentality, much in the same fashion as in the US:

> Under the rule of neoliberalism, politics are market driven and the claims of democratic citizenship are subordinated to market values. What becomes troubling under such circumstances is not simply that ideas associated with freedom and agency are defined through the prevailing ideology and principles of the market, but that neoliberalism wraps in what appears to be an unassailable appeal to common sense (Giroux 2002).

Yet, there is no denying that a full scale imposition of neoliberalism in academia devoid of critical reflection pivots the universities into treacherous territory. Any agenda that seeks to homogenize university operations akin to business traditions compromises academic freedom and faculty control in curriculum matters including the validation of knowledge. The business of generation, transmission and evaluation of knowledge bears little semblance in the operations of business enterprise as Elder so eloquently concludes:

> Colleges and universities are organizations like corporations and, the thinking goes, if business improvement methods work for corporations, they should also work for higher education. After all, teaching and learning is a product, and like other products, it is sold to consumers. The problem, however, is that although education institutions are corporation-like entities, their primary activity is teaching and learning – which itself is not a business activity. The

education process can be defined in numerous ways, but however one defines it, teaching and learning does not inherently involve the activity of buying and selling (Elder 2004).

Elders assertion provides the segue for exploring the impact of neoliberalism on the quality assurance in Kenya's state universities in so far as faculty involvement is concerned.

Accreditation and the Politics of Private Control

The fulcrum of quality assurance in higher education has been accreditation, both institutional and programme based. The advantage of accreditation over other quality assurance protocols rests on its use of a wide array of parameters to make a determination of an institution's or programme's accountability to the various standards. Further, the accreditation process involves a whole gamut of stakeholders to whom the institution and programme are held accountable. So central is accreditation that governments have not only established national agencies to oversee the process but also dictated that financial aid is only available to students attending accredited institutions and enrolled in accredited programmes.

Institutional accreditation is the process through which educational institutions proclaim their visions and articulate their programme distinctiveness as agents in knowledge production, dissemination and utilization through programme design and delivery. Through accreditation, institutions rationalize how they select, validate and institutionalize knowledge to meet societal needs and "what norms, procedures and standards they embrace to regulate these processes" (Cross and Naidoo 2011:521). Programme accreditation, on the other hand, has its locus on improvement of programme quality and maintenance of standards of core activities. It responds to societal needs along with interests of regional and international scholars with interests in the discipline (Cross and Naidoo 2011). While accreditation has been a key feature of higher education in the west, it is only a recent development in Africa's higher education landscape. By 2007, only 16 African countries had fully functioning national accreditation agencies (Materu 2007:xv). Even in the relatively advanced South Africa, programme accreditation is still mired by the racial politics of the post-apartheid dispensation (Cross and Naidoo 2011).

In Kenya, the history and current process of accreditation mirrors the road most traveled by other African countries. To spearhead the expansion of the university sector, from the hitherto single public university to a robust mix of public and private sector, the Kenya government established in 1995 the Commission for Higher Education (CHE), now Commission for University Education (CUE) since 2013, to regulate university growth and ensure quality. For an institution to be accredited, CUE has to be satisfied that it meets basic standards of excellence authenticated in adequate physical, human, library and

financial resources.[4] Currently 17 private universities have undergone the accreditation process and have been awarded charters permitting them to grant degrees. Another 11 have been granted Letters of Interim Authority (LIA) which allows them to offer degree programmes "while receiving guidance and direction from the Commission for Higher Education in order to prepare them for the award of Charter."[5] Until last year, public universities operated under institution-specific acts of parliament. They were not subject to the then CHE accreditation process and their existence and operation were rooted in legal statutes beyond the ambit of the commission.

The mandate of CUE encompasses the following: (a) Planning for establishment and development of higher education and training; (b) Mobilization of resources for higher education and training; (c) Accreditation and regular re-inspection of Universities, (d) Co-ordination and regulation of admission to Universities; and (e) Documentation, information services and public relations for higher education and training. The commission has a membership of 28 individuals with representatives from both public and private universities, all appointed by the Head of State. Since its inception, the Chief Executive Officer who also serves as the commission's secretary has been a former vice-chancellor of a public university. From the mandate, which speaks to the accreditation of all universities, as well as the composition of the commission, one would expect that public universities would be subject to its quality assurance requirements. Yet, vice-chancellors of public universities had resisted for nearly 20 years any move to have their institutions accredited by the commission. They had also vehemently opposed the annulment of the various university statutes. The vice-chancellors were able to outfox the commission since the head of state is still the chancellor of all public universities as per their university statutes then. Even though the accreditation of public universities is now a reality, it appears to be a formality since all the institutions were accredited without any significant improvements in their programmes and facilities. The state university leaders have the political clout to access top echelon decision makers to forestall any move that would jeopardize their existence as state institutions.

