*ALTER*NATION

Diversity, Transformation and Student Experience in

Higher Education Teaching and Learning

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Guest Editors
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Editorial: Diversity, Transformation and Student Experience in Higher Education Teaching and Learning

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The themes of the Fourth Teaching and Learning Conference and consequently for this special issue of *Alter*nation emerged out of engagements with key national and UKZN reports, notably the Report of The Ministerial Committee on Transformation and Social Cohesion and the Elimination of Discrimination in Public Higher Education Institutions (MCHET) (2008) and the UKZN Report of the Governance and Academic Freedom Committee of Council (GAFC) (2009). A further set of recommendations from the UKZN Senate Report on the Analysis of Research Productivity at UKZN for the period 2004-2008 and a Review of Indigenous Knowledge Systems/African Scholarship were the catalysts for a range of institutional responses, initiatives, innovations and projects which have inspired the focus on the theme of this issue of *Alter*nation – 'Diversity, Transformation and Student Experience in Higher Education Teaching and Learning'.

The MCHET, arguably one of the more severe indictments of higher education in the post-apartheid period, highlights the dilemma. The report contends that most institutions' understandings and interpretations of transformation, discrimination and social cohesion are broadly consistent with the White Paper on Higher Education. The sector has formally responded to the government's transformation programme and there appears to be broad compliance with transformation requirements, especially with regard to employment equity. However, the extent to which these responses have been able to transcend the level of symbolism is less evident. The report emphasises the disjuncture between institutional policies and the lived

experiences of staff and students evident in the learning, teaching, curriculum, language, residence life and governance at the majority of universities.

> The Committee found that the transformation of what is taught and learnt in institutions constitutes one of the most difficult challenges this sector is facing. In light of this, it is recommended that institutions initiate an overall macro review of their undergraduate and postgraduate curricula, so as to assess their appropriateness and relevance in terms of the social, ethical, political and technical skills and competencies embedded in them. This should be done in the context of post-apartheid South Africa and its location in Africa and the world (2008: 21).

Collectively, the MCHET together with the other documents identified above and the discourses they have inspired, point to the formidable challenges we face in higher education as we are called on to bear greater responsibility for transformation. Collectively, the documents implore us to concede that it can no longer be business as usual for higher education in a system where transformation is often a little more than the application of band-aid to deep-seated systemic pathologies; diversity is inscribed in the rhetoric of educational discourse but has little substantive expression elsewhere; and the student experience on many campuses is characterised by alienation, fear and in some instances, outright brutality, as students continue to endure individual, group and institutional racism through both the official and hidden curriculum. In some institutions the curriculum is so inextricably intertwined with the institutional and/ or dominant group culture that it is not conducive to reform, while in other institutional contexts, there is very little scope for curriculum innovation because of a limited view of the knowledge project (MCHET 2008).

Indeed, the knowledge project has been subverted on many fronts, but none as insidious as the subversion by academics themselves who fiercely defend their academic autonomy but are happy to relinquish it when faced with crucial choices over their curriculum and pedagogy (Nelson 2010). In short, the MCHET report concedes that while there are exemplary practices at some institutions 'nobody must underestimate the difficulties

which still exist. There is virtually no institution that is *not* in need of serious change or transformation' (2008:13).

In an article written for this special issue of *Alter*nation, Crain Soudien (who chaired the MCHET) points out that the attentiveness that is beginning to be paid to the challenge of race by South African academics and institutions is important for the transformation of our educational institutions and cultures at all levels, as well as critical for the development of ontology and epistemology here where the need is profound, as well as beyond our national boundaries.

Soudien's paper argues that South Africa is an important site for understanding how universities are engaging with the questions of change and transformation. He poses critical questions such as what it means to be human in South Africa relative to other parts of the world. He demonstrates how this theoretical space is being opened up in the South African academy and uses the experience and examples of key interventions within the higher education sector.

South African contributions to tackling the load of racial oppression borne by the African continent and diaspora are long overdue. Given our history and deep experience of racial oppression, scholars, policymakers and institutions elsewhere in the world are justified in expecting South African intellectuals and universities to show scholarly and institutional leadership in this area. Soudien alerts us to the need for greater attentiveness to scholarship and teaching that addresses indigenous forms of knowledge and questions of epistemology beyond the dominant Western models.

The focus of this special issue appears to have some consonance with developments on the continent. Mkandawire (2011:24) recently made the argument that 'Africa has the fastest growing university population in the world. This means that we can focus on problems of quality and equity'. He goes on to 'point to the strengthening and revitalising of the African faculty as the urgent issue' while recognizing the impact of democratisation on debates in higher education.

South African academics enjoy significant freedom, relative to their counterparts elsewhere in the academic world. Faculty members have substantial latitude in choosing what to teach, how to teach, and what theoretical and methodological traditions they choose to deploy. The challenge facing academic researchers who make the journey into less familiar

mindscapes of conceptualising their pedagogical work, is how to obtain the appropriate theoretical tools to make sense of their emerging insights derived from their practices, pay their conceptual debts to earlier works (Biggs 1979) and pursue roads less travelled upon to leave their own footprints.

Curriculum innovation and transformation is an awkward endeavour. Unlike corporate entities which appear and disappear and whose survival depends on their capacity to innovate in order to feed insatiable desires for novelty (following an increasingly unsustainable capitalist model), higher education is less vulnerable to the vagaries of competition. For instance, a QS Rankings observer notes that there is very little movement in top end of the league where the larger universities hardly ever close down their operations and prestigious ones seldom lose their esteemed positions. Part of the reason for this apparent stability is a 'dearth of disruptive innovation' (Christensen & Eyring 2011). The imperative to innovate is usually established by those institutions at the top and those lower adopt the survival strategy of imitation, rather than innovation. Hence, 'little-known and smaller institutions try to move up in the ranks by adding students, majors, and graduate programs, so as to look more like the large universities' (Christensen & Eyring 2011:1). It is not surprising that the essential elements of modern higher education are so similar to their earlier incarnations although students today are more diverse, 'the shape of classrooms, the style of instruction, and the subjects of study are all remarkably true to their century-old antecedents (Christensen & Eyring 2011:1).

It is therefore gratifying to be able to co-edit this special volume compiled from submissions that reflect the experiences of academics in various institutions who have embraced the challenges of diversity and curriculum transformation, muddying their boots as they traverse their disciplinary fields into the less comfortable landscape of conceptualising, researching and theorising their praxis. The emerging higher education teaching and learning landscape is rapidly providing space for academics to make explicit their tacit pedagogies and subject them to theoretical scrutiny, underpinned by empirical work.

The theoretical traditions and theorists that frame some of the papers in this volume will be familiar to many, particularly to academics in the humanities and social sciences. For some, there will be a temptation to dismiss the invoking of Piaget, Bloom, Vygotsky, Bernstein, Marx, Freud

and other 'classical' theorists as dated or inappropriate in explaining modern-day phenomena. The seminal works of these classical theorists which are firmly inscribed in teaching and learning discourses are typically more accessible to academics embracing these discourses as they expand their disciplinary repertoires. Indeed, much of this scholarship has been superseded by contemporary theorists who engage their scholarship through quite different philosophical and methodological lenses. Therefore, scholars who use them injudiciously or with scant regard for emerging works (some of which have more powerful explanatory potential) risk undermining their research endeavours, and further risk the scholarship of teaching and learning in higher education.

Vanessa Tang, in her article titled 'A Piagetian-Bloomsian Approach to Teaching and Learning Economic Concepts' reflects on the benefits to be derived in returning to the classical theorists to address the challenges of teaching and learning economic concepts at undergraduate level, which can be a frustrating passage for both teachers and learners. In managing the dilemmas of students who often arrive at university with a fear of economics she had adopted a Piagetian-Bloomsian approach to teaching, which takes a cognitive-constructivist approach to teaching and learning. She describes the approach as a visual representation and communication of an individual's knowledge structure of single or multiple concepts, as constructed by the student, taking the form of a matrix in an approach similar to mind mapping. This guided instructional technique, she argues, is designed to foster students' cognitive growth. The effectiveness of this teaching and learning approach, she notes, is confirmed by the results of a survey which demonstrate that students find this teaching approach useful and there is a strong positive correlation between higher cognitive skills and the usefulness of the teaching approach evidenced in the improvement in examination scores in four teaching semesters.

Adopting the classical theorists to make sense of her own context allows Tang to appropriate the cognitive-constructivist strategy to engage students and develop their analytical and creative skills as they identify, explore and link key concepts. Conceding that not all students would appreciate the proposed Piagetian-Bloomsian teaching and learning approach, she expects her own teaching and learning approach will evolve over time with exposure to an ever-changing heterogeneous group of students.

Responding to heterogeneity is the cornerstone of effective teaching in South Africa's diverse lecture rooms, requiring a creative blend of conventional and innovative approaches. This is evident in the paper by Annah Bengesai who demonstrates the effects of a move from conventional models of learning and teaching towards constructivist models within the Faculty of Engineering, which historically has been plagued by unsatisfactory student retention in an era when Engineering can no longer be considered anything but a global profession (Du Toit & Roodt 2009:39). Further hampered by critical staff shortages and high student-teacher ratios, engineering academics are compelled to explore alternative pedagogies to enhance student learning. Bengesai explores Supplemental Instruction (SI) which is a peer-assisted learning programme that is targeted at 'high-risk' courses rather than 'high-risk' students. The approach seeks to facilitate deeper understandings of course content while encouraging students to develop better meta-cognitive skills so that they develop higher levels of knowledge about the knowledge they acquire.

Endorsing Bengesai's claims about the potential value of Supplemental Instruction, Vino Paideya reveals through her study that Engineering students experienced chemistry SI as discursive learning spaces offering opportunities for discussion, for reflection and meaning making, motivating students to take responsibility for their learning. She argues that the social learning spaces created during the SI intervention session have the potential to develop independent lifelong learners in chemistry.

Central to the notion of lifelong learning is the creation of positive social spaces that encourage collaborative learning where students can effectively mediate knowledge and enhance their confidence as they gain access to concepts. The approach is underpinned by Vygotsky's (1978) work on cognition and premised on the principle that knowledge is first socially constructed and then internalized, emphasising that the creation of learning spaces involves more than controlling the external conditions to enhance learning. It also involves mediating the power asymmetries between students and lecturers that characterise educational practice.

Performance data provided by Bengesai over the three semesters reveals that the approach generates positive outcomes. However, the author cautions that the results also indicate that SI can potentially create over-reliance on support, presenting a paradox, in which the efficacy of SI in

promoting independent learning is brought into question, disrupting its transformative potential.

Power differentials in lecture halls, a product of the country's past, continue to impact on the dynamics of teaching and learning in the present. Juxtaposing the dual tensions of transformation and diversity in education in a democratic South Africa, Veena Singaram, T. Edward Sommerville, Cees P.M. van der Vleuten, Fred Stevens and Diana H.J.M. Dolmans explore collaborative learning from a different angle to the SI approach adopted by Bengesai. Using problem based learning (PBL) as the point of reference, the authors argue that transformative learning transforms problematic frames of reference and fixed assumptions and expectations to make them more inclusive, discriminating, open and reflective. Citing Mezirow, the authors consider how students can act on assimilated beliefs, values, feelings and judgments of others as impediments to their own learning.

Data for the Singaram study was obtained from focus group interviews with second year medical students and teachers. The process involves the posing of 'a disorienting dilemma', a situation in which new information clashes with past beliefs, leading to self-examination and critical assessment of assumptions, which catalyse new perspectives. The identification of dilemmas that hinder the transformation process presents possibilities for their eradication. Sensitive issues such as racial quotas, artificial separation and language fluency as an indicator of academic ability are explored as tensions. The authors affirm their support for changes in policy, epistemology and institutional culture, arguing that structural alterations do not necessarily change the individuals who collectively *are* the institution. Confronting some of the tensions and contradictions in the relatively secure environment of collaborative learning serves as a catalyst in transforming students' prejudices.

Many presentations and discussions at the conference reflected diverse though increasing levels of awareness of the publicly funded educator's caveat: 'The process of holding others accountable requires that we first hold ourselves accountable' (Ross n.d.:21). Contending that debates on transformation in higher education have been largely confined to institutional level interventions Murthee Maistry argues that insufficient attention is paid to curriculum and pedagogy. Drawing on his teaching in Critical Business Education he argues that teaching for equity and justice in

our unequal society and world involves more than transmitting disciplinary content and reproducing teachers who in turn induct their students into captive subject positions in the machinery of capitalism. The article asserts that it is the responsibility of academic teachers to address contradictions in their disciplines during their teaching, in pursuit of a social justice agenda.

In 'Teaching Social Justice and Diversity through South/African Stories that Challenge the Chauvinistic Fictions of Apartheid, Patriarchy, Class, Nationalism, Ethnocentrism …' Priya Narismulu reflects on the teaching of basic metacognitive skills to level one students. These and other strategies are used to enable all students to deconstruct the familiar and naturalised chauvinisms behind bigotry and learn how discursive and more material forms of power may be engaged. Students learn how to analyse narratives in relation to questions of place, race, gender, class, nation, language, and culture. This is a synthesizing strategy to overcome division, disempowerment and silencing, as illustrated through the selection of eight stories that explore and encode transformative skills and practices.

Dealing with the MCHET challenge, 'does the curriculum prepare young people for their role in South Africa and the world in the context of the challenges peculiar to the 21st century?' (2008:21), Emmanuel Mgqwashu points out that it is well established that the learning of cognitive skills is best acquired in the mother tongue and that for this reason teaching and learning needs to occur in learners' mother tongues. Given that indigenous African languages gained official recognition some time ago there is no reason for the majority of South Africans not to have access to the epistemologies and skills the curriculum and syllabus are designed to impart in these languages.

Engaging with the colonial and apartheid era prejudices that represented indigenous languages as irrelevant to the modern world and deliberately underdeveloped, this essay argues that local languages are used by a huge majority of South Africans and must be developed to enable effective teaching and learning, for instance through moving from structure-focused tuition to greater integration of language and literary studies to allow for deeper engagement with the linguistic needs and realities of people within and outside the academy.

Tackling the questions of social justice and diversity in relation to the limited and largely colonial languages of instruction in South/ Africa,

Ayub Sheik examines the significance of globalization, glocalization and emerging technologies for the cultivation of language ecology. The article argues for the use of inclusive and integrated strategies to meet students' language needs and the goals of equity and access in South Africa.

Arguing that mindfulness is valuable for action research projects that focus on social change, Kriben Pillay addresses the challenge of developing practitioner research. The article distinguishes between self-study as a cognitive strategy, where meta-critical thinking serves the development of professional practice, and a meta-cognitive approach to self-study as mindful self-observation. Arising out of a workshop presented at the conference, the paper addresses gaps in academic approaches to research (including interdisciplinary action research), postgraduate education, local economic development and other areas.

The challenge of transforming higher education literally takes on another dimension through the creation of a virtual learning environment, where educational interactions are managed online. Technology enables African teaching and learning networks, to break down the boundaries created by time and space. Craig Blewett, Rosemary Quilling, Zahra Bulbulia and Patrick Kanyi Wamuyu reflect on the virtual collaborative learning experience they set up for an Honours module involving Information Systems and Technology students at the University of KwaZulu-Natal and Applied Computer Science students from Daystar University in Kenya. Within a broad framework of social constructivism the study focuses on students' academic, operational and technological challenges experienced on a project entitled NextEd, which is an actual operational model of virtual learning environments as transformative learning spaces at the University of KwaZulu-Natal. The value of the study is that it also presents the limitations of virtual learning environments from the student's perspective, such as incomplete communication; limited ability to build relationships and other complexities of distance interactions. An interesting finding of this study is that most of the respondents are below the age of 23 and the rest do not exceed the age of 27. Aptly labelled as 'Generation Y', they are described as being directed towards visual and kinaesthetic learning and interactivity. The changing face of transformation may well be that such projects are 'student driven rather than lecturer pulled'.

The issue of supervision comes under scrutiny in the Academy of

Science of South Africa (ASSAf 2010) study. It confirms that South Africa is under-producing at the scale of only 26 doctoral graduates per million of the total population of the country based on 2007 cohort analysis of Higher Education Institutions with only 1274 doctoral graduates qualifying in that year (Samuel & Vithal 2011). This crisis, which is often attributed to the preponderance of the master-apprenticeship model of supervision (Govender & Dhunpath 2011), calls for a radical re-conceptualisation of existing supervision models to address the unsatisfactory graduation rates. Among the alternative models proposed are the cohort model and the PhD by publication to accelerate the rate of doctoral graduations.

Callie Grant takes us through her experiences of obtaining a PhD by publication. Within this contested space of doctoral education, this article focuses on the PhD by publication which, Grant clarifies, is not a single monograph or book-length dissertation, but rather a series of shorter pieces, which are assessed by a range of different readers and reviewers before they are submitted for a final examination. She explores the notion of connectedness which is central to a PhD by publication, and her article focuses on her 'logic of connectivity' which operated at five levels in the PhD. This highlights the transformational impact that PhD studies should aim for in terms of its potential to contribute to further research rather than being done as a means to an end, only to find the thesis positioned as a white elephant on the shelf. Grant presents a convincing argument that the advantages of undertaking a PhD by publication outweigh the disadvantages.

There can be little contestation around the importance of the nurturing environment free of hostility proposed by Singaram *et al.* for effective teaching and learning. However, an overly supportive postgraduate environment that fails to critique sterile ideas cultivates mediocrity. Nyna Amin's 'Critique and Care in Higher Education Assessment: From Binary Opposition to Möbius Congruity' uses a poststructuralist lens to engage the dual discourses of care and critique drawing on a study related to the assessment of Masters students. Amin explains that tensions arose when students considered critiques they received on assignments as uncaring while she interpreted their responses as a lack of care for intellectual growth. Using the visual image invoked by the 'Möbius Strip', she argues that while it appears that critique and care are oppositional stances, a deeper interrogation reveals the hidden aspects of care in critique and critique in care, demon-

strating that language constructs differences and masks the nature of reality of a singular phenomenon and, more specifically, its paradoxical nature.

While the study is presented as an illumination of the value of critique on the assessor it also highlights the experiences of students as the assessed. A study of this type attests to the nature of reflective practice in teaching and learning as a key element in the transformation of our discursive practices, forcing assessors to consider how binary structures can be destabilised without compromising the importance of assessment in higher education, particularly as it relates to MA and PhD supervision.

Assessment is perhaps one of the more neglected areas of systematic enquiry in higher education, with multiple choice questions (MCQ's) enjoying prominence in certain high-enrolment courses. Despite the controversy surrounding the approach, particularly in contexts of student diversity, its increased use in recent years has been largely attributed to factors such as increasing class sizes, reduced resources, perceptions of increased incidences of plagiarism, shrinking timelines for the finalisation of student grades and the competing demands of maintaining a creditable research profile (Hughes 2007).

In their paper, 'Producing Better Quality MCQs at First Year Level: Are Guidelines and Templates Enough?' Sue Price and Mitchell Hughes explore the problems associated with accommodating diversity in higher education assessment. Responding to high student numbers and the constraint of having to operate a common curriculum over two campuses (Westville and Pietermaritzburg), the School of Information Systems & Technology at the University of KwaZulu-Natal has adopted multiple choice questions (MCQs) as its primary assessment method at first year level. Based on their experiences of implementing a set of MCQ guidelines and an MCQ template, together with a structured cycle of review and feedback, the authors contend that there are several pre-conditions for effective and successful implementation including thorough mastery of the subject matter by the question developer and the ability to write simply and concisely especially for students whose first language is not the language of assessment.

The authors caution that academics should not underestimate the time and effort required to construct and test items that have design flaws such as implausible options, word clues, grammatical clues or logical clues in the stem or options, as well as either no option or several options with the

correct answer. These undermine the validity of assessment. The authors emphasise the importance of providing training in MCQ construction techniques to mediate these hazards.

The massification and internationalisation of higher education (Marmolejo 2010) has become the norm as government funding for higher education is diminishing in the face of the global economic crisis. This is particularly true of the United States where universities have adopted an entrepreneurial character to attract international students, and with it, the attendant complexities of diversity and difference, including the challenge of varying academic capacities that students bring from varied contexts. In this context, issues of performativity (Peters 2004) and standards of benchmarking quality are catalysts for the transformation of education.

Victor Borden, in his paper, 'Accountability for Student Learning: Views from the Inside Out and the Outside In', explores effective accountability which commences with the articulation of specific quality objectives that accommodate the diverse core objectives of higher education. Borden explains that most quality assurance processes rely on institutions to define quality on their own but that makes it difficult to convey to various constituents what specific institutions and the higher education sector as a whole contribute to society at large, individuals and communities. This paper explores practical and conceptual issues related to increased demands for accountability for student learning outcomes through a US lens of experience and offers a framework for a constructive approach to public accountability applicable to both the US and South African contexts.

Finally, in the context of the 'growing recognition that the existence of a vibrant research community is vital for the study of Africa' (Mkandawire 2011:25), it is clear that research is no less important, and in fact essential, in the areas of teaching and learning for social justice in a diverse society and world. While this special issue attempts to contribute to the development of intellectual capacity and scholarly networks (Mama 2006) it is also mindful of the need for higher education institutions to work together, as the staff and founding institutions of the merged University of KwaZulu-Natal have found necessary, to meet the needs of our society and world more effectively.

The cover of this issue of *Alter*nation has a drawing of the African Iris by artist A.W. Kruger. The iris is an emblem of diversity the world over

and is part of many local and international emblems and insignia. The African iris signifies local prevalence and its rhizomatic character represents depth, knowledge, non-hierarchy, constant renewal and change especially in contexts of transformation. '[T]he rhizome is so constructed that every path can be connected with every other one. It has no center, no periphery, no exit, because it is potentially infinite. The space of conjecture is a rhizome space' (Eco 1984:57)[1].

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The Arhythmic Pulse of Transformation in South African Higher Education

Crain Soudien

Abstract
This paper makes the argument that South Africa is an important site for understanding how universities are engaging with the questions of change and transformation. It argues that what it means to be human is a more intense question in South Africa than it is in most other parts of the world. It tries to show how this theoretical space is being opened up in the South African academy and uses the experience and examples of key interventions within the higher education sector such as the new Reitz Centre at the University of the Free State, and the Centre for Non-Racialism and Democracy at the Nelson Mandela Metropolitan University. By working through the examples, the article makes the argument that these new initiatives are important for scholarly efforts elsewhere in the world on the question of human development. This is especially so in the emphasis South African universities are placing on the question of race. The article argues that the challenge facing this South African effort is its relative neglect of questions of epistemology and forms of knowledge that fall outside the mainstream Western model.

Keywords: Higher Education, transformation, race and racism, epistemological shifts, universities and social change, education policy

Introduction: Something Amiss in the Modern University?
A small group of scholars around the world has begun an important discussion about the role of the university in the issues of social, cultural and economic progress (see for example Santos 2007). The central issue the

scholars raise is the meaning of the term 'development' and the role of the university in relation to this. Escobar, one of the more prominent scholars within the discussion, argues that the impetus that

> moved me to write about the 'invention of development' … in the late 1980s is still very much there: the fact that, as I see it, development continues to participate in strategies of cultural and social domination, even if academics might have a more nuanced view today of how these strategies operate (Escobar forthcoming: 1).

The view of Lessem and Schieffer (2010b:3) is that there is something 'amiss' in the modern university. They suggest that there is no 'integrity, authenticity, or indeed 'alternity', in the social 'scientific' education that, say, a Senegalese or Syrian receives' (Lessem & Schieffer 2010a:1-2). The concern that this group of scholars expresses is that universities, in general, promote a narrow view of what kinds of human knowledge is valuable (the epistemological question) and a similarly narrow view of the ideal human subject (the ontological question). Against this, what is needed argues Andreotti (2010:5) is a 'reconceptualisation of knowledge and learning in educational policies and practices in contemporary 21st century societies' that is inclusive, respectful of all our social and cultural differences and which is aware of the dependent relationships humans have with their wider natural and physical environment.

Because of the interest of these scholars in questions of interdependence among people, and among people and their natural environment, I refer to them as 'epistemic and ontological ecologists'. Human development for them is a much deeper question than simply economic development. They are interested in an understanding of development which is transformative. Central to this transformation is human beings' understandings of themselves and their interdependence, and an awareness of the power of knowledge in processes of transformation. They are critical of forms of knowledge which lead to hierarchy and notions of superiority and inferiority.

In this article I argue that South Africa is an important site for understanding how universities are engaging with the issues raised by the ecologists, particularly as they pertain to social inclusion. In comparison with

most higher education systems elsewhere in the world, there is a vibrant discussion underway around transformation and what universities should be doing for changing the world. I suggest that South Africans are making an important contribution in the areas of social difference, and especially that of race. South Africans are also making important contributions in the areas of teaching and learning (Bradbury 2010; and Morrow 2009). Their approaches are novel in two respects, in opening up the questions of conceptual access and in developing critical new approaches to the mediation of knowledge. It is, however, South Africa's contribution to the theoretical areas of ontology and epistemology that is the focus of this paper. It tries to show how this theoretical space, which the South African academy is opening up, is important for the epistemic and ontological ecologists. But it also argues that the area which the social ecologists have made their strength, an appreciation of the knowledge systems of the 'other', remains a major challenge for South Africa. South African contributions, I suggest, are dominated by ideas of modernism and modernity. They have difficulty in working with knowledge forms and knowledge claims which fall outside the particular modernist imagination. 'Development', as a result, is understood almost entirely in economic terms.

In light of these opening comments on development and of the questions of what it means to be human and the knowledge forms which will promote human development, it is important to assess the South African contribution to the discussion. How are the South Africans contributing to the epistemic and ontological ecologies debate? Are they in tune with or in a different step to the discussions that are taking place elsewhere in the world? What are they doing that is not being done elsewhere in the world? What are colleagues discussing elsewhere in the world which the South Africans would urgently need to be looking at or are not emphasizing sufficiently?

It is important, in opening up the discussion of transformation, to make clear that the essay does not deal with the discussion of racial representivity, particularly as it is understood demographically in South Africa. This it is acknowledged here is the primary interest of many in the discussion and is addressed in contributions such as that of the DoE (2008). The purpose of this contribution is to focus on what the major actors in the landscape are thinking, with respect to the key conceptual issues which

confront them. The essay, in these terms, is a review of what these conceptual foci are.

The South African Development Conundrum – Is it Economic, Social or What?

There is widespread agreement amongst many in South Africa that the society is in difficulty. In terms of the Gini Co-efficient, the standard indicator of economic equality inside a country where 0 indicates complete equality and 1 complete inequality, the measure for the South African population in 1987 was 0.66. Out of 57 countries included in an international assessment at that time, South Africa came last (Giliomee & Mbenga 2007: 433). The country performs as poorly on a range of other well-being indicators. These reflect the level of the social challenge confronting the country. Race and class are central. After 1994, inequality within the white population remained basically unchanged but had increased respectively by 21% and 17% amongst those classified African and coloured. In 2004 three-fifths of African people were living below the poverty datum line with some 4.3 million, 9% of the population, living on less than a dollar a day (Giliomee & Mbenga 2007: 433). In 2010, in terms of the Gini Co-efficient, South Africa became the most unequal society in the world (Nzimande 2010: 1). Unemployment figures are high with estimates veering from 20% to 40%. With a population approaching the 50 million mark (49.9m) 22% are deemed to fall below the poverty line (*The Sunday Independent* 19 December 2010:19). Six million individuals pay 95% of the income tax revenue earned by the state (Bishop 2010:21). The number of individuals on one form or another of social welfare is 14,000,000. The income profile of the formal workforce is skewed by low-incomes. Only some 6,700,000 of the formal workforce falls in the middle-income category of R 50,000 to R 300,000 per annum, with more than half of this category of workers earning less than R 120,000 per annum. The bulk of the country's workers falls in the low-income category, earning under R 50,000 per annum. Recent reports suggest that half of credit-active South Africans are classified as being 'impaired' in credit terms, i.e. they have payment statements reflecting arrears status on three or more accounts or have credit judgements against them (all the

statistics reported above are drawn from Bishop 2010:21). Linked to this learning achievement at the school and the university level is low (Lehola 2010:21). Drop-out rates in the educational system are high:

> A large proportion of children fail to pass Grade 7 by the age of 15 and Grade 9 by the age of 17 years. Estimates also suggest that 3.3 million of young people in the age category 15 to 24 were not attending educational institutions and had not completed their secondary education. More than a third of them cited poverty as the reason for the condition in which they find themselves (Lehola 2010:21).

The quality of life for most people in the country as a result of these conditions is dire. Two statistics reflect the gravity of the situation. The first is that life expectancy at birth in 2010 was estimated to be 51.5 years, compared to the figure of 55.8 years that it had been in 2000 and into the high sixties ten years before (*Sunday Independent* 2010: 19). These mortality rates reflect the catastrophic impact of HIV and AIDS on the country. Alongside this, the findings of various tests of South African children's literacy and numeracy reveal what can also only be described as a national crisis. The Third International Mathematics and Science Study Repeat (TIMMS-R) placed Grade 8 South African learners 44% below the mean scores of all participating countries. South African pupils, moreover, came last in the list of 39 countries and attained a mean score of 275 out of a possible total of 800 marks (Howie 2001:18). South Africans, using these statistics are dying young, without ever, moreover, as benchmarking tests suggest, having mastered the basic skills of reading and writing. The problem is clearly more than simply economic. It is a problem, as Amartya Sen (1999:14) would say, of human flourishing. It is fundamentally economic, but it is evident also in anti-social behaviour. Many young South Africans have issues with violence.

These descriptions indicate clearly that the country is in a development crisis. While it is doing well at some levels, it is confronted by the challenge of how to put its institutions and its resources to use in stemming the worst manifestations of poor education, ill-health and a general sense of social malaise. Against this background, how the country and its universities are coming at this crisis is important. There are innovations

taking place in the system which place it at the forefront of the higher education and transformation discussion. In some respects, as will be suggested below, South Africans are opening up the discussion of higher education and change in ways which are distinctly absent and certainly muted in the rest of the world. The contribution it is making with respect to race is crucial. At the same time, there are embedded difficulties inside the system which limit its capacity to fully recognise and take advantage of developments which are taking place elsewhere in the world.

The Institutional Transformation Response in Higher Education – An Activist State?

Confronted with this social landscape, how is the South African higher education sector, its administrators in the state, its intellectuals and the universities, approaching the crisis and why is it important for the world to pay attention to what is happening here? It is important because the urgency of the question is possibly distinctive in higher education world-wide. There are few higher education systems anywhere in the world where the questions of development are so much part of the everyday experience of what it means to teach and work in a university. There are few systems, moreover, where the universities and those who govern, including the state, and those who teach within them are being called to take positions around the complex questions of modernity, culture, and knowledge and its role in creating a new social system. There are few systems where the state is playing such an activist role in the discussion of where the universities ought to be going.

What then is the value of this intellectual and administrative ferment? One view, that of Irish academic Helena Sheehan (2008), is that it has amounted to very little. After extended study of the approach to transformation in South African universities, Sheehan (2008:68) concluded unhappily that she could not 'avoid a sense of massive disappointment and defeat' after reading extensively and visiting many campuses across the country. She asked, plaintively, what 'had happened to whole atmosphere of being challenged to reconceptualise the world and change it. Where had it gone?' (2008). The jury is out on whether the conclusion to which Sheehan comes is correct. In the wake of the Ministerial Committee into Transformation in Higher Education Report (MCTHE DoE 2008), the

country found itself fiercely divided with many echoing the kind of comment that Sheehan had made and that was contained in the MCTHE Report, and others deeply offended by what they saw as unsubstantiated allegations of racism (see HESA 2010; and UKZN 2010).

There are two major kinds of initiatives that have emanated out of the South African higher education community in relation to issues of development of which the world needs to be aware. The first relates to issues of discrimination, the legacy issues of racism and social cohesion, and the second to teaching and learning. This paper, as indicated above, will concentrate on the first.

With respect to the issues of discrimination, the South African higher education system and its oversight structures are awash with initiatives. These initiatives began, of course, with the very inception of the new South African state in 1994 when the National Commission on Higher Education (NCHE) was appointed in 1994 to make proposals as to how the sector could be transformed. Since then, over the last 12 years, the sector has been the subject of intense policy and academic review[1]. In reporting in 1996, the NCHE made several important proposals. These related to massification, responsiveness of higher education to its social context and increased institutional co-operation. This report was followed by a White Paper (1997) and a Higher Education Act (1997) in which the principles of equity and redress, democratization, effectiveness and efficiency, *inter alia,* were stressed. Out of these came key innovations such as the Institutional Forum, a structure established in each university, for the purpose of monitoring and advising universities' councils on question of transformation, and, in 1999, a

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[1] See *inter alia* Badsha and Harper (2002); Bunting (1994); National Commission on Higher Education (NCHE) Report (1996); Department of Education (1996); Council on Higher Education (CHE) (2000; 2004); Republic of South Africa (RSA) (1997); Beckham (2000); Cloete, Muller, Makgoba and Ekong (1997); Cooper and Subotzky (2001); Cloete and Bunting (2000); Cloete, Bunting and Bunting (2002); Thaver (2002; 2003); Mji (2002); Van Heerden, Myburgh and Poggenpoel (2001); Imenda, Kongolo and Grewal (2002); Taylor and Harris (2002); Cloete, Pillay, Badat and Mehojo (2004); CHE (2004); Bundy (2006); Steyn and De Villiers (2006); Jansen *et al.* (2002).

Council for Higher Education (CHE) which was established to advise the Minister of Education on a broad range of issues relating to higher education. The first and most crucial piece of advice provided by the CHE focused on the questions of the size and shape of the sector. This report provided the framework for the restructuring of the sector. In terms of it, a number of institutions were closed, merged and/or re-organized (see Jansen *et al.* 2002).

After the size and shape review process the state initiated a Ministerial Committee on Progress towards Transformation and Social Cohesion and the Elimination of Discrimination in Public Higher Education Institutions. This move was in response to events that took place at the University of the Free State in February of 2007 when a group of four young white men harassed five black custodial members of staff (see Soudien 2010). With the publication of the Ministerial Committee's Report (DoE 2008), a whole range of other activities has been initiated. Amongst the most important of these was a national summit for higher education convened in April 2010 by the Department of Higher Education and Training, at which the key issues of transformation were discussed. The Summit itself generated a slate of proposals, the most important of which was the establishment of a Higher Education Stakeholder Forum as a consultative body for the Minister (Pampallis 2011).

The Minister of Higher Education and Training also recently appointed a task team to develop a 'charter aimed at affirming the importance of human and social forms of scholarship' (MacFarlane 2010:42). The leader of this task team, Professor Ari Sitas, writing to universities ahead of visits of the team to their campuses, explained its aims:

> this is an opportunity to create a powerful, positive, affirmative statement on the humanities and social sciences, and to emphasize the role of the humanities in creating responsible, ethical citizens. This charter would serve to define a post-apartheid trajectory of scholarship sensitive to South Africa's immediate and long-term developmental needs as a key society in Africa and the 'global south' (Sitas 2010).

In assessing the significance of these moves made by the state, one needs to remember how intensely the state is driving a human capital agenda.

Despite everything else that the state is, the higher education sector has a state department which is intensely involved in arguing for a humanist orientation to the work of the universities. The Minister himself has argued that

> now is the time for the teaching of and research in social sciences and for the humanities to take their place again at the leading edge of our struggle for transformation and development (Macfarlane 2010:42).

The Intellectual Response to Transformation in the Universities – Two Steps Forward for Humanity…?

In addition to these state initiatives, a number of other developments have occurred at the national level. An important discussion was facilitated by the Academy of Sciences around the future of the Humanities in South Africa in 2010 (see www.assaf.org.za) as part of its study on the state of humanities in South Africa. Higher Education South Africa (HESA), an association of vice-chancellors, has also established a focus group to look at the question of transformation in the sector. But it is within the universities that important institutional, programmatic and research moves have existed for a long time and new ones are being made. A wave of appointments of new vice-chancellors, beginning with Salim Badat at Rhodes University in 2007 also brought a sense of urgency to the question of what universities could be. At his inauguration Max Price at the University of Cape Town committed his principalship of the University to transformation (see Price 2010). Russell Botman, at the University of Stellenbosch, similarly, initiated what he called the 'Pedagogy of Hope' campaign at his inauguration (Bisseker 2010: 47). Malegapuru Magkoba at the UKZN instituted, in response to the MCTHE and a governance reflection process at the University, a campus-wide consultation around transformation and the production of knowledge (UKZN 2009).

Existing critical initiatives within the country include the seventeen year old History Seminar at the University of the Western Cape. A pioneer in the project of reimagining the humanities in South Africa, the seminar was established in 1993 in the wake of responses to the hegemony of European and North American frameworks of analysis (Weintroub 2010:46). Explicitly

post-colonial in its approach it sought to put the question of 'how to do history' squarely on the table. The historiographies of domination, it argued, were incapable of opening up the questions of the making of the complexity of human subjecthood. The next important development was the establishment of the Wits Institute for Social and Economic Research (WISER), an interdisciplinary institute in 2001 at the University of the Witwatersrand (Posel 2002). An early important intervention of WISER was to host a conference on 'The Burden of Race? "Whiteness" and "Blackness" in Modern South Africa'. Since the establishment of WISER, important new initiatives have come into being at the University of Western Cape with the establishment of the Centre for Humanities Research (CHR) in 2006, a successor structure to the Institute for Historical Research, and the Institute for Humanities in Africa (HUMA) at the University of Cape Town in 2010. Significant about the newer institutes is their interest in the role of the humanities in dealing, as at CHR 'with questions of war and the everyday, cities in transition, violence in transition … and aesthetics and politics' (http://humanities.uwc.ac.za) and at HUMA with what it means to be human. Similarly intentioned research interventions have been established at the University of Stellenbosch where a symposium on being human was initiated by the retired theologian and scholar, John de Gruchy.

Six important institutional developments worth noting in the country are taking shape at the Universities of the Free State, KwaZulu-Natal, Witwatersrand, Cape Town, the University of South Africa and the Nelson Mandela Metropolitan University. What is significant about these interventions is their explicit engagement with the legacy questions of the country, particularly those of race. The oldest of these is iNCUDISA, the Institute for Intercultural and Diversity Studies of Southern Africa at the University of Cape Town. Its central purpose is framed as being to 'conduct … and publish … research which aims to build capacity to meet the challenges of diverse societies through research and education' and 'aims to further social justice and deepen democracy' (http://incudisa.wordpress. com/about/).

Three new initiatives which have come into being in the last three years are the Centre for Critical Research on Race and Identity (CCRRI), based at the University of KwaZulu-Natal, the Apartheid Archive Project at the University of the Witwatersrand and the Centre for the Advancement of

Non-Racism and Democracy (CANRAD) at the Nelson Mandela Metropolitan University (NMMU). The primary interest of the CCRRI is to study 'race thinking and changing identities', for the purpose of understanding and discussing 'the epistemological, moral, cultural and other bases for perceptions of human diversity and difference' (http://ccri.ukzn.ac.za/). Its most recent symposium focused on the continued use of apartheid's racial categories in the supposedly post-race constitution of the new South Africa. The Apartheid Archive Project is a research initiative which has as its main objective 'examin(ing) the nature of the experiences of racism of (particularly 'ordinary') South Africans under apartheid and their continuing effects ... in contemporary South Africa' (http://www.apartheidarchive.org). An off-shoot of the project has been the creation of an antiracism network which has drawn the leading anti-racist intellectuals in the country into a semi-formal relationship which has actively opened up questions of race and social difference and the role of higher education in the undoing of the country's racial legacy (antiracism@ lists.wits.ac.za). CANRAD was established in 2010 as an explicit project of the University's Vice-Chancellor and has as its focus the building of a non-racial orientation to knowledge production and the ideal of advancing transformation through fostering difficult dialogues. The youngest of the initiatives is the establishment of the so-called Reitz Institute at the University of the Free State (UFS). In the beginning of 2010 the UFS announced its intentions of establishing an International Institute for Studies in Race, Reconciliation and Social Justice on the site of its Reitz Residence where four young white men abused five black custodial members of staff (http:///www.ufs.ac.za/dl/userfiles/Documents/00000/128_eng.pdf).   In describing what the Institute would do one of its founding documents explained that

> it is vital to the transformation of universities in South Africa that the scholarship of teaching, research and public engagement confronts the histories, policies and practices that have shaped and constrained the intellectual and social mandates of these places of higher learning. In various ways, all of the 23 South African universities are products of colonialism and apartheid; their staffing profiles, student bodies, curricula and assessment practices bear the traces of their

racialised histories (http:///www.ufs.ac.za/dl/userfiles/Documents/00000/128_eng.pdf).

