Postgraduate Education in Kenya: A Curriculum Conversation

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Abstract

The drastic expansion of university education in Kenya has attracted scrutiny from the research community. Specifically, postgraduate education has become an area of focus. There are criticisms about the quality of programmes and graduates. As part of a way forward, the discussant draws examples from the curricular activities of a doctoral programme in an academic department of a public university in the western region of Kenya to initiate conversation on what needs attention. Through exploration and examination of policy documents and implementation practices in the programme, it is evident that some incongruence exists. A solution to this situation seems to emerge based on Bronfenbrenner's PPCT human development model. The discussion suggests that the development of a 'student development matrix' could provide new impetus in the existing doctoral programmes by serving as a curricular framework that would guide student progression through the different programme phases.

Keywords: Curriculum, doctoral programme, PPCT model, supervision.

Introduction

University education in Kenya has witnessed varied researches (Sifuna, 1998; Mutula, 2001; Kiamba, 2002; Otieno, 2004; Nafukho, 2004; Nafuko & Wagenge-Ouma, 2011; Munene, 2008; Odhiambo, 2011; Ayiro & Sang, 2011). Research on postgraduate education, in particular, has brought to the fore a host of concerns that need further interrogation (Ayiro & Sang, 2011). At the doctoral level, Ayiro and Sang (2011) show that the quality of programmes is wanting. Doctoral programmes experience challenges that range from admission procedures and practices right through to the examination of the thesis. In the recent past, the Commission of University Education (CUE) as a regulatory board of university education in Kenya, has come in strongly through policies to streamline the myriad of challenges that face university education in general (CUE, 2008; 2014). It is against this background that this paper seeks to contribute to the discussion needed at university-level in Kenya about how best, especially for the doctoral level, universities can develop their programmes by focusing on what is critical in fostering the provision of quality postgraduate education.

The paper has four sections. The first brief section focuses on the issue of discussion. In the section that follows it, there is a brief presentation on the policy context for postgraduate education. The third section examplifies (through a brief case study) the implementation of posgraduate policy. The concluding part of the paper initiates a discussion on the issues that stem from the postgraduate policy guidance and its attendant implementation by one university in Kenya. At the onset, it is appropriate to observe that this discussion holds the assumption that what obtains at the case study site may also be the same for most of the other universities that have implemented the CUE policy on postgraduate programmes.

Research Issue

Postgraduate education in Kenya is a critical component of the future of university education. In part, postgraduate education provides opportunities for those who move on to join the university workforce. Specifically, following the recent policy guidance from the CUE, universities are expected to hire their academic staff from only those who have a doctorate

qualification. However, recent research by Ayiro and Sang (2011) presents an uninspiring doctoral education landscape. In short, doctoral education programmes inhere with quality challenges that span the admission criteria and procedures, coursework, through to supervision as well as the examination. Out of this situation, this paper sought to explore what goes on in a doctoral programme at a public university in Kenya using a curriculum conceptual lens as explained in the next section.

Theoretical Lens

This discussion conceives doctoral education as a curriculum issue (see also Gonzales-Ocampo, Kiley, Lopes, Malcolm, Menezes, Morais et al., 2015). Broadly, curriculum entails a planned assortment of knowledge and skills which students need to obtain to meet the aims of a learning programme (Gonzales-Ocampo et al., 2015). Further, as 'curere'-a life-course or a programme of study, the curriculum, therefore, approximates appreciably to a construal of human developemnt as being 'bioecological' in nature (see also Bronfenbrenner, 1999). In the conversation presented in this paper, we focus on Bronfenbrenner's construct that privileges process, person, context and time as significant constituents in the developement of an individual. This conversation, thus, argues that an understanding of postgraduate education, especially at the doctoral level, requires a focus that takes on such a curriculum lens. It also provides opportunities for nuanced meaning-making on an issue that has not been conceived, so far, like one that involves deeply complex processes, practices and outcomes.