Institutional accreditation in Kenya has, therefore, been reduced to control of private growth just as it is in a number of African countries. The goal has been to limit, if not outlaw altogether, the mushrooming of low quality demand-absorbing tuition-dependent institutions. Neoliberalism envisions the role of the state as being regulatory, providing a policy environment for private capital to participate in service delivery. This private-growth control goal satisfies this neoliberal doctrine since it provides a predictable regulatory climate for private investors who now have a legal foundation for their investments in university education. For Kenyans enrolled in private universities, there are assurances that the product meets acceptable thresholds; haphazard and uncoordinated growth by profiteers would compromise this controlled growth.

Without being subjected to rigorous accreditation, public universities have been able to launch a plethora of programmes and income-generating activities which would not be permissible by CUE in private universities. Programmes like disaster management, hotel and tourism management, military studies, and revenue centres like funeral homes, manufacturing units and hotels, most which have minimal bearing on academic programming have found abode in public universities. With decreased state subventions, it seems that the "easy" accreditation of public institutions is meant to ensure an entrepreneurial culture evolves and percolates into the universities.

The downside of this mode of accreditation is that it robs the state universities' faculty input in quality assurance. In a traditional institutional accreditation, faculty input is captured through institutional self-study, programme reviews and conferences with the external reviewers. Without incentives to re-assess what the faculty is doing in terms of meeting labour market needs, new thinking in the disciplines, and the adequacy of resources, programmes remain stale and dated. The content of secondary teacher training courses in public universities, for instance, has not changed for more than 30 years. Furthermore, faculty have no say on which income generating activities the institutions should venture into and how these entrepreneurial activities would inform teaching, research and service. Decisions around these activities are made through administrative fiats by the senior management who are regarded as custodians of the institutional quality.

In sum, accreditation in Kenya is guided by neoliberal tenets of promoting and safeguarding private growth, coupled with engendering commercialization and efficient managerialism in state universities. The purported "no accreditation role" in public university is, to the contrary, a powerful statement allowing them to experiment with numerous programmes and activities geared towards revenue enhancement. In the process, faculty input in quality assurance is relegated to the margins.

ISO Certification and the Triumph of Markets

The lethal mix of surge in student enrolment, commercialization of learning, declining state funding and institutional non-accreditation have fueled fears, and rightly so, that the quality of education in state universities has been irreparably compromised. To inoculate themselves against charges of quality compromise and to give a semblance of external quality control, universities have sought and obtained the International Standards Organization's ISO 9000:2000 certification. First adopted by Kenyatta University in 2008, ISO 9000:2000 certification has now become a quality assurance memento for both private and public universities. University stationery, advertising literature and official documents are now emblazed with the "…University is ISO 9000:2000 certified" signature.

The use of the ISO certification as a signature of academic quality raises important questions. Why would premier state universities with a history of academic excellence suddenly seek foreign industrial accreditation? Further, why would a premier private university which has national accreditation seek an additional foreign certification? Additionally, what are the implications of ISO certification for faculty input in institutional governance as it relates to academic quality? A dichotomy in perspectives is evident. Administrators see the move as a marketing strategy, the consequence of the increasing competition for students between universities. Faculty views it as another assault on their authority over academic matters.

Maintained by the International Organization of Standardization, ISO 9000 and its assemblage of family standards have their roots in business and industry. They were founded to ensure uniformity of manufactured products, reduction of defects, and product standardization along with quality management to ensure customer satisfaction. If these were achieved, then cost reduction and profitability would be assured (Pun and Chin 1999). Modern universities, in contrast, had their genesis in cathedral and monastic schools in medieval Europe where knowledge refinement and transmission were the prime objectives. Academic quality in such knowledge production and transmission centres cannot be measured using the same parameters found in industrial production centres. Output products in both centres are inherently different. These contrasting roots cast aspersions on the wisdom of applying business standards to academic institutions.