Initiatives that have curricular implications but which draw from the same impetus to further an engagement with the questions of social difference and particularly the country's racial history include the Grounding Programme at the University of Fort Hare, the Project for the Enhancement of Research Capacity (PERC) at the University of Cape Town and the South African Research Chair Initiative (SARCHI) in Development Education at UNISA. The Grounding Programme was born out of a deep process of introspection at the University of Fort Hare about the nature of the curriculum in a country beset with developmental challenges. After intensive internal consultation the University made the following commitments, based on the objectives of the Grounding Course (University of Fort Hare 2007):

- To provide UFH undergraduates with a critical and de-colonising framework in which to see and understand the world, the Continent and themselves.
- To provide a progressively rigorous, responsible and compassionate basis for gaining and applying their knowledge and energies to the world.
- To provide students with a deep understanding of the principles of ubuntu, democracy, liberation and decolonising knowledge.
- To provide UFH students with the confidence to engage in lives of authenticity and dignity linked to the creation of dignified lives for others.
- To provide students with a roadmap about how to use the University space to consolidate their own access to meaningful knowledge, including inculcating a reading and writing culture within the university.
- To provide students with an experience of building a diverse, caring and intellectual community of purpose.
- To provide UFH students and academics with an experience of diverse and humanising pedagogies, as a basis to both support and demand wider curriculum renewal in the University.

Other important initiatives include the PERC programme at the University of Cape Town which grew out of an initiative in 2008 of the Centre for African Studies with Africana Studies at Brown University and the Centre for Caribbean Thought at the University of the West Indies to ground the work of staff members at UCT in the problematics of Africa. With funding from the Carnegie Corporation UCT initiated an innovative set of projects among scholars from the entire spectrum of faculties and disciplines in the Universities which had as their objective the revisioning of the epistemological foundations of their disciplines. The project spawned a number of research initiatives underpinned by the ambition of producing '*new knowledge, which is transformative in that it is appropriate to our position in SA, on the continent and in the world*' (http://www.researchoffice.uct.ac.za/research_development/perc/).

The SARCHI initiative at Unisa is a new initiative which has drawn the interest of scholars from a range of countries. One of its fellows, Howard Richards (2010:2), picking up on his engagement with the chair-holder, Catherine Odora-Hoppers, explains that the goal of the initiative is to 'humaniz(e) modernity', of making

> the university a celebration of what humans are and have been, and will be. Bring modernity's other into the curriculum, not to assimilate modernity's other into the categories the disciplines already have, but to transform the curriculum, transform research, transform community engagement.

Additional developments worthy of mention include the Global Citizenship Programme at the University of Cape Town which has a somewhat more internationalist orientation but which, like the Grounding Programme, seeks to reconstitute the challenge of development in African terms. The Vaal University of Technology is also developing an initiative for the curriculum drawing on the UFH experience.

As this brief review indicates, the sector has significant sites of innovation. These tend to be clustered in particular universities. What is happening at universities beyond this group of institutions is also not inconsiderable.

But What Do All These Amount To? A Kind of Conclusion

What does it mean, for an ecological sensibility, to have a state which is interested in the humanities? What does the intense interest in the human subject in the South African academy amount to?

The state is clearly a many-headed structure. Its preoccupation is around the challenges of human capital and its concern that universities are not generating sufficient high-level skills for the economy. Whether this makes it, at its base, an essentially instrumentalist state is open to debate. While it is conditioned by a human capital view of what is important for higher education, its awareness of the contested nature of the university and its support for a humanist orientation is deeply important. Strategically, for how universities position themselves, the kinds of levers and influences they can call upon in re-imagining for themselves the position of the state with respect to the humanities is critical. It opens up lines of discourse within the universities that makes the discussion of what the university is for so much more fluid. Even if the dominant approach of the state is a narrow instrumentalist one, the fact that key leaders within the state can see the significance of the humanist imperative is a resource from which South Africans should draw strength. The point to make is that the state is not homogeneous in its address around the questions of development.

Now, what about the discussion around what it means to be human? There is clearly need for a much closer reading of the interest that the intellectual community in South Africa is showing around the question of what it means to be human. Such a reading would need to go into the existing texts, the ones that are aired here and others, such as the journals and books on the subject. But there are already in the founding documents of institutions signs of where the emphases and limits and possibilities of this discussion lie.

The key contribution that the South African discussion is beginning to make is at the level of identity, and particularly the racial inflections placed on identity. This is a very important discussion. The way in which it is unfolding here has deep relevance for the rest of the world. The central relevance lies in the systematic way in which the various projects in the country are beginning to reveal and come to terms with the whole etymology and formation of racial subjecthood. Key moves which have been made in this analytic approach include the idea of racial construction. Working with

the idea of the social origins of categorical terms such as race and the ideological instantiation of these into the world of the everyday, and the range of projects (from the History Seminar at UWC to the Racial Categories Symposium at UKZN), the preoccupation of the South African discussion is with how this process of social construction works. Key advances made in this discussion, ones that have global significance, are the hard-won insights that race as a concept has only that value which society wishes to place on it and that nothing about it, outside of this sociology of imposition, is of inherent consequence.

The politics of the imposition of race, however, are of profound significance. The importance of this development that scholars are making around the issue of race is not sufficiently recognised, even inside the country. Inside the country, as elsewhere in the world, there remains the inevitable defaulting to the naturalisation of race and all the consequent inferences read off this naturalisation. The politics of naturalisation are essentially what projects such as CANRAD and the Reitz Institute seek to engage with. Deliberate reflections of this are being undertaken at centres such as the CHR.

Jonathan Jansen, at the UFS, for example, has come to understand the role of the university in this process. He argues that the university is the pre-eminent beneficiary of the extra-ordinary contribution that the Enlightenment has made to modern civilisation. At the heart of the Enlightenment, which fed into cultural, religious and social discourse in Europe during the 17th, 18th and 19th centuries, was fundamentally the idea of using knowledge to widen the boundaries of human inclusion, to expand the range of those for whom the label 'human' would come to apply. He recognises how significantly it is to the modern intellectuals and their universities that this burden is effectively entrusted. He recognises also, in the politics of naturalisation how, historically, the higher education system in South Africa has betrayed this mission entrusted to it by history. He is aware of how, instead, it has chosen to turn its face away from this almost sacred mandate and, instead, placed itself at the disposal other agendas. In these terms, the contribution of the South African focus on the human subject is deeply important to the ecologies discussion. It is, however, still a limited ontological discussion.

Conclusion

Unlike the developments that have taken place elsewhere in the world, with the exception of a handful of provocative projects in the country, such as the SARCHi Chair initiative at Unisa, the CHR project at Unisa, the Grounding Programme at UFH, and the PERC initiative at UCT, the questions of epistemology remain under-explored in the country. It is here that the South African discussion demonstrates its under-developed state. While recognising the limits of racial thinking as the South African discussion does, it remains inside a limited view of the complexity of the subject. This subject continues to be interpreted through the lenses of what Santos (2007) has described as 'abyssal thinking'. The subject is identifiable, interpretable and ultimately dialogically positioned within a view of what it means to be human that is discursively delimited. It lies on the 'right' side of the abyss. This 'right' side is the example provided by Europe. The 'European' subject is developed and has achieved 'civilised' status. On the other side lies a wasteland from which the Western world has already moved. This perspective has immense difficulty entering the world of meaning and the much more nuanced ideas of the individual on the 'wrong' side of the abyss. It has difficulty in recognising the nature of its own perspective of the world and so, profoundly, failing to recognise its own epistemological horizons. The South African discussion, in these terms, is strong and productive to the ontological dimension of the ecologies discussion. It is opening up the question of race to show how deeply problematic hegemonic understandings of race are. But it is weak and under-developed in relation to the epistemological. It makes a powerful contribution to thinking identity into a new and truly post-racial space but it has yet to explore the complexity of a post-racial world. It has much work to do to pick up what the ecologists mean when they talk of the reconceptualisation of the university. It is in going in this direction, it is suggested here that great promise lies for the South African university. This promise is in coming to terms with the full inheritance of understanding and insight that its racial ontology inherited from its apartheid past – that it is now trying to undo – denied it. Much has to be learned yet. This learning will have major implications for what the university does in what it teaches, how it teaches and how it imagines learning might take place within it.

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A Piagetian-Bloomsian Approach to Teaching and Learning Economic Concepts

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Abstract

The teaching and learning of economic concepts at undergraduate level can be a frustrating passage for both teachers and learners. Students often arrive with a fear of economics and weak cognitive skills. Over the years, I have had to resort to a number of changes in my teaching strategies and eventually adopted a Piagetian-Bloomsian approach to teaching. The approach involves visual representation and communication of an individual's knowledge structure, of a single or multiple concepts as constructed by the individual. It takes the form of a matrix and is similar to mind mapping. This guided instructional technique is designed to foster students' cognitive growth. The effectiveness of this teaching and learning approach is validated by the results of a survey which demonstrates that students find this teaching approach useful and that there is a strong positive correlation between higher cognitive skills and the teaching approach. In addition, an improvement in examination scores in four teaching semesters has been recorded.

Keywords: Piaget, Bloom, cognitive mapping, teaching and learning strategies, economic concepts, undergraduate level

1 Introduction

It is common knowledge that a number of students arrive at university with educational and cognitive deficits. In the teaching and learning of economic concepts, the passage can be frustrating for both teachers and learners. Additionally, students often arrive with a fear of economics. This is because for many students economics is a completely new disciplinary field. The

subject includes the application of mathematical methods to represent economic theories – and many students do not enjoy mathematics. Also, as in the study of mathematics, the ability to apply logical and rational reasoning is a vital ingredient in the study of economics.

Over the years, I have had to resort to a number of changes in teaching methods and eventually adopted a Piagetian-Bloomsian approach to teaching and learning. At its core is the instructional applicability of Jean Piaget and Benjamin Bloom's theories and educational principles in developing knowledge.

Jean Piaget's learning theory on cognitive and constructivist development has had a major influential impact on education. Whilst Piaget's theory is geared towards knowledge acquisition for children, his much inspired insights on the nature of children and their cognitive growth are useful and can also be applied to adults in higher learning; for essentially what matters in cognitive growth 'is not the age at which skills develop, but the sequence in which they develop and how they continue to evolve' (Burman 2008:162). Echoing a similar viewpoint and influenced by Piaget's ideas, is the work of Jerome Bruner and his influential book *The Process of Education*.

Piaget's assimilation-accommodation model of cognitive growth is insightful. His model allows us to reflect on the mental framework that cognitive development is an active process of acquisition and modification – a continuous process step-by-step of self-construction and discovery. For decades, to emphasise discovery learning, there has been, as Sweller (2009: 127) points out, a large number of works that have used the Piagetian theory.

What is the theoretical link between Piaget and Bloom? For Piaget, the mind of the learner exhibits cognitive dualism. But it is a duality of a particular type. For instance, at the University of KwaZulu-Natal (UKZN), the learner is thrust into a situation where a novel concept is presented by the instructor. Piaget maintains that the learner has two cognitive characteristics. First the learner must assimilate that new concept into her current set of cognate processes which are also two-fold: understanding and acting on the now shifting experiential understanding. These cognate changes are 'plans' as it were, and the learner knows that the external reality can confront these plans or desires and the second response (as part of the duality) is that the learner must reconcile or accommodate this new concept with the external world. To be fair, this explanation of the underlying theory confounds Piaget

and Vygotsky (Gillen 2000). The latter sees as fundamental, the need for an external facilitator in this dual process. Sandwiched in between the learner and the external reality is a conjuncture that an instructor helps the learner negotiate. This is where Bloom's (1984) paper is explicit as to the role of the instructor or tutor indicating that his roots are firmly in the Piaget camp *via* the influence of Vygotsky. Piaget's and Bloom's educational theories and realist-constructivist view see learners as 'the manufacturers of their own development' (Flavell 1996:200). This is what inspired and changed my teaching approach.

Thus, Piaget's and Bloom's educational theories and realist-constructivist views construct learners as 'the manufacturers of their own development' (Flavell 1996:200). This principle has inspired and changed my teaching approach which is now within a connectionist framework.

This paper takes a cognitive-constructivist approach to teaching and learning and proposes a teaching strategy that is designed to engage students and develop their analytical and creative skills as they identify, explore and link key concepts. The effectiveness of this teaching and learning approach is verified by the results of a survey. The overall results show that students find this teaching approach useful and there is also a strong positive correlation between higher cognitive skills and usefulness of the teaching approach. In addition, there has been an improvement in examination scores in four teaching semesters.

The paper is divided into seven sections. The first section sets the background. The second discusses the adapted theoretical framework of the Piagetian-Bloomsian approach. The third section describes the Piagetian-Bloomsian technique and then explores its potential usage as an instructional tool. The fourth section addresses the educational objectives of the Piagetian-Bloomsian approach and offers a practical discussion of its applications. The fifth section provides the empirical framework of this study. The sixth section highlights the hypotheses of the study and discusses the survey methodology and results. Concluding remarks are made in the last section.

2   Theoretical Base

Good teaching involves getting students to use higher cognitive level processes (Biggs 1989) and involves the creation of problem solving

scenarios for learners that follows onto one another with some guidance and freedom (Piaget in Evans 1973:53). To be able to discuss with others what one is learning and learning by doing translates into better understanding (Piaget 1926). The theoretical considerations of the proposed Piagetian-Bloomsian approach supports and draws on the realist-constructivist views of both Piaget and Bloom and visually, is closely related to various graphical organisers that are used in a variety of disciplines. Most graphic organisers such as mind mapping are based on a cognitive approach. This section explores the conceptual framework of the Piagetian-Bloomsian approach.

The theoretical base of Bloom (1984) is relatively easy to discern. While the analysis is mostly empirical the categories that are set up to evaluate improved performance have an implicit link to the theory of learning. These categories are first instruction in a class with a teacher and the occasional test, second, the class now with formative testing and feedback from the instructor and peers, and finally the one-on-one tutoring approach. Abstracting from Piaget, this structure is directly from Vygotsky and Bloom's contribution is to realise the final category is prohibitively expensive and his second category is a 'middle way' without losing too much by way of affecting learning. Whether this compromise is entirely effective has to be established. Slavin (1987) shows that it is not. However the study does have a short-term bias (Bloom 1987). Berger (2004) is closer to the type of Piaget, Vygotsky and Bloom study we conduct here.

2.1   A Cognitive Conceptual Framework

The term 'cognitive' gives a broader and deeper theoretical perspective on the idea of how mapping techniques can improve the quality of teaching. Historically, the term 'cognitive mapping' was supposedly first linked to the experimental investigations of Edward Tolman (1948). He referred to cognitive mapping as mental constructions of the spatial layout of the environment, indicating the location of different features of the environment and the paths linked to them. Others such as Jonassen, Beissner and Yacci (1993) have referred to cognitive mapping as two-dimensional or three dimensional diagrams that represent the structure and relationships between ideas.

Piaget's assimilation-accommodation model of cognitive growth can

be used as a basis for cognitive maps and to the end this active instructional strategy results in conceptual change since economic concepts are now better and more accurately reasoned and represented – satisfying theoretical views regarding knowledge coherence.

According to ongoing research in education, cognitive maps are useful tools for:

- Problem solving (Buzan & Buzan 1993)
- Creative thinking (Buzan 2000);
- Representing, assessing, conveying, and acquiring structural knowledge (Jonassen, Beissner, & Yacci 1993); and
- Identifying, exploring, understanding and linking key concepts (White & Gunstone 1992; Novak & Canas 2008)

The aforementioned assumptions that cognitive mapping can be helpful and increases learning effectiveness suggest that cognitive mapping techniques could play an important role in teaching. The *sine qua non* of most current cognitive maps is that of Bloom's taxonomy. Usually put in a pyramid structure (although it need not be, see for instance, Sam Weinberg and Jack Schneider 2010), the elements of any attempt to come to grips with a novel idea, helped by an instructor, must include knowledge, comprehension, application, analysis, synthesis and evaluation. All of these elements include the four areas above. Bloom's influence is clearly evident in these expressions of cognitive maps.

2.2 A Constructivist Conceptual Framework

Universities are said to be among the most promising candidates for encouraging constructivist-learning environments (Jonassen, Mayes, & McAleese 1993). Likewise, Piaget and Bloom recognise the importance of students active participation. By implication, the educational principle is based on a hardly debatable psychological fact that; 'intelligence proceeds from action' (Piaget 1950:35). Cognitive mapping as a cognitive tool is constructivistic because it actively engages learners in the creation of knowledge that reflects their comprehension and conception of the information (Kommers & Lanzing 1997).

In higher learning at UKZN, all courses, now termed modules, require a module template. These templates set out the goals and objectives of a course. In addition, the template also requires some framework for establishing how these goals or objectives are met. No matter one's assessment of this structure, it is easy to discern that the template structure has antecedents in the taxonomies of Bloom, which, we have argued above, have strong theoretical links to Piaget and Vygotsky. Thus at UKZN, we have the practical expression of well-established (but not without its detractors) educational and cognitive theory. Arising from this practical application of Bloom, it is thus of some interest to determine if the theoretical ideas, on which these practical ideas are based, can be tested in the classroom context at UKZN. Also given that online instruction, using the so called Web 2.0 applications is now commonplace, the taxonomy of Bloom is undergoing renewed interest. See, for example the Schoenfeld-Tacher, McConnell Graham (2001) study where computer aided instruction combined with Bloom's taxonomy provided measurable benefits to learners.

3   The Piagetian-Bloomsian Approach

In this section, a description of the Piagetian-Bloomsian technique is provided and its potential usage as an instructional tool is explored.

3.1   What is the Piagetian-Bloomsian Technique?

The Piagetian-Bloomsian instructional technique is designed to offer a conceptual change regarding knowledge coherence and foster student's cognitive growth. The Piagetian-Bloomsian technique is a visual-guided representation and communication of an individual's knowledge structure of a single or multiple concepts as constructed by the individual. It takes the form of a matrix and is similar to mind mapping.

This technique is aimed at stimulating learners and creates a more effective teaching and learning environment. The matrix system of learning has five essential characteristics similar to mind mapping:

1. The main topic is identified.
2. The key themes relating to the main topic are then identified.

3. Colours are used to highlight the main topic and the key themes.
4. Key themes are explored-linked and can comprise key words, definitions, questions, codes, symbols, diagrams or tables.
5. Sub themes are explored-linked and can comprise key words, definitions, questions, codes, symbols, diagrams or tables.

For a visual distinction between the mind map and the Piagetian-Bloomsian approach I refer readers to Figure 1 and Figure 2 in appendix 1. Technically, it aims to visually provide a one-page recording of knowledge showing relationships or connections among multiple topics/concepts and also allowing one to draw conclusions. As a visual representation of ideas or knowledge it can help learners to think or review a subject in a more structured holistic sense.

3.2   Uses of the Piagetian-Bloomsian Technique

Learners need opportunities to discuss their tentative understanding with others and build conceptual connections to their existing knowledge. Piaget (1926), Laurillard (1993), Jonassen *et al.* (1993) and Brown (1997) argue that the learner, through active participation in both arriving at, and articulating their personal understandings of new ideas and concepts, constructs knowledge. Similarly, echoing this viewpoint is the Bloom's taxonomy and its learning expectations.

As an instructional tool, the Piagetian-Bloomsian technique can be used by teachers in testing, reviewing and stimulating thoughts in a particular unit of a course. A very recent paper in this regard, is that of Lundquist and Hill (2009) who still find use for Bloom's methods in English language instruction. In this case, Bloom's approach helps to align class test results with university standards and benchmarks. This reinforces our earlier impetus for examining Bloom as UKZN's quality control processes rise out of the underlying theory.

The Piagetian-Bloomsian representation can be a useful structure/framework for testing, reviewing and stimulating thoughts in a particular unit of a course. It aims to create a way for the teacher and the learner to see interconnections and potential relationships between topics and concepts in the course, thus assisting users to see how best to present the

connection between the concepts in the course. This, allows learners to present their knowledge in a more logical and coherent form with the freedom to discuss and confer with peers.

This teaching approach when used correctly can help reduce the need for student memorisation and accelerate meaningful cognitive development. This Piagetian-Bloomsian technique can further be used by the instructor as the basis for the organisation of a lecture and to generate questions so as to stimulate 'dormant' thoughts. I have often taught using this approach but found that this method of teaching works generally better for smaller groups. Also in my experience, for a better response and more meaningful cognitive processing if the 'skeleton' concept maps are made available in advance as lecture notes, it gives the learners a preview of what they will be working on and also helps to ease the instruction.

4 Objectives and Application of the Piagetian-Bloomsian Approach

To provide a sense of realism and to be able to gauge the achievement effects of this Piagetian-Bloomsian instructional approach, the paper uses Bloom's classic taxonomy of educational objectives (started in 1948 and completed in 1956). The first part of this section of the paper begins by addressing the desired and reasonable educational objectives. The second part then provides a description as to how students can be introduced to this teaching method and in the process targets the cognitive skills desired in the teaching of economics.

4.1 Objectives

Whilst the paper chooses to follow Bloom's classic Taxonomy, it does acknowledge that the twenty-first century has brought us a revision (as illustrated in Figure 1 below) of Benjamin Bloom's work on the taxonomy of the cognitive domain (Anderson & Krathwohl 2001). Technically, it is worthwhile pointing out that in the revised taxonomy, whilst the hierarchical systems have changed; their instructional objectives have remained essentially the same. For instance, Bloom's 'synthesis' is essentially addressing the revised higher cognitive level of 'creation' – the classic

Bloom's taxonomy remains useful and for this paper, the *de facto* standard for the educational objectives of learners in economics courses.

Bloom's taxonomy presented in Figure 1 below identified six educational levels arranged in hierarchy from the least to more complex cognitive objectives. Since the heart of this paper is not on the determination of educational objectives, I refer interested readers to Bloom (1956); Bruner (1960); Saunders and Walstad (1990); Clerici-Arias (1994) and Anderson and Krathwohl (2001).

Figure 1
Classic Bloom's and Revised Bloom's Taxonomies of Cognitive Domain

Classic to Revised Objectives   Cognitive Levels
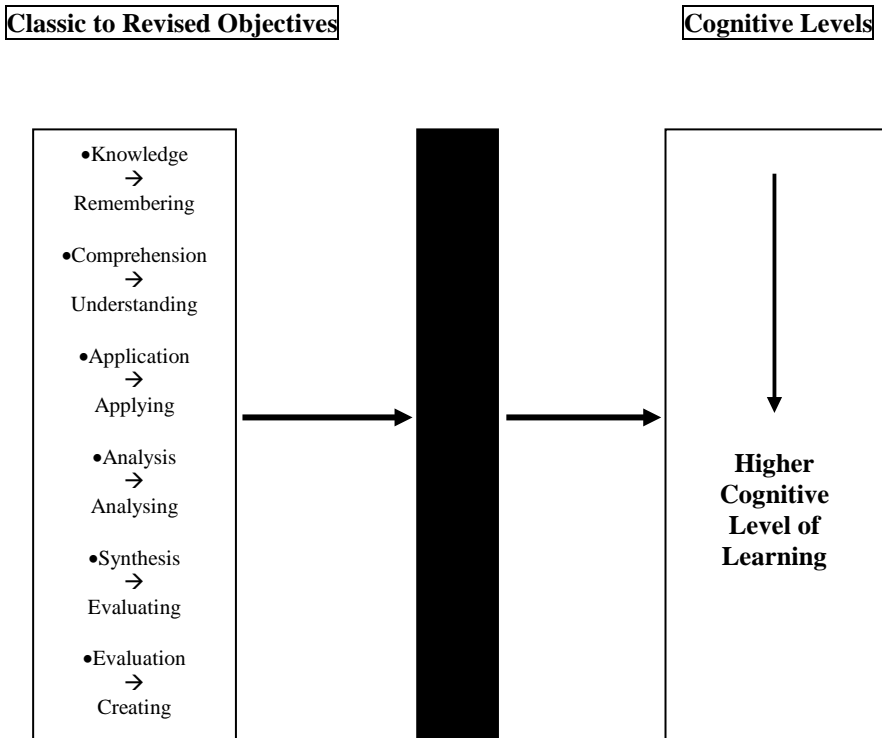
In educational objectives, when relating to Bloom's taxonomy of the cognitive domain more explicitly, the first four levels target students' recall

of prior learning; translation of information based on prior learning; the selection and application of data to problem-solving followed by comparative and contrasting analysis.

The two highest levels of learning objectives namely synthesis and evaluation are closely tied. The *synthesis* cognitive objective requires the integration of elements and parts so as to form a whole. This much desired outcome addresses the construction, creativity and inventiveness of learners. On the other hand, the *evaluation* cognitive objective placed on the highest cognitive hierarchy is concerned with the learner's ability to make a judgment either quantitatively or qualitatively based on their own or external criteria. This learning outcome is most challenging in Bloom's levels of cognitive performance since it requires competence beyond all the other categories and added logical value.

4.2   *Applications*

If one accepts that every '*learning involves a restructuring of the student's schemas, learner involvement becomes mandatory*' (Webb 1980:96). The Piagetian-Bloomsian teaching and learning promotes active student engagement (discussing, writing or drawing, asking and answering questions) in teaching and learning. This section of the paper provides an application of the Piagetian-Bloomsian technique in the context of the analysis of Demand and Supply theory. A classroom-lecture/tutorial discussion at first year undergraduate level on the subject of Demand and Supply concepts is the framework of this section of the paper.

For teachers applying the Piagetian-Bloomsian technique, it is best to start by identifying the main topic of a question/problem that students generally struggle with which provides the context for their concept map. After the domain or related question/problem has been selected, the next stage is to identify the key concepts that apply to the domain starting from the most general concepts and arranged hierarchically. Once the preliminary map is built learners are then guided to seek linkages.

In the context of the demand and supply theory of the application, one can refer to a constructed illustrative targeting framework (see Figure 1 in appendix 2). As illustrated in Figure 1, the main topic and learning object-ives as key themes are first identified and later probed. Students are asked to

use this framework in discussing and recording their thoughts and notes.

Contextualising the key concept and identifying key themes are a first step. The discussion of each key theme takes the form of several questions; for example, in a discussion on the demand theory, students are required to use their environment to bring about what the law of demand means for each learner's purchasing decisions, they are also expected to identify related key economic variables, to assess any possible relationships between the key variables and raise hypotheses.

Students are encouraged to use both their knowledge of prior learning and their environment to raise questions and possible links so as to discuss each theme. For instance, a basic discussion on the basic 'demand concept' could include and lead to questions such as: (1) what does a demand curve look like and why? (2) Since demand can affect price, what is the impact of demand on price and why? (3) How sensitive are demanders in the market? And so on .…

There are many graphs in economics which are used to convey information graphically. However, many students are uncomfortable with graphs and graphing. Understanding the basic parts of any graph makes reading and graphing easier. On the demand concept a discussion of the graph would start by hypothesising the relationship between identified variables and learners then construct an abstract graph of the relationship. Thereafter, they use the graph to question and determine the steepness or slope of the curve and possible shifts and movements along the curve. In the process, exceptional cases are compared and hypothesised.

For a discussion of the basic supply theory, interested readers can adopt a similar approach. In my experience, a mirror-image approach to teaching economics (applicable in this case) works well with students since it simplifies their learning. Students are reminded to integrate the economic issues that have been raised and encouraged to attempt a comparative and contrasting analysis of the key economic concepts under study and draw their own conclusions.

In another classroom session, or if time permits, at the end of the session, students' answers can then be discussed and students are encouraged to critically appraise their efforts against a 'sample format' provided by the teacher. In the context of the application of this paper, for readers, an illustration of a potential sample format is provided in Figure 1, Appendix 2.

5 Empirical Framework

The following section takes a look at the three measures used in this study to assess the validity and reliability of the proposed Piagetian-Bloomsian approach to the teaching and learning of economics:

1. Class Observations
2. Examination results and questions
3. Survey

5.1 Class Observations

The class observations used the first year undergraduate Economics 101 students at the University of KwaZulu-Natal (Pietermaritzburg campus) as the case study. The Economics 101 module is taught during the first semester.

Over the years, with a gradual increase in the use of the Piagetian-Bloomsian teaching strategy, many students remain sometimes opposed (judging by their behaviour) or quite receptive to this teaching and learning approach. This is possibly due to the students' previous educational backgrounds (especially learners who have spent most of their schooling learning by rote) and or the fact that this teaching approach requires much 'effort'.

Over the years, I have also found that in the initial stages of development, the process of application is much harder, especially among bigger teaching groups. There are a number of factors hindering its full potential benefits. In my experience, the most important are students' interest and attitude, followed by the increasing size of the classroom. At this juncture, it is important to mention that there has been a distinct increase in first year economics' intake impacting teaching and learning severely by stretching the existing resources. Needless to say, the application of a Piagetian-Bloomsian teaching and learning approach is increasingly more demanding and challenging.

5.2 Examination Results and Questions

I first introduced the Piagetian-Bloomsian approach to teaching and learning in 2005. Between 2005 and 2006, students were introduced to this approach on an irregular basis since the different aspects of the approach were not

fully designed. It was only in 2007 and 2008 that I used the Piagetian-Bloomsian approach more extensively. In four teaching semesters, during the period 2005-2008, the examination scores for the case study (economics 101) have steadily risen with a distinct improvement in 2007 from a fifty four per cent pass rate to sixty six percent in 2008. As a matter of interest to readers, this Piagetian-Bloomsian approach was not applied in 2009 owing to a sabbatical break. The examination score was found to be relatively lower in 2009. It is worthwhile pointing out that in 2009, the new intake of learners in Economics 101 were the first group solely educated via outcomes-based educational methods. An alternative explanation is that the school system does not impart the necessary learning skills that ease the application of the Piagetian-Bloomsian approach.

I have also noticed that the academic profile of students has declined with larger numbers of weaker students more visible especially after 2008. Whilst we do acknowledge the assistance of tutor support, the support structures (such as budget) and profile of tutors have also weakened. Nevertheless, the standard of examination papers have improved for a comparison of a higher-order 2005 exam question relative to the higher-order 2008 exam question (see Figure 2 below). It is worthwhile pointing out that in 2005 the pass rate was 48 percent and 66 percent in 2008.

In the year of this survey, concern had been raised by the university regarding the low pass rates and low throughput rates; an unacceptable number of learners were taking much longer to finish a degree. Clearly, a fresh approach was needed to overcome student's fear and indifference as well as addressing the low pass rates and to decrease completion tries.

The purpose of conducting a survey was to determine the usefulness and reliability of the Piagetian-Bloomsian teaching approach. In particular, the aim was to assess the correlations between higher cognitive skills and usefulness of the lecture approach as well as the relationship between overall intellectual development and usefulness of the lectures.

Student feedback from the case study (First Year Economics 101) was collected through a survey administered during the last lecture in May 2008. A total of 205 students took the survey. The students were given an evaluation questionnaire and asked to anonymously evaluate the usefulness of the lectures as well as the higher perceived cognitive skills acquired and the perceived increased intellectual development.

Figure 2

Examination Questions

2005		2008

■ Derive and explain the long-run equilibrium of a firm under monopolistic competition and discuss critically the concept of excess capacity. Be sure to use diagrams in your discussion.

■ Perfect competition and Pure Monopoly represent two extreme market structures. How do the two market forms compare in terms of characteristics, efficiency, short-run and long-run equilibrium situations? Be sure to use diagrams to support your answer.

The survey questions used a Likert-scale with values ranging from 'agree', 'neutral' to 'disagree'. The relationships between the survey questions were examined using the Spearman correlation analysis.

6   Empirical Survey Assessment.

6.1   Hypotheses

This study aims to test the following four hypotheses:

H_0: There is no correlation between cognitive skills and usefulness of lectures;

H_0: There is no correlation between two highest order cognitive skills;

H_0: There is no correlation between increased intellectual development and usefulness of lectures;

H_0: There is no correlation between increased intellectual development and cognitive skills.

We do this in the next section and find support to not fail to reject these null hypotheses.

6.2   Methodology

This study elects to use the Spearman's rank correlation also known as Spearman's ρ (denoted as S_ρ in this study) to carry out the above hypothesis tests of this study. The Spearman's correlation technique is appropriate for this study since we are dealing with non parametric ordinal data and the variables in this study are also not normally distributed. The correlation tests aim at measuring the magnitude and direction (positive or negative) of the association between paired variables.

The null and alternate hypotheses for the Spearman test are:

H_0: $S_\rho = 0$
H_1: $S_\rho \neq 0$.

Mathematically, the Spearman Rank formula is:

$$S\rho = 1 - \frac{6 \sum d^2}{n^3 - n},$$

where:

$S\rho$ = Spearman rank correlation;
d = the difference between the ranks of corresponding values;
n = number of observations in each data set.

The Spearman's rank correlation coefficient will take on a value between -1 and +1 and with an adjustment which is distributed approximately

as student's t distribution with $n - 2$ degrees of freedom under each null hypothesis. All our variables are positively correlated as expected.

6.3   Results

The overall results show that seventy percent of students found this teaching method useful and the results also indicate that sixty-four *per cent* believe that '*at the end of this module, I have developed intellectually beyond the point I was at when I started studying this section of economics*'. However, only forty-nine *per cent* of students indicated that '*as a result of attending lectures, I have learned to think in new ways*' and fifty-two *per cent* reported that they have '*developed an ability to critically evaluate issues or problems in the field of economics*'.

The correlation results for the questions (Q) related to the variables under study (for example, evaluation) are shown in the upper correlation matrix below (Table 1) and further supported by the mean statistical results in Figure 1 Appendix 3.

Table 1

Correlation Matrix

Spearman Rank Order Correlations (All P-Values <0.01)				
	Q evaluation	**Q useful**	**Q intellect**	**Q synthesis**
Q evaluation	1	0.784	0.838	0.945
Q useful		1	0.911	0.785
Q intellect			1	0.821
Q synthesis				1

The statistical results are indicative of a positive correlation between both higher cognitive skills (synthesis and evaluation) and the usefulness of the lecture approach (n = 205, Sp = 0.785 and n = 205, Sp = 0.784). The findings therefore suggest that a cognitive-constructivist instructional approach may well be associated with the attainment of higher cognitive educational objectives. The P-Values are all at (low) levels that by the usual

conventional criteria, this difference is considered to be extremely statistically significant. Thus we are able to put ourselves in the position of being able to 'do not fail to reject all the null hypotheses.'

Additionally, the statistical results point towards a strong positive association between the two higher cognitive skills of evaluation and synthesis (n = 205, $S\rho$ = 0.945). This study, therefore provides robust empirical evidence that creative skills and critical skills are strongly and positively related.

Lastly, the empirical estimates also indicate a strong positive relationship between increased intellectual development and the usefulness of the lecture approach (n = 205, $S\rho$ = 0.911). The findings thus indicate a strong positive relationship between increased intellectual development and the two higher cognitive skills (n = 205, $S\rho$ = 0.821 and n = 205, $S\rho$ = 0.838). Increased intellectual development is thus significantly correlated with both the theoretically identified categories and points to the usefulness of the Piagetian-Bloomsian teaching approach in enhancing cognitive skills.

Overall, the above empirical findings confirm the usefulness, validity and reliability of this Piagetian-Bloomsian teaching strategy with an acceptable measured effect size for social science research.

7   Conclusion

This study has explored the effectiveness of a cognitive-constructivist approach to teaching and learning economic concepts. The empirical findings of this study suggest that: (1) creative skills are associated with critical skills; (2) the higher cognitive skills are correlated with the usefulness of the Piagetian-Bloomsian teaching and learning approach; (3) an increased intellectual development is significantly correlated with the Piagetian-Bloomsian teaching and learning approach and (4) an increase in intellectual development is associated with higher cognitive skills.

It is well-known that there are a number of students arriving at university with educational deficits. In my experience, although not all students appreciate the Piagetian-Bloomsian teaching and learning approach, the method will evolve over time since we are dealing with an ever-changing heterogeneous group of students. However, I hope that the Piagetian-Bloomsian teaching and learning strategy presented here along with the

findings on its effectiveness will inspire others to interrogate its potential. Also, considering the challenges facing undergraduate studies in South African Universities, educators and educationalists should perhaps pay more attention to the need for constructivist learning and the value to be derived from Jean Piaget and Benjamin Bloom's work.

I hope that in sharing my views and providing a statistical analysis of teaching and learning in economics inspires us to find other approaches to teaching and learning. After all, for Jean Piaget, in conversations with Bringuier (1980:132), '*education means making creators…You have to make inventors, innovators, not conformists*' and Bloom's taxonomy encourages this view of Piaget.

