# **Editorial: Transformational Trends in Higher Education Scholarship and Curriculum**

# Rubby Dhunpath Mary Goretti Nakabugo Nyna Amin

The fifth Annual Teaching and learning Conference (2011), called for presentations and papers on postgraduate teaching and learning, African scholarship and curriculum innovation in higher education. The theme invited critical scholarship to theorise shortages of human capital and skills within an increasingly competitive global economy. The desire to increase human capital has elevated the importance of postgraduate education and it is therefore not surprising that national and international agendas have sharply focused on postgraduate education and training. No more can institutions of higher education claim a right to extravagant and self-indulgent ruminations that are purely theoretical or philosophical in nature; the present crises of growing population numbers and urgency to meet the demands of development and a better life for all means that philosophy and theory have to serve a broader agenda that includes reflexivity and curriculum innovation. Additionally, situated as we are in Africa, there is urgency for African scholars to shape and influence postgraduate teaching and learning so that the needs of the continent are not marginalised or dictated to by powerful, wealthier contexts with narrow self-interests. Translating the abovementioned imperatives into reality requires critical transformation in higher education.

Consequently, the transformation of higher education is being reshaped by new developmental imperatives and more complex relationships between universities, the state and business. Universities are not only expected to contribute to innovation and technology transfer, they also have to become active partners in promoting economic growth. To that end the papers that make up this compilation are instructive. The categorisation of the papers has been channelled into three broad streams, namely postgraduate teaching and learning, African scholarship, and higher education curriculum and curriculum innovation. These demarcations are neither water-tight nor arbitrary, especially as some papers straddle two or three of these categories. The separation is purposive; to enable a deeper discussion of the contribution made by each writer.

### **Postgraduate Teaching and Learning**

Is transformation a buzzword in the post-apartheid era or does it offer opportunities to generate alternative futures by challenging traditional ways of teaching and learning? The generation of alternatives requires a deep understanding of our current pedagogies and teaching and learning practices, by making explicit their theoretical orientation and making them available for critical scrutiny. Liz Harrison et al. provide an intimate glimpse into the Transformative Education/al Studies project led by researchers from three universities engaged in self-study of their practice in higher education, from an inter-institutional, trans-disciplinary learning community. The analysis of the project which aimed to enhance and study the development of selfreflexive, pedagogic research and supervision capacity among these participants, contributes to a body of academic work that explores how collaborative and social approaches to scholarship are engaged. Collaborative and social approaches, they argue, can enhance research capacity, productivity and quality in higher education. This article is underpinned by the notion of an African reflexivity, ubuntu, which demands a consciousness of developing 'selves' and as supervisors.

This theme of reflexive praxis finds resonance in Ronicka Mudaly's 'Gazing Inward' as she reflects on what it means to teach in the postgraduate milieu. Critically reflecting on her practice of supervising the research work of postgraduate students, and teaching collaboratively in a Masters level module in the higher education context, she draws on theoretical frames from feminism and cultural production theory to explore her experience as a woman academic navigating the postgraduate landscape. She considers the intersecting influences of age, gender, experience in teaching and research, and the hierarchy of different types of work, on her academic development. She describes how the formation of partnerships can be achieved by working with a cadre of fellow academics who share the same values and practices about teaching en route to becoming organic intellectuals.

Changing academic and professional identities and roles within a massified, diversified and globalised higher education sector has propelled institutions to explore innovations in postgraduate teaching and learning as traditional apprenticeship and allied models are no longer the most efficient in the context of unsatisfactory postgraduate productivity. There is now consensus that the key to sustaining a thriving and productive higher education academy are intellectuals with PhDs. A study of PhD education in East Asia, Southern Africa and Latin America reveals that universities across the world are looking to build research capacity and are increasing the number of doctoral graduates they produce (University World News, 7:10:2012). This finding resonates with Maresi Nerad's argument that a paradigm shift has silently evolved in doctoral education. Preparing the next generation of PhDs to function successfully and contribute to the present and future global world requires going beyond the conceptualization of an apprenticeship model to that of communities of practice and which recognises peers as learning partners. It also requires coordinated efforts of many levels inside and outside a university. More is asked from the next generation of researchers: traditional academic research competencies, professional skills, and intercultural competencies. Learning at the doctoral level needs to be purposefully structured so that it allows for transformative doctoral education.