Academic knowledge is generated and thrives in a non-linear fashion; in most cases, it thrives in a non-rational method in which time and space may be contrary to conventional wisdom. We are all familiar with illustrious scholarship in which great discoveries and writings occurred beyond the confines of a regulated academic environment. By blindly adopting ISO 9000:2000 standards, Kenya university administrators are succumbing to the faulty logic, promoted by business and industry, that non-rational systems are less efficient or even inefficient. A cursory examination of distinguished universities across the globe proves otherwise. Universities that have promoted a differentiated and divergent approach to scholarship are the world leaders in knowledge production and dissemination today.

An efficient management system as the one espoused by ISO 9000:2000 is inimical to academic governance with its emphasis on collegiality among the faculty. For product standardization and efficiency, management structures in business and industry are characterized by a top-down hierarchical governance model. Euphemisms such as Total Quality Management (TQM), Continuous Quality Improvement (CQI) and Self-assessed Quality Management System (SQMS) are a convenient cover for this disempowering management structure.

Universities, in order to promote knowledge generation, are generally characterized by a decentralized collegial governance model comprising numerous committees and offices. Top administrators are first and foremost teachers in order to emphasis this collegiality.

Audit for ISO 9000:2000 certification is equally problematic. In Kenya, this is undertaken by SGS Kenya with the assistance of Kenya Bureau of Standards (KeBS). These organizations are well known for their work in inspection, verification, testing and certification of goods and services provided by businesses and social institutions. Faculty at both Kenyatta and Nairobi universities faulted these agencies foray into Kenyan university certification business on a number of fronts, including lack of peer-equivalency as research or academic institutions. Being outside the knowledge production industry and wanting in professionals with that background, it is doubtful that they would have the necessary skills, knowledge and competency to provide appropriate university certification. It was noted that inspectors from both agencies are first degree holders and only in very rare cases did they possess a master's degree.

The peer-equivalence deficit has also been compounded by the absence of internal self-study in the ISO certification process. Academic units are hardly required to undertake a self-assessment of their strengths and weaknesses vis-à-vis the institutions' strategic plans and missions. All that is required of faculty are teaching demonstrations. It is this perfunctory faculty role that has contributed to feelings of disempowerment in academic decision making.

If non-accreditation and ISO certification result in better governance, then the recent student riots at Nairobi and Kenyatta universities suggest otherwise. Less than a year after the ISO certification, the universities had to confront the perennial ghost of learning disruption as students took to the streets in violent and deadly demonstrations. The March 2009 riots at Kenyatta University were the most destructive in the history of the country's higher education. Over Ksh. 200Million (US $2.6Million) in university property damage, 2 student deaths and over 50 incarcerated as a results of student rampage over the administration's intransigence over a flexible fee-payment plan the students had proposed (Munene 2013). These incidents are hardly the stuff internationally-vaunted management practices are made of. Old managerial habits die hard.

It bears noting that the vice-chancellor (president) of the University of Nairobi betrayed the neoliberal agenda in ISO certification when he asserted that "part of the reform programme…a Quality Management System that would ensure the institution meets customer requirements as well as statutory and regulatory needs pertinent to University services". Students no longer view the university as a learning community but rather as customers who vote with their bottom line. The universities processes, programmes and outcomes are to be measured by customer satisfaction rather than pedagogical needs and

appropriateness as determined by the teaching fraternity. This is yet another evidence of the faculty disempowerment in curricular matterson the altar of student-customer satisfaction.

Internal Quality Assurance Units and the Neoliberal Agenda

Without a modicum of internal quality assurance mechanisms in place, no external quality assurance agency is sufficient to eliminate some measure of cynicism about the quality of an institution's academic programmes. External constituencies need assurances that the university is cognizant of its responsibility to mount programmes that are relevant, current and delivered competently as determined by the academic staff. The internal communities need a structure that ensures they participate in making determinations as to the quality of the programmes offered. Many universities have established internal quality assurance units to coordinate the various activities that comprise internal quality assurance. Among the plethora of internal quality assurance tools in use are external examiners, self-evaluation and academic audits. Of these, self-evaluation is at the top in terms of faculty involvement and empowerment in curricular matters as it provides space for internal critique of programmes, opportunities for identification of strength and weaknesses, and means of identifying key performance indicators.