Appendix 1

Figure 1: The Mind Map Approach
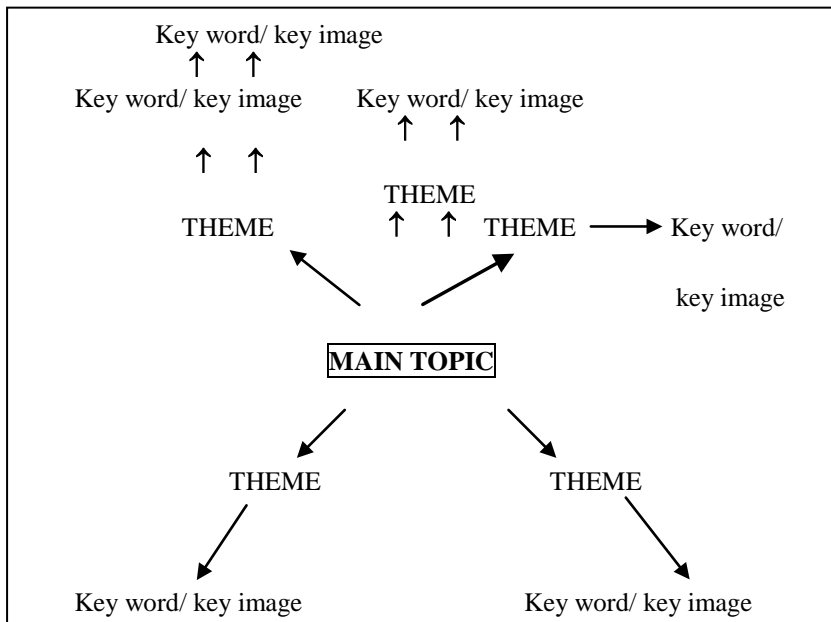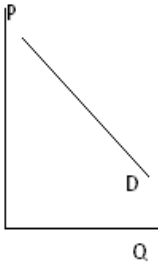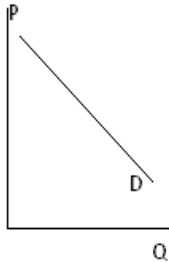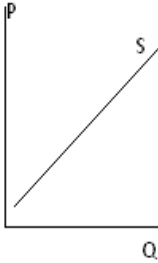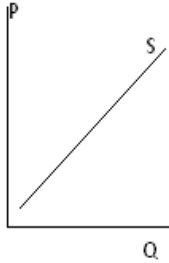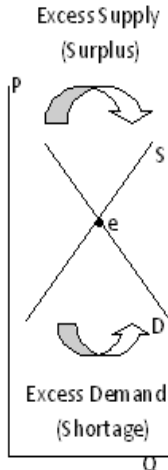
Figure 2: The Piaget-Bloom Approach

MAIN TOPIC				
THEME	**THEME**	**THEME**	**THEME**	**THEME**
• definitions & / key words & / symbols & / diagrams & / tables & /	• definitions & / key words & / symbols & / diagrams & / tables & /	• definitions & / key words & / symbols & / diagrams & / tables & /	• definitions & / key words & / symbols & / diagrams & / tables & /	• definitions & / key words & / symbols & / diagrams & / tables & /
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Appendix 2
Figure 1: Piaget-Bloom Application – Demand and Supply

DEMAND / SUPPLY

	Law	Graph	Movement (curve)	Shift (curve)	Equilibrium
DEMAND	•↑P ↓Q •↓P ↑Q •-ve	•Slope (-ve) (graph: downward sloping curve D, axes P and Q)	•▲ P (graph: downward sloping curve D, axes P and Q)	•▲ in: •Income •Taste/ preferences •Population •Expectations (future prices) •Prices of other related products (complements and substitutes)	•Qd = Qs •Equilibrium price is the price that equates quantity demanded to quantity supplied. If any disturbance from that price occurs excess demand or excess supply emerges
SUPPLY	•↑P ↑Q •↓P ↓Q •+ve	•Slope (+ve) (graph: upward sloping curve S, axes P and Q)	•▲ P (graph: upward sloping curve S, axes P and Q)	•▲ in: •Prices of inputs •Technology •Number of firms •Expectations (future prices) •Prices of related goods (complements and substitutes)	Excess Supply (Surplus) (graph: supply curve S and demand curve D crossing at equilibrium point e, axes P and Q) Excess Demand (Shortage)

Appendix 3
Figure 1: Box & Whisker Plot
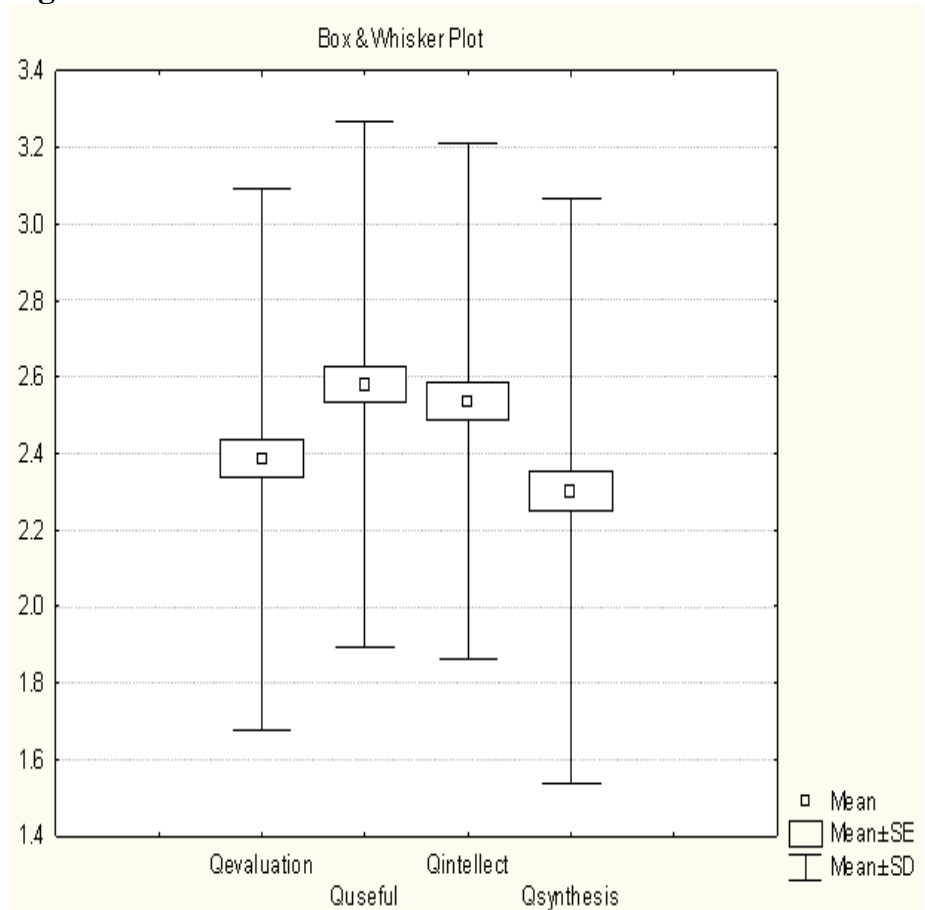
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Engineering Students' Experiences of Supplemental Instruction: A Case Study

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This article explores Engineering students' experiences of supplemental instruction (SI). SI is a student engagement approach that is meant to provide 'support' to students with the aim of improving pass rates. The sample population used in the study was constituted from the 2009 Chemical Engineering cohort. From this broad sample, the performance scores of 15 regular SI attendees were tracked over a period of three semesters. Qualitative data was also collected through focus-group discussions with six of the regular attendees. The data was analysed using an interpretive methodology. The findings from the study suggest that SI has the potential to provide positive learning spaces for students, enabling them to effectively engage with learning materials. However, the results also underscore the need to modify the programme to ensure that students do not become overly reliant on it.

Keywords: supplemental instruction, experiences, engineering students

Introduction

The notion of student engagement has been around for some time, though conceptual approaches to it differ. Scholars such as Jean Piaget (1977) and Vygotsky (1978) have been credited with advancing the idea, and their work has been influential in the development of a number of approaches that encourage collaborative learning. These approaches include mentoring, peer tutoring, and supplemental instruction (Falchikov 2001). This article is mainly concerned with the approach called supplemental instruction (SI),

which was introduced at the Faculty of Engineering in the University of KwaZulu-Natal (UKZN) in 2008. This project was conceived and enabled through a Faculty grant from the Department of Higher Education and Training to improve throughput and curb attrition rates.

The fact that students under-perform in higher education in the South African context has been well documented in a number of research projects (see for instance Du Toit & Roodt 2009; Scott, Yeld & Hendry 2007; Shackleton, Riordan & Simonis 2006). In 2008, the former Minister of Education, Naledi Pandor, indicated that only 50% of students who enter higher education actually graduate (Pandor 2008). However, it is believed that attrition rates are more severe in engineering education (Case 2006; Shackleton *et al.* 2006).

A number of reasons have been advanced to explain this attrition: the dominant one being the history of disadvantage, which was brought about by the apartheid government. However, reasons peculiar to engineering include the high student–lecturer ratio as a result of the brain drain that has seen a number of trained engineering professionals leaving the country (Du Toit & Roodt 2009) as well as 'limited knowledge' in science and mathematics (Case 2006; Jacobs & De Bruin 2010; Nel 2010). There is also the belief that engineering faculties have a 'sink or swim' policy, which can be challenging to students (Shackleton *et al.* 2006). This implies that there is limited, if any, support to enable these students to gain epistemological access. Consequently, students are limited in terms of opportunities to participate in meaningful ways in their education. If this is the case, then classrooms become contested spaces in which only the fittest and strongest survive.

The issues highlighted above pose challenges for pedagogy, with the main problem being the fact that the way the teaching and learning context is constructed has implications for student learning. Broadly speaking, the issues suggest that the nature of the learning context impacts significantly on the process of learning (Smith 1999). It is in line with this concern that the extent to which SI as an academic development programme can provide engineering students with opportunities to participate in a meaningful way in their own learning is explored.

There are five main sections in this article. The first section focuses on literature on SI, describing what the concept and its main issues entail. The second part sets out the theoretical framework informing this study. The

third section presents the context and the methodology that was used in this study. The fourth section discusses the findings to establish the extent to which SI can provide students with opportunities to meaningfully participate in their own learning. The last section is the discussion in which the findings are synthesised.

What is Supplemental Instruction?

SI was developed in 1973 at the University of Missouri-Kansas City 'as a response to a need at the institution created by a dramatic change in the demographics of the student body and a sudden rise in student attrition' (Arendale 2002: 4). Since then, SI has been implemented in many institutions across the world under various labels, such as peer-assisted study sessions (PASS) in New Zealand and Australia (Van der Meer & Scott 2009) and peer-assisted learning (PAL) (Topping & Stewart 1998). Although SI was only adopted at the UKZN in 2008, the history of its use in South Africa dates as far back as the 1990s (Voster 1999). Therefore, it is not new in this context.

SI is a peer-assisted learning programme that is targeted at 'high-risk' courses and not 'high-risk' students (Arendale 1994; 2002). It is also a two-tiered programme that seeks to facilitate understanding of course content, while at the same time encouraging students to develop better learning skills and strategies and meta-cognitive skills. Meta-cognition which involves 'knowledge about knowledge' is a reflexive ability that helps students to understand their own learning processes (Biggs 1985; Cross & Steadman 1996; Jackson 2004). Given this background, the value of meta-cognitive skills in the learning context can therefore never be overemphasised. When students are aware of their own learning, and especially how they learn, they become better able to manage their own studies. Within the SI framework, students who have excelled in a targeted SI module are trained[1] as SI leaders. The role of the SI leader is to model effective learning strategies that students can adopt in a specific course. The SI leader also acts as a facilitator in the collaboration of learning with

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[1] SI leaders are trained by qualified supplemental instruction supervisors in facilitation methods.

students during SI sessions (Arendale 2002). In this sense, SI is a learning community made up of students and has the potential to increase student engagement.

Studies on Supplemental Instruction

The literature on SI is concerned with foregrounding the benefits of SI by establishing a causal effect between SI attendance and pass marks (Bowles, McCoy & Bates 2008; Gardner, Moll & Pyke 2005; Marra & Litzinger 1997; Wolfe 1987). These benefits have included economic benefits (Zerger, Clark-Unite & Smith 2006), benefits to the faculty (Voster 1999; Zerger *et al.* 2006), benefits to the institution (Voster 1999; Zerger *et al.* 2006) and benefits to the student. With regard to economic benefits, advocates have argued that SI is 'helpful for institutions' budgets because student retention rates are higher' (Zerger *et al.* 2006: 66). These economic benefits translate into institutional benefits; hence, SI promotes the service component of the institution. While the literature suggests that the faculty also benefits from SI training in collaborative teaching techniques, not many empirical studies have explored this. As far as students are concerned, the literature indicates that when students attend SI regularly, they learn material more effectively, which leads to the improvement of their grades (Gardner *et al.* 2005; Marra & Litzinger 1997; Zerger *et al.* 2006). This is because SI is believed to develop students' meta-cognitive 'skills', making them independent learners in the process (see Arendale 2002). In light of this, SI is well placed to improve teaching and learning, especially in a country in transition such as South Africa.

Based on all these benefits highlighted in the literature, it is not surprising that SI has been incorporated into programmes such as mathematics (Gardner *et al.* 2005), medicine (Hurley, McKay, Scott & James 2003), economics (Worthington, Hansen, Nightingale & Vine 1997) and biology (Shaya, Petty & Petty 1993) internationally. In the South African contexts, the Nelson Mandela Metropolitan University has also incorporated SI in all its disciplines and has been established as the national office for coordinating SI in the country. Notwithstanding the value placed on SI by advocates, there has been little scrutiny of the causal effect between pass rates and SI attendance. There are other factors that could impact on student

success, such as the curriculum as well as socio-economic or historical factors. While I took the focus on pass rates as the starting point for analysis of SI efficacy in the study on which this article is based, I also extended the scope to include an analysis of the effect of SI on the learning context. I believe that, while pass rates are a relevant measure of efficacy, there are also benefits in measuring the extent to which SI can improve student participation in their discourse community.

Theoretical framework

Approaches to understanding the teaching and learning context can be largely classified into two categories: On one side, there are those who see learning as contingent on individual characteristics as '[a] process by which a learner internalizes knowledge' (Lave & Wenger 1991: 47). On the other side, there are those who see learning as embedded in and a product of socio-cultural practices (Gee 2003; Lave & Wenger 1991). This study draws from the latter of these categories and sees learning as a shared responsibility between students and others in their learning community. Consequently, it draws from a social view of learning known as situated learning (see Lave & Wenger 1991), which also suggests that people learn from observing other people in their contexts (Smith 1999). In this sense, learning occurs if it is embedded in the socio-cultural context in which it will be used; students should therefore engage in purposeful activities in shared practices of the community of practice. Thus, SI fits naturally within this theoretical framework, given its main objective, namely to enrich learning outcomes by increasing student interaction and engagement.

Context

At UKZN, SI is offered by the Academic Support and Advancement Programme (ASAP), which is affiliated with the Faulty of Engineering. The mission of ASAP is to offer academic support to all students within the faculty to facilitate academic progress. ASAP runs various student- and staff-development workshops, SI sessions, tutoring sessions, writing programmes and one-on-one consultations with the various academic development officers affiliated with the five schools in the faculty.

Methodology

This study was conducted over three semesters at the UKZN and the sample population was constituted from the 2009 Chemical Engineering cohort. These students were enrolled in three gatekeeper courses, namely Chemical Engineering Principles 1 in Semester 1 of 2009, Chemical Engineering Principles 2 in Semester 2 of 2009 and Mass and Energy Balances in Semester 1 of 2010. These three courses are typical 'high-risk' courses (as defined in the SI literature, see Arendale 2002, for instance) in the School of Engineering with a combination of a high failure rate and large classes. Furthermore, success or failure in these courses has implications in terms of progress, given that they are pre-requisites to a number of the Chemical Engineering modules.

I decided to focus on attendance patterns in Semester 1 of 2009 for this cohort of students. The focus on attendance patterns is consistent with the literature on the effectiveness of SI (see for instance studies by Arendale 2002; Bowles *et al.* 2008; Van der Meer & Scott 2009). From this data, 15 frequent attendees were identified and their performance was tracked in the three semesters between January 2009 and June 2010. The analysis of their pass marks was done initially to establish whether SI had an effect on their academic performance. The regular SI attendees were then tracked in the second semester of their first year in a follow-up course, Chemical Engineering Principles 2, as well as in the first semester of their second year in 2010, in Mass and Energy Balances. Qualitative data were also collected through focus-group discussions with six of the regular SI attendees. This information was used to complement the data on pass rates and SI attendance in order to gain an insider perspective of reasons for attending SI. This brings me to the next section, which explores the findings of this study.

Findings

The analysis of the data revealed a number of issues related to both the literature review and the theoretical framework. These are as follows:

- Regular SI attendees performed well in all their modules over the three semesters.

- SI sessions can create learning spaces that encourage participation from students.
- SI leaders helped develop students' confidence.

However, the fourth finding below challenged the theoretical understanding on which SI is built, as reported in the literature surveyed in this article, namely:

- SI can create overreliance on support.

Supplemental Instruction Attendance Patterns
In the context of this study, a student who attended at least one session was considered an SI attendee, while a student who attended at least five sessions through the semester was regarded as a regular attendee (see Table 1 below). Two SI sessions were scheduled per week over a period of 10 weeks in each semester. However, students were to attend only one of the two sessions; thus, 10 attendances were possible for each student. Nonetheless, some of the students attended both sessions each week; thus, for these students more than 10 sessions were possible.

Table 1: SI Attendance Patterns

Attendance patterns			
0 times	1–4 times	5–9 times	10+ times
45	35	13	2

The results from the SI attendance for the first semester of 2009 indicate that 50 of the 95 students taking part in the study (i.e. 52%) attended SI at least once during this semester. However, a closer analysis also reveals that 35 (37%) of these students attended less than 4 times, 13 (14%) between 5 and 9 sessions, while only 2 (2%) attended 10 or more sessions. Forty-five students (47%) did not attend any SI session. This means that only 15 (16%) students in this cohort regularly attended SI sessions. Though non-attendance was not the focus of this study from the onset it became necessary to explore it in light of these findings. During informal discussions with students, time was indicated as the main reason why most of the students could not attend SI

sessions. However, what I found difficult to understand was that students from the first-year cohort, who were not repeating any courses at that time were not attending SI sessions, while other students from the same group were making the time to attend. A number of explanations can be given for this. First, it can be attributed to issues of commitment and dedication as well as taking responsibility for their own learning – aspects that seemed to be lacking in many of the students. Second, there is a possibility that many students perceive additional tuition negatively, as an indication that they are perhaps not 'smart' enough. Given that there was no data to substantiate these claims at the time of writing this article, these explanations remain speculative and an issue for further exploration.

From analysing this dataset on SI attendance and reasons for attending or not attending, it made sense to further sample the 15 students who were regular attendees in the first semester of 2009 to explore their experiences of SI. These regular attendees turned out to be largely African. It is also important to reiterate that this was not planned from the outset, but it became apparent as the analysis evolved that I would get rich and fine-grained data from analysis of these few students, given they were the only ones with sustained attendance patterns.

Pass Rates

An examination of the pass rates of regular SI attendees (see Table 2 below) resonates with the available literature (for example Arendale 2002; Bowles *et al.* 2008) on the value of SI in improving student performance. The results of the SI in the first semester of 2009 correspond favourably for the 15 regular attendees who had a 100% pass rate in Semester 1 of 2009. In Semester 2, 14 out of the 15 students attended SI regularly and again all 14 (100%) passed. In Semester 3, only 8 of the 15 students attended SI regularly. From these, five passed their examinations with marks ranging from 51% to 73%, while two managed to make it to the supplementary examinations. Only one student from this group did not progress to the next module, Thermodynamics 1. With regard to the other seven regular attendees who did not turn up for SI in Semester 1 of 2010, only two passed their examination the first time, with one passing the supplementary examination and the rest failing to meet their progress requirements for this module.

Table 2: Pass Rates of Regular Attendees

Category	Semester 1, 2009	Semester 2, 2009	Semester 1, 2010
Regular attendees	15 out 15 attendees passed (100% pass rate)	14 out of 14 attendees passed (100% pass rate)	6 out of 8 attendees passed (75% pass rate)

Could these students have progressed without SI? Possibly, but the data from the interviews with some of these students, as revealed in sections to follow, indicate that SI was helpful in their passing because it taught them not only how to study, but also taught them higher-order thinking skills that they had not been exposed to. They also claimed that they adopted these strategies in studying for their other modules. These findings lend support to the literature in which the development of higher-order thinking skills is viewed as the core of learning (see for instance Arendale 1994 2002; Cross & Steadman 1996). Furthermore, evidence of the efficacy of SI in helping these students is revealed in their sustained attendance of SI. A closer look at this data reveals that the majority of the students (10 out of 15) who attended SI frequently have all met their progress requirements.

While the analysis above seems to suggest a causal effect between frequent SI attendance and pass rates, I am neither overlooking the fact that there are some factors that can potentially affect academic performance, nor am I unaware of the fact that the number of regular SI attendees in this sample is too small to make any conclusive correlations. My main concern, however, was to understand the experiences of this group of students who consistently attended SI, and to examine what worked for them in SI. To answer this question, I first explore their reasons for attending SI, followed by their perceptions of what worked for them.

Reasons for Attending Supplemental Instruction

The analysis of the interview data revealed a number of reasons to explain why this group of students consistently attended SI. These reasons can be classified into two broad categories, namely the creation of a social learning space and the enhancement of confidence. However, the difference in the learning environment provided in both SI sessions and lectures figured more in students' responses.

Creation of a Social Learning Space

Students indicated that in their first year of study, they felt afraid and intimidated to ask any questions in the lectures. This is not surprising for first-year students, who are often confounded by the transition from high school to university. For this reason, it is not surprising that they found the approach that was used in SI sessions friendlier and more conducive to learning than the one used in the lectures. This is captured in the following excerpt:

> *As a first-year student, I wasn't comfortable to ask lecturers questions in class. I felt intimidated in large classes. But in SI, I was confident enough to ask questions. (C1)*

This was also confirmed by another student, who said:

> *I was afraid to ask any questions during lectures. (C2)*

A PhD study by Paideya (2011) also came to the same conclusion, namely, that SI can create a positive social learning space. In the current study, all six students unanimously felt that SI presented them with a friendly learning environment, confirming the fact that meaningful learning is a product of socio-cultural practices (Lave & Wenger 1991), as outlined in the theoretical framework in this article. They made comments like 'The atmosphere was free'; 'SI is a "free zone"' and 'You get more attention in SI'. A number of reasons can be given to explain why students felt free to ask questions in the SI sessions. In the first instance, SI leaders are fellow students; therefore, there are no power issues resulting from age differences and positionalities. The power asymmetries that exist between lecturers and students as well as language barriers, especially for African students, affect students' self-esteem and confidence, thus they naturally avoid consulting with their lecturers. This potentially makes SI leaders more approachable than lecturers; hence, there was more participation from these students during SI sessions than there was during lectures. Another student was more explicit about the differences in the approaches used in lectures and in SI:

[SI is] more personal than lectures, in that in lectures, the lecturers have to deal with a class full of people and the lecturer has a certain schedule that he has to stick to, whereas in SI, it is possible to spend time on certain problems that an individual or a group is having trouble with. (C3)

Another student also made an interesting comment related to teaching approaches in the lectures:

I was able to understand content better in SI. Lecturers sometimes go fast, and even when you ask questions they just repeat the same things in the same way, not realising that if you did not understand it the first time, you will still not understand it if it is repeated in the same way. In SI you can ask questions and get clarity. (C4)

The above comment is especially consequential for pedagogic practice and conjures up questions like 'Do academics consider the implications of their practice and how such practice can lead to the frustration of students, as revealed in the above excerpt?' In terms of the situated learning theoretical framework used in this article, the finding suggests that learning in this context takes on an autonomous model and is not a shared responsebility between the lecturer and the student (see Gee 2003; Lave & Wenger 1991). Scholars writing in engineering education have also suggested that there is neglect of teaching approaches and discourse in engineering curricula because subjects are treated as bodies of knowledge with little attention being paid to how students process or acquire that knowledge (see for instance Allie *et al.* 2010; Jacobs 2010). This is a crucial issue that needs to be addressed if the teaching and learning context is to be improved. Thus, just like the SI model is conceptualised, there is a need for collaboration between SI practitioners and mainstream academics in developing teaching/facilitation techniques that encourage meaningful learning.

Essentially, for these students, SI provided a space in which they could negotiate their challenges of transition to university, fears of asking questions and the need for personal attention. In the SI learning context, they could engage with learning material more effectively in the space created by SI.

Enhancement of Confidence

The second category of reasons for attending SI that emerged from the interviews with the students was related to confidence. Because this group of students managed to pass all their modules and progressed well over the three semesters, their confidence levels were raised. They now felt they could handle the curriculum and could progress well. Some of the students continued to attend SI because of the benefits they experienced over the three semesters. However, some of the students felt that they had acquired the needed skills to make it on their own. For this reason, they felt the scaffolding provided by SI had managed to equip them with the necessary skills to handle the curriculum.

> *SI leaders have gone through the module, they know the challenges that you face and how you can better study for that module, so they help with tips. (C5)*

Thus, students learnt through observing and interacting with others. Other comments related to confidence included:

> *SI leaders instilled confidence. When you are not clear about a concept and you are afraid, they encourage you. (C6)*

And

> *I never used to ask questions in class when I was in first year. But now I am used to it because that is what we do in SI and I sometimes ask lecturers in class. (C7)*

With improved confidence comes participation; therefore, the situated context in which students engaged in SI encouraged their learning. Generally, the findings indicate that SI was beneficial for these students. Though a causal effect could not be conclusively established between SI attendance and pass rates, what is clear is that SI was useful in helping students develop learning strategies as well as take ownership of their own learning. The next section discusses what did not work for the students.

What did not Work for the Students in Supplemental Instruction?

While most of the comments from students indicated that SI was beneficial in terms of the categories identified above, they made comments that indicated that class management was sometimes a problem during SI sessions. There was also an indication in their comments that they had become over reliant. While the students did not see this over reliance as an issue, I found it problematic for a number of reasons, as discussed in the sections to follow.

Classroom Management

Although the students in this sample felt that SI was generally beneficial for them, they also indicated that SI sessions were noisier than lectures, mostly because the SI leaders had limited power to control unruly students. This can be expected, given that the SI leaders are also students. Consequently, there could be a tendency for students to take these leaders for granted. In this regard, there is a need for ongoing support for SI leaders in class-management strategies.

Reliance on Supplemental Instruction

The six students interviewed in this study are now in the third year of their Chemical Engineering degree. SI is not offered in any of the modules that they are taking because the pass rates in those modules have always been high. Yet, they all expressed dissatisfaction at this, as they felt SI was still relevant to them. Some even suggested that they needed SI in their fourth-year modules, and expressed their concern with failing given the unavailability of SI. This, they maintained, had to do with the teaching style in lectures, which they felt did not adequately encourage learning, as revealed in comment C4 above. With this in mind, it seems as if these students had relied heavily on SI over the first two years of their studies, to the extent that it has become a 'crutch' for them to lean on. This is not the purpose of situated learning. Situated learning is meant to facilitate participation and independent learning. This overreliance on SI also presents a paradox, in which the efficacy of SI in promoting independent learning is

brought into question. Interestingly, students who gleaned study tips from SI leaders and who also claimed that their confidence had improved as a result of SI attendance (see comments C5, C6 and C7), still found it difficult to cope with their studies in modules in which SI was not offered. However, anecdotal information from these students and some who were not necessarily part of the sample revealed that students perceive SI as a substitute for lectures. This is a possibility that is dangerous and that can potentially make students abandon their lectures in favour of SI. This is neither in line with SI principles nor is it acceptable in the university.

Discussion

The data presented above indicate the efficacy of SI in providing positive social spaces that encourage collaborative learning and where students can effectively mediate knowledge. These spaces also enhance confidence in students to ask questions. While the literature on SI widely acknowledges that SI can benefit students in terms of improving their academic performance (Bowles *et al.* 2008; Gardner *et al*. 2005; Mara & Litzinger 1997; Zerger *et al.* 2006), the findings of this study incorporated issues of 'learning spaces'. The PhD study by Paideya (2011) also lends some support to these findings and suggests that SI as an academic intervention privileges social interaction in the development of meta-cognitive strategies. This resonates well with Lave and Wenger's (1991) socio-cultural theory, where learning is perceived as a socio-cultural activity in which social agents construct knowledge together through collaboration and participation. The relationship between students and the SI leader also seemed to confirm the theoretical construct privileged in this study; hence, students felt freer and more comfortable dealing with SI leaders than they did with their lecturers. In this sense, a programme such as SI is well positioned to address the issue of power and positionality in that it makes use of peers, removing the power asymmetries between students and lecturers that characterise educational practice. Once power is removed from the educational context, students see themselves as equals and they are then in a better position to learn without fear of intimidation or ridicule. This was indicated as one of the learning transformations that occurred for the students surveyed in this study.

However, in spite of the positive learning context provided by SI and

the availability of literature on teaching approaches, what remains in the classrooms is in essence an autonomous model in the teaching and learning relationship between students and their lecturers. Some of the comments from students indicated that there is no consideration by academics for the way in which students process knowledge (see comment C4). This was indicated as the reason why students required SI in most of the modules.

The overreliance on SI is also an issue that needs to be addressed. Could it be possible that there is dissonance between SI principles and actual practice? If students consistently feel they need to be supported, even after attending SI in three modules, is it possible then that SI is no different from the rest of the academic support programmes that have been proved to be inefficient in terms of providing students with epistemological access (see Boughey 2005)? Although there was not enough evidence in this study to make a conclusive argument, this assumption suggests a compelling motivation for future research.

With regard to pass rates, while the data indicate a correlation between regular attendance and a pass mark, a simple causal effect could not be established. I am aware that there are other factors that could potentially account for this success, for instance student agency and lecturer input or socio-historical factors. Therefore, resulting discrepancies may not be intended, leaving some emphases in this study open to speculation. This becomes a major limitation of this study and an issue for subsequent exploration.

Conclusion

The aim of this article was to explore engineering students' experiences of SI. These experiences are analysed using the theoretical constructs on which SI is based as revealed in the literature as well as a socio-cultural view of learning. The findings suggest the following:

- Creating learning environments that offer students an atmosphere that emphasises care and respect and that enhances interaction can influence student performance as well as develop an interest in engineering education.

- SI can potentially enhance students' confidence in their learning and develop the study skills necessary to handle the curriculum.

This is particularly true for the group of students that was interviewed in this study, whose performance over the three semesters was impressive and consistent. However, the results also show that SI can potentially create overreliance on support; thereby preventing students from becoming independent learners. This is a concept that has not been explored in the literature on SI. Nonetheless, this was a small-scale exploratory case study that involved a small number of regular SI attendees; hence a conclusive argument cannot be made. However, I believe this issue of overreliance on support might apply to all students. Therefore, it requires further exploration.

In conclusion, it is hoped that this article will lead to discussion among academics in engineering faculties regarding teaching approaches and the influence they can have on student participation since learning is ultimately a shared responsibility between students and lecturers.

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Engineering Students' Experiences of Social Learning Spaces in Chemistry Supplemental Instruction Sessions

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Abstract

Over the past three years, Supplemental Instruction (SI) has been introduced to the first year engineering and mainstream chemistry students at the University of KwaZulu-Natal as part of the 'Throughput in Engineering Sciences (TIES)' programme. SI is a student academic assistance programme providing regularly scheduled sessions for high risk courses. This programme aims to improve the throughput of the engineering and science students with the aid of support programmes for first year students designed on collaborative learning principles. Often, working in teams, students gain professional experiences that are designed to aid the transition to professional employment, building confidence, generic skills and capability in the discipline. This paper focuses on engineering students' experiences of the social learning spaces created in chemistry SI sessions. Data was collected using video-recordings of SI sessions, individual interviews and focus group interviews with students. Data was analysed using social constructivism as an analytical framework as it is the intention of this paper to understand students' experiences of the SI social learning spaces. The data reveals that engineering students experienced chemistry SI as discursive learning spaces offering opportunities for discussion, for reflection and meaning making, motivating students to take responsibility for their learning. It is argued therefore, that the social learning spaces created during the SI intervention session have the potential to develop independent lifelong learners in chemistry.

Keywords: social learning spaces, collaborative learning, chemistry Supplemental Instruction

Introduction

Learning spaces in universities are changing. Shifts in student mobility, pedagogy, curriculum management and technological tools are beginning to impact directly on the planning and development of campus learning spaces (Chang, Stern, Sondergaard & Hadgraft 2009). There has been a shift away from transmission models of learning to constructivist approaches which emphasise active, collaborative, peer and social learning (Lee 2006; Brown 2005). Reflecting this adoption of constructivist approaches to learning nationally and internationally, there is a shift away from the concentration on lecture and classroom spaces to now also include collaborative, informal and social learning spaces. In many cases, the rationale for these spaces extends to the enhancement of student agency and a shared construction of knowledge and learning contexts. The underlying aim of learning space innovation is to improve the student learning experience, and by association, transform student learning outcomes.

The Faculty of Science and Agriculture at the University of KwaZulu-Natal has recognised that students in their first year of study have particular learning needs as a result of their diverse backgrounds, previous learning experiences and their often under-developed learning skills. Supplemental Instruction (SI) has thus been introduced as a transitional support for first year engineering students. SI is a student academic assistance programme which applies strategies and aims at increasing academic performance and retention amongst students for high risk courses using collaborative learning principles. It is assumed that the students who participate in SI learning communities would become lifelong learners, able to think critically across disciplines and not needing to rely on being taught the information.

It would be interesting to establish whether the opportunities created for these social learning spaces allow students to work more collaboratively with peers during SI sessions. These questions are important to engineering education because engineering schools are supposedly preparing students, who as professional engineers, will be required to work in self directed ways through problem solving and collaborative team work.

It is assumed that the primary focus of SI sessions is aiding student assimilation and understanding of course content by thinking, reasoning, analysing and problem-solving (Phelps & Evans 2006). Martin and Arendale

(1993) have stated that SI leaders can assist students engage in thinking behaviour which facilitates connections between notes, textbooks and problem-solving. This is done in different ways which include students in SI sessions working collaboratively to understand the course concepts, brainstorming ideas, engaging in discussions of how the concepts relate to each other and reflection upon the task. According to McGuire (2006), these activities facilitate their greater conceptual understanding, and their success on problem-solving tasks and examinations increases substantially. This paper begins with a discussion of what constitutes a social learning space within a social constructivist paradigm as indicated by selected literature in which concepts are clarified. The methodology used in this study is then explored and the findings presented. The results from the focus group interviews and video recordings of SI sessions are then analysed to determine the ways in which the engineering students experience the discursive learning spaces created in development of chemistry concepts in chemistry SI.

Theoretical Framework

Internationally, as engineering schools grapple with how best to prepare effective engineers in the twenty-first century, there is a move from transmission models of learning and teaching towards constructivist models. At UKZN, groupwork skills are used on extensive projects such as design projects in mainstream teaching in the faculty of Engineering. In a number of universities worldwide, problem-based learning (PBL) and project-oriented and problem-based learning (POPBL) have also been introduced as part of the pedagogical tradition. SI, which was introduced at UKZN to supplement mainstream teaching as a student academic support programme, has constructivism as its theoretical foundation and bears many similarities to problem based learning as they function on the premise of collaborative learning. SI is based on three fundamental ideas viz. the idea of interaction as a prerequisite for learning, the idea of meaningful conditions for learning and the idea of questioning in a way that promotes the development of concepts (Mannikko-Barbutiu & Sjogrund 2004).

The notion of social constructivism has been given many interpretations. In one school of thought, the knowledge is constructed first

on a social plane, and then internalised. This is strongly influenced by the work of Vygotsky (1978). Vygotsky's theories stress the fundamental role of social interaction in the development of cognition (Vygotsky 1978; Wertsch 1985), as he believed strongly that community plays a central role in the process of 'making meaning'. Vygotsky (1962) describes the zone of proximal development where learning takes place in discussions between students who have reached different levels in their individual learning and who can benefit from each other's learning experience and knowledge. This theory is central to SI where students come to solutions through common discussion. Authors who adhere to this view and considered knowing and learning in terms of culture and practice are Lave and Wenger (1991); Brown, Collins and Duguid (1989); Lave (1988) and Cobb (1994).

Wenger's (2000) conception of a 'community of practice' offers a possible model for a classroom that could facilitate learning through social interaction. Wenger described learning as taking place within collective activity in which individuals provide scaffolding for each other to acquire the skills and knowledge for participation. In a classroom modelled on a community of practice, students would not only interact with central participants, such as the teacher and in this study the SI leader. Students also interact with peripheral participants, such as other students at varying levels of skill. In such a view, learning involves not only developing new knowledge but also acquiring an identity associated with the group.

Situations in situated learning theory such as learning spaces are not necessarily physical places but constructs of the person's experience in the social environment. These situations are embedded in communities of practice that have a history, norms, tools and traditions of practice (Kolb & Kolb 2005). Social learning space refers to the myriad of physical and virtual resources which support student-centred, as well as interactive learning in formal and informal contexts (Oldenburg 1991 cited in Williamson & Nodder 2002). What kinds of spaces support the social dimensions of learning? Some answers have included providing spaces other than lecture halls and tutorial rooms and activities beyond lectures, such as dialogue and debate, small and medium group activities, group projects etc. (Chang, Stern, Sondergaard & Hadgraft 2009). There is a growing body of work relating to learning spaces across the education sector but it is beyond the scope of this paper to investigate evaluations of learning spaces but rather to explore the

engineering students' experiences of the social learning spaces created during chemistry SI sessions.

A social perspective is concerned with ways of acting, reasoning and arguing that are normative in a classroom community (Cobb, Stephan, McClain & Gravemeijer 2001). Social scientific norms thus frame a student's reasoning as an act of participation. In SI, the dialogue is not made up of questions and answers but rather aims at rephrasing and redirecting the original questions. This allows the students to see the phenomenon from different angles and to develop concepts and achieve a more profound understanding of a phenomenon (Mannikko-Barbutiu & Sjogrund 2004).

Furthermore, (Johnson, Johnson & Smith 1991) indicate that social interaction leads to advanced cognitive development and promotes higher academic achievement than individual learning activities do. However, for collaborative learning groups to be successful, students are required to make a paradigm shift from the traditional model. This transition is not always an easy one, as many of our students have been conditioned since primary school to acquire knowledge from the teacher who is considered the key transmitter of knowledge. Data reveals that many of the first year engineering students have not made this paradigm shift as will be discussed later and are still fixated on the 'didactic model' of learning.

Methodology

A qualitative research methodology was used to understand the first year engineering students' experiences of the social learning created by the SI leaders. In this study, a sample of engineering students from UKZN was observed over a period of thirteen weeks (one semester). During this period fifteen SI sessions were observed in two different first year engineering chemistry modules. The qualitative research method employed in the study involved observations through video recording. The use of video-recordings helped to observe situations more than once.

Towards the end of the course, students were asked to attend focus group interviews on a voluntary basis to ascertain factors that influenced student learning through engagement. The main aim of this paper was to understand students' experiences of the social learning spaces created in chemistry SI sessions. Thus, to explore this aspect further, students were

asked to describe the ways in which they felt the social learning spaces in chemistry SI sessions played an integral part in improvement of their understanding of chemistry concepts. Individual interviews were conducted with students with different academic performance in order to obtain a range of perspectives with respect to students' experiences of chemistry SI. This paper reflects the findings of the focus group and individual interviews and is compared and contrasted with the researcher's observations of the SI sessions to ascertain students' experiences of the SI social learning spaces. Students' names in the data analysis have been falsified to protect their identity.

SI Setting

An SI session is neither a lecture nor a lesson in the traditional sense of the word but rather a formal learning space where students discuss the subject matter on a voluntary basis and out of their own interest. The SI sessions integrate facilitative measures to encourage an atmosphere that emphasises that 'no question is a dumb question' (Webster & Hooper 1998), thereby encouraging students to ask the dreaded question 'why'. These SI sessions are usually held for 45 minutes twice a week. The learning spaces designated for SI sessions are flat rooms with approximately 5 round tables seating 10 students around it to enable communal arrangements. The limited seating per room was designed to facilitate small group discussions. This environment has been created to encourage a collaborative learning space during SI sessions.

SI leaders, usually third year or post-graduate students, are trained with respect to SI principles and facilitation techniques prior to commencement of SI sessions. The focus of the training is to introduce the basic ideas of SI to the participants and give them tools for their role as an SI leader. Besides the initial SI leader training, SI leaders receive regular training in facilitation skills, collaborative learning techniques and are mentored as well as supported throughout the semester. SI leaders use a variety of pedagogical techniques to facilitate student engagement and create an interactive collaborative learning environment through group and peer discussion, questioning techniques and student explanations.

SI sessions take the form of students either working in groups or pairs to discuss the problem followed by a team member responding to the solution of the problem through explanation of concepts and justification of claims. This is followed by a class discussion where SI leaders facilitate the discussion through the use of various questioning techniques such as the use of probing, redirecting and prompting questions.

Findings and Discussion

Students' Experiences of Social Engagement

It was found that social engagement did different things in the learning of chemistry such as motivated student learning, contributed to collaborative learning and lastly developed confidence through understanding.

Data from the focus group interviews and video recording revealed students' experiences of social engagement with respect to the following categories of description.