In a bid to compete favourably in the global knowledge economy, South Africa has, like many other countries all over the world, set out to increase the number of postgraduate students particularly at doctoral level (Nerad 2011). Indeed the recent report of the Academy of Science of South Africa locates South Africa's future development in its capacity to produce more high quality PhDs (ASSAF 2010). Due to the incapacity to attract sufficient numbers of local students to meet the increased demand for PhD graduates, South Africa has been, and will continue, drawing from international students to close the gap. Schoole (2011: 59) notes that of the total number of students enrolled on PhD programmes in South African universities in 2005, 27% were international students, increasing to 29% in 2009. A proportion of this increase was of students from other African countries whose percentage increased from 8% to 10%. With the recent South African Government decision to waive tuition fees on all doctoral programmes for all students from all over the world, the number of international doctoral students in South African universities is going to increase. Therefore, the debate now ought to shift from the 'statistics' of international graduate students to the quality of their experiences in South African universities and how their presence can be maximised as an educational opportunity for the host institutions and nation at large.

In a narrative inquiry into the experience of an African international postgraduate student at one South African university, Pithouse-Morgan, Morojele, Pillay, Naicker, Chikoko, Ramkelawan and Rajpal tackle this issue head-on. Their article, "The air is hostile ... ". Learning from an African International Postgraduate Student's Stories of Fear and Isolation within a South African University Campus', documents accounts from a postgraduate student whose experiences are characterised by fear and isolation due to the xenophobic instances he has encountered in the various social spaces. Although the student under study is able to find solace in his 'study room', when he is with his 'supervisor in his office' and 'in the library' it should be recognised that learning takes place beyond the confines of designated academic spaces such as classrooms, offices, study rooms and libraries. Thus, Pithouse-Morgan et al. recommend that [South African] universities foster 'pedagogic settings that are nourishing and secure for all those who learn, teach and live within them' and these settings should include the various social spaces in which students and staff interact. It is through maximising the cultural and intellectual capital that international students bring into South African universities, through a reciprocal provision of non-discriminatory experiences, services and spaces, that the widening of access for international postgraduate students would be said to truly contribute to the country's and global knowledge economy.

Delia North, Temesgen Zewotir and Michael Murray's Modelling Research Productivity using a generalization of the ordered logistic regression model draws our attention to the South African Department of Education's funding formula that focuses primarily on student throughput and academic staff-based research productivity. Accordingly, South African universities have developed their own strategies to help improve staff publication rates. In this paper they are concerned with identifying potential factors that affect the publication rates of academic staff at the University of KwaZulu-Natal. They consider some extensions of the ordered logistic regression model with the final objective being to produce a model that can assign a particular academic (with a given set of demographic variables) to one of four possible publication-based productivity classes.

# African Scholarship

The issue of African scholarship and Indigenous Knowledge Systems (IKS) is taking centre stage in curriculum discourses on the African continent today. After many years of absorbing western-modelled education and knowledge systems, it has become paramount for Africa to reposition herself as an active player in the global knowledge economy, and also to develop African knowledge frameworks. This requires rethinking university curricula and pedagogy such as finding 'meaningful ways in which to translate new and emerging knowledge from research, especially IKS into curricula' and invoking African perspectives in the study of the continent's fauna and flora (Vithal 2011) or social, economic and political issues such as human rights promotion, environmental sustainability and eradication of poverty and disease and for research that provides possibilities on how knowledge emerging from IKS 'could systematically and in a coordinated fashion, feed into the educational system' (Smit & Masoga 2012:6).

In order to find its space as a relatively new knowledge model on the global scene, African scholarship and IKS ought to not only challenge but also draw from already tested theoretical and epistemological frameworks. It is this cautious approach to embracing and repositioning African scholarship that Govender also takes in his article 'Educational Implications of Applying the Complexity Approach to Indigenous Knowledge Systems'. Defining IKS as 'a body of valuable knowledge produced and owned by local people in their specific communities and found worldwide' Govender notes how it is neglected in Africa's formal education despite the existence of supporting national policies such as South Africa's IKS policy. While strongly arguing for the integration of IKS in South Africa's science and education, he cautions that 'since globalisation influences and affects knowledge systems, it is necessary to critically challenge and cooperate with mainstream ways to create a platform to integrate IKS with other knowledge systems especially Western science'. Due to a multiplicity and diversity of African IKS, Govender considers it to be a complex knowledge system which, if it is to be meaningfully integrated into or added to the formal education curricula, would benefit from 'seeking platforms for interdisciplinary connections, integration of science and IKS, and exploring culturally appropriate research methodological trends.' He therefore considers complexity systems and complexity theories as suitable frameworks that can be used to interrogate how university curricula can be refocused and restructured for crossdisciplinary teaching and learning in the light of IKS. He specifically argues for the use of Capra's notion of meaning, Luhmann's concept of communication in social systems and metaphors such as *autopoiesis* (selforganisation) from complexity as tools for providing explicit educational value and a critical pedagogical stance to begin exploring network structures in achieving a holistic and organic perception of IKS.