Kenyan universities have recognized the need and importance of internal quality assurance in academic programming as a means of ensuring accountability as nearly all universities have established directorates dedicated to quality assurance. At Kenyatta University, the Centre for Quality Assurance was founded in 2003 "….to assist the University in achieving its mission of providing quality education and training, promote scholarship, service, innovation and creativity and inculcate moral values for sustainable individual and societal development."[6] The mandate of the centre encompasses the following:
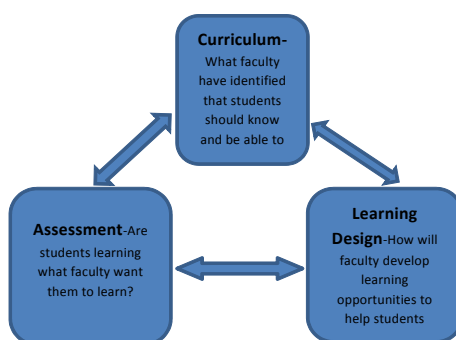
- Coordinate the Student-Lecturer Evaluation exercise.
- Synthesize, analyze and submit a report to management for necessary action on departmental external examiners reports
- Initiate departmental market surveys to determine market needs and relevance of our academic programmes.
- Liaise with departments to monitor course reviews to ensure relevance as informed by the market surveys.
- Maintain a tracking system of departmental cyclic course reviews (at least once every four years) and provide periodic reports on status.
- Recommend to management departmental programmes due for review.
- Recommend the development or de-establishment of programmes based on the findings of the market surveys.

In three important ways, these goals highlight the preponderance of neoliberal thinking in quality assessment. First is the emphasis on utilitarian-market function of academic programmes. The centre intiates "departmental market surveys to determine market needs and relevance of our academic programmes", recommends "the development or de-establishment of programmes based on the findings of the market surveys" and coordinates "with other departments to monitor course reviews to ensure relevance as informed by the market surveys". Simply put, academic programme survive or fall depending on economic potential; cognitive and socio-political significance of academic programmes are subordinated to the dictates of the marketplace.

Second, a subtext in the goals is the heightened managerialism that informs the process of programme review. In both the preview and post-review stages, considerable focus is on the university management, consisting of the vice-chancellor and the cabinet, as the recipient of feedback rather than faculty or students. The centre synthesizes reports "to management for necessary action on departmental external examiners reports" and advises "management departmental programmes due for review." The evaluation tools used by students in the evaluation of instruction are also designed and administered by administrators. Results of student evaluations of faculty are used as personnel action items when necessary to reprimand or discipline an instructor over such mundane issues like punctuality. Missing in both the design of evaluation protocols and the use of the evaluation results is the role of faculty. Faculty play no significant role in determining the quality of academic programmes mounted and the quality of instruction by their peers. Nor do they play any significant role in mentoring their colleagues on instructional strategies based on student evaluation.

The consequences of internal quality assurance mechanisms as currently conceived is to disempower faculty in their legitimate role of assessing programme and instructional quality. Indeed, the evaluation of instructional quality requires a grassroots collaborative endeavor involving students, faculty and the academic unit head as laid out in Figure 3 and Table 1. Each has a distinct role to play which ensures that critical stakeholders in the instruction process are represented in the determination of quality. However, neoliberal tenets that have magnified the importance of the market have changed the discourse of programme and instructional assessments in Kenya's state universities from that of continuous improvement in content development and instructional design to one of congruence with labour market requirements. The overarching concerns have been with faculty compliance with management dictates regarding the knowledge to be created and delivered, and less about pedagogical strategies and student learning outcomes.

Figure 3: Model for Relationship between Curriculum, Learning Design

Table 1: Scheme for Collaborative Teaching Evaluation

Criteria	Sub-criteria	Evaluator			
		A. Faculty member:	B. Students:	C. Peers:	D. Chair/Director:
1. Content of Expertise	*Analysis of Content Expertise*	Reflects on Content Expertise	N/A	Review course materials	Reviews Course Materials
	Perceptions of Instructor's Content Expertise	Team teaching, Peer assessment, teaching scholarship	Evaluate instructor via questionnaire	N/A	N/A
2. Instructional Delivery	*Effectiveness of Delivery*	Describes philosophy & methods Video self-assessment	Evaluate instructor via questionnaire	Review videotaped instruction	N/A
	Student Success	Describe efforts to ensure student success	Evaluate instructor via questionnaire	Review failure rates and explanation	Reviews failure rates and explanation
3. Instructional Design Skill	*Analysis of Instructional Design*	Describes philosophy and approach	N/A	Review course materials	Reviews course materials
	Perceptions about Course Design	Describes course objectives, measures for attaining & outcomes	Evaluate instructor via questionnaire	N/A	N/A
4. Course Management		Describes philosophy & Methods	Evaluate instructor via questionnaire	Review course materials	Reviews course administration, materials & student feedback

Source: Adapter from Felder and Brent (2004) and Arreol (2000).