Specifically, Bronfenbrenner's (1999) notion of the 'bioecological model' of human development provides this conversation with the necessary conceptual optic. He does this through two propositions. First, the model makes a distinction between *environment* and *process*. In addition to the *process* being at the centre of human development, it also relates to the *environment* and the features of the developing person. Therefore, the model posits that a person develops progressively through 'more complex reciprocal interaction of an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate external environment' (Bronfenbrenner, 1999: 5). In short, this proposition underscores the centrality of an enduring interaction (proximal processes) between an individual and the immediate environment.

The second proposition defines the proximal processes by elaborating on their three-fold source. According to Bronfenbrenner,

> …the form, power, content, and direction of the proximal processes affecting development vary systematically as a joint function of the characteristics of the *developing person*, the *environment* – both immediate and more remote - in which the processes are taking place, the nature of the *developmental outcomes* under consideration, and the social continuities and changes occurring over time during the historical period through which the person has lived (Bronfenbrenner, 1999: 5).

Out of this understanding, the design model of process-person-context and time (PPCT) derives as a construct for testing its utility. Therefore, from this proposition, the dynamic processes operational in the context of an individual over time tend to influence the outcome (the development/product of interaction/processes).

The theorisation by Bronfenbrenner (1999) has a direct bearing on the curriculum conversation of this paper. Specifically, there are five features of the proximal processes that resonate with the activities of the doctoral programme. These features indicate the expected processes or activities that lead to some development. First, the person involved must engage in an activity if at all development is to occur. Second, an activity is effective only if it is

regular. Third, an effective activity takes a longer time and is incrementally complex. Fourth, effective proximal processes must be initiated and responded to in both directions. Lastly, proximal processes go beyond interpersonal interaction to include objects and symbols and thus, the latter ought to invite 'attention, exploration, manipulation, elaboration, and imagination' (Bronfenbrenner, 1999: 6).

The conception of the proximal processes that lead to the development of an individual by Bronfenbrenner (1999) can map themselves readily onto the analysis of the curricular activities of a doctoral programme covered in this paper. Certainly, the notions of process, person, context and time readily plot onto programme features; namely, students, coursework, programme artefacts (structure and duration), to mention a few. Similarly, the five features stated in the second proposition on proximal processes also reverberate with the activities that ought to be at the centre of nature of an academic programme. Essentially, through Bronfenbrenner's bioecological model of human development, there is clear conceptual guidance on how postgraduate activities can be analysed to obtain insights into a much-needed conversation in the country at this level of education. In the section that follows, the discussion dwells on the context of postgraduate education in Kenya.

The Policy Guide for Post-graduate Education in Kenya

Postgraduate education is a critical sub-system of the university and has a core productive function (Bowden & Marton, 1998). In Kenya, policy guidelines exist on all aspects of the postgraduate programme, from the purposes through to outcomes. For this paper, however, three areas of the programme will be highlighted (CUE, 2014a). These are the purposes of postgraduate education, the actors (full-time staff requisite academic qualifications) and the expectations on the thesis report (length and publication of journal articles). Of interest, for this conversation that is hinged in the construal of Bronfenbrenner (1999) and as highlighted in the preceding sub-section, is the way public universities (through an example of one institution) have implemented their postgraduate education programmes given the extant challenging institutional contexts.

According to CUE (2014a: 48-49), postgraduate programmes at universities in Kenya should address specific goals. At the doctoral level, for instance, policy posits thus:

a) A doctoral programme shall be designed to train research scholars and, in many cases, future university faculty members. The programme shall:

i. Enhance knowledge at the most advanced frontier of the discipline or field of study;

ii. Provide the learner with the most advanced and specialised skills and techniques required to:

iii. Solve critical problems in research and innovation; and

iv. Extend and redefine existing knowledge.

v. Entail demonstration of substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of a discipline or field of study

[….]

c) Two kinds of doctoral level programmes exist, notably Doctor of Philosophy degrees programmes and other doctoral degrees. A clear distinction shall be made between the Doctor of Philosophy degree programmes and other doctoral degrees.

i. Doctor of Philosophy degree programme shall focus on producing scientist practitioners who are mainly engaged in generating knowledge through research and teaching;

ii. Other doctoral degree programmes shall be practice-oriented and shall focus on producing practitioner scholars who are engaged mainly in consuming knowledge, practice and active research;

[….]

f) The length of the thesis/dissertation of a doctoral programme shall normally be at least 50,000 words; and

g) Before the award of a doctoral degree, a candidate shall normally show proof of acceptance for publication of at least two (2) papers in refereed journals.