Inspiration through Support / Motivation

Learning chemistry during SI was regarded as a 'fun' endeavour which is revealed by the following student's description of his experience of engagement during SI sessions as being inspiring. He believed that his understanding in a sense increased because of the support he received from the SI leaders, as well as the fun he experienced in learning:

> *Engaging in SI sessions boosts our understanding of chemistry. The tutors are very supportive and your experience at SI is one not to forget. While learning we also have fun – so it makes us to want to learn chemistry because coming to SI is quite exciting.*

This student refers to the social aspects of learning by associating it with being fun, but only refers to the support received by tutors. However, he does not say what actually makes the learning fun. Zamo on the other hand explains why she thought her experiences of SI engagement were fun:

We get to work with many people and they have different ideas and so we also get to learn how other people think. So that's my definition of fun. Sometimes you can't do your things on your own – you know something about the question and someone else knows how to start then someone in the group assists you because they know and we carry on from there. We assist each other actually.

This student associates 'fun' learning in chemistry SI as a social endeavour rather than an individual task that involves knowledge construction through various input, collaboration and support.

Students also reflected during the focus group interviews that motivation played a fundamental role in inspiring them to learn, which is represented by the following excerpts:

It is like when you like something you want to spend more time with it and keep on doing or practicing it.

This student has another take on why she is motivated to study chemistry more than other subjects: she describes her predilection for the subject with respect to giving more time and practice to something you enjoy doing.

The way SI is carried out or the way SI is organised, when we come to SI we have a feeling of wanting to learn and as a result your mark is boosted because of the knowledge gained during the SI session.

This student is motivated by different learning styles offered by the SI sessions which in my opinion, probably refer to collaborative learning styles. He further recognises that motivation to learn is linked to the learning that takes place.

Joe in contrast, is motivated by the solutions to problems he receives at SI where he is able to reflect on his understanding of concepts:

… it wakes up your mind and motivates you after you have been failing – a you realise where you went wrong and you get some solutions.

Other students further suggested that they are motivated to take

responsibility for their learning by attending SI sessions because they are aware of the vast content that is covered in class and are either overwhelmed by amount of work to be covered or feel that they can only achieve the learning with support and guidance that SI offers.

The discussion above reveals that learning in chemistry SI is regarded as a 'fun' learning experience through collaborative learning engagement, exposure to a diversity of learning ideas and the support that is received in learning. It is evident that motivation also plays a significant role in chemistry SI by encouraging engagement with difficult stoichiometry concepts, thereby increasing students' confidence through collaboration and support.

Collaboration

Students' collaborative learning engagement were described in several ways which is discussed as follows, firstly students recognised that learning is a social endeavor which developed a better understanding of concepts through exposure to different points of view which is depicted by

> *… while I was working in a group I found that what I knew, was not better than what others knew so it is better to work in a group.*

This point is further emphasised by the following excerpt:

> *I feel that one of the good experiences are that you get to work in groups and with different people which really clarifies your understanding of chemistry concepts because people might really have different views, methods or ways of working out stuff and …so in that way I think it clarifies chemistry concepts.*

This student seems to value group work or collaborative learning as she believes that the variety of input received during group discussions has improved her understanding of chemistry concepts. These sentiments are further emphasised by Mbonga who expresses that the '*explanations received during collaborative learning have also been good*'.

Group discussions also seem to serve as a means of revision as is indicated by this student who remarks

If you talk to each other you find out that, oh, you forgot this, and tend to remember things you forgot.

Working in collaborative groups during SI sessions appears to expose students to different ways of answering a question; this was described as motivation for learning as discussed earlier in this chapter. The following excerpt describes Amanda's experiences of collaborative engagement:

You find that when you work on your own you sort of use that same methods but when you come to SI like you find other methods used by people, which are much easier than the one you were using, in that way you benefit.

This student values collaborative learning in gaining exposure to different methods used in problem solving, which she views as beneficial in clarifying her understanding of concepts.

The discussion above indicates that collaborative learning has many roles which are represented by developing a better understanding of concepts through exposure to different points of view; explanations have been useful and also serve as a means of revision of concepts. It can therefore be concluded that collaborative engagement allows students an opportunity to learn from each other as suggested by Akash in his individual interview: '*we definitely learn from other people*'.

The following students describe how group or paired problem solving increased their confidence in attempting to answer questions during class discussions in chemistry SI sessions:

'*If you discuss the answer in a pair you feel sure of your answer*'.
'*Discussing in pairs first helps in answering in front of the class*'.
'*If you know each other you feel more comfortable and it is much easier to talk and go up to the board*'.

These students ascribe their increase in confidence to the collaborative learning styles used in SI sessions which encouraged discussion and participation and developed a sense of familiarity with other students in the class.

This point is highlighted by Thuli who claims '*I find it easier now to approach people if I have a problem because I know that everyone here wants to learn'*. This student expresses that she now finds it easier to ask questions with respect to developing an understanding because she has come to the realisation that everyone at SI is there to learn and does not feel intimidated by asking questions.

Akash mentions in his individual interview that '*the effort that we put into group discussions makes us feel good even if we come up with solutions that sometimes might be wrong*'. This comment suggests that collaborative engagement allows students an opportunity to construct a shared understanding of concepts which gives students a sense of confidence, rather than having no idea on how to attempt the problem.

Mbonga on the other hand revealed that he feels that collaborative learning is not always good for him. In some instances, when he cannot contribute towards the right answer, he becomes frustrated and has negative feelings of group work, which is depicted by the following remarks:

> *Group work is not always good – because sometimes if you don't have a clue of what is happening – you end up asking and asking you feel a bit silly and like the silly person who doesn't know anything in that group.*

This student shows a lack of understanding of meta-cognitive skills required in learning. He is more fixated on knowing the right answer rather than developing an understanding contributing to knowledge construction through discussion and support.

It is evident from the excerpts above that discussion and collaboration amongst peers seems to develop a sense of confidence which motivates the engineering students' ability to learn from each other. There are, however, other opinions that collaboration is not always successful but rather, is seen to develop negative emotions among students who feel that they have nothing to contribute to the discussion.

Opportunities for Social Engagement

Students in this study believed that the opportunities created during SI sessions for social engagement provided feedback that improved their understanding as well as their confidence in sharing answers. Students described the different ways in which such opportunities were created during the SI sessions for social engagement among students and the SI Leader. Commenting on an SI Leader, several students observe the following:

> *'She asks us to explain in our own words and usually uses the feedback thing where she asks what do you understand by that question?'*
> *'The SI leader asks another group to help when no one knows in our group',* or
> *'She also asks what do you understand by the question ...then you realise what is actually being asked';* and
> *'She asks what is given and why it is given, or she asks us to refer to our notes'.*

These questioning techniques are portrayed as opportunities created for engagement during SI sessions in developing a better understanding of chemistry concepts.

This reflects the student's understanding that the process of learning is more important than the product. What also comes through is the fact that this student valued the feedback or support received from other students and the SI leaders. On the other hand it would seem that some students still focus on the product of the exercise, which is evident from the individual interview with Nivashni who states that she will only go up to the board to explain a concept if she is confident that she has the correct answer:

> *I would go up to the board but I mean it depends how confident I am about my answer.*

This statement indicates that students' confidence is influenced by their understanding of chemistry concepts. She goes on to explain:

> *I do feel comfortable and safe and stuff there, but if I know for sure my answer is wrong I wouldn't .... I'd let someone else do it and then I can correct my mistakes and know where I went wrong.*

This statement indicates that the environment encourages varied degrees of confidence with respect to learning engagement, and it influences peer learning when students lack confidence in their understanding of concepts.

Zamo, on the other hand, reveals in her individual interview that '*if you explaining to other people you feel like I'm superior, I know the stuff and you feel more confident*'. This comment further supports the finding that the SI environment encourages different levels of confidence with respect to learning engagement, which is dependent on students' understanding of chemistry concepts.

Students have also indicated that collaborative learning techniques offered in chemistry SI have assisted in increasing their confidence in contributing to explanation of concepts in their own words; this is depicted by the excerpt below:

> *She'll give us a specific problem …. we'd all answer it and we compare our answers and we see that it's right and then you get confident knowing that someone else also has the same answer as you so I mean its' confidence that maybe you answer is right but even if it isn't you are corrected there and at least you learn from your mistakes.*

However, only when prompted with respect to the different types of social engagements opportunities experienced in the SI sessions do students actually come up with the examples of how they engage during SI sessions. This in a sense reveals that not all students are aware of how they learn and value the support and feedback from the SI leader more than their attempts to develop an understanding of concepts.

These different opportunities for social engagement are valued by students which are depicted by the following excerpt:

> *… in lectures we do not necessarily have the time to go over the notes but when you go over the notes with another person I find that you understand better.*

This student describes how collaborative discussion of lecture notes improves his understanding of chemistry concepts. Students also illustrate

that collaborative learning techniques such as paired problem solving also create opportunities for engagement which is depicted in:

> *She also pairs you and when paired with different people you become more comfortable around different people.*

This student further explains that these collaborative techniques encouraged student engagement by creating a more relaxed environment where students were familiar with each other and this is believed to break barriers to engagement in the SI sessions.

Some of the students displayed an understanding of the different meta-cognitive skills required in developing an understanding of a concept which is represented as follows:

> *… She allows you to speak in groups but she does not leave you hanging and she verifies your answers'.*
> *'She gives one person an opportunity to explain the way they understand it'.*
> *'Everyone is involved in the activity it's like not you alone or you and your partner are not the only one involved in the discussion'.*

Students therefore indicated that opportunities for social engagement were created by the SI leader who developed an understanding of chemistry concepts through feedback (*verifies your answers*), explanation (*gives students an opportunity to explain*), and the use of collaborative learning techniques (*everyone is involved in the activity*). Social engagement was experienced as a fun way of learning, inspired learning through peer motivation and support, it created collaborative learning opportunity, developed confidence through understanding and created opportunities for feedback.

A social constructivist perspective reveals that deep understanding is dependent not only on exploring values and having social interaction, but on engaging all other aspects of the person as well, including attitudes, emotions, aesthetic experience and behaviour (Leithwood, McAdie, Bascia & Rodrigue 2006). This perspective is consistent with the engineering

students' views on their experiences of how they engage during chemistry SI sessions.

Socio-constructivist theories confirm the importance of community and interactive forces to motivation, which in turn link effective teaching with modes of delivery that promote engagement and discussion (Cannon 1988), particularly in ways that encourage active and equal participation. Motivating approaches to pedagogy can also be considered important from the perspective of responding to the diversity of students' learning styles and preferences. This study highlights the collaborative learning activities offered to the engineering students in chemistry SI that have the potential to assist in promoting deeper levels of knowledge generation (Felder 2003), as well as develop initiatives and higher order thinking (McLoughlin 2000).

The results above reveal three broad themes with respect to student experiences of the SI social learning spaces, viz. through motivation to learn, collaboration among peers and opportunities for social engagement.

Conclusion

Students regarded their experiences of the social learning spaces created in the chemistry SI sessions as inspiring because of the support they received from SI leaders and peers. They developed a better understanding of concepts through exposure to different points of view and different pedagogical activities offered. The findings reflect that the different pedagogical and learning techniques offered in the SI social learning spaces accommodated for the diversity of students' learning needs, encouraging students to take responsibility for their learning through feedback, motivation and support. Social spaces served for mini revision of concepts, explanations and discussions that improved understanding of concepts and collaboration amongst peers which increased students' confidence in answering questions.

The findings from this study show that SI social learning spaces create opportunities for learning engagement that differ from lectures in many ways, particularly as they relate to:

- offering more opportunities for practice and reflection;
- access to a variety of questions;

- access to support and immediate feedback;
- opportunities for collaboration;
- students taking responsibility for learning; and
- motivation to learn.

Students commented that student focused learning, which involved peer teaching and learning, encouraged them to:

- develop thinking, reasoning and social skills which enabled them to engage with the problem solving activities more effectively;
- develop confidence with respect to making appropriate choices in terms of chemistry concepts; and
- explore, question and research other alternates as a fundamental component of their learning.

It is evident from these responses that students who engaged in these social learning spaces developed a better understanding of concepts through collaboration. It is therefore argued that the social learning spaces created during the SI intervention session have the potential to develop independent lifelong learners in chemistry.

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'*Looking at the glass half full*': Exploring Collaborative Mixed Group Learning as a Transformative Force for Social Inclusion in a South African Higher Education Setting

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Abstract

Among the challenges faced in South African education is the need to transform its face, its function and its folk, drawing the three aspects away from the divisive apartheid past towards a more inclusive, affirming and enabling future. The thrust of transformation underscores the tension between eliminating the inequities of our past and remaining conscious of our people's underlying diversity. Collaborative learning is ideally suited to helping students mediate and explore the tensions of transformation as well as the discomfort of diversity. In this study, data from focus group interviews conducted among a stratified sample of second year medical students and teachers of problem based learning (PBL) was analysed using Mezirow's first phase of the process of transformation. The process poses 'a disorienting dilemma', which refers to a situation in which new information clashes with past beliefs, leading to self-examination, critical assessment of assumptions and to a new perspective. Four major transformational dilemmas are identified. We show what aspects of diversity are operating in our student population and suggest what may be done to maintain a constructive balance between the polarities. In addition, we argue that collaborative learning is an effective way of presenting these aspects to a diverse, heterogeneous student population for their reflection towards personal transformation.

Keywords: Collaborative learning, problem based learning, transformation, higher education

Background

'Nothing in life is constant; everything is variable. Transformation, if properly managed, offers a tremendous opportunity to enhance self-fulfilment for all – in other words, society at large benefits. It is indeed gratifying that there are good practices that have been noted, as some of the institutions that can serve as models for emulation. It should be kept in mind that in the South African context, transformation in the broader sense has become imperative, due to the inequities inherent in apartheid. The task of moving from the old to the new is indeed, both complex and daunting' (*Report of the Ministerial Committee on Transformation and Social Cohesion and the Elimination of Discrimination in Public Higher Education Institutions,* 30 November 2008:119).

A variety of interpretations of 'transformation' arose during the ministerial committee's investigations, starting with the vision of Education White Paper 3 (1997:5) of a 'democratic, non-racial and non-sexist system of higher education'. The committee identified three critical elements: 'policy and regulatory compliance, epistemological change, at the centre of which is the curriculum; and institutional culture and the need for social inclusion in particular' (Report of the Ministerial Committee 2008:36). While acknowledging the validity of these conceptions of transformation, we argue that the idea should in fact comprise more than policy and numerical compliance, and changes in curriculum and institutional social practices. The heart of transformation is surely transformation of the individuals engaged in higher education. Of the 15 'key elements' listed in the Report (2008:36), only four can be related to the individual: a sense of belonging, non-dominance among diversity, non-marginalisation, and sufficient diversity to nurture non-racialism, non-sexism, multiculturalism and multilingualism. We argue further that collaborative learning in diversely constituted groups brings individuals face-to-face with these elements.

'Transformative learning is learning that transforms problematic frames of reference – sets of fixed assumptions and expectations (habits of mind, meaning perspectives, mindsets) – to make them more inclusive,

discriminating, open, reflective, and emotionally *able to change*' (Mezirow 2003b:58, emphasis added). As one of the foremost writers on transformative learning over the last four decades, Mezirow (2003a:1) describes 'the epistemology of how adults learn to think for themselves rather than act upon the assimilated beliefs, values, feelings and judgments of others', and notes that 'influences like power and influence, ideology, race, class and gender differences, cosmology and other influences may pertain'. He lists ten phases in the process of transformation; the first of these is 'a disorienting dilemma': a situation in which new information does not align with past beliefs, and leads to self-examination, critical assessment of assumptions, and ultimately to incorporation of a new perspective. We describe below a number of tensions between opposing viewpoints arising in the course of collaborative learning, and suggest that these represent 'disorienting dilemmas' that may be fruitfully exploited in the pursuit of transformation.

While accepting Dillenbourg's (1999) point that cooperative learning tends to allow division of labour within learning-group members, whereas collaborative learning encourages all members to research all aspects of the topic under discussion, for the purposes of this article we maintain that the principle of learning together non-competitively in small groups is the same. This form of learning has been described as the instructional procedure that affects the head and hand while simultaneously affecting the heart (Johnson *et al.* 2007). The head refers to the intellectual development, the hand to skills development and the heart to the development of appropriate attitudes and values.

Collaborative learning occurs between participants when they share a common goal, shared responsibilities, mutual dependence and open interaction to reach consensus or agreement (Johnson *et al.* 2007). Collaborative learning pits effective learning (in terms of outcome – 'We all learn more together') against efficient learning (in terms of process – 'I could get through this much faster on my own'). Collaborative learning affirms that I learn by teaching you and that your struggle to understand helps me too. As a learning tool consisting of friable strands held in tension, collaborative learning stretches out like a spider's web. However, users of the tool acknowledge that knowledge does not passively drift into the net; those who seek knowledge must shift to gather and construct knowledge actively.

We aim in this paper to examine the findings from a recent study

(Singaram *et al.* 2011) in order to engage with some of the transformation issues highlighted by the ministerial committee, and to illustrate the tensions that our students and staff face. The tensions may give rise to Mezirow's disorienting dilemmas. We highlight the aspects of diversity that are operating in our student population, and suggest what may be done to maintain a constructive balance between the polarities. We also argue that collaborative learning is an effective way of presenting these aspects to a heterogeneous student population for their reflection.

Context

In 2001 the student-centred problem-based learning (PBL) curriculum replaced the traditional medical curriculum at the Nelson R Mandela School of Medicine (NRMSM). In addition to large group resource sessions (similar to traditional lectures), students engage in collaborative group learning in PBL tutorials. Each of the PBL 'themes' is a multidisciplinary learning unit between six and nine weeks long. In the first three years, students meet twice weekly in preselected groups of 10 to12 individuals to discuss relevant clinical and basic science cases using an eight-step method (van Wyk & Madiba 2007). The method was adapted from the University of Maastricht (Schmidt 1983). In brief, this allows the group to explore collaboratively a relevant problem with a facilitator, initially using prior knowledge, sharing insights and brainstorming possible explanations.

Then, after a period of self-study with the aid of lectures and/or practical sessions, students meet again and synthesise information gathered during the week. Facilitators are full- or part-time faculty members who come from a range of medical, allied health, racial and language backgrounds. Prior to being allowed to facilitate, facilitators receive training and are then briefed by subject experts or the theme head on the details of the learning objectives for every week in each theme.

The diverse student population at NRMSM is multilingual and multicultural; with a range of ages, schooling backgrounds and prior educational experiences (some students enter medical school straight after school while others have some tertiary experience prior to gaining a place in medicine). South African schools still differ in terms of resources; infrastructure and methodologies implemented in a variety of public and

private secondary schools. Differences in the schools result in students having different levels of academic preparedness and skills when they enter medical school. The majority of the learners have English as a second or third language, as SA has 13 official languages. The collaborative PBL tutorial groups are mixed based on race and gender in an attempt to balance the diversity in each group; the group members' composition is changed for every 'theme' (i.e. every six weeks).

Participants

A stratified random sample of 20 undergraduate medical students who had at least two years experience working in PBL tutorials was selected, taking into account ethnicity, previous tertiary experience, language, gender and age. Based on these diversity factors, the second year students were divided into homogeneous strata. A random selection from each stratum was selected based on the proportion of that stratum in the student population of that year cohort to form a heterogeneous sample.

The selected students were individually invited to participate in the interviews and were selected after ascertaining their comfort with discussing diversity issues in heterogeneous, as opposed to homogeneous, groups. Eleven PBL facilitators out of the 20 invited accepted an invitation to a focus group interview. In total, two student groups of 10 students were involved and one group of 11 facilitators. Each student group met twice.

Instrument

In semi-structured focus groups, interviews explored the views of students and facilitators regarding the advantages and disadvantages of being in heterogeneous (multicultural, multilingual, multi-educational) PBL groups. The principal investigator (VSS) conducted the focus group discussions for students and facilitator groups. Another investigator (TES) acted as moderator and scribe. The focus groups were held for 90 to120 minute periods. Basic ground rules for the group to prevent potential limitations of focus groups such as dominating students were established at the start of the interview sessions. Discussions were audio taped. Students and

facilitators were each given a specific number prior to the discussion and their inputs were recorded anonymously. In the second round of student meetings, specific issues that needed additional clarification were explored, with students being given a chance to comment further on the issues discussed. Since no new points emerged from the discussions after the second round of discussions, a third round was not necessary. In total, five focus group sessions were held. Summaries of the discussions were authenticated by the students. The second round for the facilitators could not be held due to unforeseen circumstances.

Analysis

The tape-recorded discussions were transcribed literally and uploaded into the ATLAS-ti software program. Using the basic idea of grounded theory, an inductive approach was used to analyse the data as reported in a previous publication (Singaram *et al.* 2011). As outlined by Singaram *et al.* (2011) the data were read and re-read to 'discover' or label variables and their inter-relationships by using open (identifying, naming, categorising) and axial (relating codes or categories) coding (Strauss & Corbin 1998). Initially, the transcripts were read by one researcher (VSS) and a set of preliminary codes was designed. This was then discussed with another researcher (DD) and the transcripts were re-read. A trained assistant then read the transcripts and independently came up with a coding framework. The coding framework was then discussed by three researchers and modified until conformity and verification was reached. Transcripts were then re-read and coded using Atlas-ti. The coded data were then grouped into categories and underlying relationships explored. Hence, the themes and categories were determined or emerged from the data, as opposed to grouping the data into a set of pre-selected categories. Thematic analysis resulted in the identification of nine main themes related to the benefits and challenges of diverse group learning.

In this study the data were re-analysed by two of the researchers independently. Themes were grouped into relevant categories and underlying relationships were explored using Mezirow's first phase of the process of transformation i.e. 'a disorienting dilemma' as described earlier. After verification, four major transformational dilemmas were identified.

Results

1. *Student Selection by Quota—Academic Achievement*

For over ten years, our students have been selected so as to reflect the population demographics of KwaZulu-Natal. Since selection is secondarily based on matric performance, as we select from the top achievers downward, this inevitably means that the spread of ability in any group is inversely related to the size of the group. This then introduces a bias that affects each cohort of students throughout their degree programme. Smaller population groups tend to feature disproportionately at the top of the class, while larger groups, because of their lower average ability, tend to feature to a greater extent at the bottom of the class. As staff members, we have striven to make the point that the competition to secure places in the medical programme ceases once the programme itself begins. The faculty's use of criterion-referenced assessment means that students need to aim to satisfy the criteria, not to do better than others, in order to pass. We also make the point, as illustrated by the comments below, that one of the strengths of collaborative learning is that in working together, each contributes to the building up of individual and group knowledge of the topics under discussion.

Facilitator Perspective

... we've been in the apartheid era for so long and the disadvantaged Black students and Indian students often feel inferior to a White student who comes from a different educational background. In that sense, I feel that the facilitator's role (in the PBL tutorial) is to engage them and tell them that they are on common ground and we don't have any structural differences. 'We don't worry about which background you come from; we are here to learn from each other'.

Facilitator Perspective

When you look at both sides of the situation, where you have a very strong student, perhaps feeling being held back by a group consisting of large number of fairly weak students ….

Student Perspective

… looking at our country, helping to build for example our Rainbow Nation, I think this is what this (mixed) group is doing and it's actually helping us to get to know different people from different cultures. And with regards to the academic work and that sort of thing, it's actually like in a mixed group you get to learn about other people's experiences and you supposed to use your prior knowledge when you go into your first tut, so I think that it is a wonderful thing ….

2. Social Divisions — Tolerance

The diversity of student doctors collaborating, interacting, socialising and problem-solving provides a fertile training ground for their future careers in diverse healthcare teams in the SA healthcare sector. Despite segregational conditioning brought on by the previous apartheid era, the collaborative learning setting in the PBL tutorial encourages students to interact in academic discourse. However, remnants of a bygone era still exist as students segregate along racial, cultural and social class divisions as illustrated in the comments below.

Student Perspective

… but the problem is …. we seem to isolate. . . there is just this isolation amongst students, even in tuts. Even if you can look around now, I don't know what's happening but you'll be sitting in the corner there and even in lectures there is just this isolation. I don't know what the problem is. And it is very difficult for you as an individual to go up to a group of ten people from a different culture and try to be friends with them or try to get information from them. It is very difficult.

Student Perspective

And the other thing is the social class difference because I'm in a group where you can see that the people are wealthy, and they are rich and they have it all, and you can see that they know it, so they sort of belittle the other people and they make you feel small or whatever and I'm not sure if there is a way of overcoming that, and there are times in the tut when you feel uncomfortable because of that un-equalness.

Student Perspective

> Most of the times when you are from a rural area, you are de-motivated from the first day, you just see this place the medical school, you don't understand what is happening and you have these people that undermine you, they look at you like you are inferior, so you don't get into it. Most of the students from the rural areas, they don't get those good marks, because they are de-motivated from the first day.

The following comments illustrate consciousness of overcoming social barriers by developing a tolerant, patient attitude and sometimes even becoming friends as they get to know each other in the collaborative learning tutorials.

Student Perspective

> But maybe that situation breeds tolerance. But also like … ah … what's the word, when you, like, irritated with someone but you let it go … you know what I mean? Its like, I dunno, a personal issue, not like a cultural thing. And you can't change people, people are like the same, you might as well just move on, because worrying about it … well there's just no point to it. To me, the whole point of these mixed groups is that they breed tolerance … but I don't like the word tolerance, but you know what I mean. You don't have to accept what they doing, you just have to tolerate it (or) be patient.

Student Perspective:

> …. you greet people you'd never think you'd greet, you know, and it's like when you come into first year you thinking …. 'I'll never speak to that person' and then you go and sit in tutorials for like, one or two themes and then …. they even know you or your name …. And … sometimes you even meet like out of school and so ja I think it is beneficial socially.

Student Perspective

… I found that I have a keen interest in learning the other languages, 'cause we have people that speak Tswana, there are people who speak Sotho, and I think that as I am trying to learn these languages, I'm actually developing close relations with these people.

Student Perspective

I think there are advantages and disadvantages as such, but I've made a lot of friends of different cultures

3. Cognitive Constraints—Richness

'Cognitive' refers to students' academic and linguistic ability, as they have been inextricably linked in the South African context. The collaborative PBL tutorial provides an opportunity for academic support and development. As students work together in the first tutorial, tapping into prior knowledge, and in the second tutorial, discussing and exploring learning goals and co-constructing knowledge, English second language students benefit from contact with their English first language peers. We find disadvantaged students sometimes not being able to cope in the tutorials, as illustrated below.

Student Perspective

If you are all not on the same level, you find that some people do get left behind. Whether it's language or they don't understand or maybe you are not perhaps from the same Matric school and some people live in the rural areas, there are going to be those people who are going to be left behind ….

Facilitator Perspective

So I am saying it's disadvantageous … when ... the gap between your students is too big ....

The wealth of diversity also provides an opportunity for facilitators to help students address any sense of inferiority, lack of self-esteem or failure of confidence which may hinder their learning. If facilitated well, the tutorial can provide a safe environment for learning, sharing, caring and motivating each other, as illustrated in the comments below.

Facilitator Perspective

I find that by having the right mix of diversity, you have a group dynamic that works. You can't have too many bright students and you can't have too many weak students, it just won't work… It's nice to see the weaker students now coming forward, participating and learning from the brighter students.

Facilitator Perspective

I think the mixed group idea is an advantage in the sense that you cannot separate students and teach them, because that will be wrong. You will get students whose understanding of English is limited, but it will be good to pair them with students who have a good understanding of English. That will give them the idea of understanding from another person's point of view and they will understand the subject well and will be able to explain that well.

Student's Perspective

And educationally, I think that it is better to be with people, even if they are from a different educational background because you need to be with someone who knows more than you to learn from them. If I'm with people who are just as clueless as I am and don't understand English, I will never learn English .…

Student Perspective

... academically you are stimulated to do something when you see someone doing something and you develop something, and you have to go and study more about that thing, then you end up being on that level. So I think that the mixed groups are good.

4. Self Interest — Altruism

The altruism of the academically strong students is challenged, as they are more often than not on the giving end. This tends to frustrate these students, as illustrated in the quotes below. This frustration presents the opportunity to appropriately orientate and sensitise these students to imbalances brought on by past inequities.

Student Perspective

> I'm not sure if it's a language barrier, or lack of knowledge or whatever it is, but sometimes when you have members like that, it frustrates the group and people wanna contribute less to the tuts because its just a factor, when you say something it's explained to the person, and the more is said, the more has to be explained, so people want to contribute less to the tuts.

Facilitator Perspective

> I can think of individuals coming to me at various times and saying, 'You know this is terrible, I'm way ahead of these people and they are holding me back'.

Facilitator Perspective

> Sometimes you get this kinda attitude. 'Well I know this work and I'm gonna sit here and why should I contribute to this process because I'm doing all the work' or something like that. And that becomes quite a problem.

We have heard these expressions of frustration many times over the past years. This is not invariably the response of the more able students, as illustrated below. The thrust to move on at one's own pace is held in tension with the philanthropy of drawing one's colleagues along with one – with the advantage of ensuring that one's own knowledge is actually securely based.

Student Perspective

> What, what this method does do is that, it tells you that, to learn, teach others. Not really teach but try to impart some knowledge, you know. And if you want to explain it to others, that's the best way you'll understand something.

Facilitator Perspective

> I've seen where the stronger student has actually participated and helped in the learning process considerably and that is really rewarding to see …

Discussion and Conclusion

We reiterate our support for changes in policy, epistemology and institutional culture – but these structural alterations do not necessarily change the individuals who collectively *are* the institution. Our argument is that personal confrontation with some of the tensions – or outright contradictions – inherent in a diverse society may be the catalyst that promotes individuals' transformation. That the task of transformation is 'both complex and daunting' is illustrated by the tensions we cite. Students are brought face-to-face with the consequences of 'getting the numbers right' in terms of racial quotas, and with the inequalities of schooling, with social inequalities and the otherness of those they must work with, with differences in language and learning ability, and with the drive of self interest versus the impulse to help others. We argue that these tensions pose the sort of disorienting dilemma described by Mezirow, and that encountering them in the relatively secure environment of collaborative learning plays a part in transforming students' personal viewpoints.

As regards the first tension we describe above: the racial quotas introduced to redress past imbalances in access to higher education are understandable. The consequences are at first glance unpalatable and hard to accept. However, confidently one asserts that all students are equal once they have gained access; the reality is that the very fact of ensuring numerical equity has by the same token ensured academic inequity. This sparked complaints initially, but explanation of the predictable consequences of the quota system led to its acceptance as a fact of life. It is heartening to see that

both staff and students have faced this unavoidable tension and have found positive aspects of the spread of academic ability.

The second tension reminds us that South Africa has laboured for so long under conditions of artificial separation that it is unsurprising to find automatic separations along various lines. The Faculty's policy of forming tutorial groups of mixed backgrounds forces group members to interact. Our respondents evidently found this difficult to deal with, whether the differences they confronted were racial, cultural, socioeconomic or geographical. Some of the responses indicate withdrawal, but in the main respondents found, perhaps with some surprise, that otherness was tolerable, interesting and even amicable.

The third tension introduces a number of comments about language fluency, often linked to perceptions of academic ability – the language in which teaching and learning are carried out is an obvious influence on academic achievement. McDermott (2001) illustrated how the language used in schools can shape the learners themselves, while Howie *et al.* (2007) reported that the low literacy rates in South African primary schools were considerably exacerbated in the case of second-language learners. In their description of a variety of influences on academic achievement, Heugh *et al.* (2007) state that '... teaching, learning and assessment in languages other than home language may have negatively affected learner performance in *all* learning areas' (e.a.). Second-language learners' grasp of the discourse of the field of knowledge may be difficult to distinguish from their grasp of the language of instruction. Nevertheless, respondents recognised that the mix of these crucial differences in fact made for a stimulating group environment of which they could take advantage.

The fourth tension emanates directly from the other three. Having competed for places in school and for entrance to medical school, members of this selected student body might be dismayed to find that, for various reasons, others are not equally gifted or display the same level of enthusiasm. Some respondents evidently felt this keenly. As with the other tensions, the dilemma was resolved at least in some instances, as less able students needing help found a corresponding ability to help in the form of their more linguistically or academically endowed colleagues.

Although separation along racial or social lines impacts negatively on group morale, this presents an opportunity to address uncomfortable

issues in a safe setting. By emphasising the motivational and social cohesion aspects of collaborative group learning, students can be encouraged to leave their comfort zones and address misconceptions about each other. Possibly an equal ill to the forced separation of the past could be forced integration – the pretence that the colours of the rainbow nation could and should blend together. Ultimately, differences must be suppressed for the greater good of society. This idea fails to do justice to the creative interactions that diversity allows. This is one of the areas where the wish to come together and the impulse to separate are held in tension by collaborative learning.

Our facilitator respondents are not unaware of students' expectations in heterogeneous groups. Creating an equitable environment is vital in addressing power issues and inequalities prevalent in diverse groups. The creative resolution of the tensions of diversity and conflict resolution is critical to subdue the pride and prejudice that creep in, and their damaging effects on group effectiveness and student development. Students' reactions to these dilemmas may be misunderstood by group facilitators as individual personality issues, and require acute insight in order to move the confrontation of the dilemmas through the other steps of transformation and allow new perspectives to emerge.

In keeping with those of Singaram *et al.* (2011), our results demonstrate that collaboration of students with diverse backgrounds has two sides; although there are challenges, there are also benefits in heterogeneous collaborative learning. We need to address the challenges more proactively, acknowledging the constraints that come with our prejudices so that we can start to create comfortable open forums to address our biases and deepen our understanding of each other's cultures. It is important to bridge the cultural divide and address the insecurities of students, particularly the disadvantaged. Support of cultural and ethnic diversity should be tangible. We recommend that future studies explore staff diversity training in more detail. In addition, noting the limitation of focus groups and possible constraints relating to dominating individuals and 'groupthink', we suggest that future studies include individual interviews and observational methods.

The *Report of the Ministerial Committee on Transformation and Social Cohesion and the Elimination of Discrimination in Public Higher Education Institutions (30 November 2008:119)* made a clarion call 'for students and their organisations to move from the periphery of university

life to the centre, and to start engaging in meaningful ways with the issues that impede their full participation in university life and, more particular, in the area of learning ... (and) that academic staff … need to become aware of, and learn to understand the students they teach, by being much more sensitive towards these students'. In the light of this need, we suggest that the use of collaborative learning aids transformation towards social cohesion in higher education.

In the Ministerial Report 'students raised socio-economic factors, particularly those pertaining to social class, as an inhibiting factor concerning their ability to not only access higher education opportunities but to take full advantage of the range of opportunities provided'. The committee also found that students who are not English first-language speakers continue to face challenges in many institutions. The need for higher education institutions to provide staff with ongoing training and support to deal effectively with diverse students is highlighted by the ministerial committee's report and supported by our findings.

The powerful effect that student backgrounds can have on the curriculum and its outworking with regard to professional development, particularly in the medical and health science field, needs to be harnessed. We believe that collaborative learning, in which students are working face to face with one another and with staff members, is one way of engaging with the issues that arise rather than avoiding them. We further believe that the miscellany of learners' and teachers' characteristics should be acknowledge-ed, not just for the purpose of transformation in diverse student populations but for academic failure to be addressed, as throughput rates at higher education institutions need to improve.

Universities should be alert to approaches that will improve throughput rates of students. According to Schmidt *et al.* (2009), 'dropout is often explained by Tinto's theory of student social and academic integration. According to this theory, the persistence of students is primarily a function of the extent to which these students involve themselves socially and academically in the university environment. Engaging in direct contacts with peers and faculty would be a major factor in promoting persistence. From this point of view, active-learning curricula are successful because they enable these social contacts through small-groups'. We caution once more against a purely numerical assessment of transformation, while conceding

that the important factors in diversity that are foregrounded by collaborative learning are not necessarily the same factors that influence success in assessments. Collaborative learning inculcates interpersonal skills that are seldom, if ever, formally assessed and therefore do not appear as influences on individuals' academic success or institutions' throughput rates. This is not to say that only certain factors are worthy of attention; it does suggest that students can achieve excellence without necessarily being bound by perceived inequities.

As highlighted by Mezirow (2003b), transformative learning involves critical reflection of assumptions that may occur in group interactions. Our findings support the role of collaborative learning as a transformative force in higher education. Some of us feel very deeply that unity in diversity benefits our collective progress – as enunciated by a future leader, a student doctor:

> Every single bone in me would not go for homogeneous …. [T]wo groups of people will advance at a different rate but if they are mixed, they would advance at an astonishing rate together ….

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Transformation through the Curriculum: Engaging a Process of Unlearning in Economics Education Pedagogy

Suriamurthee Moonsamy Maistry

Abstract

Debates on transformation in higher education in South Africa have been largely confined to how transformation and social cohesion play themselves out at an institutional level. Much energy has been expended on complex and elaborate plans for transformation, including enrolment and employment equity targets and other strategic interventions. However, there is a dearth of understanding on how tensions around issues of transformation and social cohesion manifest and become contested at the proverbial 'chalkface', that is, in our lecture halls. While some academics propose an approach to curriculum development and transformation that endeavours not to 'contaminate' either the curriculum or the purity of disciplinary knowledge, others actively embrace and engage the curriculum as a means to facilitate processes that open up spaces for deliberation on issues of transformation. This article reflects on how transformation elicits debate and contestation in a teacher education pedagogy course that is informed by the principles of critical curriculum theory. Using self-study methodology, discourses of transformation are considered at the classroom level. The article argues that while it is possible to scaffold a process of unlearning and relearning, several tensions are likely to emerge which the university pedagogue has to manage.

Keywords: curriculum transformation, economic education, pedagogy, teacher education

Introduction and Background

The 2008 Ministerial Committee report on Transformation, Social Cohesion and the Elimination of Discrimination in Public Higher Education presents a disconcerting finding, that higher education institutions in South Africa engage with transformation in various ways, with some opting for technical compliance as manifested in carefully scripted policy documents (Oloyede 2009). However, as Esakov (2009) notes, the political will to follow through with substantive transformation initiatives appears to be constrained by significant inertia on the part of various actors. There are several reasons for this, but it is beyond the scope of this paper to engage with them, except to note that the transformation process is likely to be slow, painful and fraught with challenges.

Higher education institutions may be able to produce statistics and data on student enrolment patterns that reflect the changing demographic profile of the student body. However, these somewhat sterile quantitative data are hugely inadequate to help develop a rich qualitative understanding of who our students are, and how they are likely to experience the academic programme. While programme co-ordinators develop and implement curricula, at times such efforts happen in a vacuum. In this respect, they occur devoid of an overt and sophisticated understanding of the academic learning model being endorsed, and more importantly, the nature of the students likely to receive the curricula. This inability to understand students in rich, qualitative ways is arguably the most serious impediment to substantive and meaningful transformation of our academic practice as well as student experience of our programmes.

This paper starts from the premise that students' experiences – whether positive or negative in higher education – is a direct function of the academic practice that they encounter. While there may be slight variations in academic practice across programmes, in the main the academic practice of an institution is determined by the nature of the prevailing academic learning environment.

There is a need for a meta-cognitive reflection and critical introspection of the model at work. What makes this kind of critical reflection particularly difficult is that the model is elusive and invisible, yet both pervasive and deeply entrenched. Unless an academic institution can unpack this model and reflect on how it determines the prevailing practice

they will fail to address – in any comprehensive manner – the pressing issue of transformation as it relates to academic practice.