Thus, African scholarship should also mean empowering higher education staff and students to contribute to finding African solutions to challenges such as poverty, poor quality education, HIV/AIDS, hunger, environmental degradation, human rights abuse, bad governance, and corruption affecting contemporary African society. It is within this understanding and context that Van Laren, Mitchell, Mudaly, Pithouse-Morgan and Singh underscore the role that African higher education, particularly teacher education can play, in mitigating HIV/AIDS and preparing graduates to face the multiple challenges associated with living and working in the context of the HIV & AIDS pandemic. Their article 'Exploring University Educators' Lived Experiences of Curriculum Innovating through Integrating HIV & AIDS' contributes to the view that preventive education can only effectively make meaning when it speaks in the lived experiences of the community for which it is meant. In exploring the lived experiences—personal and professional—of curriculum innovators who integrate HIV & AIDS into their teaching in an African university, the authors highlight the commitment of these curriculum innovators to making a difference as well as drawing attention to the emotional and professional challenges they encounter. The article offers encouragement and further possibilities for integrating HIV & AIDS in Higher Education teaching as an innovative strategy that can contribute to lessening or maintaining the low HIV prevalence rate among higher education students in South Africa.

### **Higher Education Curriculum and Curriculum Innovation**

Conventional notions of the domestic student attending a local university are being eroded as global mobility influences policy developments and assumptions regarding employment, skills, economic development and social engagement. This has profound implications for higher education curriculum transformation particularly in the context of theorising the acquisition of literacies in disciplinary discourses and generic skills. This requires us to critically appraise the structure of degree programmes and explore innovative teaching strategies in the context of technology rich learning environments in which E-Learning and Web 2.0 Applications make possible flexible and distance learning, while virtual learning and social networking platforms enable collaborative learning blended learning and mobile learning.

Noel Gough, in 'Generating Curriculum Visions for Global Citizenship: Collective Stories and Creative Imagination' argues that defensible curriculum decision-making requires the availability of the greatest possible number and diversity of alternative solutions to problems for practical deliberation. He contends that contrary to prosaic notions of a knowable, fixed reality, visions of alternative futures arise from many sources. He focuses on two such sources that tend to be under-represented in both school and higher education curricula, namely, the collective stories that reflect some degree of cultural (or sub-cultural) consensus about desirable futures and the speculative futures imagined by creative artists in various media. The paper describes selected examples of approaches to generating alternative futures with particular reference to the implications of a global knowledge economy for contemporary understandings of notions such as citizenship. But we also have to cast our gaze beyond contemporary moments to rescue the future.

Curriculum transformation in higher education will remain trapped in rhetoric unless we address the crucial role of language and literacies which act as enablers barriers to academic performance. Despite South Africa's multilingual language policy which confers the choice of languages to universities, the majority have adopted English as their medium of instruction, contrary to undisputed evidence that home language instruction promotes cognitive development and enhances learning outcomes. In the Return to Reading: Acquisition, Reading, Research on Narrative and the Implications for a Multilingual Pedagogy for Higher Education in South Africa, Robert John Balfour presents five arguments in defence of a changing language pedagogy that should be informed by cognitive linguistics and psycholinguistics for the development and use of indigenous languages development in South Africa. First, he argues that grammatical competence develops earlier in bilinguals because the use of two languages encourages an awareness of language systems (syntax and semiotics) such that the grammaticality of language is drawn to the attention of bilingual learners when differences between two language systems become evident in the way these language are used and even learnt. Second, he notes that the role of vocabulary development is crucial for the successful learning of a target language and such learning becomes more profound when phonology is developed and awareness of pronunciation is reinforced through reading. His third contention is that bilinguals develop an awareness of syntactic differences within languages at an earlier age than do monolingual speakers owing also to language exposure and use. Fourth, that phonological awareness of language use can be developed earlier when two languages are used and further that phonological awareness development is closely correlated to the development of reading skills as sight and sound work together to develop and enhance language awareness in bilingual speakers.

While language literacies continue to demand robust policy intervention and scrupulous monitoring to develop indigenous languages as a moral imperative, the pervasive infiltration of technology in every facet of our lives demands that technological literacy be accorded attention in our quest to enhance equity of access as well as equity of outcomes. Conventional notions of the domestic student attending a local university are being eroded as global mobility influences policy developments and assumptions regarding employment, skills, economic development and social engagement. Theorising the acquisition of literacies in disciplinary discourses and generic skills for epistemological access impel us to explore innovative teaching strategies in the context of technology rich learning environments in which e-Learning and Web 2.0 Applications make possible flexible and distance learning, while virtual learning and social networking platforms enable collaborative learning. Blended learning and mobile learning smartboard teaching technologies and content management systems provide opportunities for e-learning architectures, systems and solutions in face-toface environments while the shift to open access materials and instructional design for digital libraries for E-learning enable asynchronous learning; active learning; problem based learning all of which have implications for curriculum, assessments and evaluations

Craig Blewett's 'Exploration of e-Learning Terminology Trends' which could serve as a lens to scrutinise institutional paradigms reveals a disturbing dichotomy which he contends is becoming apparent within e-learning. On the one hand are reports of increasing use of e-learning environments by higher education institutions, however on the other hand are

indications that the use is limited and pedagogically rigid. By exploring the changes in e-learning terminology and research foci over the past ten years it is possible to trace underlying pedagogical currents in higher education.