These policy guidelines are clear on the aims, the expectations of the thrust for disciplinary knowledge, the nature of the processes in the programmes, the scope of the thesis report and the professional identity that the graduate of such programmes will attain through his/her published research work.

The policy also gives guidance to those who provide the education at this level. There are details on the qualification, experience, number of supervisees and the procedures on the 'how-to' of supervision. Specifically, the CUE policy (CUE, 2014a: 62) postulates the following; that the minimum academic qualifications of academic staff for a given level of the academic programme shall be at least one level above what he or she is supposed to teach as provided. For instance, to teach at the postgraduate level, one needs a relevant doctoral degree with at least five (5) years of teaching experience and evidence of research inclinations through individual research, supervision of research and theses and involvement in peer reviewed publications. An academic staff shall be assigned students to supervise on thesis/dissertation based on a combination of his/her teaching load, administrative duties, and supervision experience and capacity. The maximum number of students an academic staff shall supervise in any given academic year shall be five (5) at Master's level and three (3) at the Doctorate level.

Overall, it is significant to note that the scrutiny of postgraduate education in Kenya is a subject that will continue to be focal for as long as university institutions are mandated to serve the needs of both national and personal development. That CUE has set forth a host of quality assurance policies (CUE, 2008) is, therefore, an educational management strategy that is mandatory and necessary for the postgraduate education sector in the country. Before we look at how one university has implemented these policies, it is useful that we survey some of the researches that have looked at the university sector, as part of our effort to contextualise the conversation on postgraduate education in Kenya.

Away from policy guidance, research evidence locates Kenya's universities institutions as entities that face unique challenges (Odhiambo, 2011). Through an exploration of the struggle to develop quality and quality assurance mechanisms against a background of rapidly diminishing income, brain drain, political interference and the negative aspects of globalisation, Odhiambo contends that there is a decline in the quality of education offered at higher education institutions in the country. As amelorative measures, according to Odhiambo, clear policies on compensation would lead to the retainment of staff. Also, there is need to institute measures of controlling some of the recent politically instigated expansion of university institutions. Overall, Odhiambo concurs with Ayiro and Sang (2011) that quality assurance measures would be another important mechanism for salvaging the fast falling educational standards in the higher education sector.

Doctoral education programmes in Kenya have received some research attention. Ayiro and Sang (2011) carried out a study on the PhD award with a quality assurance perspective. Although the study revealed numerous issues, it was apparent that doctoral programmes in Kenya faced challenges that put to question their quality. For instance, due to systemic issues, academic faculty observed that the uncontrolled increase of doctoral students had resulted in the lack of supervision capacity in universities. Further, the study found out that universities did not have clear criteria on the appointment of supervisors so much so that some supervisors were selected yet they had no training in supervision, leave alone exposure to advanced research methods. In short, according to Ayiro and Sang (2011), the extant

practices and procedures of doctoral programmes in the country were not only wanting but required urgent systemic attention.

Unlike the preceding research, Munene (2008) carried out a study on the university sector in Kenya with an inclination to marketisation as an approach to public university renovation. In addition to his research providing a succinct global status of higher education institutions, it also suitably locates the situation in Kenya within this global framework. According to Munene (2008: 1-2), five characteristics distinguish the university sector in Kenya. These are:

> … massification'-acceleration and expansion of higher education and increased access to it (Open University 1995); … increased inter-institutional competition leading to university–state relations being re-cast in contractual terms (Bargh, Scott & Smith, 1996); shift in the centre of power from 'internal' academic issues to more 'external' questions of institutional milieu and reconfiguration of missions to guarantee financial survival (Henkel 1997); … the creation of new relations with students and users, cutbacks in student subsidies and the introduction of loans; and lastly, '… state regulatory institutions and agencies have devised policies that have fostered the notions of 'market' culture and resource allocation which have turned institutions into 'quasi-markets' (Bertelsen, 1998).