To enable an institution to understand the nature of the model at play, reference will be made to the Cross *et al.*'s (2000) work at a large urban university in Gauteng, South Africa. The authors argue that the academic culture of the university is foreign to students, especially those from poor and working class backgrounds. It is far removed from their lived experience. More importantly, the demands and expectations with regard to teaching and learning present immense, and sometimes insurmountable, challenges. These students do not have the requisite social and cultural capital to meet the academic requirements of university. There is a fundamental disjuncture between the skills and competence that poor and working class students leave high school with, and the requirements of the higher education institution, whose model is predominantly performance-driven. Drawing on Bernstein's work, Cross *et al.* (2009: 33-34),describe a performance-driven learning environment as one that is characterised by the 'specialization of knowledge, competitive academic environment, and modes of transmission and evaluation that give primacy to individual academic achievement or success … with limited peer collaboration or faculty support'. The major resource for success is students' accumulated social and cultural capital, their ability to work independently and their individual autonomy. In the process, students have to become self-reliant, resourceful and motivated.

From the perspective of the University of KwaZulu-Natal (UKZN), in the decade leading up to the dawn of the democratic era in South Africa, the two merging institutions that comprise UKZN began to enrol larger numbers of African students. Following the merger, there is now a critical mass of so-called 'non-traditional' students, comprising mainly students of indigenous African origin, many of whom (like some Indian and Coloured students) are from poor families. Most of the African students have mother tongues that are not English, the language of instruction.

Given this shift in the student profile and the firmly entrenched per-formance-based model at play at UKZN, we need to interrogate the extent to which the university as an institution has responded to this changed profile of its student body. To what extent has the university transformed its academic practice, or has it been business as usual? There is a need to move beyond the brand of transformation that operates at the level of rhetoric and political

compliance, contained in carefully scripted policy. An important starting-point for this to happen is to reflect on the changed student profile of the university together with the pedagogical models in operation.

Clearly, the current hegemonic model has distinct power implications: as it exists, the model serves a particular 'calibre' of student, and sidelines the less able students, who end up struggling to survive or complete their degrees. The following questions beg to be addressed: how does UKZN disrupt, dislodge, deconstruct and reform what has been established as an unflinching canon, and how does the institution begin to shape a model that is responsive to the needs of the majority of students? An additional question is how to ensure the curriculum transformation enterprise takes root and gains momentum?

In this paper I reflect on my experience as a higher education pedagogue who has worked in teacher education for just over a decade. In particular, I present narrative accounts of the strategic pedagogical moves I have made, and reflect on the tensions that emerge. For every strategic choice one makes as a pedagogue, there are always consequences, both positive and negative. As a teacher education specialist working in the field of Business Education (Economics, Accounting and Business Studies), I draw on political economy as a philosophical critical pedagogy principle in the presentation and analysis of my practice.

Towards 'Authentic' Curriculum Transformation in Higher Education

Transformation as a conceptual construct has its roots in critical theory, as informed by the work of Paulo Freire and earlier classical theorists such as Antonio Gramsci and Michel Foucault. My engagement with the discourse of transformation is informed by critical theory and critical pedagogy. It could be argued that transformation can only be authentic if the advocated change starts from the fundamental premise that there are inherent issues of power at play in the various facets of society. Curriculum transformation would then refer to fundamental changes to the core of the academic offerings of the institution, namely, profound epistemological, ontological and methodological moves that orientate towards a transformation agenda. These moves ensure change to the very nature of programme offerings.

Fundamental curriculum transformation requires both political will and academic stamina to see the process through its multiple phases. In particular, transformation as it relates to curriculum is complex, especially at higher education institutions whose constituencies carry substantially differrent and contested historical knowledge. This kind of paradigmatic shift is likely to be slow, painful and often hotly contested. As Thomas Kuhn reminds us, the paradox with a paradigm shift is that it is not a neat, linear movement from one curriculum space to another. Rather, it is fraught with tensions, conflicts and contradictions that are indeed necessary for change to occur. In the complex bureaucracies that exist in higher education institutions, making changes to the fundamental core of programmes require endorsement at various structural levels, which is necessarily a lengthy process. Proposed changes have to be vetted for quality and academic integrity at several academic quality assurance structures within the institution, and ultimately by the external, state-mandated quality assurance watchdog institutions.

The curriculum could be viewed as a site or vehicle for transformation. The nature of this kind of transformation is qualitatively different, and often not a mandated or contrived imposition by external pressure groups such as the state. This kind of work is often far-reaching and driven by intrinsic desires for social justice. It may include pedagogical processes and content selections that actively advance a transformation agenda. Such efforts are usually associated with critical theory and critical pedagogy. Critical pedagogy questions assumptions, reveals power relations, acknowledges the authority of experience in developing ideas,; and promotes the ideal of a society based on justice (Reynolds & Trehan 2001). A critical perspective entails not only a focus on course content, but also on procedures, assessment and teaching methods that value experiential and participative approaches which can engender a culture of consensus. In the discussion below I reflect on my experiences in the Business Education courses of a teacher education programme.

A Brief Note on Methodological Orientation

Educators' attempts to research their practice have been an ongoing enterprise that has taken on various guises. Whatever the nature of the initiative, the goal is always directed at the improvement of teaching and

learning. While each of the various approaches has its merits, they also present challenges in their implementation. In recent years I have been drawn to 'self-study' as a strategy for researching my practice (Kosnick, Freese, Samaras & Beck 2006; LaBoskey 2004; Lassonde, Galman & Kosnick 2009). I concede that in my initial years as a teacher educator the issue of problematising my own practice was not high on my list of priorities; neither did I value the methods that were available at the time (Cochran-Smith 2001). However, the pressure to develop and maintain a teaching portfolio as a living document, and more importantly, the need for me to model the expectations I set for my students, resulted in a search for an approach that would allow me reflexivity in researching my practice.

To this end, self-study as a developing and emerging field of educational research has particular appeal. The explicit focus of this genre of educational research is on the self, that is, problematising the self in practice by reflecting on experiences 'with the goal of reframing … beliefs and/or practice' (Lassonde, Galman & Kosnik 2009:5). Self-study starts from the fundamental post-modern assumption that the self is implicated and complexly connected to the research process and educational practice. The self-study approach allows for multiple examinations of the 'self in teaching', 'the self as teacher' and 'the self as researcher of my teaching' (5).

Feldman (2009) draws attention to the very nature of an emerging field of research as necessarily implying an emerging set of theoretical constructs that may be subject to varying interpretations. Of importance for me as teacher educator is that self-study 'makes the experience of the teacher educators a resource for research', allowing me to use experience as data for research (37). To this end, I maintain a reflective journal in which I document my experiences with my pedagogy classes. These are not random entries, but capture critical incidents and issues in my teaching and learning experiences with my students. In the discussion that follows I reflect on my experiences as I engage with my ongoing transformation enterprise.

Reflections on Engaging a Critical Gaze in Business Education Pedagogy

I have been involved in teacher education for just over a decade, working in the broad field of business education. Essentially this entails working with

both pre-service and in-service teachers of Economics, Accounting and Business Studies. This paper draws on my experiences of teaching pedagogy courses across these disciplines, through reflection on my engagement with students on the fundamental tensions within the disciplines themselves, as well as pedagogical issues related to the teaching of business education content knowledge.

As a self-study scholar, I start from the premise that the self is complicit in educational practice; it is not possible to separate the self from one's practice. As such, the nature of (my) self, value system, aspirations, memory and theoretical orientation infuse and permeate every aspect of my practice. Having been schooled in resistance politics as a youth activist and a teacher activist, issues of equity, redress and transformation are central to the work I now do as a teacher educator. While I draw my inspiration from critical pedagogy, in particular the work of Giroux (2004), Kellner (2003) and McLaren (2003), I am also mindful of the critique of critical pedagogy as an educational project (Ellsworth 1994; Lather 1998). However, I do find myself in a somewhat tenuous position, namely, helping my students acquire and develop pedagogical content knowledge (Shulman 1986) in disciplines whose genesis and fundamental epistemologies, ontology and methodologies are firmly anchored in market discourses (Maistry 2010).

In recent years the broad field of business education has been subject to interrogation and critique. Critical accounting education is beginning to emerge as an important field of scholarship (Boyce 2004; Broadbent 2002; Ferguson, Collison, Power & Stevenson 2009; McPhail 2004). Similarly, the hegemonic influence of neo-classical economics on the broad field of economics has also been aggressively contested (Bourdieu1986; Fine & Milonakis 2009; Heilbroner 2003; Leander 2001; Lebaron 2003; Milonakis & Fine 2009; Sen 1999; 2005; Stilwell 2003).

The neutrality of entrepreneurship education and the role of the corporate sector around the issue of corporate social responsibility is beginning to gain some currency, although at a rather a slow pace in the South African context. The extent to which university students see corporate social responsibility as an aspect of the work of corporate enterprises is a matter that has not been sufficiently explored in South African educational research (Maistry & Ramdhani 2009). These tensions within the disciplines provide a challenging yet opportune space to creatively develop a pedagogy

curriculum in the business education courses I teach.

The key issue in these pedagogy courses is the disruption of the so-called received disciplinary knowledge (Jansen 2009) that students have acquired. This is a particularly painful process for students, especially when they are required to question the very foundations of the disciplines they have mastered, and made their own. In my Economics Education pedagogy classes, students are challenged to review and revisit the canonical positions articulated and espoused by the disciplines of Economics, Accounting and Business Studies. In particular, students engage in the fundamental neo-classical assumptions of the market, namely rationality, individualism and private property rights. Here lies the opportunity to bring to the fore the institutionalised assumptions about the world, and the economic world in particular. In this respect, the work of Harvey (2007), which analyses how neoclassical economics and neo-liberalism have informed and shaped the world economy, has particular currency and power in the Economics Education pedagogy classes. Of particular significance and evidence of neo-liberal ideological failings has been the recent global financial crisis that rocked the economic world. Neo-liberal ideals of individual entrepreneurial freedoms and rampant fictitious capital accumulation have resulted in arguably the most spectacular stock market and bank collapses in the modern era. So much so that Iceland and Portugal, Italy, Greece and Spain face the prospect of bankruptcy should they not be bailed out by their more powerful allies in the European Union.

This crisis could have a devastating effect on the developing world. There is little contention that it is the poor and working classes who bear the brunt of this kind of economic calamity; the capitalist classes always find ways of reasserting their powerful economic positions. This is an overriding signal of the need for alternative approaches to economic education.

As a teacher education pedagogue, I start from the premise that teachers have a powerful role to play in the process of societal transformation. In the South African context this transformation has to be more than 'change for the sake of change'. It has to be a fundamental and nuanced kind of transformation capable of making a substantive material difference to the poor and marginalised people of our country. My experiences of working with novice student teachers reveals that they believe that they are handicapped and constrained by various mitigating contexts,

which bar them from making a significant contribution to societal change. The focus of my critical Economics Education project involves a complex process of debunking and demystifying the myth that student teachers lack the necessary capacities and potentials.

It is not unusual for student teachers to construct deficit identities of themselves, given that South Africa's main school and university education systems have constructed students as receipients of knowledge rather than co-constructors and critics of received knowledge. Disciplinary knowledge, as suggested above, especially in business education (Economics, Accounting and Business Studies), is presented as unquestioned doctrine by school teachers and university academics. So a typical Economics or Accounting graduate who signs up for a teacher education programme (a Postgraduate Certificate in Education in the case of South Africa) would have mastered an undergraduate programme and been schooled by disciples of the disciplines they selected. The issue of concern is the extent to which the business education disciplines have been presented as contested terrains.

My own experience as an undergraduate and postgraduate student, and the experiences that student teachers that I have worked with for the past 12 years, indicate in no uncertain terms that the canonical position of neo-classical economics continues to hold firm. If anything, the fundamental assumptions of the market as espoused by neo-classical economics and neo-liberalism are pervasive. Its 'naturalness' appears to blind both academics and teachers to the notion of any kind of disciplinary contestation. In short, disciplinary knowledge, as espoused and taught by schools and university academics, remains uncontested received knowledge.

The epistemological, ontological and methodological blueprints of such students have been cast in certain ways. In the first few years of my career as a teacher educator, I saw my role as primarily that of creating opportunities in the pedagogy curriculum for students to develop pedagogical content knowledge (Shulman 1986) in their chosen business education subject specialisations. This knowledge had discomfiting neutrality to it. In recent years my attempts to review, reflect on and refine the work I do have been informed by my own research and engagement with critical theory and critical pedagogy (Giroux 2004; McLaren 2003). I have come to the realisation that a narrow focus on pedagogical content knowledge as it relates to the business education disciplines was insufficient and limiting. It was

clearly inadequate to address issues of poverty, inequality and redress that are germane to a South African context.

Business education teachers have to do more than reproduce the content of the disciplines they chose to teach. They need to be exposed to a pedagogy curriculum that will enable them to use the disciplines they teach as vehicles for developing critical citizenship (Giroux 2004). This shift in the focus and purpose of the business education pedagogy curriculum meant that there was a need for a substantive transformation of the core aspects of that curriculum. Of significance for me was the realisation (metacognitive awareness) that the pedagogy curriculum needed to be transformed at two levels: core content and delivery.

Transformation at the level of the curriculum content raises two important issues that come into play in a pedagogy course. The first revolves around the nature of the disciplinary or subject knowledge that student teachers have mastered and made their own. As discussed above, the nature of this knowledge, how it came be applied, and specific selections that have been made for both university and school curricula, are subject to contestation. The opportunity then arises to create spaces where this received disciplinary knowledge can be contested. Through carefully selected materials that empower students to question the fundamental assumptions of the discipline of business education, student teachers begin to engage with alternative discourses. For most students this is a new experience. Students generally struggle with this, as the fundamental fabric of the disciplines they have chosen to become experts in are called into question. This kind of activity creates much tension and stirs up lively discussion.

As teacher educator I am aware that a single pedagogy course in the year-long programme is insufficient and inadequate to make substantive and fundamental inroads into students' thinking about the disciplines in business education, especially for those student teachers whose predetermined agendas have been to become competent teachers of the discipline in its 'purest' form. What this kind of exposure does, though, is to open the door to exploring the taken-for-granted 'neutrality' of business education disciplines. This can prove to be quite overwhelming to student teachers, who are required to learn how to teach disciplines or subjects whose fundamental, foundational assumptions have been brought into question.

This process of challenging these fundamental assumptions has to be

sustained especially since neo-liberalism has become such a pervasive and deeply entrenched ideology. These reinforce and create conditions for capital accumulation by the capitalist class at the expense of the working and middle classes, and have become largely invisible to the unwary observer. Business education is value-laden; that is, content topics and subtopics of Economics, Accounting and Business Studies, as scripted in the nation's curriculum statements, carry with them a neo-classical ideological position firmly embedded within a neo-liberal market framework (Maistry 2010). The challenge then is to create learning opportunities and spaces for student teachers to challenge the disciplines in which they will teach. This is similar to Dowling's notion of a 'mathematical gaze', which allows individuals to 'see' the mathematics in everything (Dowling 1988).

The competence aspired to in this case is to develop a 'critical business education gaze'. The key objective here is that student teachers will develop the proficiency and skills to be able to use the very content of the disciplines they teach as vehicles to address the transformation agenda. More specifically, the prospective teachers will be able to reveal the inherent tensions between neo-classical market economics and social justice issues, including race, class, gender and power. In the process, student teachers will begin to see that the purpose of education as substantially more than simply teaching business education.

The second curriculum transformation issue central to a pedagogy course is that of pedagogy itself as it relates to the business education disciplines. As stated above, in my initial years as a teacher education pedagogue under the guidance of a senior mentor, the pedagogical orientation I perpetuated was informed by what could be described as liberal approaches to education (Gwele 2005). More specifically, liberal ideologies informed my perceptions of the role of education, the role of the teacher, the role of the student and the nature of the teaching and learning experience. My higher education study enabled me to reflect on this particular orientation. My engagement with critical pedagogy discourse has allowed me to question the pedagogical advocacy project that my student teachers were being subjected to. Of particular significance was the 'realisation' that pedagogy was a profoundly political process, and that pedagogy was not neutral. This was a particularly important watershed moment for my work with teachers of business education in context characterised by stark

inequalities and injustices in almost every sphere. The relative blandness of the liberal education project began to create much discomfort and internal tension within me.

Consequently, the signature pedagogy of Economics, namely, that of problem solving in line with the nature of the discipline, was beginning to look increasingly sterile and benign. My engagement with critical pedagogy resulted in me constantly revisiting the purpose of education; the roles of the teacher and the learner; and the teaching and learning process. It required that I critically interrogate the ideology of the liberal pedagogical project I was advancing and reproducing through the student teachers enrolling for my courses. The ensuing tensions and contradictions that I experienced signalled the start of my ongoing curriculum transformation enterprise.

Liberal approaches to Economics Education pedagogy serve as a useful starting-point in the pedagogy curriculum I plan for my student teachers. Its application, merits and limitations within a peculiar South African context are interrogated by looking at what it allows us to teach as business education teacher trainees, as well as what it silences. This then serves as a useful point from which to explore the critical pedagogy project of business education. Here, too, the fundamental tenets of the critical pedagogy project are subject to scrutiny, which again enables post-modernist and deconstructionist debates to happen. However, these more sophisticated approaches remain largely at a superficial level as students struggle to transcend their existing beliefs. For many students, whose experiences of schooling and university education have essentially been conservative, and in some cases liberal, the paradigmatic shift to critical pedagogical thinking, and the prospect of possibly embracing such moves, proves to be quite traumatic. One way to help students overcome such trauma is to model critical pedagogy practice.

Teacher education pedagogues find themselves in a special space. In particular, those who teach pedagogy courses related to disciplines or school subjects are uniquely positioned to be able to model the pedagogies they advocate, for their student teachers to employ. For my teaching of pedagogy courses to business education teachers, this requires that I serve as a model for pedagogy in action. In other words, my own pedagogical practice should reflect the kind of practice I foreground in the pedagogy curriculum I design for my student teachers.

The reorientation of the core of the pedagogy curriculum has demanded that I transform my own practice, in line with the critical pedagogy approach that I use in my pedagogy courses. In order for my students to begin to engage with what a critical pedagogy might look like in practice – as opposed to dealing with an abstract phenomenon– I have had to enact the gospel that I preach. This shifting pedagogical orientation in terms of delivery means I have to pose the fundamental questions about education to myself, and attempt to make sense of my answers in particular ways.

From a critical perspective, the answers to the following questions are challenging:

- What is the purpose of education?
- What is the role of the student?
- What is the role of the learner?
- What is the nature of the teaching and learning process?

These issues are fraught with tensions. Nonetheless there are immense possibilities in them. Arguably, the most challenging yet illuminating experience is how power becomes a central conceptual tension.

I have had to review and reflect on how I constructed my students and their roles in the development of the curriculum, as well as in the teaching, learning and assessment processes. Adopting a critical pedagogical orientation means much more than simply paying lip service to the ideology; it means living it. It entails a critical examination of all aspects of one's work as a university pedagogue.

From my reflections on the pedagogical shifts I have attempted, I am able to discern and manage elements of the canonical performance-based model at UKZN more effectively. With a rising level of critical consciousness about the nature of the models at play, and the nature of the so-called 'non-traditional' students that enter higher education, I am able to make conscious choices about various aspects of my practice that would lend themselves to a competency-based model with strong elements of a social justice orientation, a practice that is responsive to the needs of my students and the broader goals of societal transformation.

The challenge of occupying a critical pedagogic space has lead me to the realisation that the critical pedagogy project is indeed complex, and

fascinating. Of particular significance is that it allows me to reflect on the nature of my students' experiences of the pedagogy programme that I offer. The relative infancy of the critical business education research enterprise in the South African context opens up various possibilities. The work of Deleuze and Guattari (1987) on the notion of rhizomatic theorising presents as an interesting and useful framework for beginning to theorise critical business education pedagogy.

Towards a Transformational Model for a Pedagogy Curriculum

In the discussion that follows I attempt to theorise a transformational model for a pedagogy curriculum (see figure 1 below). The nature of teaching and learning is indeed complex. The articulation and intersection of the pedagogue, the student, the curriculum and pedagogy make describing and theorizing of this intricate and elusive phenomenon particularly challenging. The elements that make up the model presented below are connected in complex ways (see figure 1).

On a cautionary note, every model is in essence an abstraction of reality and will have limitations as to its explanatory potential. The elements that constitute the model are:

- ➢ transformation enriched critical pedagogy curriculum;
- ➢ teacher education pedagogues (transformation activists);
- ➢ the troubling of discipline knowledge; and
- ➢ the student teachers.

A transformation enriched pedagogy curriculum is a special pedagogy curriculum with an advanced and heightened awareness of transformational issues. The ideology of transformation is central to the pedagogical approaches advocated for potential teachers to master.

The notion of a curriculum that overtly and actively foregrounds issues of transformation is not new. Such a curriculum may draw on a wide range of theoretical roots whose principles emerge from the important starting point, namely, that the fundamental power-related inequalities and injustices in society can be brought into contestation.

Figure 1: An integrated transformation model for a pedagogy curriculum
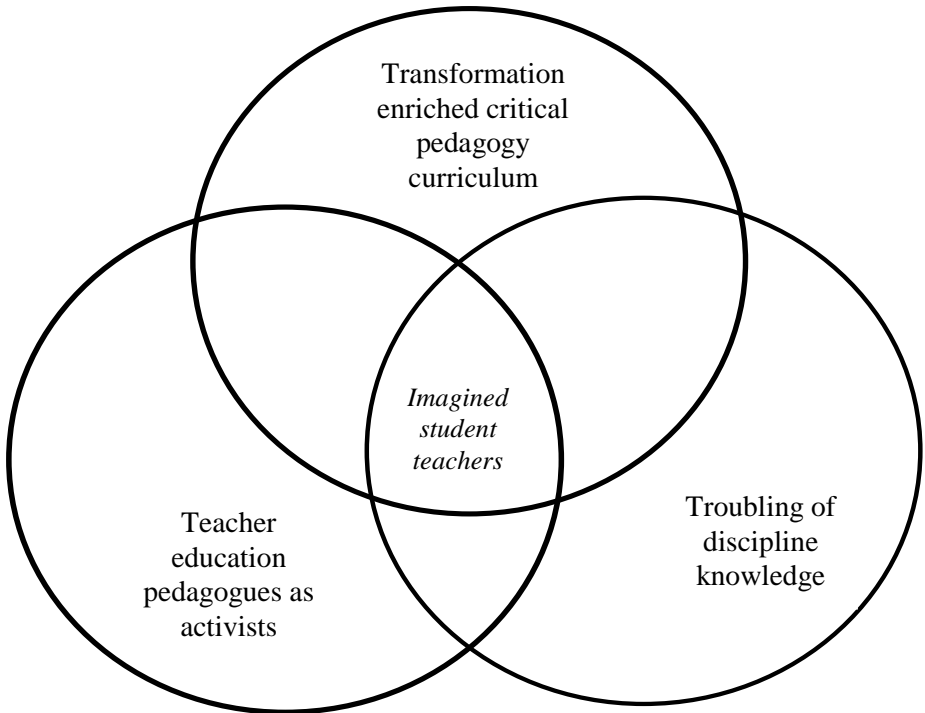
A rich body of literature on what this pedagogy may look like does exist (Elbaz-Luwisch 2009; Green 2009; Jansen 2009; Jansen & Weldon 2009; Kahn 2009; Keet, Zinn & Porteus 2009; Robinson & Zinn 2007).

Teacher education pedagogues as transformation activists have a heightened sense of transformation issues as they relate to how power manifests in society and how powerful positions are reified through discourses that appear 'normal' and every-day. Such people are acutely aware of their own prejudices and embody the principle of mutual

vulnerability (Keet *et al*. 2009). They see themselves as active agents preparing novice school teachers to develop a transformation gaze, that is, the ability to see transformation issues in various aspects of daily life.

The troubling of disciplinary knowledge refers to the process of bringing into contestation the fundamental assumptions of disciplinary knowledge prescribed for schools. It entails identifying and recognizing how such knowledge came to be and how if transmitted unchallenged, serves to reify hegemonic positions of the powerful. This necessarily requires a critique of the ontological, epistemological and methodological canons that have shaped the existing disciplinary knowledge.

The student teachers are critical inquiring individuals who question what looks normal and institutionalized, with a view to developing pedagogical strategies that will actively foreground issues of transformation. They learn to engage in ongoing reflection and self-critique.

Conclusion

In this article I attempt to bring together several issues relating to transformation. I have drawn on my experiences to describe how transformation as a goal could be woven into the curriculum that is designed. I argue that transformation through the curriculum entails more than narrow alterations, it means change with a particular social justice agenda. A model for curriculum transformation as it may apply to a pedagogy curriculum is also presented. Transformation through the curriculum is clearly a tension-filled process that necessarily entails discomfort and disruption. Ideally, the transformation agenda should be in tension with a performance-based model but have resonance with competence-based social justice models. In higher education institutions, where powerful neo-liberal discourses have become the order of the day, transformation is likely to remain an elusive project unless conditions can be created for the development of a community of practice of critical higher education pedagogues (Wenger 1999; Wenger, McDermott & Snyder 2002). Communities of practice are powerful learning spaces led by a core group of individuals who shape the agenda of the community. In this case it could be together with a core group of practitioners and theorists with a critical curriculum agenda. Such a learning community allows for fluid membership, either core or peripheral, ensuring

flexible movement between the types of membership as and when individuals deem fit. Such flexibility adds value to the agenda of the community. This kind of community arrangement provides creative spaces for the development of curriculum transformation serving the respective programmes, as opposed to institutionally imposed prescriptive models for curriculum transformation.

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Teaching Social Justice and Diversity through South/ African Stories that Challenge the Chauvinistic Fictions of Apartheid, Patriarchy, Class, Nationalism, Ethnocentrism …

Priya Narismulu

Abstract

In a complex world where social, political and economic value systems are shifting, young intellectuals in developing societies need effective tools for reconstruction as much as for deconstruction. Anti-colonial approaches to literary studies can contribute to transformation by developing awareness of the significance of social justice and agency (empowered action) by exploring diverse South/ African subjectivities, subject positions, voices and values, even (if not ideally) in exceedingly large level one classes.

Students work with primary texts that tackle discursive and more material forms of power creatively. They learn how narrative building blocks are constructed, through formal elements such as character, narrator, plot, theme, style, audience. And they are taught metacognitive skills to enable them to analyse many familiar, naturalised and pervasive chauvinisms behind bigotry. These are taught *through* a heuristic to help them read and analyse each and all of the formal elements in relation to place, race, gender, class, nation, and culture. This is a synthesizing strategy aimed at countering the histories of systemic violence that persist despite their long-established bankruptcy.

These skills are explored and developed through a selection of short stories that deal with the challenges of difference across South/ Africa: gender identities (including sexuality and masculinity), inter/ intra-gender relations, sexism, racism, ageism, poverty, family violence, sexual violence, HIV-AIDS, inter-group/ global oppression. All the stories are in English, with a proto-feminist fantasy translated from isiZulu. Several stories

exemplify strong elements of African orature, and contradict colonial logic to produce and recontextualize knowledge developed in contexts of violence.

Keywords: postcolonial culture, identity and literature; teaching social justice and diversity; South/ African short stories, voice and agency; chauvinism and bigotry; transformation

1 Introduction

South African life has been woven out of many discourses and fictions of identity, such as race/ gender/ national/ ethnic homogeneity, differences, supremacy and purity. These ideologies were imposed by the colonial and settler colonial (apartheid) regimes for so long that they assumed the hegemonic status of truths, to which the unwary and the opportunistic still subscribe. That such entrenched fictions retain their hegemonic power is absurd this late in our young democracy and needs challenging.

Some of our literary works (among other arts) have been very effective at rendering and challenging such fictions and discourses of identity, both during and after the apartheid period. Postcolonial fiction[1] worthy of the name has striven to represent such narratives at the same time as it deconstructs them, weaving the weft of criticism into the warp of creativity, to generate further metacognitive development in all people yearning for greater freedom and justice.

In our large level one classes (of around 600 students, divided into two groups) I introduce the focus of this section, identity, by pointing out that none of us has had much choice over our identities, whether racial, gender, ethnic, or even national and class identities to a large extent. So what is the point of holding those identities against anyone? It is what a person *does* with her/ his received identities that counts. That is a fairer and more effective basis for such judgments, whether in fiction or in life. This helps to level and equalise the subject position of every student, whether oppressed/ beneficiary of apartheid, patriarchy, capitalism, etc. The aim here is to enable

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[1] This genre is one among others, notably poetry, as argued elsewhere (e.g. Narismulu 2003).

and challenge students to think critically about social justice in our society and world, at the same time as learning to be engaged and effective in an increasingly diverse world.

Progressive or social justice conceptions of diversity involve recognising and appreciating the equality, dignity, complexity and rights of other individuals, communities and societies. The corollary, chauvinism, forecloses on the shared character of being and therefore existence, which extends to denying the rights of others, as happens in racist, patriarchal, class bound and other elitist systems. Bigotry is chauvinism in action[2].

Since the late-1980s I have addressed the challenge of bigotry at all levels of teaching, and have sought to break the silences and develop my understanding through scholarship and research I conducted and published. Deeply ingrained historical conceptions of difference have complicated our constructions of ourselves and others, and have stymied our interactions with each other at every level. This is one of our core challenges for this problem does not improve with neglect; if anything, denialism compounds the problem, much as in the case of HIV/ AIDS.

It is necessary for the deepening of human rights and democracy that the value of social justice and diversity are addressed by publicly-funded institutions and intellectuals. Our lecture rooms are important places for furthering the values and deepening the knowledge that will challenge the bankrupt histories and ideologies of otherness, give substance to *simunye,* and rescue many of us from a mindless nationalism that is little more than tribalism[3].

Our universities need to actively promote social justice and diversity in policies, practices, research and curricula to overcome centuries of segregation and enable one of the most divided societies in the world to transform. Students are as central to this process as academics and other support staff. At least since the early-1990s, in an increasingly globalising

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[2] This is for the purposes of teaching at this level and in the small time frame of six lectures (eight if possible) and two tutorials, which is very little but all that is currently allocated.

[3] Nationalism and tribalism have colonial exploitation as their engines, beginning with the Dutch-British incursions to the FIFA football empire and beyond.

world, it has been apparent that it is also important to make a difference in the larger world, for our world is in fact one and indivisible, despite the national and ideological fictions entrenched for the benefit of elites, imperial forces, and the increasingly segregating operations of neo-imperial capital.

I have always assumed that our students are going to make a significant contribution to our society and our world, which informs my expectations of them and of myself. By way of reflecting on the teaching of a section on social justice and the complications of our time and place, this paper addresses the contribution of a range of outstanding South/ African writers to the challenges and resources of identity even while apartheid dictated its balkanising fictions. The following sections will focus on the teaching philosophy, and the experiments with curriculum development and pedagogy in a level one module.

2 Teaching Diversity

2.1 Constructing an Inclusive Programme that Challenges Entrenched Fictions of Difference

In my lectures I begin with what is most accessible and inclusive, for dealing with issues of difference can be quite scary, given our history and our manifestly inadequate skills (including intellectual) for engaging openly with our social realities. So I begin by noting that all human beings are storytellers, as is obvious from our frequent use of anecdotes, excuses, explanations, and lies. It is instructive that a range of professions work closely with narratives: lawyers, social workers, psychologists, health workers, historians, anthropologists, etc.

Traditions of oral storytelling (e.g. fairy tales, fables) are found in all societies, and are particularly well developed on our continent. There are hundreds of sub-genres (e.g. crime, romance, trickster), some dating back to the Bushmen tales (of Southern Africa), followed later by collections like the *Panchatantra* (India), *Aesop's Fables* (middle East), Chaucer's *Canterbury Tales* (14th century England), the fairy tales of the Brothers Grimm (17th century), Brer Rabbit (United States, though of African origins), etc. More recent exponents of the art of the short story include Anton Chekov, Joseph Conrad, George Orwell, and South Africans such as Herman Charles

Bosman, Can Themba, Nadine Gordimer, Zoë Wicomb, and the writers included in the primary readings in this section[4].

An inclusive introduction helps counter the unnecessary histories of segregation. An integrated approach to the genre signals a challenge to the gratuitous history and perpetuation of social alienation, and prepares for the inclusion of stories from some of the most marginalised sectors. Central to relating better to the people around us who may be different on the grounds of gender, race, class, nationality, etc. is the challenge of confronting learned bigotry.

This is a good point in the lectures to contextualise the origins of Southern African and world art, by referring to the finding of a shard of engraved clay at Blombos cave in the Western Cape from some 70 000 years ago (McCarthy & Rubidge 2005). It is also a good place at which to reflect on the significance of narrative in creative reconstruction and analytical reflection. Caveats against newer forms of national chauvinism must also be addressed through the caution that this is but the *latest* finding, and that all human beings will continue to benefit even from the finding of older cultural artefacts in other places. In 2010 such an argument helped question the hype around hosting extravaganzas like World Cups that offer only vicarious and fleeting experiences to the millions of people who must bear the material costs for many decades to come.

Pedagogically, there is a conscious effort to situate the range of learners in familiar contexts, through:

- stories collected and reproduced in the Course Reader so that they are accessible to all students;

- tutorial questions (beginning with items such as: What do I already know about this topic?);

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[4] The stories have included Bessie Head's 'The Old Woman'; Asilita Philisiwe Khumalo's 'The Floating Room' (translated from isiZulu); Bessie Head's 'Life'; Gcina Mhlophe's 'The Toilet'; Joan Baker's 'Undercover Comrade'; Puseletso Mompei's 'I Hate to Disappoint You'; Mtutuzeli Matshoba's 'To Kill a Man's Pride'; and Shimmer Chinodya's 'Queues'.

- a cartoon to ease students into accessing (even in cases of ingrained or latent bigotry) and interpreting the core concepts, challenges and debates;

- a heuristic to help young analysts navigate and perform quite complex analytical operations;

- detailed skills-based worksheets;

- the provision of contextual information (in lectures, as well as in lecture note summaries distributed at the end of the lecture series); and

- reproducing interviews with the writers, analytical arguments by the writers, and secondary readings on the genre, orality, and creativity.

The stories, approaches, heuristic, secondary material, tutorial challenges, skills development exercises and the assignment, test and examination questions seek to locate all the students at the centre of the teaching and learning endeavour.

Part of our challenge as South African intellectuals (and emerging young intellectuals) involves learning how to communicate sensitively and assertively in public about the often closeted subjects of identity (Narismulu 2001b),which tend to be aired only within 'in-groups' that consider themselves homogenous. With the skill of the storytellers, and some trust and tolerance (of which there is plenty, even in huge first year classes), holding up the madness of our behaviour to light is sometimes enough to help it start to evaporate. This makes for exciting teaching and learning but whether it has a lasting impact requires far more sustained curricular attention, and further research.

There is a commonplace idea that unity is the opposite of diversity, which seems fair enough, except that these binaries say little about history and agency. However, I have learned that by *valuing* diversity what can be achieved, with some effort, is the goal of inclusiveness. Inclusiveness is a value that requires action and references history, as it is the opposite of that South African staple, *apartheid* (segregation).The attendant bigotry or

prejudice may be more productively characterised at this level of teaching as chauvinism, because young people have some familiarity with that concept, and have not learned to be too afraid of it. Almost as ugly and egregious as the other concepts, chauvinism works as the core concept in the section for it can be put to work to unpack patriarchy and sexism (including hetero-normativity and homophobia), apartheid and racism, capitalism, nationalism, ethnocentrism, ageism, etc. This is a fitting way of dealing with our legacy of bigotry: one of the satisfactions of intellectual work is that some of the most reprehensible human practices can be turned into valuable instructional material.

The term chauvinism signifies excessive support for one's own group or cause that precludes due regard for other subject positions, individuals or groups whom we may consider different. It represents a narrow, pre-digested conception of oneself and one's attributes. Such an understanding is at the root of our prejudices, and prevents us from understanding or appreciating others. Chauvinism lies at the core of most of the bigotry and prejudice that has characterised our society, notably during the colonial-settler colonial periods, but also before that, in the subjugation of women and groups like the Bushmen, who turn out, ironically, to be among the earliest communities in the world (McCarthy & Rubidge 2005). With just a little reflection it is obvious to students that chauvinism is at the core of virtually every form of oppression: sexism, misogyny (patriarchy), racism (apartheid), class (capitalism, feudalism), nationalism, ethnocentrism, ageism, etc. At the core of chauvinism itself under the overt manifestations of arrogance and grandstanding, is fear and ignorance. It is interesting that a number of South/ African writers have dealt with one or more forms of chauvinism in their stories, and a selection of these narratives form the primary readings in my teaching of the South/ African short story.

2.2 Conceptual Framework: Teaching Core Concepts

One way of dealing effectively with our generally inadequate approaches to our social and intellectual challenges is to offer students tools they need to deal substantively with a range of cognitive skills to be effective in academic work, in society and, as Griesel and Parker (2009) indicate, in the world of work. What is needed to deal with such challenges is what Apple (2008) has

identified as synthesizing strategies. Given the attention that a range of disciplines (including English Studies) pay to postcolonialism, it is important to develop more integrated approaches to the (often fragmented) cultural analyses that we undertake. Not just as postcolonials, but as global citizens committed to transforming all forms of neo-imperialism, we have special interests in countering the unnecessary divisions that have silenced and stymied us.

Analysis is at the core of the work that is done in many disciplines and fields, including literary studies, and more needs to be done to scaffold this important social and intellectual skill. For this reason strategies for promoting metacognition inform the design of the entire section. An explicit focus on reasoning balances with the attentiveness that must be paid to subjectivity in African literary studies (and indeed all humanities and social sciences). Students learn that analytical reasoning is generally expressed through concepts. Concepts help articulate points of view and assumptions (definitions, axioms, principles, theories, or models), they have implications and effects, and they can help lead to solutions or address challenges effectively. The Introduction to Short Stories revolves around the following core concepts, which articulate with the stories that are taught:

1. Identity and social justice;
2. Texts: short story (narrative form); influence: oral literature; medium: English, some isiZulu (translation);
3. Contexts: South Africa and Africa; city, township, rural village;
4. Diverse identities: gender, race, class, ethnicity, nationalism, age, language, etc.;
5. Discrimination: colonial/ apartheid/ patriarchal/ class opportunism, chauvinism, stereotypes, bigotry, oppression, violence; and
6. Narrative representations of difference: chauvinism, opportunism, oppression (singular and multiple forms), and violence:

- Race: racism, apartheid;
- Class: elitism, deprivation;
- Gender: patriarchy, hetero-normativity, sexual relations, sexism, misogyny, sexual exploitation, HIV/ AIDS;
- Age: elder/ youth stereotypes, oppression; and

- Cultural identity: ethnocentrism (including tribalism), national-ism, xenophobia.

7. Responses of characters/ narrators:

- Empowered: agency (i.e. empowered action), creativity (e.g. problem-solving, artistic, literary voice/s), resistance (challenging oppression), transformation;
- Disempowered: apathy, passivity, denialism, risk-taking; and
- Transitional figures.

These core concepts comprise one of the tools used to enable and challenge students to think critically about social justice in our society and world at the same time as they are empowered to be focused and effective in an increasingly diverse world.

2.3 Developing Awareness of the Pervasiveness of Chauvinism and Bigotry through a Cartoon

Awareness is central to knowledge, self-knowledge, and transformation. Attentiveness to questions of social justice is introduced through a cartoon, to encourage all students to learn how to recognise and analyse a range of familiar, naturalised and pervasive chauvinisms. Because most prejudices have become so entrenched and 'natural', the cartoon helps students become aware of the chauvinistic stereotypes and logics that influence thinking. Many years of teaching South/ African literature helped me realise that skills in metacognitive thinking are particularly useful for helping expose ingrained bigotry and for showing how discursive and material forms of oppression may be challenged creatively and analytically. The Conditions of Illusion cartoon (1993:85) serves as an effective catalyst for developing metacogni-tive thinking and analysis. It also helps students develop their responses to the various kinds of chauvinism and bigotry that appear in the stories.