Just-in-Time Training – Internships and Career Training

Professional education programmes in universities are deemed incomplete if students are not exposed to the practical minutiae of professions in real life settings. To be certified in education, medicine, pharmacy, and engineering among others, students are to invest time in the field gaining practical experience while working under experienced professionals. The time spent depends on programme and ranges from 3 months to one year. A myriad of nomenclature characterize these practical experiences including attachment, practicum, internship, and partnerships reflecting the diversity of experiences students are exposed to. In the neoliberal era practical application of knowledge is absolutely necessary. The analysis that follows is dedicated to partnerships and internships in the scientific/engineering and business realms which are the most prominent in Kenya's state universities. The training of teachers is excluded since it has always been a component in the teacher education programme and the neoliberal impact has been minimal at best.

University-industry partnerships have been instrumental in strengthening the neoliberal climate in Kenyan state universities. Kenyatta University has established the Directorate of University-Industry Partnerships in order to harness valuable resources from the private sector as a vehicle to enhance its revenue base along with strengthening academic programming. The directorate is tasked with "strengthening the partnerships between the University and private sector both locally and internationally, coordinating goodwill activities between the University and industry, seeking motivation awards from the corporate sector as well as generation and incubation of business ideas from research, technology and innovation".[7] Besides establishing a business incubation centre, the Chandaria Business Innovation and Incubation Centre (C-BIIC), sponsored by a leading industrialist, Manu Chandaria, the directorate also supports the following activities:

1) **Student Work Induction Programme (SWIP)** – where students from various disciplines are placed in participating organizations to acquire practical work experience. They work under a performance contract and salary; and

2) **Student Motivation Awards Programme (SMAs)** – Outstanding students from various disciplines academic disciplines are rewarded for their performance.

This model of partnership and internship epitomizes the rhetoric of neoliberalism from a variety of vantage points. First, the establishment of the incubation centre is billed as a global trend at "world class universities"[8] signifying that global competitiveness supersedes local engagement and relevance determining the quality of academic programming. As universities seek to position themselves in

global rankings (Bowman and Michael 2011; Salmi 2011), the discourse on "world class" university as a measure of quality has become pervasive in universities in developing countries, Kenya included. Second, the "distinguished mentors" at the centre, those to inspire, motivate and provide lessons on entrepreneurship are "…renowned Kenyan entrepreneurial icons; some of whom are leading industrialists in the region; others are CEOs of public and private corporations."[9]

This narrative suggests that the quality of the output is determined not by the quality of university faculty input in nurturing the budding entrepreneurs but by the sole input of successful industrialists, businesspeople and corporate executives. Third, students assigned industry internships are subjected to performance contract and payment of salary by the hiring agency suggesting that the employers' evaluations of learning outcomes eclipses that of lecturers at the university. So, industry has become the sole determinant of field experience learning outcomes.

In all the partnerships and internships in Kenya, the university faculty involved plays a very minimal role in assessing and determining the quality of student learning. Any role is limited to visiting students at their workplace to verify that they regularly show up. The partnership and internships are in essence structured in a hierarchical paradigm that privileges a new academic order inimical to the old tradition of the academy. The decisions of university management and industry chiefs on what constitutes quality knowledge to be obtained by the students – practical knowledge as executed in a corporate/industrial setting – is perceived to be superior to cognitive and pedagogical decisions made collegially by the faculty in the universities. Furthermore, there is a hidden narrative that elevates module 2 knowledge – applied knowledge that can be quantified, commoditized and marketized – while at the same time denigrating basic knowledge – foundational knowledge that cannot be measured nor commoditized. Yet it is the building block of all forms of knowledge. The disempowering nature of this arrangement for academics at the university cannot be over emphasized.