While all these features typify the higher education sector in Kenya, of interest to this paper is what Munene (2008) proffers as 'academic capitalism.' This conceptual optic refers to a transformation that higher education institutions have had to undergo so that, for survival (in part), institutions focus on the admission of more fee-paying students as a measure to deal with the reduced government funding.

Other researchers also expound on the university education sector. In particular, Wangenge-Ouma and Nafuko (2011) focus on the changes in the sector that Munene (2008) had highlighted. According to Wangenge-Ouma and Nafuko (2011), funds from the 'full fee-paying' students filled the shortfall that resulted from the reduced government fiscal allocations to universities. The full-fee paying students unlike those whose fee is subsidised by Government end up paying what Nafukho (2004) and Wangenge-Ouma and Nafuko (2007) refer to as 'cost recovery fee.' In short, in addition to being students, the full-fee paying group become a financial asset to the universities. This status has implications on how university management would expect programme implementers (lecturers) to conduct the affairs of the academe as a whole but also the pedagogy of postgraduate education in particular. It is at this juncture that this conversation moves to a specific university from where we get an example of the implementation of the CUE policy.

The Implementation of CUE Policy on Doctoral Programmes

Universities in Kenya run their academic programmes under the watch of CUE (CUE, 2014a). The CUE mandate is to regulate all university programmes in the country. As shown in the previous section, CUE is clear on the expectations it has for doctoral programmes. Before universities launch programmes, CUE must approve the specific programme. According to the strategic plan for the Commission of University Education (CUE, 2014b), quality university education is critical as it will contribute some of the work-force that will leverage Kenya towards attaining its Vision 2030 development policy. It is in this regard that CUE as a regulator of university education has set standards for all academic programmes.

Doctoral programmes at universities in Kenya are expected to have several characteristic features that include coursework and a high percentage of research units (CUE,

2014a). Adherence to the requirement ought to bear a structure that reflects semblance to the illustration on table 1:

Table I: Course Distribution Structure

Year 1	Year 2	Year 3
Semester 1 At least nine units of coursework & a maximum of 6 units of research	Research only (15 units)	Research only (15 units)
Semester 2 At least 12 units of coursework & a maximum of 3 units of research		

In addition to the doctoral programme having more research units, it is also mandatory that guidance on the procedures for research supervision be specified. Evidence at one of the universities that provided the example for this paper shows that the university has documented guidance on the conduct of research and supervision, with specific details for student and supervisor. In part, the following information on principles of supervision and responsibilities of supervisors obtains in the postgraduate rules and regulations policy document (MU, 2015: 9-11):

Supervisors' Guiding Principles
a) The supervisors shall be responsible for guiding the candidate in the conduct of the research.
b) In the absence of one of the supervisors for a period of up to two months, the relevant Head of Department and the other supervisor shall be responsible for ensuring the candidate's compliance with [the] regulations and procedures.
c) If a supervisor ceases to supervise a candidate for a period exceeding three months, the Departmental Graduate Studies Committee (DGSC) shall immediately appoint a replacement.
d) A maximum period of one month shall be allowed for supervisors to attend to students' work (theses/chapters/proposals).

Responsibilities of the Supervisor
a) Being the research advisors to the student.
b) Facilitating the candidature by offering expert guidance, direction and constructive criticism at all stages and in particular: guiding the student to develop a research proposal, conduct research, analyse data and write a thesis, and guide the student in maintaining the progress of the work by the approved programme.
c) Providing constructive feedback on drafts of the thesis promptly, with appropriate comments to allow the candidate to achieve and maintain a scholarly standard in the thesis within the period of official/normal registration.
d) Inspecting the raw data.