Serving as an ice breaker at the beginning of the lectures and tutorials, the cartoon engenders humour, encourages student participation and stimulates a critical attitude.

Figure 1: The Conditions of Illusion cartoon (1993:85).

The cartoon is a handy tool for learning about a form of oppression (sexism) that has become so naturalised (through the operations of patriarchal power) that it is quite invisible to many people. The cartoon uses six frames to tell a story that is accessible and familiar (in that it resonates with virtually everyone's experiences), in ways that are sophisticated and dialogical. Through the words (voices) the cartoon records a range of injunctions that issue from the system of patriarchy. At the same time the cartoon challenges the values of patriarchy directly through the sequence of drawings that show how girls *and* boys grow up so stunted by patriarchal stereotyping that they are unable to develop fully or communicate with each other.

It also highlights the metacognitive skill of going beyond the 'naturalness' (i.e. the entrenched logic) of the dominant ideologies and discourses to address their contradictions. It helps people who may fear being sanctioned for challenging authoritarian systems to see how strategic action may be effective (in this the cartoon anticipates the themes of several stories).

The cartoon also illustrates how anti-sexist (including feminist) approaches to gender roles and relations do not only serve women's rights (as big as that battle is). By addressing the disabling stereotypes that both women and men endure, it shows that such interventions can also help liberate men from entrenched patriarchal demands.

The cartoon serves to reassure students who may have learned to be fearful of addressing 'difficult' questions of gender (or race/ class/ ethnicity/ nationality), or who have no experience (beyond their primary groups) of broaching such sensitive issues. It also offers a progressive place to start from, rather than the mindless racism, ethnocentrism and other forms of bigotry that all too many people encounter in 'own' group communication, or the crude sexism, elitism and unequal racial representations (some copied from western countries with inverse racial profiles) that pervade the media and commercials.

As a public text the cartoon counters the in-group stereotypes that characterise communication in bigoted subcultures, showing how form may help develop more public (diversified) engagement and dialogue on issues considered sensitive. It also shows how the form and content of a text may challenge censorious authorities by skilfully opening up what may have been made taboo (e.g. 'Don't criticise men/ Whites/ Blacks/ Indians/ Coloureds/

Americans', etc.) in ways that generate more light than heat. From the cartoon students also learn how far a little courage, imagination and frankness may go towards overcoming unnecessary histories of oppression and silencing. At the same time the cartoon engages readers who are conversant with feminist or other critical/ liberatory discourses, supporting them to go much further in their own analytical and activist work. In these ways the cartoon supports the urgent social need for people of different races, classes, genders, nationalities, ethnicities, etc. to make the shift from speaking only *about* each other in private to speaking *to* each other directly, and publicly.

What is also shown in the cartoon is that even the beneficiaries of elite power (e.g. boys in the case of patriarchy) receive emotionally destructive and socially stunting messages that may suppress or distort natural, amicable responses towards others. Various chauvinistic forms of socialization have the effect of incarcerating not just the other in 'conceptual prisons' (Spivak 1990) but the privileged subjects as well, constraining them to serve and reproduce inequitable systems. This is achieved through the disparaging stereotypes of people constructed as the other (who could be as close as mother, sister, wife, daughter in the case of patriarchy, or extending even to male relatives as happened in Rwanda). The destruction of the character, spirit and potential of people by groups who imagine themselves to be elites also occurs through toxic inducements and threats to members to secure ongoing control of ill-gotten benefits and resources that were hijacked from the broader society, as is evident in the tellingly inaccurate label of 'affirmative action candidate/ s' that is used in South Africa, where it is the inequitable *systems* like higher education that are still in need of thorough redress and overhaul.

The cartoon anticipates the focus of the stories that follow, stories which expose the operations of sexism, racism, imperialism, class or ethnocentrism and show how ordinary women and men deal with these challenges. Like the short stories, the cartoon encourages and rewards (with powerful insights) those who dare go beyond the still pervasive chauvinisms to explore the deeper and more meaningful layers of experience to be found in our lives. This suggests the capacity of the discipline to go beyond its vestigial functions to address the challenges of context and epistemology. The cartoon also serves students (and even tutors) as a tool for easily

identifying patriarchal logics and stereotypes, and by inference, racial logics and stereotypes, class logics and stereotypes, ethnocentric logics and stereotypes, nationalist logics and stereotypes, and so on.

Finally, as far as possible the concepts are taught inductively so that students have an opportunity to arrive at them on their own, in this way activating and centering prior (oral and incidental) knowledge and reading. Students are also encouraged (in class and through the Worksheets) to do independent research using the library, internet, notes and exercises in the Course Reader and Workbook, etc. and raise their findings in tutorial discussions[5]. This is intended to help students work out their own interests and values in relation to the concepts under study at the same time as they learn the importance of research and learning in community with their peers, tutor, lecturers and others. It is important for students to have the space to explore and develop their own ways of dealing with these social contradictions, at the same time as enabling them to recognise the inherent dynamism of knowledge, for these dialectical and dialogical processes will recur throughout their lives as public, postcolonial and majority world intellectuals.

2.4 Introducing Gender Analysis, to Empower Students to Tackle all Forms of Oppression

In introducing the concept of gender I draw on the cartoon to point out the ubiquitous and normative character of patriarchal (as well as racial, class, ethnic and national) chauvinism, and the disabling effects its norms have on people who are 'othered'. Race-class-gender chauvinisms dislocate most, if not all, South Africans. Submissiveness to such unrepresentative norms is completely unnecessary at this point in our history, and reasonably educated people need to take more responsibility for disabusing themselves of what they tacitly allow to oppress themselves, and move on to deal with the real and urgent problems of our time.

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[5] In lectures, tutorials, notes and self-study exercises attention is also paid to skills in reading, analysis, argument construction, writing, and test/ time management to serve personal, social, intellectual and career development.

Priya Narismulu

It is usually easiest to introduce the critique through the best known form of chauvinism: patriarchy represents a system of male authority and privilege, in which men have much more social power than women merely as a result of their biological identity. Patriarchy is found everywhere, e.g., in the way couples, families, communities, corporations, governments, and global organizations are structured, function and communicate. Women experience oppression in most societies, even in South Africa, where the constitution recognizes gender equality. The cartoon also helps address the disabling and unnecessary stereotypes that women and men too endure.

The concept of masculinity is meaningful wherever gender roles are distinct (i.e. virtually everywhere). Masculinity refers to maleness and to behaving in ways considered typical for men (behavioural norms are associated with given gender identities). Through the gender/ sex system biological sexuality is used to set up social norms that privilege men. Women tend to be constituted as the 'other' (the shadow) of masculinity. This impacts on perceptions of women, norms governing women's behaviour, and women's own self-images. Women who deviate from patriarchal norms risk ostracism and violence, as do some homosexual men.

Even in relatively peaceful societies, young men tend to be socialized to engage in risky and aggressive behaviour (sometimes through injunctions such as 'Be a man' from loved ones, peers and media that glamorize macho role models). The consequences are evident in the high levels of alcohol and drug abuse, road accidents and injuries, HIV infections, interpersonal violence, and deaths from unnatural causes. Increasingly, these problems are also affecting young women, which is a travesty of the meaning of equality (because they represent the most reductive denominator). We can all do better than risk our lives mindlessly, because we are intellectuals, and publicly funded at that. We are meant to be in a new society but our thinking remains surprisingly hopeless and bankrupt. Why should publicly-funded academics be reproducing the old ways of thinking and blaming when we are among the best placed to transform ourselves, our curricula, students, institutions and societies.

That's only gender, how much more complicating are the operations of class, race, age, geographical location, nationalism, linguistic marginalization, and educational underdevelopment? The majority of people in South Africa experience numerous interwoven layers of oppression, which

raises the challenge of what are we doing about all these oppressive systems that should have long been overcome, at least in the publicly funded palaces that are our universities.

2.5 *Tackling Various Forms of Chauvinism, Prejudice and Bigotry*

For some years I have used a conjunctural approach to overcome the contradictions that many South Africans, including many intellectuals, display: acute sensitivity to particular forms of oppression (e.g. gender) accompanied by apparently total incomprehension of other forms of oppression (e.g. race or class). Encountering such inconsistencies challenged me to work out what would enable intellectuals to perceive and overcome such ugly and disabling blind spots in a heterogeneous society/ world in which egalitarianism is not only a desirable value but a life skill.

It became apparent that the simplest way to disabuse anyone of learned insensitivity to particular forms of oppression and social justice is to draw on a form of oppression that the person understands as a starting point, and incrementally address the other forms of oppression:

> The most effective way to challenge a form of oppression that seems 'natural' (to a beneficiary of a particular system of privilege) is to invoke a form of oppression that that person has experienced, establish agreement about what it means and then challenge the person to transfer recognition to the other forms of oppression. Engaging race, gender and class stereotypes alongside each other helps overcome the selective perception characteristic of a particular form of privilege and counters the marginalisation of particular forms of oppression (Narismulu 1999)[6].

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[6] While this works well enough in classroom engagements with students, and in tests, assignments and examinations, it would be interesting to test its efficacy under more complex conditions, particularly where histories and discourses of self-interest prevail.

Gender identities, like racial and class identities, can be complicated. There are men who do not subscribe to patriarchy just as there are women who actively serve the interests of patriarchy while being oppressed by it (illuminating Gramsci's idea of the hegemony of power). Not all men benefit from patriarchy in the same way. Some men enjoy elite (class or racial) privileges while others are subservient, e.g., black women and men were subordinated to white men and white women under apartheid (and colonialism), as 'The Toilet' by Gcina Mhlophe and 'To Kill a Man's Pride' by Mtutuzeli Matshoba illustrate. The class/ race oppression that men experience is often linked to how they treat the women in their lives. Shifting gender or any other form of inequality cannot be expected to work if it occurs in isolation.

Feminists have identified and challenged previously naturalised systems of male privilege and dominance, and mobilised support for gender equity and women's empowerment. Despite this individual feminists and feminist groups have long been pilloried, by critics who are conspicuously silent about the problems of patriarchy and their own contradictions. This closely resembles the labelling of Nelson Mandela as a 'terrorist' for decades by the people who supported and benefited from apartheid and even some people from among the oppressed groups who were unable to think for themselves. Besides the impact of hegemony, this is also the consequence of the systematic educational and social underdevelopment that occurred under apartheid and colonialism.

3 The Stories: Exploring Issues of Social Justice through f(r)ictions of Chauvinism and Bigotry

Eight South/ African short stories dealing with questions of social justice were chosen to enable students to interact confidently and skilfully with a variety of discursive subjectivities. All the stories are used to help students learn to read attentively and deconstruct the assumptions, concepts, reasoning, form, style and speech patterns in the narrative texts as well as in their own lives. These are taught through a range of metacognitive skills to enable students to learn that they can use their otherwise binaried resources of words-worlds (or texts-contexts) as a continuum.

Fictional narratives have the power to alert us to the many narratives

and fictions of being that inform our consciousness and which have become naturalised through racial, class, gender and cultural hegemonies. A great strength of the arts such as literature is their capacity to represent social challenges, articulate their complexities from various points of view, as well as offer commentary, alternatives and solutions, often well in advance of the development of social and academic analyses (Narismulu 2001a)[7]. Through the selection of texts that reward attentive reading, students are encouraged to develop more engaged analyses of characters, themes, plots, narrator, style etc. as resources and skills for making greater sense of these referents in their own lives. This works, in möbius-strip fashion, to enable them to draw on their life experiences (or those of people around them) to make greater sense of what they are reading. So the culture of inter-relatedness, inter-transferability, equivalences, and inter-permeability is introduced before engaging with the specifics of form (and more poststructuralist issues such as inter-textuality, which includes references to the oral tradition).

All the stories produce, reproduce and recontextualize knowledge (Bernstein 1996, cited in Apple 2008) to engage insightfully with the challenges of difference (diversity). All have characters (main, and some secondary as well) who are socially marginalised, singly or severally on the grounds of race, gender, class, rural location, age, education, marriage, HIV, language, ethnicity, and nationality. Five of the seven writers are Black Africans: Asilita Philisiwe Khumalo, Gcina Mhlophe, Puseletso Mompei, Mtutuzeli Matshoba and Shimmer Chinodya. Two of the South Africans were classified as Coloured: the late Joan Baker and Bessie Head, who never knew her White mother or her African father. Five of the seven writers are women. Among the writers are two Batswana: there are two stories by Bessie Head (who found apartheid intolerable and left to settle in rural Serowe) and one by Puseletso Mompei (who has been working in Johannesburg). One of the male writers, Shimmer Chinodya, is from Zimbabwe.

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[7] This may well have been the reason that some intellectual gatekeepers and beneficiaries of apartheid disparaged oppressed writers who dared to challenge the injustices, which a number of South African writers did particularly well, despite the criticism and the structural repression they endured (Narismulu 1998).

Through the selection of stories and writers[8] the challenge of representing people who have endured oppression is tackled. It makes an enormous difference that these writers have written powerful, lively and engaging stories that give students a good introduction to the richness of this often disparaged period in our cultural history. Such stories challenge students to:

- think in more focused ways about South/ African experiences and challenges;

- make links to their own lives, and ask more questions about issues that are often muted or silenced, such as race, class, gender, ethnic, national and language differences;

- access a variety of cultural forms, histories and methods of social production;

- understand the writers as fellow intellectuals and citizens who offer significant knowledge about the world and how people respond to their challenges;

- be attentive to the feelings, ideas, concerns and roles of African/ world citizens, artists and intellectuals;

- question the legitimacy of the dominant power-knowledge systems and consider alternatives to them;

- challenge racist, patriarchal, elitist, ageist, hetero-normative or ethnocentric (including unduly westernised, Anglicized or Americanised) representations of people and values;

- develop their capacity to understand and engage with emerging discourses;

- participate consciously and actively in the development of African literature in English, in race, gender, class, ethnic and national relations; and in discursive constructions of these identities and challenges such as HIV/ AIDS;

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[8]There are many more than the approximately 2000 stories I audited during initial preparations for the teaching.

- identify various manifestations of the chauvinisms that undermine individual/ social development as well as interpersonal and intercultural accord, and think through the options exercised by different characters; and

- counter class chauvinism (some of it incipient) and rethink their own and others' subject positions in relation to the geopolitics of the English language, which needs to offer better advantages as a cultural currency (than the financial currencies that mainly serve neo-imperial globalization).

Several writers show that the frightened self and its pseudonyms inform unthinking self-caricatures by self-important bearers of apartheid/ colonialism/ patriarchy/ capitalism/ ethnocentrism/ nationalism. Overcoming internalised fears (sometimes expressed as hatred of others who are constructed as different, inferior, deviant or undeserving) is closely linked to fears about the alienated self. In her story 'Life', Bessie Head illuminates the problem through the character of the macho Lesego whose chauvinism, despite his successes, is predicated on an underlying lack of confidence and communication skills. This is apparent even today in all too many of the unconscious behaviours South/ Africans have inherited from the past and which are visible in the narrow, threatened, increasingly-competitive self, in the ever-assailed, ever-fragmenting ego that must compete at all costs, even to the death, for whatever is valued, whether lofty or ridiculous: a country, car, salary, partner, or game. Yet the value that is supposedly generated through endless competition can never quite compensate for the absence of self-worth. The question of intrinsic value gets lost in the macho hype of an overly materialistic and superficial approach to the world. As majority world intellectuals we need to contradict imperial logic (Ngugi 1986) and learn to look beyond the dismissive attitudes towards the other and the mistakenly narrow constructions of self-interest that have characterized apartheid, patriarchal and capitalist ideologies.

While our world is slowly beginning to appreciate the value of biological diversity many intellectuals still battle to grasp the value of human diversity, which needs simple tolerance and open, caring communication, as Bessie Head tried to teach decades ago through her shocking yet poised and

insightful story. Indeed the valuing of social diversity (including one's own differences from entrenched norms) is central to the ethos of social transformation, helping reverse the hold of the prejudices, exclusions and fears that characterise the chauvinism underlying racism, sexism, elitism, ethnocentrism and other forms of bigotry. Mtutuzeli Matshoba's apartheid era story 'To Kill a Man's Pride' (1980) tackles many of these challenges in ways that are instructive and sophisticated.

The power of storytelling is used by all the writers to challenge bankrupt discourses in the governing narratives, to inscribe new narratives even as they examine new ways of being (through the plot and character representation), new values (e.g. through new themes), and more caring ways of communicating with and treating each other.

The First Story: 'The Old Woman' by Bessie Head

The first story I teach is Bessie Head's 'The Old Woman', which counters the stereotypes attached to the demographic: the feebleness and powerlessness of old age, exacerbated by race, poverty, rural underdevelopment and social disregard. The themes of this very short story revolve around the intrinsic value of all people, self respect and intra-gender responsiveness.

Through her narrator in 'The Old Woman' Bessie Head articulates a personal ethical position that respects and values social and class diversity. The narrator celebrates the dignity of the poor old woman and her equally poor woman relative, showing the reader that human value resides in a variety of locations. Through the empathetic responsiveness of the participatory narrator, Head challenges the reader to either perpetuate (however passively) or transcend the barbaric systems of social inequality in which we find ourselves. For young people preparing to be leaders in a world that seems to be governed, economically and politically, by insecure and irresponsible egos, this tiny story deftly captures the social and cultural dimensions of community and individual responsibility, and suggests the value and benefits of respect and sensitivity when negotiating with others in our increasingly complex social conjunctures. With its quiet insistence on intrinsic values, this is a very mature and instructive African vignette against the shallow, noisy materialism that pervades much of our world.

Despite its brevity 'The Old Woman' is very resonant, and sets out to provoke its readers to reflect on issues such as:

- How much humanity do *we* (intellectuals) actually have?

- What appreciation do we have for the lives of people around us and what can we learn from them?

- Do we treat the people around us, who still endure the oppressions of the past, with dignity, consideration and fairness?

- To what extent are we aware of our own limitations?

Bessie Head challenges a range of chauvinisms in this story: class elitism, sexism, ageism, ethnocentrism, and the hegemony of the English language. Like Matshoba, Head does not only teach the art of the story with wisdom and grace, she also teaches a poetics of care and resistance. This is done while the narrative responds to the underlying challenge of how to remain sane and effective in a violent and dislocated world. In addressing this challenge Head, Matshoba and the other writers illustrate the contention of Amilcar Cabral (1979) that art has the capacity to make a powerful contribution to oppressed people's struggles against various forms of domination.

The horrifying circumstances of Bessie Head's birth and estrangement from her mother and family are issues that are raised after students have had a chance to analyse the story as well as the story 'Life'. This helps them to develop a clear sense of the themes of each story. Once this is well established (through the lectures, worksheets and tutorial discussions on each story) students are invited during the third lecture to observe how a woman of Black and White parentage, who was profoundly excluded by the apartheid political and social systems, dealt with the challenges of identity through the resources of narrative art. Overcoming Head's own marginalisation and degradation by the apartheid system, the complex, ambitious and deeply engaged stories underline how various forms of bigotry and chauvinism may be tackled by people who have very few options or resources. Students are invited to read Head's responses to such challenges alongside their responses to these and other challenges, as well as

the responses of family members (e.g. grandmothers, given that Head was born in 1937) to the forms of chauvinism and bigotry that have been encountered.

4 Conclusion

Through these approaches, methods and generative stories the Introduction to Short Stories attempts to assist all students, irrespective of race, gender, class, ethnicity, nationality, or other identities, to begin to develop agency through metacognitive skills and transformative practices. The objective is to shift the focus from received identities (where some seem to feel stymied into passivity) to the interesting and galvanizing challenge of what we *do* with such identities. The larger goal of this teaching and learning project is to help students find their own voices (adapted from Greene 2000), overcome their obstacles (Freire 1973), draw on generally difficult histories and subject positions as resources to change their lives (adapted from Grumet 1980), and so strengthen their capacity to improve their world (adapted from Freire 2004)[9].

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[9] Given that 12 August 2010 – 11 August 2011 was the International Year of Youth (cf. United Nations website http:/ / social.un.org/ youthyear) helped strengthen the thematic focus on the social and intellectual empowerment of young people in my 2010 teaching of the section.

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Academic Literacy in the Mother Tongue:
A Pre-requisite for Epistemological Access

Emmanuel Mfanafuthi Mgqwashu

Abstract

Freedom from apartheid oppression in South Africa offered opportunities for the reconsideration and eventual recognition and adoption of the languages that, during the colonial and apartheid eras, were seen as backward and irrelevant to the needs of the modern world. The granting of official status to these languages and providing learners an option to be taught in them within formal education after the demise of apartheid oppression is part of the decolonization and liberation processes. It is against this background that this paper argues that local languages could be enriched to convey the international body of knowledge and enable their speakers to be taught and learn in their first languages, something the English and Afrikaans speaking communities started enjoying since the formation of the Union of South Africa in 1910. The paper uses isiZulu within the context of a Faculty of Education at the University of KwaZulu-Natal, and Northern Sotho within the context of a Faculty of Humanities at the University of Limpopo, two of the indigenous languages in South Africa, to advance the argument. The paper suggests ways in which an environment can be created where indigenous language teaching moves from mundane, structure-focused tuition to becoming more relevant and more engaged with the reality of the language as experienced by people on day-to-day basis, both within and outside the academy.

Key Words: university exclusion, university dropout, Language of Learning and Teaching (LoLT), isiZulu ontology, isiZulu epistemology

Emmanuel Mfanafuthi Mgqwashu

Introduction

Increasing rates of student exclusions and dropouts, accompanied by decreasing graduation rates, at undergraduate level at the University of KwaZulu-Natal (UKZN) (Report on Student Exclusions and Dropouts in Undergraduate Degrees, 2009) are becoming a matter of concern for students, parents, academics, the government and the executive of the University. What exacerbates this concern is the fact that the problem is not confined to undergraduates. There are an increasing number of postgraduate students who take longer than the allocated time to complete their studies. According to the *Report on Student Exclusions and Dropouts in Undergraduate Degrees 2006-2008* (2009:4):

> the number of students who were 'excluded and not readmitted' together with dropouts increased in 2008 to 2479 (11%) from 2074 (9%) in 2007, while the number that graduated from 3-4-year undergraduate degrees had decreased to 4306 (19%) from 4505 (20%) during this period. Most important, is the fact that, in terms of exclusion by race, overall exclusions were 'highest for African students at about 3% and lowest for White students at 1% (*Report on Student Exclusions and Dropouts in Undergraduate Degrees* 2009:6).

Scott *et al.* (2007: 2) point out in their report for the Council on Higher Education that 'of even greater concern is that student performance continues to be racially differentiated. Black students do worse than White students in most disciplinary fields and African students performed worst of all'.

It may be simplistic to associate the high dropout rate of African students only with the fact that the Language of Learning and Teaching (LoLT) used at UKZN is not their mother tongue. It can be argued that there are other psychological, social and economic factors that could be responsible for this state of affairs, such as individual student's motivation to study, family and cultural backgrounds, both of which are intertwined with such issues as economic status and lack of opportunities for the enhancement of 'school literacies' in the home and community environments. However, as Prah (2002:1) suggests: 'It is in their languages that knowledge intended for the upliftment of the larger masses of African society can be effected'.

Learning and teaching in one's own language in a postcolonial context like SA, in other words, is a matter of social justice, in relation to the upliftment of the previously disenfranchised indigenous communities.

Within formal education, such upliftment is dependent on students' ability to produce discipline-specific and acceptable quality of written work, either as assignments or during the examination period. The assessment and acceptability of such written work at university level involves rather more than endorsing students' ability to regurgitate tutorial, lecture, or textbook material, but an evaluation of the extent to which students, regardless of linguistic, cultural, and even class backgrounds, can manipulate language academically. Boughey (2005:167) defines this as the ability to use 'prior knowledge to interpret a work; predicting a further outcome or a logical conclusion; identifying values in a [spoken and written] message'. Within the context of academic literacy-type and discipline specific modules taught and mediated in the language spoken by the majority of students as an additional language, as research (Mgqwashu 2009; 2007) has already indicated, such assessment goals often get frustrated. Both at undergraduate and postgraduate levels this means high failure, exclusion and dropout rates. In some cases it results in slow progress as students take longer than required to finish their studies.

It will therefore be incorrect, and perhaps misleading, if I base the argument for the development of isiZulu as a LoLT in formal education solely on the fact that Holland, Finland, Japan, China, Germany, Norway, France, to name a few countries, have managed to implement their indigenous languages as mediums of instruction from primary to tertiary education. That would be insufficient for implementing indigenous languages as LoLT in a postcolonial context. None of the countries I have mentioned has gone through what Africa experienced in 1884, when the colonial powers during the Berlin Conference decided to subdivide Africa amongst themselves (Ngugi 1996). The colonial countries had established themselves as trading powers and imperial powers, and imposed their languages across the globe. The direct implications for Africa, as a consequence of such invasions, range from the political and economic to the social, cultural, and of course, educational spheres. The history of African education alone reveals that:

> Many African societies placed strong emphasis on traditional forms of education well before the arrival of Europeans. Adults in Khoisan and Bantu-speaking societies, for example, had extensive responsibilities for transmitting cultural values and skills within kinship-based groups and sometimes within larger organizations, villages, or districts. Education involved oral histories of the group, tales of heroism and treachery, and practice in the skills necessary for survival in a changing environment (Batibo 2001:9).

If things were to remain this way, that is, assuming there was no European imperialism whatsoever, it would probably be fair to compare Africa to the developed countries referred to above. Given the fact that this is not the case, such a comparison would be irresponsible, subjective and shortsighted. As early as the 17th century Africa's future (in every sense of the word) was in the hands of the colonial powers, and this is still the case, for instance, through financial institutions such as the World Bank and the International Monetary Fund. This perhaps explains why Burundi, Botswana, Rwanda, and Somali deliberately decided to adopt English as the only official language and medium of instruction at all levels of education. It may be argued that these countries did not understand this decision as the betrayal of the indigenous languages and cultures, but as a policy decision that acknowledges the perceived irreversibility of the 1884 Berlin Conference resolutions concerning the future of the African continent.

Such perceptions are fuelled by 'one of the major lending institutions for educational development in the post-colonial world' (Roy-Campbell 2001:26), the World Bank. In its Sector Paper (1980: 20), it claims that 'the emphasis on local languages can diminish an individual's chances for further education and limit access of specific groups or countries to the international body of knowledge'. Oblivious to the fact that local languages could be enriched to convey this knowledge, Burundi, Botswana, Rwanda, and Somali chose not to make them LoLT, nor gave them an official status. Yet in these countries 75% of the population speak the same indigenous languages: Kirundi, Setswana, Kinyarwanda, and Somali, respectively. This is not surprising for, during the colonial period, 'mental control was effected through the colonial school system where there was a systematic assault on the African people's languages, literature, dances, names, history, skin colour, and

religions – the tools of their self-definition' (Ngugi 1986, in Roy-Campbell 2001: 26). Such an assault caused post independence political leadership to accept arguments in favour of European languages as 'common sense'.

This paper argues that isiZulu, one of the local languages in SA, could be developed to enable its speakers to 'internalize the knowledge through the medium of a [first] language then indicate how much they have retained [and contribute to new knowledge] using this same language' (Roy-Campbell (2001: 31). To develop this argument, I draw from two bodies of work. First, I draw from Thomson's (2008) study, part of which examined students' experiences of engaging with academic texts written in isiZulu in a Bachelor of Education Honours modules. Then I discuss the University of Limpopo's bilingual Bachelor of Arts in Contemporary English and Multilingual Studies (BA CEMS) degree to illustrate ways in which an indigenous language can convey a body of international knowledge. I argue that enriching indigenous languages, and isiZulu in the context of this paper, will offer the majority of students opportunities for epistemological access and interventions.

Students who speak English and Afrikaans as first languages have been experiencing and enjoying epistemological access since primary education. Throughout their education they have used 'the language they know from their parents, from home' (Prah 2002:1). For speakers of isiZulu as a first language, who constitute the majority of students at the University of KwaZulu-Natal, enriching isiZulu will mean not just access to theoretical concepts that are hard to comprehend when taught in an additional language, but also opportunities to acquire and apply epistemologies in their own language. Then, and only then, would we, as one of the institutions of higher learning, have contributed meaningfully to the implementation, first, of *The Constitution of the Republic of South Africa* (Chapter 2, Act 29 (2) 1996:11) and to the University of KwaZulu-Natal's bilingual Language Policy (2008). This paper, furthermore, is not about arguing whether or not mother tongue instruction should be an option for our country. Instead, it attempts to suggest ways in which we can create an environment where indigenous language teaching moves from mundane, structure-focused tuition, to becoming more relevant and more engaged with the reality of the language as experienced by people every day, both within and outside the academy. Within the context of formal education anywhere in the world, teaching and learning mediated

through the mother tongue of those receiving tuition is the precondition for access to the epistemologies and skills the curriculum and syllabus are designed to impart. If this attitude and approach from policy makers, unions, students' and parents' organisations, curriculum and syllabus developers, and classroom and lecture hall instructors is absent, then high failure, drop out and exclusion rates, and slow progress by the majority of students will be the natural consequence.

On Developing isiZulu Academic Discourse

Reading within the context of higher education requires more than just the ability to decode letters, words, phrases, sentences and paragraphs. Additionally, and importantly, the reader's challenge includes using knowledge of other texts and of the world to question what is read. Not only does a reader require knowledge of these extra-textual details. They also need to make inferences and draw conclusions within the texts they read. The expectation, in other words, goes beyond just these skills, and includes students' ability to take a different position derived from values and attitudes related to what counts as knowledge, and how it can be known within various disciplinary discourses. In South Africa, a context where high value is still placed on the ex-colonial language over local, indigenous forms, the acquisition of these higher order thinking skills by students who speak the LoLT as an additional language is persistently compromised. This is the consequence of the fact that

> the indigenous languages have not been taken seriously as subjects of study, which means that the cognitive, affective, and social development of young people, which must necessarily occur through a language that is well known, cannot take place effectively (Kembo 2000:287).

A lack of concerted efforts to improve the teaching of indigenous languages as subjects of study, and their limited use as LoLT in higher education, seem to have implied that these languages cannot participate effectively in the world. Such linguistic suicidal tendencies manifest in curriculum and syllabus choices in most higher education institutions:

> Rather than focus on African languages as living cultural media, the academic study of African languages in South African universities has in general followed the international pattern of change in the field of general linguistics: briefly, grammatical studies on the lines established by CM Doke in the 30s, 40s and 50s were followed in the 60s by structuralism, pioneered in South Africa by E B van Wyk. The 70s saw work shaped by transformational-generative approach (LW Lanham, A Wilkes, DP Lombard, HP Pahl *et al.*). The African Linguists who now work in the field have generally stayed with this model of academic linguistic inquiry, seeking ever more accurate descriptive and analytical knowledge (Wright 2002:17).

The consequence of these tendencies is that there is still a lack of cutting-edge research into the study of indigenous languages as disciplines, which is necessary for such languages to be part of the economy. What this indicates, furthermore, is that the development of indigenous languages requires urgent attention so that they can carry all aspects of a modern technological society and become LoLT in formal education. This must necessarily involve creating an environment where indigenous language teaching moves to becoming more relevant and more engaged with the reality of the language as experienced by people on a day-to-day basis in the media, communities and, most crucially for this paper, within the academy. Meaningful and successful engagement with the development of, for example, isiZulu so that it becomes part of the academy, will depend entirely on implementing strategies to develop its academic discourse, that is, the secondary discourse after the primary discourse of the home. Lakshear (1997, in Thomson 2008: 242-243) reminds us that:

> Discourses, or forms of life, involve agreed upon combinations of linguistic and non-linguistic behaviours, values, goals, beliefs, assumptions, and the like which social groups have evolved and which their members share. *The important point here is that the language component is inseparable from the other elements in these combinations.*

The fact that the language component is inseparable from non-linguistic behaviours, values, goals, beliefs, and assumptions which members of the discourse have evolved, developing academic discourse in indigenous languages in the 21st century will necessitate, in the first place, the re-discovery of 'the validity of indigenous people's culture and lifestyle' (Roy-Campbell, 2001: 23). As early as 1922, however, attempts towards such 're-discovery' met with resistance from the communities for whom it was designed. The Phelps-Stokes Fund report which set up the Education Commission for Africa made a strong argument for the use of African languages as instructional languages in school. Despite these recommendations, African countries resisted attempts to implement the idea:

> The Africans felt … that most of the colonial language policies suggesting that Africans use their vernaculars in school were inspired by racial prejudices regarding the supposedly intellectual inferiority of Africans, a factor making them incapable of benefiting from a Western education. The Africans suspected that the language policies were designed to keep them in their social ghettos … in separate institutions which were inferior to the ones the white children attended (Brock-Utne 2000:146).

Distrust of colonial authorities and lack of insight into the pedagogic and intellectual value of learning through and about one's own language, and the accompanying ideological hegemony of the colonial system, has robbed African countries for decades of the richness and capacity of the African languages. Roy-Campbell (1998) draws on the works of Diop (1974, 1991) to point out that the achievements of Africans during the age of antiquity in mathematics, architecture, chemistry, astronomy, and medicine were accomplished in African languages[1]. It is important to point out that all these areas required technical vocabulary and conceptual frameworks, all of which was made possible in African languages:

> Walter Rodney (1976) has described the process by which Europe underdeveloped Africa, technologically and scientifically deskilling

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[1] Cheik Anta Diop (1974, 1991) has written extensively on the African past.

Africans. The accounts of both Cheik Anta Diop and Walter Rodney are a statement to the vast capabilities of African peoples realised through the indigenous African languages. One of the forms of written language in the world – Ge'ez – was found in Africa, in the area currently known as Ethiopia. But European mythology about Africa, which came to be accepted as the early history of Africa, did not recognise the achievements of African societies in pre-colonial times. From the perspective of these Europeans, the activities worth recording began with their contact with this 'dark continent'. Africa was presented as comprising peoples speaking a multitude of tongues which did not have written forms. Roy-Campbell points to written African languages dating to 3000 BC that are still used today (Brock-Utne 2000:143).

These technologically competent African languages were undermined by the colonizers, and this is partly the reason they have not developed to cope with the demands of specialised expression.

Teaching, Learning and Assessment in Higher Education

Since universities are institutions that offer formal education, one of their major tasks is to develop students' cognitive abilities. These abilities include 'memory, their ability to generalize, to grasp relationships such as cause and effect, to predict the consequences of events, to grasp the essential message of a speech or a book, and to evaluate situations' (Kembo 2000:289). Formal education is also designed to develop learners' affective skills such as 'attitudes to work and study … tolerance for people who may differ from them … learners' social skills … their ability to work together with other people, to communicate with them, and to support those who need assistance' (Kembo 2000:289). The development of these cognitive and affective skills can successfully occur in ones first language, and Cummins (1984 in Kembo 2000:289) has already shown that 'optimal first language education provides a rich cognitive preparation for the acquisition of a second language, and that the literacy skills already acquired in the first language … provide easy transition to [the acquisition of a secondary discourse]'. It is in this context I argue that unless isiZulu language studies is centrally concerned to show

how complex discourse works, and isiZulu literary studies return to a linguistic base, we are simply alienating indigenous languages and their speakers from playing an effective role in the academy.

The reason this is a potential consequence is that whenever isiZulu departments in South Africa attempt to teach 'language', such programmes focus mainly on grammar teaching, separate from literature, and not at all on academic literacy development in isiZulu. This is contrary to English departments where, at almost all universities both nationally and internationally, they offer communication and/or academic reading and writing courses in English for all undergraduate students. In this way, English language within academia thrives as such initial offerings provide opportunities for first entry students to practice reading complex written and visual texts, and to write in ways that are valued within academia. After all, English is the LoLT and English disciplinary concerns influence much of what goes on these courses (Balfour 2000; Mgqwashu 2007; Mabunda 2009). On the contrary, the tendency in isiZulu departments is to use pedagogic strategies that fail to draw students' attention to the role of language in constructing and contesting different subject positions, identities, and knowledge. This is because the artificial separation of language studies, literature studies, and academic reading and writing in isiZulu usually results in pedagogic practices that leave students either understanding texts and able to discuss them orally, or with the ability to regurgitate what they have copied during lectures and can draw from memory. Under these circumstances the consequence is that students are left with an inability to construct complex and persuasive arguments in writing, and a failure to engage critically with detail in isiZulu texts.

In *Changing Words and Worlds?: A Phenomenological Study of the Acquisition of an Academic Literacy* Thomson (2008) illustrates the consequences of such omissions in a Bachelor of Education Honors academic literacy module. In this module, two key readings were translated from English into isiZulu, with the hope that students who spoke the latter will find the translations helpful. The name of the module was *Reading and Writing Academic Texts* (RWAT) and the two key texts that were translated into isiZulu were Hyland's *Genre Theory: Just Another Fad* (1992) and Johnson's *Language and Education in South Africa: The Value of a Genre-based Pedagogy for Access and Inclusion (*1994). The title of Hyland's

article was translated as *Ucwaningo lohlobo lombhalo: Kungabe isimanje esidlulayo?* and Johnson's was translated as *Ulimi nezemfundo eNingizimu Afrika: Ukubaluleka kohlelo lwemfundo olugxiliswe embhalwenni lokufinyelela kanye nokubandakanya uwonkewonke.*

At a first glance, as one of the participants in Thomson's (2008: 240-241) study points out, the isiZulu translation seemed different and alien to the speakers of the language:

> it's given me a hard time … it was time to constrain us … it was Zulu and Greek … in some text you have something written in Zulu, and when you relate it to English as you are a Zulu speaker, you find that you have a problem to understand what is going on; they were very difficult … the English versions made more sense to me; it's something else when you are reading in Zulu ….

What this participant actually struggled with was not isiZulu *per se*, as much as the discourse used in the original, English version texts and *translated* into isiZulu. While the translation of English texts into isiZulu could be seen as one way to ensure epistemological access for the majority of students who speak English as an Additional Language (EAL), it seems to me this may not work if the target students' exposure to the academic discourse of isiZulu is not already established. Therein lies the challenge for isiZulu advancement and knowledge contribution to academia: to draw from indigenous ontologies and develop epistemologies that are consonant.

> Our Eurocentric education system assumes western sensibilities, yet African learners bring a unique set of skills drawn from their natural, social and historical environments, such as skills of negotiation and problem solving learned in families with many siblings (Ntuli 1999: 196)or in the extended family … learning and teaching takes place through participation and performance, the antithesis of the passive classroom mode where opportunities to interact are typically highly structured and bounded (Ntuli 1999: 197; Asante 1988:62f). For Africans, knowledge is not a collection of dead facts but 'has a spirit and dwells in specific places' and learns through direct experience … through doing and through immersion in the human situation.

> Moreover, knowledge is inseparable from ethics which informs application (Asante 1990:11; Van der Walt 2006: 210), and wisdom entails the ability to integrate knowledge, ethics, direct experience, social intelligence … (Haire & Matjila 2008: 160-161).

This partly explains the reason some isiZulu-speaking students find that translated English texts constrain rather than enable learning. The English language has over centuries developed within a very specific ontology and epistemology akin to its long established and shared cultural values and norms that are alien to isiZulu language and culture. Translating texts is thus limited to the visible linguistic, grammatical level, but leaves invisible English cultural discourses, which are fundamentally different to those of isiZulu, intact.