Given the tendency of neoliberal universities to concentrate power in the managerial class, it is hardly surprising that in Kenyan universities, partnerships and attachments have relegated the power of academics in assessing the quality of student learning outside the institutions to the backwaters of commerce and industry. The asymmetrical power relation in these contractual arrangements is captured in the following warning by Cardini:

> Although theoretical definitions present partnerships as a cluster of symmetrical and complementary sector partners, in practice partnerships tend to show asymmetrical and unbalanced relationships between different members….and….although the theoretical concept of partnership is directly linked to the idea of social and community participation, in practice partnerships seem to be the instrument to implement top down central policies (Cardini 2006).

To ameliorate these challenges of power along with quality assessment, Bloomfield advocates a collaborative engagement that recognizes the interests of all critical stakeholders including faculty as "…addressing issues within relationships of instability, contradiction and power differentials is a necessary step for moving beyond simplistic generalizations and optimistic advocacy of 'partnerships'…." (Bloomfield 2008:10).

Totally Wired: Webometrics and the Illusion of ICT Prowess

> We are pleased to inform Kenyatta University fraternity that ranking on webometrics has improved significantly. We have maintained our national ranking at position 3 from 5 in 2009. Our continental ranking has improved from position 100 in 2009 to 45 in 2012 and from position 9129 in 2009 to 3034 in 2012 globally…..We wish to thank Kenyatta University management for the guidance, encouragement and support that has made the website come this far. We also wish to congratulate all schools, departments and directorates/centres for having been part of this initiative of good performance by providing timely information to be uploaded to the website.[10]

The above congratulatory message to the Kenyatta University fraternity serves as a stark reminder of the dominance that information technologies have played in the transformation of higher education. At the forefront of managerialism, efficiency, and globalization, important canons of neoliberalism in higher education, are information communication technologies (ICT) that have grown exponentially in the last two decades. As universities have become more entrepreneurial, academic capitalism (Slaughter and Larry 1997) has become the guiding value in institutional process and outcomes. The use of sophisticated information technologies has permitted universities to standardize and routinize work activities, manage and evaluate faculty work, undertake product innovation and marketing, all geared towards enhancing their global competitiveness in the marketplace. The ability to effectively leverage ICT resources is, therefore, regarded as a good indicator of institutional quality in the neoliberal dispensation.

The obsession with webometrics,[11] a ranking system that merely evaluates universities based on their web presence, is another manifestation of concern with global competitiveness at the expense of local relevance and engagement first encountered in the section on ISO certification. It disempowers the academic faculty in determining the quality of instruction as it is merely concerned with web presence rather than effectiveness of academic instruction, student engagement and faculty peer collaboration. In more significant ways, the Kenyatta University website itself is an epitome of administrative centrism infused with contradictions and inaccuracies. Rather than individual faculty members and departments controlling and managing content about their units on the World Wide Web, the development and updating of the website is handled centrally at the "university website office" – a nondescript unit staffed by

techies. Due to the absence of grassroots initiative in the website development, it is not surprising that the content remains out of date and contradictory – on the one hand the newsletter will declare a faculty member as deceased but the departmental website will list the member as active in teaching and research. There are few incentives for departments and academics to update their profile. Furthermore the university website lacks interactivity – hardly can any business be conducted online other than downloading of application forms and newsletters.

Evidently, the Webometrics quality assessment does not disclose that technology access along with internet connectivity for faculty is still wanting at Kenyatta University. Faculty members do not have computers in their offices and nearly all teaching and learning support activities are still manual. Only departmental chairs and offices are provided with a computer; teaching staff are expected to purchase their own using a loan agreement negotiated by the university and a local financial institution. Put differently, the teaching faculty have not been central to technology integration at the institution.

The emerging picture is that ICT at Kenyatta University is merely a tool for management to market the institution rather than an instrument for enhancing university operations in support of teaching and learning. Technology planners have long recognized that implementation of ICT should be informed by the institution's intellectual assets – the faculty. Technology should mediate the social contact between the faculty, students and the university; "the challenge is not simply to open the eyes of participating faculty to new technologies and methodologies; faculty must be mobilized to redefine their profession in a rapidly changing world" (Slaughter and Larry 1997). Apparently this is the target that Kenyatta University, as a microcosm of the status in Kenya's state university, has missed.