His paper presents a framework that classifies e-learning into Type 1 environments, typified by Learning Management Systems which continue to dominate, while Type 2 environments such as Virtual Learning Environments are becoming increasingly popular. However, despite technological innovations in Web 2.0 platforms, Type 3 Personal Learning Environments appear to already be floundering. The results indicate that out-dated approaches to learning, supported by 'industrial-age' models may be hampering the adoption of alternative learning paradigms which are more readily supported by Type 3 environments. Future research may need to focus on exploring new informal learning environments, such as social networks, that are more authentic to the student learning and communication experience.

A citizenry that is skilled in high stakes subjects like mathematics and science are better positioned to contribute to personal and national development. The dismal record of South African performances in two Trends in Mathematics and Science Studies (Howie 1999; 2001) are testimony to the huge deficits that need to be overcome in teaching and learning. The problems in basic education, which are connected to higher education in and through students, are complex. The iniquitous distribution of resources, variations of school contexts and teacher qualifications, complex curriculum changes and prolific policy generation, amongst a range of factors besetting education (see e.g. Bloch 2009), attest to the need for higher education intervention. The introduction of the Advanced Certificate in Education (ACE) programmes in a range of subjects, attempts to address some of the deficits in basic education. Two papers on ACE programmes, the first by Bansilal, 'Exploring Success Rates in a Professional Development Programme ...', describes and analyses the success rates of the ACE in mathematics for in-service teachers. Bansilal takes the unconventional position of arguing that a success rate of fifty percent is laudable. Her generous take was made possible by stretching the notion of success beyond that dictated to by throughput rates of completion in minimum time. Productive change Bansilal suggests, demands patience and adjustment of criteria suited to the kinds of students who register in higher education institutions to reclaim personal and national development goals. It means too,

that higher education may need to reconsider its obsessions with time-based throughput for a greater good. The second paper on the mathematics, science technology ACE module for in-service teachers by Sibanda and Jawahar, 'The Impact of Mentoring ...' forms the basis of an intervention that tweaks the practice component in an innovative way. Instead of using teacher educators to supervise teaching practice, the study explores how experienced school-based teachers mentor their peers who enrolled for the mathematics, science and technology ACE. Their findings suggest that content knowledge of in-service teachers was improved through peer mentoring. Considering the needs of the nation to produce large numbers of highly competent teachers, the Sibanda and Jawahar study makes visible how partnerships with schools will enable higher education with limited human resources, to do so.

Raniga's paper, takes us back to an undergraduate curriculum. The undergraduate space is the hub of the production of professionals, particularly of those in the social sciences. In, 'Community Work through Reflective Practice ...' she challenges us to consider the makings of a social worker in higher education. Offering a curriculum that includes placement in authentic settings and deploying a sustainable livelihoods model for community engagement she suggests, is one way to create a social worker with a consciousness and conscience. Aware of the deep social and economic hardships of communities on the margin, she invites her students to serve their practicum in a low income community. In her paper, she draws on French and feminist philosophical traditions of reflexivity as an interventionist tool for professional growth and development. Her analysis distils three themes: reflections on self, reflections on team meetings and reflections on working with community members. Reflections, the paper implies, is a self-surveillance mechanism, serving a wider mandate that bridges the worlds of higher education and society.

Finally, the position paper by Akoojee and Nkomo, 'Access for Labour Market Equity ...', like Gough's paper, takes us back into the terrain of the imagined. Their focus is narrowed to the issues that are at the heart of transformation – not just making higher education accessible, but making it responsible for the employment of its graduates. National development, they argue will be accelerated if those who have acquired skills in higher education are given the opportunity to serve. The data shows that employability is still race-based, with whiteness continuing to be a passport to better work prospects. Eighteen years into the post-apartheid period, has so

little has changed race-wise? Their arguments leave no doubt that transformation has been slow, insufficient and inconsiderate. Clearly, the mandate for higher education is a deliberate, transformative imagination that benefits society.

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Rubby Dhunpath Mary Goretti Nakabugo Nyna Amin University of KwaZulu-Natal