Thus, what the isiZulu speaking student above struggled with, in essence, was not isiZulu language, but the English academic cultural repertoire that got transposed into the isiZulu language in the process of translation, and the context-independent nature of written language, an aspect that languages with a persistent oral tradition, like isiZulu, have not fully developed. This is the reason, as Thomson's (2008: 242) work shows, that one of her participants felt that isiZulu is a 'very very long language' and 'short cuts' are an impossibility. 'The consequences of this for Folly were that, 'because we are translating it from isiZulu so it will take a long time before you can reach the point' (Thomson 2008: 242). The fact that Dick, one of the study participants in Thomson's (2008: 244) research, points out that he '"had a look at one or two paragraphs" but quickly said to himself that "no, I'm not going to be able to understand this if I'm making use of Zulu"'. This indicates that, as part of the process to introducing isiZulu as the LoLT, strategies designed to develop students' skills in both Basic Inter-personal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) in isiZulu are a pre-requisite (Cummins 1984).

It may be argued that this is what, the University of Limpopo's School of Languages and Communication Studies attempted to achieve in 2003 when they launched a BA in Contemporary English and Multilingual Studies (BA CEMS) degree. The structure of the degree seems to be offering speakers of Northern Sotho an indigenous language, and opportunities to develop their BICS and CALP in an indigenous language. The degree has

two majors: Contemporary English Language Studies (CELS) and Multilingual Studies (MUST), also known as *Thuto ya bolemente*. The former is taught in English and the latter, as would be expected, is taught in Northern Sotho. This means 'half the subjects in the BA CESM degree … are taught and assessed in Northern Sotho' (Keeple 2010:1).

Contrary to the experience discussed in Thomson's (2008) study above, while few key scholarly articles for the Multilingual Studies component of the BA CEMS degree are translated from English to Northern Sotho, the bulk of the cognitively challenging reading material is developed by Northern Sotho-speaking staff. This means students engage with academic texts that draw from Northern Sotho ontologies and epistemologies in ways that the translated readings discussed in relation to UKZN do not. These texts are originally written in an indigenous language and students' academic reading of the material and writing about it ensures epistemological access. It is because of this socially just, academically rigorous and pedagogically sound choice that 'the degree represents a model of additive bilingualism because it develops students' competence in English while simultaneously developing their knowledge and use of their home language for higher-order cognitive work' (Ramani in Keeple 2010: 2). This partly explains the increase in students' enrolments from 38 in 2003 to 192 in 2010, 'a pass rate of 92%, one of the highest in the university, and a third of graduates are pursuing postgraduate studies ...' (Keeple 2010: 3). These developments are a clear indication that learning in an indigenous language guarantees possession and/or access to new knowledge in ways that transcend geographical context. The challenge is observed in the case of isiZulu:

> Michelle surmised that because she is a Grade 12 isiZulu mother tongue teacher with a Bachelor of Arts degree in isiZulu, the isiZulu translations were not a problem for her. What did offend Michelle was other students' negative reactions to the translations …. Importantly, Michelle read the isiZulu texts *before* reading the English ones … and though in her view the isiZulu used in the translations was 'good', she recalled that some students had said that 'some of the words are not translated right'. She herself, however, 'did not have a problem when reading those things because I'm used to it' (Thomson 2008: 245).

Like the students who are pursuing postgraduate studies in a bilingual education program, what seems to be coming out of Michelle's observations is the fact that she seems to have had sufficient exposure to academic isiZulu (beyond communicative isiZulu) within her intellectual repertoire. She has, in other words, gone beyond Cummins' (1984) BICS to CALP in isiZulu, a prerequisite to engage successfully with the academic registers within formal education. Dick's reservations above, however, still require some attention because they suggest that even pursuing academically dense isiZulu texts could defeat the purpose of facilitating epistemological access for speakers of isiZulu themselves.

The fact that Dick, the study participant in Thomson's (2008: 244) research, 'resolved "not to look at what is written in Zulu because I knew that I'm going to write something which is very wrong"' indicates, as Thomson put it, that 'the translations were rendered unusable as an effective learning tool for them'. Dick's struggle with the isiZulu translations is rooted in his status as an 'outsider' to isiZulu academic discourse. Unlike Michelle, who is a Grade 12 teacher of isiZulu and holds a Bachelor's degree in isiZulu studies, Dick lacks familiarity with the literacy or 'deep rules' (Boughey 2005) of academic isiZulu. This understanding, that students who struggle with academic isiZulu may be experiencing difficulties with the academic discourse of the requisite levels, and not with language (grammar) per se, encourages us to research and develop ways in which isiZulu can be taught, learnt, developed and understood as an academic language.

These are the concerns, especially in a module designed to develop students' academic reading and writing skills so that they can successfully access epistemologies within an Honours degree. This is crucial because modules in this degree are taught in English, the language not spoken by the majority of students as their mother tongue. How then do we escape the situation where even the most progressive and democratic, constitutionally responsive and well meaning attempts by the *Reading and Writing Academic Texts* course developers to observe the Language in Education Policy (1996) of SA, benefits only a handful of the target group and the majority of people are still excluded epistemologically? So much needs to be done to develop

a socially accepted association among ways of using language, thinking, feeling, believing, valuing, and of acting that can be used to

identify oneself as a member of a socially meaningful group or 'social network' or to signal (that one is playing) a socially meaningful 'role' (Gee 1990: 43).

Indigenous Language Research Work in Progress

As a starting point the teaching of isiZulu as a subject from primary to tertiary levels needs to incorporate the teaching of skills and knowledge that would enhance the Cognitive Academic Language Proficiency skills in the mother tongue. Students who major in isiZulu receive tuition in isiZulu at Honours, Masters and PhD levels in teacher education programmes. And, instead of translating the reading material, all the reading material needs to be written in isiZulu. In this regard the University of KwaZulu-Natal's School of Language, Literacies, Media and Drama Education, for example, has already graduated MEd and PhD students who wrote their theses in isiZulu. This means there is a growing body of work written in isiZulu academic discourse. Furthermore, the School has plans to pilot an Honours coursework degree, with a research component, to be taught in the medium of isiZulu. This program will enrol students who recently completed their four year undergraduate Bachelor of Education degree and those who are already teachers of isiZulu from primary to secondary schools. What follows is a description (one in isiZulu and the other in English) of the modules that will be piloted in this research project:

1. Two compulsory foundation modules (48 credits)	• Ukuqonda Ucwaningo (16) • Ukucwaninga Ngokuzimela (32)

2. The following compulsory core modules in Language and Media Education	• Ulwimi kanye Nemfundo (16) • Ukucwaningwa koLwimi kanye neMedia (16)

3. Three 16 credit modules	• Ukufunda Nokufundiswa koLwimi Emiphakathini Enamasiko Ahlukene (16) • Ukuxoxa Indaba Nokufunda (16) • Academic Literacy in isiZulu (16)

1. Two compulsory foundation modules (48 credits)	• Understanding Research (16) • Independent Research (32)

2. The following compulsory core modules in Language and Media Education	• Language and Education (16) • Critical Awareness of Language and Media (16)

3. Three 16 credit modules	• Language Learning and Teaching in Multicultural Socieites (16) • Narrative in Education (16) • Academic Literacy in isiZulu (16)

The development of the B.Ed Honours degree that uses isiZulu as the LoLT will increase the number of postgraduate students pursuing M.Ed and PhD studies in the development of isiZulu, which is in line with UKZN's Bilingual Language Policy.

As part of its postgraduate students' recruitment strategy, the School of Language, Literacies, Media and Drama Education invited all fourth year B.Ed students and their parents to a postgraduate recruitment and awards day. The School is concerned that very few graduating isiZulu major students choose to pursue postgraduate studies. Those who do either tend to drop out, take long to complete the degree, or struggle with writing assignments at the standard expected of postgraduate studies. After formal deliberations, and subsequently with students' representatives and the School Executive Committee, an agreement to design and pilot a B.Ed Honours degree in the medium of isiZulu was reached. Plans are in place to encourage the students to pursue an M.Ed either by research or by course work, where both the LoLT and the reading material will be in isiZulu. The motivation for this is that isiZulu teaching and learning needs to draw from the ontological and epistemological foundations of the community where the language evolves, and these need to be made explicit in understanding the academic discourse in isiZulu.

The School recently received funding to pilot an Honours program to be taught in the medium of isiZulu. The program will enrol students who

recently completed their four year undergraduate Bachelor of Education degree and those who are already teachers of isiZulu from primary and secondary schools.

Concluding Thoughts

The research agenda of the School in relation to teacher education is to examine ways in which isiZulu can be taught, learnt, developed and understood as an academic language. We recognise that a good grounding in the mother tongue is the precondition for epistemological access in all knowledge areas: 'Confidence [students in the University of Limpopo] exhibit in using both their own language and English is evidence of skills and strategy transfers across the two languages' (Kepple 2010: 4). This should be encouraging some academics and most parents who express ambivalence (Pretorius 2002) about mother tongue education. Writing about un-examined perceptions of equating knowledge of an 'international' language with 'success' within most African contexts, Kembo-Sure and Webb (2000:115-116) assert that:

> It is likely that many parents of school children will argue that they want their children to be taught in English (or French or Portuguese) precisely because it is in the interests of their children that this should happen. They feel that a school-leaver who is proficient in an 'international' language is far better prepared for life (particularly the economic or professional domains) than one who is not.

As the way forward, we need to engage with the teaching of indigenous languages as subjects which extend beyond grammar teaching and the superficial analysis of literary texts. One way to achieve this, e.g., in isiZulu, is by first acknowledging that 'isiZulu' as the name of a subject is an adjective made to serve as a noun. So 'isiZulu' is always pointing towards an absence – the noun. Is the subject literature, language, culture, or people? I argue that it is all of these.

Colleagues and students in isiZulu can tap into un-explored research areas regarding isiZulu Education and pedagogy. The project focuses,

amongst other things, on paying explicit attention to the ways in which language in isiZulu-medium literary, oral, and visual texts, as well as in media and popular culture, is used to construct contestable meanings about individual, group, community and societal identities. This is the basis upon which pedagogic practices in the teaching, learning and study of isiZulu can introduce innovations in the broader field of isiZulu Studies.

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'My vuvuzela shall not be silenced': Towards Linguistic Equity in South Africa

Ayub Sheik

Abstract
This paper interrogates the linguistic landscape of South Africa by surveying the effects and opportunities that globalization, glocalization and emerging technologies present for the cultivation of our language ecology. It argues for the revitalization of our indigenous languages by positing an integrated pluralistic vision invested in strategies for managing the linguistic socialization of our students. Addressing the multilingual realities of our student population means activating a classroom domain of inclusion instead of exclusion and is a norm of best practice intimately aligned with our cherished values of equity and access.

Keywords: Multilingualism, South Africa, indigenous languages, linguistic ecology

The strengths of multilingualism[1], previously invisible, need to gain higher visibility. This paper calls for a change in the linguistic landscape of South African universities by advocating the development of dynamic linguistic contact zones which denaturalize English and give voice and agency to the diverse linguistic resources students bring to their learning domains. It argues that the languages that have been absent from our educational institutions,

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[1] For this analysis I use the term multilingualism in an inclusive way, i.e. as the acquisition and use of two or more languages, so bilingualism is treated here as a particular instance of multilingualism.

and confined to the home and community, must now become visible and audible in our schools and universities as a politics of practice.

An examination of South African newspaper headlines suggests that there are persistent fears about the status of indigenous languages in South Africa:

- 'Prominence of English Kills African Languages' (*Daily News* December 24, 1999).
- 'Language Barrier: South Africa has Eleven Official Languages, but Many could Soon Face Extinction' (*Sowetan Sunday World* August 5, 2001).
- 'African Languages "Under Threat"' (*Mail & Guardian* February 1, 2007).
- 'School Kids Reject African Languages' (*Sunday Times* November 8, 2008).

These headlines chronicle the anxiety and threat faced by our indigenous languages under the onslaught of English. It is also a subliminal plea for the rehabilitation and restoration of our indigenous languages and advocacy for a more just and egalitarian society. This is especially pertinent in the light of evidence culled from a number of international surveys in 2005 that point out that seventy five percent of the world's population do not speak any English, and ninety four percent do not speak it as their mother tongue (Makoni & Pennycook 2006:99).

If indeed discrete groups are to promote peace, mutual understanding, development and social stability, they require enhanced communication. Multilingualism affords us the opportunity to create communicative contexts that would empower people to improve their social welfare and civic life. And yet, an irony in the history of Africa is that many nations are reluctant to implement language policies that promote indigenous languages. By adopting a former colonial language as their dominant lingua franca, they are inadvertently courting the death of African indigenous languages, since the dominant languages cannibalize them. The South African constitution has enshrined legal and moral obligations to liberty, equity and dignity in its recognition of eleven official languages (isiZulu, isiXhosa, Afrikaans, English, Sepedi, Setswana, Sesotho, Xitsonga, siSwati,

Tshivenda, and isiNdebele) in the Bill of Rights. In some quarters, however, this has been criticized as utopian nonsense and political grandstanding. If indeed South Africa moves to develop a credible language policy, the State needs to conceive and execute a coherent strategy for language maintenance and multilingualism, which goes beyond rhetoric and constitutional fanfare.

The United Nations Educational, Scientific and Cultural Organization (UNESCO 1951) report on languages in education still has currency today. The recommendations acknowledge that the mother tongue is a person's natural means of self expression and one of the first needs is to develop the power of expression to the full. The report also points out that there is nothing in the structure of any language which precludes it from becoming a vehicle of modern civilization. Of particular interest to South Africa is Article 6, which states if the mother tongue is adequate in all respects, and could serve as a vehicle of university and higher education (Mesthrie, Swan, Deumert & Leap 2000:169). These make a strong case for indigenous language revitalization in South Africa, making it incumbent on the State to allocate resources and expertise for the development and growth of all official languages.

In an interdependent and technologically enriched world the opportunities for the growth and maintenance of indigenous languages are unprecedented. It is these possibilities that need to find expression in the linguistic ecology of South African universities. Efforts to transform the virtual linguistic landscape of cyberspace to include indigenous knowledge systems as equal and valued options is a strategic innovation from monolingual imperialism. This is possible because new communication technology and globalization have significantly impacted on language practices in the twenty first century. National economies have become indelibly integrated in the global economy, with money and workers becoming much more mobile. In addition, communication and information networks have grown enormously. In a virtual linguistic space awash with possibilities, our indigenous languages must be understood as part of a dynamic system of world languages.

Approximately fifty percent of Google users worldwide choose a language other than English to access the web-search utility (Garcia 2009:182). New software has increased the potential number of different scripts available to users. Moreover, an increasing number of websites are

resorting to multilingual strategies, allowing users to access the internet in a language of choice. Translation is also readily available and serves as a significant resource for the development of metalingual competence. Voice-over internet protocol, available to consumers at little or no costs, coupled with short text messaging (SMS), enable many more people to communicate across national borders. They are able to do so not only in different languages, but also by using different modalities, where language is bound up with visual, audio and spatial semiotic systems. The ability to download media files through podcasting enables many users to share their own languages across time and space in unprecedented, evolving and ever expanding ways. The internet is becoming increasingly multilingual mainly because the agents of economic globalization have realized that adapting to local cultures and linguistic preferences is an essential aspect of remaining competitive, and because the commodification of language-related goods constitutes an enormous and growing global market. These developments have made it possible to hold on to multiple languages and to engage in multiple communicative and literacy practices.

The twenty first century, characterized by economic and environmental migrations, displacements from conflicts and political unrest, international trade, tourism and technological advances in communication, renders multilingualism a necessity. This form of multilingualism is crucial if transformation is to occur in the lives of millions of children and adults globally. In many places in the world entire communities are marginalized because of their native, localized languages, and individuals are consequently condemned to unemployment, menial labour and vituperative forms of social and political exclusion. In Southern Africa, research by Bamgbose (2000), Mazrui (2004),Vavrus (2002) and Mgqwashu (2007), among others, has extensively documented the abandonment and decline of native voices in preference for English. English is widely perceived as a language of status, signifying educational and economic empowerment.

Understandably, these choices of a perceived prestige language such as English are made in many instances in the quest for economic security, reinforced by an apartheid legacy in which Bantu languages were used to separate, discriminate and disempower. It is at this ideological nexus that the state is required to urgently intervene by marshalling its considerable resources and affording space and recognition to indigenous languages in

both basic and tertiary education, as well as in its employment and management practices. The agenda is certainly not to dictate language choices or to politicize or romanticize language preferences but to avail to ordinary South Africans of the possibility of students being educated in the linguistic resources they bring to classrooms and universities. Other advantages are options to undertake work, transact business and seek legal services in a language of choice. An additional option is the confidence an individual gains, assured that his or her interests would not be prejudiced by using an indigenous language.

The evolution of a language in the classroom requires a shift from teaching different languages as subjects towards using a mix of languages to teach subjects. Using a language as a medium of instruction provides more exposure to the language and an opportunity to integrate content and language. This value laden enterprise would see the languages of the public domain in South Africa given conscious recognition in the learning domain. The development of such metalingual awareness would undoubtedly deepen our democracy and enhance the quality of our intercultural communication and contact.

Developing and implementing a bilingual curriculum, however, is only half the battle. Our practices must be informed by an astute strategy. Are our objectives language shift or language maintenance? That is, is South Africa's Education Department encouraging students to shift seamlessly and rapidly into mainstream academic English, or do we have the maintenance of the home language as a goal at the same time as developing competence in academic English? If the department is to succeed in multilingual language planning, all curricula must articulate a well defined sequence of continuity and progression.

Further the concept of the 'mother tongue' cannot be simply glossed over. Skutnabb-Kangas (1981: 18) has problematized the notion of the mother tongue quite astutely. The mother tongue may be referenced in the following terms:

- origin: the language one learns first;
- competence: the language one knows best;
- function: the language one uses most; and

- identification:
  - internal: the language one identifies with; and
  - external: the language others identify one with.

Nevertheless, it must be noted that language is not a static phenomenon but something which is dynamic, continually evolving against the backdrop of variables which themselves are continually changing. This understanding must also inform our use of the term, which underlies the complexity that language poses.

Therefore, some critical questions that tertiary institutions in South Africa need to ask of themselves are as follows:

- How could the pace of change accelerate so that universities become multilingual in practice as well as in population?
- Within the multilingual context, how will curricula reflect an intercultural understanding across different lived experiences and world views?
- What steps do we take to restore and empower those who have been historically oppressed, with the resulting decline or loss of indigenous languages?

To initiate the change process, initially universities would be required to create the ideological spaces for multilingual education while expanding the linguistic capital of faculty and staff. Taking South Africa's politically burdened context into consideration would expose several variables that could negatively impact language status. Such variables give insight into the existing linguistic challenges currently besetting multilingualism in tertiary institutions. Historically, both colonialism and apartheid have impacted on our linguistic landscape by relegating the majority of mother tongue languages of African indigenous origin while simultaneously privileging English and Afrikaans. A similar pattern is evident in Africa and the rest of the colonized world.

In the light of this phenomenon, it is inevitable that the processes of decolonization are necessary precursors to linguistic equity. The perceptions of indigenous languages as inferior and ancillary are for the most part genealogical. Naming, cataloguing and classifying indigenous languages

were part of the colonial inventories of control, a trend that was and remains reductive and pejorative. For example Springer, writing in 1909 about *ChiShona* in Southern Africa comments, 'various terms have been invented by the white man, the most common being *Chiwina*, meaning, *the language of the filthy people*' (Makoni & Pennycook 2006:67). As it stands, indigenous languages worldwide have been treated as the disease of the poor. There is need, therefore, to deconstruct myths about language value, status and function, engendered by colonialism, consumer culture and failed state policies on language development and maintenance.

As language users, we have to deconstruct our speech repertoires and critically gaze at what we take as natural and for granted. This recognises that languages have never been assigned separate functions or territories or status, except where ideological graft is principal. This understanding is critical to explaining why English has acquired the status of a 'killer language'. Ngugi wa Thiong'o (1986:16) puts it succinctly:

> the language of an African child's formal education was foreign. The language of the books he read was foreign. Thought in him took the visible form of a foreign language.

If we are to foster a plurilingual repertoire in the learning domain then we have to summon the temerity to review our language practices accordingly. This is precisely because our students come from a variety of linguistic, cultural and social contexts, which largely go unrecognized in curriculum planning and instruction. Prioritizing students' own language experiences is motivating and empowering, and is interpreted as an invitation to learn.

I am of the conviction that the seven principles offered below could significantly enhance our plurilingual status and broaden the appreciation of our South African diversity. Most importantly, implementation of multilingualism could create a discursive space in which students from diverse backgrounds can negotiate their linguistic identities within a pedagogic framework which recognizes their linguistic histories and cultural contexts as valuable resources and platforms for learning.

Firstly, indigenous languages should be interdependent with and not dependant on English. Our pedagogic practice must consider the development of indigenous languages in tandem with the development of the

languages of instruction. This idea is supported by Cummins in what he calls the 'interdependence hypothesis', in which skills in both languages are mutually complementary and both first and second language development are closely tied together (Mesthrie, Swan, Deumert & Leap 2000:373). It is also now widely accepted that strong academic and conceptual skills in the mother tongue are crucial for achieving those in an additional language. Shattering the colonial hierarchy of superior and inferior languages and creating spaces for languages to coexist and complement each other is critical to this realization. Multiple languages must be seen as cultural and economic resources instead of being viewed as a problem. This change in the public mindset is crucial to the development of a culturally rich, linguistically diverse and democratic society. Because the vitality of a language can only be determined by its use, everyday usage in the learning domain is necessary if we are to realize this goal. I acknowledge, nonetheless, that the type of languaging selected for teaching will depend on particular instructional circumstances. Importantly, we have to ensure that languages do not exist in competition on our campuses but in a functional interrelationship. Our goal is not to replace a dominant lingua franca with another but to be sensitive and culturally in tune with the vibrant multilingualism that obtains across our geopolitical spaces.

The *second* principle I advocate is code switching. Quality code switching, is used not only to call attention, discipline and issue instructions, but to provide meaningful pedagogic support. The pedagogic advantage to be gained from code switching is that it enables learners to explore ideas and concepts in a familiar environment and is a useful resource for mitigating the difficulties of learning through another language. Code switching also assists in maintaining the focus of students by regaining their attention and can help clarify and reinforce learning. Code switching may also be interpreted as an enabling, scaffolding technique that assists students in understanding learning content in an additional language. According to Gutierrez, Baquedano-Lopez and Alvarez (2001:128) code switching is a systematic, strategic, affiliative and sense-making process. Consequently, universities with a multilingual agenda should be domains where code switching should be the expectation rather than the exception (Makoni & Pennycook 2006:237). As it stands, teaching and learning at universities are discrete monolingual events. Teachers should be expected to now learn to

communicate a pluralingual discourse in the classroom as students come to appreciate each another's languages and cultures.

Co-languaging is a *third* important factor for multilingual success in the learning domain. Co-languaging is when the content of a lesson is delivered to different language groups simultaneously. PowerPoint enables co-languaging. In co-languaging the content can be shown, for example, in both isiZulu and English for instance. The use of this teaching technology also makes it possible for deaf students to be accommodated, and helps to integrate students from diverse linguistic groups. Co-languaging also occurs when subtitles accompany a film. This process develops cross linguistic awareness both consciously and unconsciously and is useful in developing the multilingual repertoire of students.

The *fourth* principle is either previewing or reviewing (or both) a lesson in the majority mother tongue if the language of instruction is not that language. This is a useful strategy which encourages and supports students by using their home languages as a supporting tool to clarify ideas and concepts. The instructor gives the gist of the lesson, (the preview), most often in the home language of the students, then teaches the lesson in English, then once again reviews the lesson in the majority home language. If the instructor is not conversant with the mother tongue language, suitably trained tutors may be employed in a team teaching approach.

To develop the capacity for dual language instruction we require both pre-service and in-service training for instructors as well. At present, the University of Kwa-Zulu-Natal's lecturing staff are trained to communicate a monolingual experience at university. The success of the multilingual enterprise depends on building capacity in dual medium instruction.

In addition, the signage, notices and communication from the university must reflect a dynamic multilingual domain. The value of our indigenous languages must not only be talked and theorized about it must have practical, everyday application. Multilingual signage has an important role in defining the socio-political and sociolinguistic character of a university. Consequently, it must become the norm and an integral part of university culture, linguistic policy and identity.

The *final* principle is that of translanguaging. According to Baker (2001), translanguaging involves the hearing, signing, or reading of lessons in one language, and the development of the work (the oral discussion, the

writing of passages, the projects and experiments) in another language. Translanguaging helps students develop by reinforcing both their first and second languages. In some courses, certain parts of the syllabi can be taught in the majority mother tongue, whilst the rest of the module may be taught in English. I taught an undergraduate course in Communication at Dubai University in which I taught the English content in rotation with Arabic. The content was not repeated in either language and students were assessed in both languages. The final mark consisted of an average of assessment tasks in both Arabic and English. Of note, was the enormous popularity the course enjoyed amongst Arabic students who relished the opportunity to translanguage in English and Arabic. The benefit of translanguaging was that students acquired a deeper understanding of the subject matter while simultaneously developing their competence in the weaker language. In addition, students with different levels of linguistic competencies were able to collaborate with one another to realize the learning goals of a particular lesson or assignment.

If we are sincere about multilingualism, then we have to replicate the bilingual experience of learning and teaching in our universities. Multilingualism revolves around the issue of equity, equity for the students, their languages, and their cultures and communities (Garcia 2009:319). Multilingualism also creates a non-threatening learning context and builds linguistic identities. Naturally, using two or more languages in a classroom is not without its challenges, particularly when questions of academic rigour and the maintenance of high expectations come into question. One needs to take into account both the situational and operational factors that would make multilingual learning and teaching feasible. Situational factors such as the social and linguistic background of target students, population diversity and literacy levels in languages need to align convincingly with curriculum objectives and assessment instruments. In its infancy, it would be prudent to introduce bilingual programmes at university by what Ofelia Garcia terms a *sliding bilingual allocation*. What is meant by this is that as bilingualism develops the allocation of time to different languages changes (2009: 209). For example, we may introduce isiZulu in a mainstream English medium class in history in a 90:10 allocation program. As students become more proficient within constructivist pedagogy, the instructional time in isiZulu can increase gradually, while that of English can decrease correspondingly.

Learning experiences that are technologically enriched, drawing from films, tapes, videos and photographs from cellular phones which are easily transferable with Bluetooth technology, the Internet and other multimedia platforms are a significant boon to multilingual education. Likewise, the use of language that is tautological, that is, saying the same thing twice in different ways to enhance understanding, will also greatly facilitate multilingual learning. In addition, all disciplines have different linguistic registers and students should be made aware of such differences. Vocabulary will feature high on the list of challenges in a multilingual domain. Vocabulary must be taught directly and systematically, focusing on both meaning and form. The focus should be on both technical words and high frequency words and ideally included in a 'text walk'. This process entails getting to know the text prior to reading, speaking or writing, so as to engage the student more productively (see Vogt 2000).

Moreover, dealing with more than one language in a classroom requires the development of effective negotiating strategies among students and these should be a visible part of curricula and strategic planning at universities. To be successful in this enterprise, students need to be trained to be confident about the existing differences in communication. Students will also require orientation in the use of psychological and sociolinguistic resources to enable them to negotiate such differences successfully. To achieve this calls for embracing parallel pedagogic objectives. In addition to developing mastery in the target language, there is need to develop a multilingual repertoire of codes amongst our students in which bilingual policy must be additive in orientation which forms a framework in which both the home language and English are valued. In a subtractive mentality, the home language is seen as one of limited use, serving as a gateway to the mainstream language. In short, the development of metalingual awareness is necessary.

Multilingual pedagogy can only be meaningful with proper assessment strategies. As Foucault (1979) suggests, assessment is always a political act, a way of exercising power and control. All testing draws on specific ideologies and is embedded within specific cultural and pedagogic traditions. In brief, this shores up the argument that assessment practices for multilinguals need to orient towards principles of linguistic diversity, intercommunication and multicultural appreciation whilst striking the correct

the balance between language proficiency and content proficiency. Performance of multilinguals must be interpreted as a continuum of language acquisition so that contextual factors and differences in students' literacy levels are taken into account. This shift in focus will lay more emphasis on formative assessment practices. Formative assessment (constant evaluation of the student's learning that help shape pedagogical practices and curricula, and which is enabling and constructive to the student) should lay the ground for effective summative assessment of uncompromising standard. Flexible assessment strategies are fundamentally in the interest of the student if he or she is given the opportunity to demonstrate his or her academic achievement in content areas in a preferred language. Finally, assessment in a multilingual domain of learning should gravitate away from exclusive testing in print and embrace multimodal forms of testing. This strategy will give the emergent bilingual much more opportunity to work to his strength in demonstrating his capacity in specific learning areas.

In conclusion, much more research needs to be done to effect a transition from monolingual practices to bilingual ones. We require curricular, pedagogical and assessment practices that respond to the challenges of multilingual education and that derive from our unique contextual variables. We have to create the opportunities for both faculty and students to develop multiple understandings about languages and cultures that foster tolerance and appreciation for human diversity.

Bilingual education is not a one size fits all phenomenon. Research also needs to be prioritized in regard to the role of translanguaging, code switching, the tolerance level of errors and the logistics of team teaching in a multilingual learning and teaching domain. A major hurdle is the need to develop scientific academic registers in our indigenous languages to enable teaching and learning in the sciences at university. This perceived lack, together with the disconcerting lack of sufficient reference material available in the indigenous languages is an obstacle for indigenous language acceptance and growth at universities.

A major concern is the cost implications associated with multilingual education. In this matter we have to take a long term view. Cost benefit calculations will be offset by enhanced earning potential of students with multilingual proficiency. In this sense, it becomes a viable investment for the State in its most valuable of resources; its people.

Multilingualism is a crucial platform for preserving our cultural heritage. Indeed, the most obvious marker of identity of a community is first and foremost its language. Consequently, there must be support for all the languages spoken in South Africa. However, it must be borne in mind that language revitalization and maintenance can only occur through use. The more opportunities we create for the use of indigenous languages, the more successful we will be in validating their importance. South Africans have to recognize that language development is a continuous process that occurs throughout our lifetime and is recursive and circular. In that sense, we are all language learners, under certain conditions, with certain people (Makoni & Pennycook 2006:59).

Establishing multilingual domains at universities and schools is a value laden enterprise, precisely because language has much more than a semiotic and symbolic function. It also has a rhetorical function which is used to discursively construct identity and solidarity. As South Africans, we have to reinvent ourselves as users of multiple languages. The former colony must have the will and determination to decolonize and embrace the languages of our people by strategically marking it in the forefront of the nation's consciousness and as the cornerstone of our language policy. Our language strategy must convincingly align with the interests of commerce, industry and education. Graduates nurtured in multilingual practices will be culturally rich, linguistically competent, socially sensitive and better positioned to grow our economy, cultural heritage and knowledge systems. Academic achievement in two or more languages must be encouraged. It is time that South Africans reap the benefits of multiple ways of knowing the self and recognizing the fact that one language cannot reflect the linguistic complexity of the world. As we march through the 21st century, we have to have the sense to recognize that the rainbow nation is more than an ideological construct, that it serves more than a symbolic function. The rainbow nation, in all its diversity, in all its multiple tongues, represents a fabulous opportunity for the cultivation of a linguistic ecology that will deepen our democracy and establish the conditions for economic prosperity. It is time that all stakeholders acted on the premise that a monolingual view of modernization is no longer tenable.

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Local Economic Development Postgraduate Education and Mindful Research: Deepening the Practitioner Research Paradigm

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Abstract

Practitioner research, historically, has grown out of the self-study movement initiated by British teacher educators who saw the need to interrogate their own teaching practices in order to deepen the practices of their learner teachers (Loughran 2004). Parallel to this was the reaction by teachers to the authority of academic educationists making pronouncements on what should happen in the classroom. The movement of self-study was essentially a research initiative where practitioners researched their own practice in order to bring about change in the classroom. In the last two decades a considerable body of research material has emerged (Loughran 2004), which fed into the field now called practitioner research, and which extends beyond teaching into many forms of professional practice, and especially areas where change of some kind is required.

This paper draws a distinction between self-study as a cognitive strategy (where meta-critical thinking is employed in the development of professional practice) and self-study as mindful self-observation (which is a form of meta-cognition), where the latter can be regarded as an ontological condition prior to the thinking process, and which makes for more mindful – rather than mindless – living and learning. The implications for research in general will be considered, and in particular specific attention will be given to the context of developing Local Economic Development (LED) practitioner researchers who are engaged in postgraduate study.

Keywords: Practitioner research, mindfulness, Theory U

Kriben Pillay

Introduction

This paper argues for the inclusion of mindfulness as a necessary next stage in the way we conduct practitioner research, developing the thesis that mindfulness is crucial to any action research project that is focused on social change. Mindfulness is an active expression of non-conceptual awareness that deconstructs the chronic sense of separation felt by most human beings, through the primary modes of fear and self-centred activity. First, a brief background is given to both the philosophical context of mindfulness, particularly its neglect in Western thought, and to the new developments in neuroscience and Western nonduality that are bringing the concept and the experiential practice of mindfulness into greater prominence. In this paper, LED practitioner research from a postgraduate programme is considered as a practical example for deepening research practice through mindfulness. This is not the only educational context in which mindfulness has a role to play. The LED practitioner research context, intersects with many rich strands of the sciences and social sciences: technology, environmental sciences, agriculture, development economics, sociology, etc, which allows the rationale for mindfulness in research to be explored more fully. Lastly, mindfulness in practitioner research, as a form of action research, is explored through the social change model Theory U, which is proposed as a model highly appropriate for interdisciplinary action research for accessing the deepest potential of mindful practice.

There is an obvious limitation to this exploration, in that what is being used is one way of knowing – the conceptual realm – to point to another which is its polar opposite by virtue of being non-conceptual. The latter can only be meaningfully engaged with through experiential practice in order to test its truth claims.

Mindfulness: A Brief Overview of the Philosophical and Scientific Contexts

Mindfulness, as an experiential practice of non-conceptual contemplative inquiry, has its philosophical home in non-dual Buddhism where the intent – of being mindful of body, feelings, mind and phenomena – is essentially a deconstructive one so that 'we have a clearer notion of how reality is constructed' (Wallace & Hodel 2008:217). However, the term 'contem-

plative inquiry' can be misleading if it is not preceded by the qualifying term 'non-conceptual'. This is because it can suggest an activity of thinking, which it is not; rather, it is an interior, non-grasping, choiceless awareness (Krishnamurti 1992).

Furthermore, while mindfulness is regarded as a type of meditation, it is not a meditative practice that is centred on stilling the mind, pursuing altered states of consciousness, or in any way goal-oriented. Mindful practice, ontologically, is simply about recognising that there exists, prior to thinking, the fact of being aware (Corrigan 2006), and thereby loosening the hold that thinking has as a medium through which we view reality. This includes viewing reality with all its attendant distortions; the primary one being that there is a separate self. For this reason *seeing* rather than *meditation* is the preferred term to describe mindful practice, because it avoids the accumulated cultural baggage that comes with the latter.

Kingsley (2003) explores the possibility that in the beginnings of Western philosophy, especially in the work of Parmenides, the ancient Greeks practiced a form mindfulness called '*Mêtis* …. It meant a particular kind of awareness that always manages to stay focused on the whole' (2003:90). But it is also Kingsley's contention that later philosophers, like Plato and Aristotle, reinterpreted Parmenides' teaching to be one of utter rationality in the service of logical thinking. While it may be tempting to ascribe to this re-interpretation – very different course of philosophical development in the West as compared to the East – it may be more meaningful to see the attitude to mindful practice as a psychological expression of the thinking process itself. The thought, with its constructed sense of self, is threatened by any process where it is not the dominant mode of being. And given the development of intellectual traditions in the West, with their strong emphasis on a rational, positivist approach to uncovering reality, it is not surprising that even with the rise of phenomenology and the focused interest in human experience, there was still no inquiry into non-conceptual awareness. Varela *et al* comment that the inquiry was done 'in a purely theoretical way' (1991:19).

Goode's (2007) survey of nondualism in Western philosophy also reveals no tradition with a specific gesture towards mindfulness (although there may have been similar but non-theorised forms in certain contemplative traditions). It is arguable that the concept perhaps only took serious hold with

the teachings of Krishnamurti (1992) and the introduction of Buddhism to the West, and the impact that these had on Western psychologists (Epstein 1995; Almaas 1986; Crook 2009) and integral philosophers like Wilber (1995; 2004). These teachings were reinforced by the English nondual teacher and writer Douglas Harding (1979; 1986; 1997) with his highly innovative *seeing* experiments. And at present, the rising phenomenon of neo-nondual teachers in the West is contributing to a greater popular practice of mindfulness. But as yet, in Western academic disciplines, there is very little interest by the social sciences, except in transpersonal psychology (Davis 1998) and perhaps within certain approaches to cognitive therapy, where the interest is mainly therapeutic. There are two notable exceptions with the publication of the books *Presence* (2004) and *Theory U* (2007) by academics at the Massachusetts Institute of Technology, where the focus is on social change rather than therapy.

Within a scholarly exploration of the Eastern philosophical expressions of nonduality, Loy's (1988) study, *Nonduality*, is definitive, while he has also presented a compelling treatise on Buddhist social theory showing that mindlessness, both ontologically and epistemologically, has created a world driven by 'the three poisons: greed; ... ill will; ... delusion' (Loy 2003:28).

However, there is one discipline in the West where mindfulness is seriously researched, and this is in the cognitive neurosciences. The fairly recent publication of Siegel's *The Mindful Brain* (2007) outlines the current neuroscientific research that validates the importance of mindful practice:

> The role of mindful awareness is to enable the mind to 'discern' the nature of the mind itself, awakening the person to the insights that preconceived ideas and emotional reactions are embedded in thinking and reflexive responses that create internal distress. With such disidentification of thoughts and emotions, by realizing that these mental activities are not the same as 'self', nor are they permanent, the individual can then enable them to arise and burst like bubbles in a pot of boiling water (Siegel 2007:77).

This captures one of the primary interests of neuroscientists in the field, i.e. how the practice of mindfulness creates psychological well-being,

which is the research mapping the neural correlates of states of consciousness. With the recent founding of the NeuroLeadership Institute in the United States, with its own academic journal, a slowly emerging pattern connecting mindfulness and interdisciplinary studies can be observed, where the scientifically validated outcomes of mindfulness are being extrapolated to areas of social action, such as leadership and action research for social change.

In the 2008 and 2009 issues of the NeuroLeadership Journal, four articles focused on mindfulness: Tang and Posner (2008); Hassed (2008); Love and Maloney (2009); and Siegel and McCall (2009). These ranged from discussing the value of mindfulness on well-being and performance, to drawing the connections with enhancing the capacities of leadership. Siegel and McCall's article is of particular importance to this paper, with its emphasis on the 'interdisciplinary inclusiveness' (2009:23) of the inquiry into mindfulness, which Siegel terms 'mindsight'.

However, it is noteworthy that the current work on mindfulness from a neuroscience perspective does not touch on the core quality of this nonconceptual awareness. This form of awareness collapses the subject-object duality and the apperception that there is no separation between observer and the observed. This insight goes beyond even the conceptual terrain of systems thinking, which has yet to shake off completely its origins in reductionistic positivism and objectivism, although the developments in soft systems thinking hold promise for a more rigorous interrogation of consciousness and other ways of knowing, which meets what has already been accomplished in the philosophy of nonduality. But a materialist worldview is – overtly or covertly, consciously or unconsciously – at the heart of most academic disciplines. Readers are alerted to Wilber's (1995) critique, especially the false knowledge claims of scientific positivism, and like Wilber, I would add that post-modernism, for all its advances in erecting meta-critical platforms for investigating all kinds of truth claims and providing alternative conceptual lenses, is nevertheless still a theoretical enterprise and not an experiential one. From a nondual point of view, all thinking is essentially about objectifying experience, that is, making conceptual objects or conceptual *things*, which are often mistaken for self-existing realities. The German word for think, *denken,* shares the same etymological root as the word *thing*. Mindfulness reveals that all our thinking is prone to this illusion.