Concluding Remarks

Undoubtedly, neoliberalism has been the most potent force in the transformation of Kenya's higher education landscape. In terms of system configurations, institutional operations as well as modalities of knowledge generation, neoliberalism has redefined the entire fabric of university education in the country. Public universities are now defined by massification, commercialization of learning, commodification of knowledge and corporatization of governance (managerialism) all which have raised apprehensions about the nature of knowledge generation and transmission. Issues of quality assurance have taken centre stage in contemporary narratives of higher education development in recent years.

This chapter has explored the impact of neoliberalism on quality assurance mechanism employed by public universities in Kenya to assess the quality of teaching and learning. Specifically, we used the experience of Kenyatta University as a microcosm of a public university to interrogate the

disempowerment of academics in the determination of quality in knowledge production and transmission. The absence of national accreditation for state universities denies faculty in state universities opportunities for self-study – a critical component of evaluation that relies of peer institutions and colleagues assessing each other's programmes and resources. This absence could also be suggestive of the state's tacit support for the universities to embark on the commercialization and marketization activities as means of enhancing revenue generation. In an effort to assuage concerns over quality the state universities have sought industry-based quality assurance standard, the ISO 9000:2000 certification. This industry-based certification eschews faculty input in quality assurance and places premium on university structural processes and operations rather than knowledge generation and transmission.

Internal quality assurance audits that universities have instituted are also skewed against faculty input. Emphasis is placed on the utilitarian-market function of university education and the supremacy of the university management in the designing of evaluation tools as well as in the use of the evaluation outcomes. Course evaluations results are used by management to discipline academics rather than as tools for improvement of teaching and learning. The ascendency of the market-management duopoly is also manifest in attachments and internships where industry captains and university management determine the quality of the type of knowledge that students ought to obtain while on the practical training. The emphasis is largely on practical dispositions – applied knowledge. It is an arrangement that minimizes the input of faculty and basic/fundamental knowledge that is so central to university education. The universities managements' celebratory accolade that has accompanied the implementation of information technologies in the universities is a case of dancing lame before the main dance. An improved Webometrics ranking, which measures an institutions web presence, is frequently cited as a measure of quality education. However, this belies the fact that technology integration into the fabric of university teaching and learning remains a constant dream. Needless to state, departments and faculty remain powerless in the development and management of university content on the World Wide Web.

It goes without saying that there is still a long way to go in empowering faculty to take control of quality assurance in knowledge generation and transmission in Kenya's state universities. The concerns with revenue generation and linking universities to industry has blindsided university administrations to the critical role that an empowered faculty can play in determining the quality of a university's research, teaching and learning missions. Only a comprehensive reform strategy that puts the faculty at the centre of university transformation will ensure that the cardinal mission of the universities with regard to knowledge generation and transmission are not sacrificed at the altar of commercialism.

Notes

1. In this chapter higher education and university, despite different meanings in different contexts, are used interchangeably to refer to any degree-granting institution.

2. Quality Assurance guidelines have been established by the Association for African Universities (AAU) http://aau.org/?q=qa the Inter-University Council for East Africa (IUCEA) http://www.iucea.org/index.php?option=com_content &view=article&id=106&Itemid=66 and the South African University Vice-Chancellors' Association (SAUVCA) 2003.

3. For a discussion on Kenyatta University's commercialization and marketization activities see Munene, 2008.

4. See CUE website at http://www.cue.or.ke/services/accreditation/status-of-universities (Accessed October 10, 2014).

5. CUE website http://www.cue.or.ke/services/accreditation/status-of-universities (Accessed October 10, 2014).

6. See Kenyatta University Center for Quality Assurance site: http://www.ku.ac.ke/index.php/about-ku/administration/directorates/quality-assurance (Accessed April 3, 2012).

7. See Kenyatta University Directorate of University-Industry Partnerships site: http://www.ku.ac.ke/index.php/centres-a-directorates/330-university-industry-links(Accessed April 9, 2012).

8. Ibid.(Accessed April 13, 2012).

9. See C-BIIC brochure at: http://www.ku.ac.ke/c-biic/images/stories/docs/C_BIIC_Bronchure_ 2011.pdf

10. Kenyatta University Newsletter: A Fortnightly Publication of the Office of the Vice-Chancellor p. 10: http://www.ku.ac.ke/images/stories/docs/newsletters/vol_8_issue_%202.pdf (Accessed April 23, 2012).

11. See Webometrics website for additional information at: http://www.webometrics.info/ (Accessed April 24, 2012).

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