The Responsibility of the Student
Students also have specific responsibilities. Some of the responsibilities include:
a) Upon passing the proposal stage, the students shall agree with the supervisors on the supervision plan for the research and thesis.

b) It is the responsibility of the student to contact the supervisor detailing the supervisory plan.

c) A student shall prepare and submit a regular progress report of their work.

d) Each student shall report their progress at departmental seminars as required from time to time.

e) The student shall come up with original work and avoid plagiarism in accordance to the anti-plagiarism policy of [the] University…

In short, the examples above provide a structural outline of how one of the universities in Kenya has implemented its doctoral programmes in line with the CUE policy. That this is the situation, alongside the challenges that have been depicted to face postgraduate programmes in the country, therefore calling for more reflective, scholarly undertakings. Specifically, of interest about this curricular examination, however, is the extent to which such a development could be tested out using the theoretical framework by Bronfenbrenner (1999). How is the preparation (education or development) of doctoral students undertaken? In the next sub-section, the conversation tries out the constructs of the process, person, context and time on what is going on in an academic department that offers a doctoral programme as guided by CUE policy and the institution's postgraduate study policy. Before giving an explication on the postgraduate experience in the selected department, it is necessary to provide a brief description of the example. For purposes of fulfilling ethical requirements in research, however, the identity of the department is deliberately concealed much as the information is kept as authentic as possible.

Doctoral Programme Activities at the Department

The Department that provides the example in this paper is part of a School with six departments at a Public University located in the western region of Kenya. Academic programmes offered by the different departments together constitute courses that make up a professional training programme offered by the School. There are both undergraduate and postgraduate programmes offered in the School. While undergraduate programmes have many students enrolled, the postgraduate tire enrols a fewer number of students. The doctoral programme, in the department, being new and having not been in existence before at the School, interestingly attracted a sizeable number of students. The inaugural cohort of the doctoral programme attracted thirteen (13) students, a number far-much higher than for the students enrolled in the master's programme. The number of doctoral students, in a way, presented an on-set challenge to the department's graduate faculty much as this event proved promissory regarding enabling most of the teaching staff who had enrolled in the programme to edge towards obtaining a mandatory educational qualification that would guarantee their positions in the department. In short, for the department, the doctoral programme was an undertaking that would guarantee it qualified workforce.

The implementation of policy on doctoral programmes at the department examined presents a mixed scenario that approximates to 'idea versus practice (reality)'. Often, reality turns out to be appreciably different from 'thought'. As a start, the doctoral programme had to satisfy all requirements set out both by CUE and the University's graduate studies guidelines. Presently, the programme is in its third year of operation. At this point in the programme, all students are ideally supposed to be close to submitting their theses reports for examination. However, the actual situation does not reflect the noted expectation. Students still have two courses to cover, and some of them are yet to begin their formal fieldwork; a phase of the programme that entails data collection. Also, the department has five (5) graduate faculty (academic staff who are specifically distinguished for doctoral studies teaching and supervision duties). From the number of graduate faculty, the allocation of

students to supervisors has gone beyond the stipulated number. In short, supervisors have more students to supervise than the recommended number of three (3). The status of the doctoral programme briefly described, as discussed below, points to the need for the adoption of a careful and elaborate conceptual framework as an alternative model of guidance in the implementation of similar academic programmes, especially at the department level.

According to the PPCT model (Bronfenbrenner, 1999), human development is a phenomenon that oscillates around four main features-person, processes, context and time. In turn, for the doctoral programme examined in this paper's exploration, there ought to be a clear conception of what each of the parts of the model entails for the development of each of the 13 students. In other words, for each student, a matrix could be drawn to assist in mapping each of the four (4) features of the PPCT model. Notable about the model, as shown earlier, is the postulate that the proximal processes play a critical role. Not only do the developmental outcomes stem from the proximal processes directly but also; they are the predictors of advancement by providing more potent force in enhancing the attainment of developmental growth.

Additionally, the power of proximal processes is a function of the environmental context and the characteristics of the person. Finally, the proximal processes have an effect of reducing or buffering against the environmental differences that may occur in the developmental outcome of a person. In the situation of the doctoral programme in focus, the implication is certain. For the achievement of the set outcomes of a programme to be realised, it is important that all activities be systematic, clear and specific to each candidate.

Following the PPCT model and borrowing from Maxwell and Symth (2010) notion of 'research management matrix', the Department's doctoral programme could chart its future activities by mapping out a 'student development matrix' as illustrated in table 2.

Table 2: Student Supervision Development Matrix

Person	Proximal process	Context	Time
Characteristics of students: What programme-oriented qualities do students have/or do not have?	*Academic activities*: What mandatory activities should each student undertake in order attain the programme's outcome(s)?	*Programme ecology*: Who, what & where surrounds the student? What is their influence on the attainment of programme outcome(s)?	*Duration & Frequency of tasks*: How much time & how often is time set aside for activity meant for the attainment of programme outcome

In consideration of the individual student as being central to postgraduate studies-the formation of an academic or professional, it is necessary and appropriate to have details of students' programme specific characteristics. Students' academic characteristics need to be singled-out with certainty way beyond those qualities provided in the procedural and formal programme requirements. As shown in Table 2, there should be avenues to identify, harness, improve and sustain characteristics that would add value to the attainment of the ends set for a programme. Although this is daunting, for the sake of doctoral programmes remaining on course as well as producing the quality of graduates desired, this exercise should be mandatory.

Discussion

Kenya's consolidation of her university education sector through the activities of the CUE as a regulator equates to what Europe started earlier off through the Bologna Process and in the

Accountable Research Environments for Doctoral Education Project (Byrne, Jorgensen & Loukkola, 2013). Because of what we have shown about the CUE's policy on doctoral programmes and the subsequent example of what obtains at one of the universities in the country, it would be appropriate to posit that doctoral education in Kenya is on a modernisation course. In this pursuit, though, the most pressing concern is how institutions maintain, among other things, effective student development.

A focus on the preparation of research academics for the doctoral programmes at universities in Kenya has noteworthy curricular implications. In part, the quality of supervision is crucial in supporting doctoral students' evolving processes. In this milieu, the supervisory affiliation is essential to how students experience the curriculum. In the main, the experiences and satisfaction of students closely relate to the nature of the association developed between them and the supervisors. Thus, the supervisors' role is critical to productive doctoral training (see also Lee, 2008). As shown earlier, CUE guides that supervisors carry out their mandate within specified parameters. Under the supervision policy from CUE, in the example at the Department of focus, it is appropriate to observe that though the context presented principles of supervision and the attendant set of responsibilities for supervisors and students, a possible fruition of the aspirations in doctoral programmes at public universities in Kenya will need further conceptualisation of the curricular processes involved.

Borrowing from a conception developed by the European University Association (European University Association, 2012), this discussion on a doctoral programme appreciates the fact that there is an ascertained guidance on the purpose of doctoral education. Doctoral education is a process that nurtures an outlook to research that does not only value the elasticity of thought but also encourages ingenuity and academic autonomy through an original research venture. Although there is evidence that efforts exist in the development and launch of appropriate doctoral programmes, there is need to concentrate on certain curricular fundamentals. Student-centred curricular measures are critical. This understanding, in part, stems from Bronfenbrenner's (1999) PPCT model on human development. With a focus on student characteristics, curricular activities, ecology, duration and frequency on curricular tasks, this conversation has attempted to re-direct the conduct of existing doctoral programmes towards an outcomes-oriented direction. Success in doctoral programmes is dependent on a process that is structured or defined. The PPCT model suggested in this discussion attempts to provide one such useful curricular structure.

Conclusion

Postgraduate education in Kenya continues to draw attention with the diverse conceptualisation of the issues considered pertinent by the different stakeholders. This paper presents one of the possible approaches that could be used to ensure the successful realisation of the aspirations of the doctoral programmes. The argument of the paper needs to be construed as a proposal and not an outright alternative for addressing one of the key curricular challenges to postgraduate studies programmes-the processes of programme delivery. The paper hence is part of the contribution in the on-going conversations on postgraduate education in Kenya, if not the world at large.

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