However, this must not be seen as a rejection of the scientific method, but understanding, as Harding (1997) shows, that there are two rigorous ways of knowing, which are essentially contained in two kinds of science. The first is the science of the third person (our current science of the objective world), and the second is the science of the first person, where 'the next stage will be about reconnecting and integrating the rigor of scientific method with the richness of direct experience [mindfulness] to produce a science that will serve to connect us to one another, ourselves, and the world' (Senge *et al.* 2004:218).

Perhaps the concluding remark that captures the primary thesis of not just this section but the entire paper should come from a cognitive scientist: 'In mindful, alert awareness the differences between self and other, and the mind and its contents disappear. This is known as nonduality' (Blackmore 2003:389).

There are highly technical nuances and subtleties of difference in how mindfulness is articulated in the various nondual philosophical traditions. For the purposes of this paper, I have opted for a core generic definition contained within all the nondual traditions, both past and present: mindfulness as the recognition of nonconceptual awareness, where this awareness is prior to the fragmenting activities of thought, and which restructures the way we perceive ourselves and the world[1].

The LED Research Context and Mindfulness

The inspiration to introduce mindfulness into practitioner research arose when I taught the research module for a cohort of LED practitioners from KwaZulu-Natal who are pursuing a master's programme in leadership and LED. It was agreed that the most meaningful research projects for this cohort was some form of practitioner research, where their formal research projects could feed into enhancing their professional contexts.

The need to bring about an awareness of mindfulness in practitioner research is based on the view that the imperatives of the LED movement will be stunted by the historical forces at play; that is, we are bound to add more

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[1] This is a cursory sketch. A succinct practical guide to mindfulness as given here is to be found in Goode's book *Standing as Awareness* (2009).

mess to a messy situation, especially in the light of our world-wide recession. This is because we hold a perspective of the world and ourselves that is inadequate to meet our complex systemic challenges. Our dominant worldview is not only a materialistic one, but is one that treats the world as made up of discrete objects that need to be subjugated and exploited, especially as the felt experience for most of us is one of separateness. And with separateness comes fear and the need to protect oneself against the other. The Buddhist three poisons referred to earlier – greed, ill will and delusion – are the mindless expressions of this condition (Loy 2003:28).

Our world history is a testament to this fact, and our current ecological and social crises signal the effects of this perspective. We do not only need change, we need radical change. I am proposing that this change, first and foremost, is located within a change of ontological perspective, that is, how we fundamentally experience and know ourselves and the world. In this nondual perspective, ontology and epistemology are collapsed into one movement of Being-Knowing.

This paper, hopefully, will reflect the quality of the change needed by its very construction. The accepted academic model of research is itself located in the worldview described above; an insistent reductionism that is characterised by ever closer scrutiny of the part with a view to understanding the whole. In our social sciences tradition, these parts are largely the conclusions of others based in turn on philosophical inquiry or empirical research, or both. However, almost always research is conducted into the part and never the whole. This has its uses, but only in certain domains of knowledge, for example, technology (Wilber 1995); and this is useful where the findings of others present the original utterances of giants rather than the regurgitations of pygmies. With this in mind, I am writing this paper not only as a theoretical description of a research perspective for LED students, but the actual writing is the outcome of my own on-going self-study (Pillay 2009).

The writing is an outcome of *seeing* and not just thinking. In fact, thinking, as we normally experience it, plays a very small part in this current construction; there is flow and hardly any intellectual effort; this part (this writing) is subservient to the whole (which cannot be defined because it is not conceptual, but which can be pointed to). And the enigmatic character of these statements will hopefully become clearer as the writing unfolds.

However, one aspect of orientating oneself to seeing rather than thinking is that flow manifests as synchronistic occurrences (Jaworski 1996), and this has huge implications for doing the practical aspects of research.

For example, as I was writing this section, I felt that I needed a particular reference, and I as I searched my library for a particular book, I stumbled upon a book (April *et. al.* 2000), which opened to a chapter on awareness, which is the dominant exploration of this paper. I have no recollection of purchasing this book, let alone ever reading it, yet its timely appearance allows for this inquiry to be more firmly rooted in the innovative scholarly research of others. In this particular case, the book has added value because it emanates from the work of South African researchers.

More precisely, this endeavour is about deepening the practitioner research perspective, located as it is within the social change praxis of action research. Through this approach the LED practitioner researcher engages with concepts that allow for an emergent space to open, where there is a full spectrum engagement with oneself as the primary domain of research, because this domain, it is argued, is not separate from the larger collective.

This requires a text that hopefully engages rather than alienates. Firstly, the text is built solidly on a platform of persuasive argument rather than un-investigated assertions. Next, the text is informed by the research of others without blind acceptance. Thirdly, the text holds the understanding that both the poetic and the technical utterance are needed to effect the recognition that the goal of this form of practitioner research is finally about a *re*-cognition. In the latter process, the conceptual terrain is a servant in the service of a mindful awareness. Finally, the text is not the action of thinking – that is, incessant conceptualisation – but is prior to it.

It is important to note that only one academic research book actually approaches mindfulness as central to the research endeavour, but even here the discussion takes place in the chapter 'Additional Suggestions' (Braud & Anderson 1998:243) rather than in the main sections, although it is implied at the very beginning of the textbook. It is useful to note the authors' characterisation of mindfulness, because this reinforces what is being argued here:

> Mindfulness involves a clarity of perception, a clear and undistorting mirroring of the fullness of what reality presents. It is an abiding awareness, an integral awareness, an expansive awareness. It is also

a compassionate awareness – a compassionate awareness of actions, motives, and thoughts; a sweet and mellow feeling toward life and toward oneself, others, and all of nature (Braud & Anderson 1998*:*243).

Geake's *The Brain at School* (2009) exemplifies the current non-recognition of mindfulness in educational settings. While showing earlier that research into mindfulness is gaining momentum in the cognitive and neurosciences, it is rather surprising that there is no mention of it all in Geake's book beyond noting that there was a suggestion from an educational workshop that neuroscience should research whether 'meditation techniques in the classroom improve children's attention through enhancing executive control' (Geake 2008:19).

But meditation techniques do not necessarily have the same objectives or even the same worldviews, so this cursory reference to meditation cannot be construed to refer to mindfulness as discussed in this paper, where mindful research needs to be articulated in real world complexities where change – radical change – is needed.

Davis' work with mindfulness in ecopsychology (1998:8[2]) is important not only as an example of real-world mindful practice, but the domain of ecopsychology, especially in rural LED activities in South Africa, has great socio-environmental meaning for how we use our natural resources for sustainable development. Davis writes:

Ecopsychology is based on the recognition of a fundamental nonduality between humans and nature and on the insight that the failure to experience and act from this nonduality creates suffering for both humans and the environment.

The crucial question to ask is: Are LED practitioner researchers exposed to this perspective? And how can this be meaningfully enacted? Local Economic Development (LED) may appear to be one of the panaceas for our economic and development woes but, if the thinking that underlies

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[2] This page number refers to a PDF of the journal article available from http://www.johnvdavis.com/ep/thpeptp.htm.

the endeavour is still situated within an economic model of ever-increasing development and unbridled consumerism, then all we are ever going to have is the illusion of change, and not change itself.

To illustrate the above point, if somewhat simplistically: If one of the objectives of LED is about getting more foreign investment to create more factories to produce more plastic goods (from a talk given by a KZN municipal LED officer), what exactly is the nature of the development? In the short term we may count the creation of a few hundred jobs and the added flow of money into the economy; this, put simplistically, has always been the model of industrial progress, local or otherwise. But what are the systemic consequences when there is environmental degradation, eventual consumer satiation, and the hidden expansionist policies of a foreign nation (ill will, greed and delusion)? What are the consequences when the policies that do not factor these effects into account are themselves holding unconscious worldviews, which can be traced to an 18th century scientific paradigm?

Both our current capitalist and socialist worldviews can be traced back 'to the strong influence of the techno-economic base of *industrialization* and the machine mentality' (Wilber 1995:417) and there is little room in these views for a discussion of mindfulness. In the dominant worldview, thought is the nexus of experience, and any discourse which allows for a consideration of consciousness or awareness is relegated to the metaphysical/spiritual and not worthy of inquiry related to concrete reality. The arguments for this exclusion are based on the apparent inability to empirically verify consciousness through third-person science. But there are now compelling arguments for a first person science (Pillay 2007). However, this bias is still the *status quo*, although there are slowly emerging signs of a new perspective developing across a range of disciplines.

Whatever is emerging that may eventually challenge the dominant discourse, the larger terrain, however, is still held within the grip of a positivist outlook so that even pioneering works on mindfulness, within a Western scientific perspective, are approached from the objective of enhancing cognitive strategies, rather than being an ontological condition as given in Eastern philosophies and experiential practices (Langer 1989:78-79), where *thinking* is contained within *mindful seeing*. Seeing is variously described as: mindfulness/mindful attention in Buddhist traditions; self-

observation (Deikman 1982); choiceless awareness (Krishnamurti 1992); and Wilber (1995:357-358) credits St. Augustine with developing the concept of the 'interior Witness' in Western thought.

But the thesis being advanced here does not exclude the growing body of work of Langer and others, and sees this work as providing empirical evidence for what has loosely (and misleadingly) been termed 'mystical' (Stacy 2007: 92-93), but which, in fact, is just simply the condition of *being* (Scharmer 2007: 108), which we overlook because thinking conceptualises itself as one's primary identity.

Within the area of practitioner research, the first recently published text book (Fox *et al.* 2007) contains no concept that comes close to mindfulness as a practice for research. There is a brief reference to the positivist criticism about 'whether self-knowledge acquired through self-reflection or introspection is a valid form of knowledge' (Fox *et al.* 2007: 15). However, it is not clear within what domain self-knowledge is placed; is it referring to the ontological condition of being mindful, or to the conceptualisation of the thinking process? It is most likely the latter because mindfulness, until recently, has had no place in general academic discourse. As we proceed, we will see that mindful awareness and mental cogitation are two very different, but complementary, ways of knowing.

However, before we can understand more deeply the relationship of LED practitioner research to mindful research, we need to understand more clearly what *mindlessness* is.

Understanding Mindlessness

Simply put, mindlessness is the act of not paying attention to the here and now of one's experience. Thinking dominates the experiential field of awareness, and while the thinking process may set up the illusion of being attentive, the very act of thinking, without standing back and witnessing one's thinking, is a fundamental form of being mindless.

However, the work of Langer (1989; 1997) provides more accessible examples of mindlessness within the domain of enlargening positive cognitive strategies. We can relate more easily to these examples because they are still within the realm of the conceptual; true mindfulness does not exclude the conceptual, but is emphatically non-conceptual. An apt analogy

is that of a bowl (the condition of being mindful) holding its contents (which are the processes of thinking and the concepts which arise from this). A simple example of a mindless action is taking a learnt behaviour into a context where it does not apply. For example, drivers accustomed to driving on the left side of the road need to be alert to their driving habits when driving in countries where the right side is legal. Being mindless in this situation could be fatal.

At a deeper level, mindlessness occurs 'when we rely too rigidly on categories and distinctions created in the past' (Langer 1989:11), which Scharmer (2007:37) calls 'downloading patterns of the past'. A particular delusion arises from this; we mistake the conceptual perspective for the actuality itself. When we defend our point of view, we are actually defending a story.

Towards Mindfulness for the Practitioner Researcher

In Scharmer's Theory U model, the journey of inquiry and transformation can only begin when we learn to suspend our mental models (Senge 1990: 8), and when we develop the capacities of seeing, sensing and presencing (Scharmer 2007:37).

Theory U is a pioneering work because mindfulness is the focus of an ontological journey which intersects with different ways of knowing, and unlike Langer's work, explicitly honours the larger ontological enterprise of bringing presence (that is, being mindful or choicelessly aware) into being through dedicated practices like awareness training (Scharmer 2007:408).

Let us now briefly understand the different ways of knowing described by Theory U so that we can see their relevance to practitioner research. The first movement is the active suspension of the habitual downloading of mental models from the past, and Scharmer views the downloading phase as an egocentric condition 'I-in-Me' (Scharmer 2007:11). While there are legitimate life conditions that require the I-in-Me self-interest phase (for example, physical security), by and large the incessant identification with 'me and mine' constructs identities of self which limit collaboration to a very narrow field of action, and is essentially self-centred in character. In public life these play out in party politics with their competing ideologies and their essentially destructive nature. For the LED

practitioner researcher, this phase will be the most challenging, because we are normally oblivious of the psychological identities that are formed through the course of a life's social conditioning. For example, the LED context is one of multiple partnerships in the service of local social development. These partnerships cannot be decided by self-interested ideological perspectives, but by the emergent needs of the context, however, this is easier said than done. Being unaware of the psychological investment in a particular ideology, something more than self-reflective critical thinking is required, so that fearful reactions to opposing points of view are seen objectively rather than subjectively. This requires the movement into 'seeing', a term which I am now using in Scharmer's sense, rather than as a synonym for mindfulness.

The seeing phase of the U-model requires the individual and the group to consciously engage in seeing the problem situation as part of a larger natural and social context, leading to what Scharmer terms 'Open Mind' (Scharmer 2007:15). This is still an oppositional phase (I-in-It), where the social conversations are dominated by debate, nevertheless, it is more meaningful because there is at least an acknowledgment of the other; it is not only about me and mine. This acknowledgement may be antagonistic, which our current social institutions reflect through relationships, and to which our postmodern response has been to invest in the intellectual process of critical thinking. The response is an exercise of close intellectual discrimination, usually involving varying forms of conceptual deconstruction and reconstruction. This phase is dominated by mind, but in a much more discriminating, critical sense.

Within the research arena, especially action research, which is the umbrella paradigm for practitioner research, critical thinking is the foundation of the research endeavour as it is in all forms of social sciences research. What marks action research as a process of social change is the framing of critical thinking as the bedrock for the iterative experiential learning cycles which, it is theorised, will result in incremental social change. In other words, action research is about action which is informed by critical thinking.

In Scharmer's seeing, all of this is necessary, but the U-process stretches the concept of seeing to go beyond mere intellectual seeing. Nonetheless, the process includes actual empirical observation, like that of

the natural scientist, where there is an inner standing back to observe closely and objectively, without the movement of the past interfering with the seeing in the now. This seeing anticipates the third movement of the process.

The U-process's third movement, sensing, is an original contribution to action research. Conventional research processes have no equivalent for sensing because you will only find instances of this experiential practice in certain spiritual and artistic traditions, which are focused on developing mindfulness.

In this practice, sensing is the mindful awareness of the total functioning of the physical senses – which are habitually ignored, and which, in the mindful view, leads to *ignorance* – with the outcome being that of breaking down the false duality of self and other. Sensing is really about being embodied through the full functioning of the senses. This process entails allowing a non-judgmental awareness to completely accept whatever is occurring; that is, if one is tasting, then there is complete attention to what is being tasted. And if there is pain, psychological or physical, there is no resistance to it, and if there is resistance then there is an acceptance of this resistance. The experience is then not split into mindless mental activity *and* the particular sensory experience; dualistic experiencing is transcended in the moment by nondual awareness.

Sensing is somewhat paradoxical, in that one would think that complete attention to the physical senses would increase self-preoccupation, but in fact it does not because nondual awareness has no sense of separation within it as do the constructs of thought. Harrison (2002: 90) clearly defines the distinction when he writes that 'the challenge is to introduce this in a way that shifts the perspective from that of thought/ me to awareness/ us'.

Scharmer offers dialogue as the active conversation of this phase, where dialogue is about suspending one's point of view in order to see the situation through the eyes of the other. This 'I-in-You' phase is essentially the real beginning of the breakdown of our conceptual dualistic distinctions and is characterised by empathic listening and deep learning. In this fully embodied state we are more like performing artists acutely attuned to each other in the act of creation; there is actualised mindfulness with its outcomes expressing creative responsiveness. And yet, all of this is occurring without the habitual isolating self-sense normally produced by mindless thinking.

The felt experience is of one being moved by the field awareness

rather than acting upon it in a manipulative way. Expressions of this apparently counter-intuitive experience (counter-intuitive because it is radically different to our self-centred mode of wanting to control experience) can be found in the literatures and artistic expressions of all cultures down the ages (Katz 2007). In the U-model there is, perhaps for the first time, a detailed critical description of this mode of mindfulness which is outside the poetic expression or the scholarly scrutiny of mysticism, but firmly located within an experiential process that is employed in business and social change settings.

For the LED practitioner and researcher this involves the cultivation of a global, non-isolating awareness that is a prerequisite for entering into a meaningful, constructive dialogue with social partners, each coming with their own agendas. The phase of sensing offers a rich field of research into what kinds of processes will work best to facilitate the flowering of a collective wisdom amongst the participants, but it also throws up challenges for an integral learning that has not been part of our mainstream education.

In their recent work *The Power of Collective Wisdom*, Briskin*et al.* (2009) provide examples of how groups can display both profound wisdom and debilitating folly. The former arises when a creative field of potential is nurtured through mindful practices, which break down the sense of separation; folly arises when groups proceed to entrench narrow self-interests and are located in the I-in-Me and I-in-It modes of being.

The journey from sensing continues to *presencing*, which is characterised by letting go in order to let come; it is a contemplative phase of being immersed in an alert mindfulness – the I-in-Now – in order to sense what the future wants to unfold. And to the mind conditioned by linearity, this makes no sense, unless we apperceive the fact that time is a construct of thought. Again, experiential exercises can provide a deeper understanding of what appears to be highly counter-intuitive, and while it is not necessary to have intellectual proof first for mindfulness to be present, it does help to challenge the argument that this is the terrain of the esoteric. On the contrary, the case studies provided by Scharmer and others show just how rooted this perspective is in the realities of everyday life. The difficulty is not in the practice, but in the adherence to taken-for-granted assumptions of what we think is true.

Even at a very simplistic analytical level, we do not normally see that

we are moved by the future. I am writing this now in order to contribute to a journal article in the future. The future, in this sense, is orchestrating this writing. But in actuality even this is untrue from an ontological perspective; the past and future are constructs of thought, there is only the *now* in which the movement of time appears to take place. Again, thought cannot perceive this, but mindful awareness can.

For the LED practitioner researcher, this would be engaging in action research of a qualitatively different order altogether, where transformative social action arises through the following:

- Suspending out-dated mental models;
- Nurturing an embodied relationship to the world;
- Sensing that I am not separate from the world;
- Consciously surrendering to mindful unknowing (without abdicating critical thinking);
- Allowing the generative field of the collective to unfold the new;
- Developing prototypes of new social processes; and
- Engaging in continual cyclical learning.

The above summary is a description of where the practitioner research endeavour needs to go if it is to transcend current *praxis*. This is not being dismissive of what practitioner research holds as its fundamental vision, that of bringing about change. What is being argued here is that this vision requires a radical re-assessment of where the nurturing of this change is actually located.

In the book that I found synchronistically (April *et al*. 2000), the dominant theme is that of awareness as a meta-cognitive skill. Essentially, it is arguing for similarly described capacities to be developed as given here for mindful research. The book is about awareness and leadership, and this paper, ostensibly, is about mindful research for the LED practitioner-researcher, but both explorations are, finally, about the development of latent human capacities that are seen as essential to meeting our complex adaptive challenges. The fundamental capacity to be developed is a new way of seeing, which is located first in mindful awareness, and then in the process of

critical thinking. Are there actual differences between the concerns of leaders in general and LED practitioners? Are not the latter leaders of necessary social action?

As different disciplines converge with similar understandings of what it means to be fully human in a complex world, where such a complexity may actually be, at the social level, an outcome of our mindlessness, we no longer have the luxury of holding onto questionable shibboleths, however fanciful the academic dressings that support their continued existence may be.

Conclusion

I have argued in this paper that LED practitioner research is one obvious example in both postgraduate education and actual real-world practice where mindfulness in research would benefit the social change enterprise.

From the discussion of mindfulness and the discoveries of neuroscience, we can list at least three levels of value in engaging in mindful practice. Using the LED practitioner researcher as an example, we note that the first level of bringing psychological well being to a profession that is very stressful[3] can only enhance research and professional competence. The research in the neurosciences attest to the positive psychological outcomes produced by mindfulness (Siegel 2007).

The second level is concerned with cognitive strategies for recognising limiting mental models in order to see the problem situation with greater systemic clarity. There are a number of effective processes that can be used in the service of cognitive restructuring. An elegant example is The Work of Byron Katie, which is a process of self-inquiry using four questions to inquire into a firmly-held belief (Pillay 2001).

The third level, as emphasised in both the perspectives of nonduality and Theory U, is living from the field of nonconceptual awareness (that is, Being/Presence), which deconstructs the sense of separation from the world and begins to heal the attendant problems that such a condition gives rise to.

However, it would be very naive to assume that such a programme of

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[3] My knowledge of the stressful nature of LED practice comes from my direct engagement with LED practitioners from local municipalities.

radically restructuring perception and values can happen without threatening deeply-rooted structures of consciousness, that is, the movement of thought with it constructed sense of identity and duality, which then play out in the way social forms perpetuate themselves. In Blackmore's meme theory (1999; 2003), the root is the un-investigated illusion of self. And being mindful of 'your own experience does not reveal a solid world observed by a persisting self but simply a stream of ever-changing experience, with no obvious separation between observer and observed' (Blackmore 1999:236).

This is an important inquiry, not just for LED practitioner researchers, but for all human beings. LED practitioner research, however, given its imperatives for sustainable development and social change, might just be the area in educational and professional practice where this perspective has some chance of taking hold.

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Student Challenges in a
Virtual Collaborative Learning Course
Spanning Multiple Countries

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Abstract

Web 2.0 technologies have been instrumental in the development of a new collaborative learning space called Virtual Learning Environments. There are a variety of challenges in virtual learning environments, including team issues, technological problems and pedagogical practices. However these challenges can be broadly grouped into student challenges and lecturer challenges. Virtual Worlds such as Second Life (SL) and Social Learning Networks have provided many opportunities for lecturers to explore these challenges and ways of overcoming them. This study focuses on student challenges in these environments.

In terms of the findings of this study, student responses were generally positive, with 77% of students finding international collaboration on their project beneficial. In addition, they report spending more time on the course and exerting more mental effort. They are satisfied with the organization and scaffolding of their learning but are still overwhelmingly dependent on campus computing resources, which is a limitation. The limitation points to the potential value of a beta-mindset approach supported by scaffolded learning. This research reports on the experiences and lessons learned during a virtual collaborative learning experience in an Honours module involving fourth year Information Systems and Technology students at both the University of KwaZulu-Natal in South Africa, and Applied

Computer Science fourth year students from Daystar University in Kenya. The research was conducted in March and April 2010. This paper explores the academic, operational and technological challenges, from a student perspective.

Keywords: Collaborative learning, virtual learning environments, virtual worlds, multiple-country, Gen Y, beta-mindset, scaffolded learning, Second Life

Introduction

A virtual learning environment is a system where educational interactions are managed in an online environment (Dillenbourg 2000). Technology has the capability of bringing together individuals who are geographically dispersed in both educational and organisational contexts (Dickenson, Pedler & Burgoyne 2009). Students in a virtual team can be geographically spread, work in different time zones, and may possibly never meet face-to-face. Virtual teams depend on asynchronous collaboration tools such as fora and email as well as synchronous collaboration tools which include video-conferencing, chat and other interactive technologies tools to support interaction between team members (Lam *et al*. 2005).

In addition to allowing for collaborative learning engagements, virtual learning environments provide an ideal platform to implement alternative educational pedagogies. Educationalists have over the years postulated a range of educational pedagogies. The two points of reference against which a variety of other theories can be positioned are Instructivism and Constructivism . Instructivism, the classical approach used in the classroom, is based on an objectivist theory of knowledge (Reeves 2008). In this mode of teaching the instructor provides some form of formal instruction to a class while the learners remain largely passive (Gulati 2004). The other end of the scale is characterized by the constructivist paradigm: students are placed at the centre of the learning activity, where they construct the knowledge themselves (Gulati 2004). Constructivism is based on the premise that we all construct our own perspective of the world, through individual experiences and schema. Constructivism involves the use of more active forms of classroom interaction that engage the student in the process of learning (Gulati 2004). Further studies highlight the role of social

constructivism. Brown and Adler (2008) found that one of the strongest indicators of students' success in higher education is their ability to form, or participate in, small study groups and hence socially construct their knowledge. Traditional learning environments are, however, often not suited to implementing social constructivist approaches (Quilling & Blewett 2009). Virtual learning environments, and in particular 3D virtual worlds, seem to provide an ideal constructivist platform. This is possible because such environments impose few limits on students' possible learning experiences.

In addition to removing the limitations of physical time and space, virtual learning environments can be transformative learning spaces as they allow students to set aside those elements of their culture and context, which they may find constraining. This can include physical characteristics such as race and gender as well as cultural norms of behaviour, such as exhibiting deference to those in positions of authority and only speaking when formally addressed. Lecturers find it challenging to provide this opportunity to students, as it requires a space that provides a highly immersed experience, not just a virtual- or blended- learning experience. The opportunity to work in an immersive medium as well as working with lecturers and students from another university allows for even greater anonymity as well as greater student- context- and content diversity.

These perceived potential benefits have resulted in a project called NextEd, which has been running at the University of KwaZulu-Natal over the past 3 years. With the support of funding from the Association of African Universities (AAU), the project sought to investigate how Web 2.0 social computing communities could be used to support learning in Africa. A number of virtual courses were run involving staff and Honours (fourth year) students from the School of Information Systems and Technology at the University of KwaZulu-Natal, Westville, South Africa, and Applied Computer Science Honours students from Daystar University, Nairobi, Kenya. During the four phases of the project (each phase lasting one semester), the project attempted to develop both a model and supporting principles for effective engagement. The project resulted in policy briefs relating to the institution, the lecturers, and the students. This paper focuses on issues relating to the students, in terms of academic, operational and technological challenges.

Literature

The implementation of social constructivist pedagogies through technologically mediated platforms is still in its infancy. The lack of understanding and application of this pedagogy is intensified by a lack of experience and training in using new technologies to support new approaches (Dickenson, Pedler & Burgoyne 2009). Educational research suggests social constructivist approaches as a way to 'reach' students. Historically though, this has been difficult to implement. However, the current confluence of the way we approach learning (social constructivism), available platforms (Web 2.0), and the generational profile of students (Gen Y) provides an opportunity to align appropriate teaching paradigms and the vehicle for educational delivery in a way that would appear to suit learners (Quilling & Blewett 2009).

The challenges of working in virtual environments (VE) can be divided into those experienced by the lecturers and those experienced by the students. However, many of the challenges are experienced by both lecturers and students, the perspectives and approaches to these challenges can be vastly different. The key challenges experienced by students can be loosely grouped into those relating to academic, operational and technology issues (Blewett & Quilling 2010). These challenges are introduced in the following section.

1. Student Academic Constraints

Academic challenges relate to those issues that impact on the students learning experience, such as adjustment to the adopted pedagogy, learning to cope in an academic virtual environment, and the challenges of working in virtual teams.

1.1 Learning Curve

The first academic challenge is that there is a steep learning curve for most of the participants. While students are often familiar with Web 2.0 technologies, the environments and implementation of these environments to teaching are new to most students. It is important for the students to be made to feel as comfortable as early as possible in the virtual environment. This

allows them to be more focused on the learning objectives and experience, rather than focusing on the platform on which they are engaging. This requires time to be spent in 'orientation' sessions with the students, before the formal course content begins. This approach is supported by Zhang (2009) who reports a steep learning curve in Second Life. Adequate time for orientation sessions may not always be available, as the timing of content needs to meet the time tables of all the institutions involved Additionally, students may not have the notional study hours available to allow them extended periods of orientation for foundational elements that are not related directly to the course content (Blewett & Quilling 2010).

1.2 Team Issues

Central to the student experience is their involvement in team-based work in the virtual environment. For the majority of students, experiencing cross-cultural virtual groups and the associated dynamics presents a challenge of its own. As the group size starts to increase (beyond five members) so too do issues with individuals not performing as they should. While this may also be true in real world groups, the frustration experienced by group members who cannot contact non-performing members creates additional tension in the group (Blewett & Quilling 2010).

According to Rayner (1997) there are three key challenges in virtual teams: incomplete communication, limited ability to build relationships and the complexity associated with distant interactions. The first challenge is that there is incomplete communication. While all teams (both real world and virtual) suffer from communication challenges, the problem is often worse in virtual teams. This is because in virtual teams most of the communication is non-verbal and mediated through digital channels, leading to an increased likelihood of misinterpretation.

Secondly, there is limited ability to build relationships. A major factor that divides members of a virtual team from traditional team members is that with the former it is harder to get to know other members on a personal basis. Virtual teams lack the informal communication that exists among traditional team members. Among traditional teams significant statistical relationships have been shown to exist between measures of academic performance and factors relating to friendship and advice (Yang & Tang 2003).

The third challenge faced by international virtual teams is the added complexity of distant interactions. For instance, with a traditional team, setting up a meeting is reasonably easy, as the members tend to be within reasonably close physical proximity. With a virtual team, setting up the same meeting could be a great deal more difficult owing to time zone differences and other localized demands and challenges.

2. Operational Constraints

In addition to the academic challenges experienced there are operational constraints, which relate to the timing of collaboration based in different institutions, countries or time zones even. Project management of the course itself and the interactions with, and among students may also prove challenging (Shea *et al*. 2010).

2.1 Time Investment

One of the key operational challenges is the time investment required by all parties involved in this type of collaboration. This is linked to the academic constraints outlined above. In order to become comfortable with this new form of collaboration, any collaborator (both lecturer and student) will of necessity have to invest time in addition to their normal workload, or notional study hours. The time constraints are often exacerbated by differing semester calendars and requisite commitments of the students from the participating institutions. Another aspect that creates complexities is when the participating institutions are located in vastly different time zones. This not only creates team issues but can make the management of team work and submissions more complex for students (Blewett & Quilling 2010).

2.2 Number of Students

Another challenge faced in virtual environments is the number of students that need to be dealt with simultaneously. Due to the relative ease with which collaborations between multiple institutions can be established, the collaborative virtual course could easily involve 40 or more students. The size alone creates issues of management, in addition to the technological issues discussed later. This is equally challenging for lecturer and student alike.

3. Student Technology Challenges

While academic and operational challenges faced by students tend to complicate the virtual engagement, technological challenges can, if not addressed, completely stall or stop the virtual course.

The basic underlying premise of the NextEd project is that leading edge technologies centered on Web 2.0 will form the basis of education in future. Besides, such technologies are also key to helping address the digital divide. However, while these cutting edge technologies offer many exciting solutions to problems, they also bring numerous challenges.

Research conducted by Yiong (2008) found that e-learning acceptance by students was higher when the virtual environment experienced minimal technical issues. As such, attempting to launch a course in a stable virtual environment is deemed highly desirable for the perceived success of the course. However, this flies in the face of one of the underlying tenets of Web 2.0: its beta nature (O'Reilly 2007). Web 2.0 technologies are in a constant beta state as they are continuously being developed, evolving to meet new user demands. This means that users need to have the ability to adjust to unstable, changing environments and approaches (Rollett *et al.* 2007).

While stable platforms may appear to be desirable for perceived student acceptance, nevertheless it is assumed within a Web 2.0 environment that there is a high likelihood of technological challenges being experienced. Therefore, rather than building rigidly structured courses on stable and well-established platforms, fluid and adaptive courses need to be developed on shifting and advancing technological platforms. Tools are employed to support collaboration based on both current and prior experience. If the tools are found to be flawed, they should be replaced. Each engagement is seen as an opportunity to build on prior interactions, and where critical challenges arise, alternative routes and mechanisms are explored in subsequent iterations. Thus, each engagement with a specific technology is not cast in stone. Rather, the decisions about which technology to employ, and potentially changing the technology employed during the running of a course, are embraced as part of the model of engagement.

NextEd collaborations occur between parties who have self-identified their technological readiness and the potential platforms which they feel they are able to sustain on the behalf of students and lecturers alike,

for the duration of the shared project. However, despite such collaboration, technological challenges are still anticipated and experienced.

Previous NextEd projects (Blewett & Quilling 2010) have recorded student complaints regarding lack of Internet connectivity and technology barriers. This included projects in 2008 and 2009, as well as for students in African and American contexts. These responses appear likely to recur, as the nature of this type of course is highly reliant on the web2.0 technology being implemented, and students' ability to accept the less stable nature of such platforms. From an academic perspective, however, it is hoped that students' benefits from such contexts are greater than the challenges experienced. If this proves not to be the case then perhaps this approach could be seen to be academically flawed.

Research Questions

Based on the outcomes of prior studies, both within the NextEd project collaboration and within the literature, the research questions posed in this paper are:

- What challenges do students experience in a collaborative, multi-country virtual learning environment?
- How do students perceive the impact of a collaborative, multi-country virtual learning environment on their learning experience?

These issues are explored specifically in terms of potential academic, operational and technological challenges.

Research Methodology

The paper deals with the 2010 collaboration between IS&T Honours students on the Computer Mediated Communication (CMC) module at the University of KwaZulu-Natal (UKZN), South Africa, and the Applied Computer Science Honours students on a Human-Computer Interaction (HCI) module at the University of Daystar, Nairobi, Kenya. The collaboration centered on a single topic within the modules and related to working within Second Life. The objective was for students to develop and explore the relevance of

various HCI-related issues in education, business and entertainment within Second Life. The collaboration covered a four-week period, running from 18 March 2010 to 19 April 2010.

Overall 44 students were involved in the collaboration. Of these, 28 were based at UKZN and divided between the two campuses on which the module is offered: 18 on Westville campus and 10 on Pietermaritzburg campus. The remaining 16 were from Daystar, Kenya. Due to practical constraints within the Second Life environment, many teams could not be supported on the NextEd Island. As a large number of students needed to be accommodated, they were placed in teams of six or seven members. Team members from three different sites were split roughly as follows in an attempt to create teams with roughly similar geographic memberships: two students from Westville (UKZN), 1 from Pietermaritzburg (UKZN) and three from DayStar.

Two virtual platforms were used for the course. The first was Second Life and the second a Social Learning Network (NextEd Ubun2.0) implemented through Ning (http://www.ning.com). Second Life was used as a 3D virtual space for students to engage in real-time collaboration while experiencing issues relating to communication and development in a virtual world. NextEd Ubun2.0 was a social learning network that was set up for the students to establish a virtual presence on their own page, besides sharing their learning through such means as blogs and discussion fora.

The teams were each tasked with focusing on theoretically and practically exploring the process of developing in a 3D environment (Second Life). This included reflecting on their individual experience in relation to the theoretical positions presented in the literature they initially explored. Student teams were required to build communes in Second Life. Team members developed individual spaces but were also required to collaborate sufficiently to allow an integrated space to develop, with the hope that it would meet all the needs suggested. To this end blogs on individual progress reports were posted in NextEd Ubun2.0, together with course-related discussions with lecturers and tutors.

Contrary to a conventional development project, students were not required to formally elicit requirements from a client. Instead, in order to allow them a measure of flexibility, they were allowed to determine the functional requirements they felt would be important, with input from the

class and lecturers. The construction of communes allowed students to actively experience the virtual environment in accordance with constructionism pedagogies (Resnick 1996). This experience was then described in individual reports, with reference to the blog posts they had published. Assessment included the two reports and the marking of the communes in the virtual world. These assessments included individual, group and participation elements.

As part of the review of the collaboration a survey was run from the May 3 2010 to the June 4 2010. Of the 44 course participants, 31 students responded to the online survey. The questionnaire that was used included questions relating to student motivation adapted from the IMMS survey (Keller 1983) as well as questions relating to technology acceptance. However, only those questions that provide insight into the challenges experienced by students are considered for discussion here.

Results and Discussion

This discussion will provide some demographic introduction to the student group. The discussion will also focus on challenges faced by students in the context of the issues highlighted in the literature review, namely, academic, operational and technological challenges.

Fifty eight percent of respondents were younger than 23 years, while all students were under 27 years. This identifies all students as being Generation Y or Net generation students, as they were born from 1982 onwards (Oblinger 2003). In addition, 71% of the sample was male while 29% was female. This was by no means unexpected, and indicates that IST is a largely male-dominated discipline. By way of an example that supports this problem with diversity, in 2005 only 22% of US undergraduate computer science degrees were earned by women (Klawe *et al*. 2009).

1. Student Academic Challenges

As mentioned earlier, academic issues are where most of the challenges are faced by students engaging in this new learning environment. Next we discuss our findings relating to academic issues experienced by students, viz. Learning Curve, and Virtual Collaboration/ Team Issues.

1.1 Learning Curve

Yiong (2008) found that stable environments where students are comfortable improves student acceptance of the course. However, as was argued earlier, the beta nature of Web 2.0 environments requires students to learn to adapt to new environments. Figure 1 indicates that students seemed to easily adapt to the online environments, despite this being their first experience with such a learning environment. At least 87% of students agreed or strongly agreed that it is easy for them to remember how to perform tasks in the social learning network (NextEd Ubun2.0) used during the collaboration.
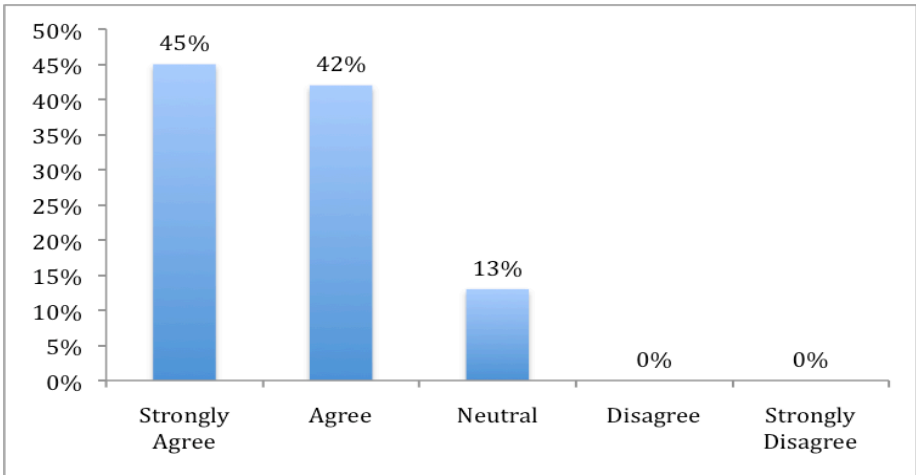
Figure 1: It is easy to remember how to perform tasks in the social learning network

Generation Y students are typically characterized by their ability to adapt to changing situations and to learn by discovery (Oblinger 2003). As such it is not surprising that students were easily able to learn how to perform tasks in the new environment. Additionally the Social Learning Network has many similarities to social networks such as Facebook. As was expected, this too contributed to the students 'comfort' with the learning environment. In addition, one could reasonably assume these students are studying in a computing discipline and are more familiar with and can adapt

more easily to various computing contexts. However, the fact that they are quite young and studying in a computing discipline would not automatically ensure that they would find this 'easy' as they are still out of their learning comfort zone. This extremely positive result is thus of interest and can serve as a comparative basis for lecturers in other disciplines engaging in similar activities.

1.2 Virtual Collaboration

A key perceived benefit from the lecturer's perspective is the richness and experiences gained from international collaborations. However, what is unknown is how students perceive virtual collaborations involving students from different countries.
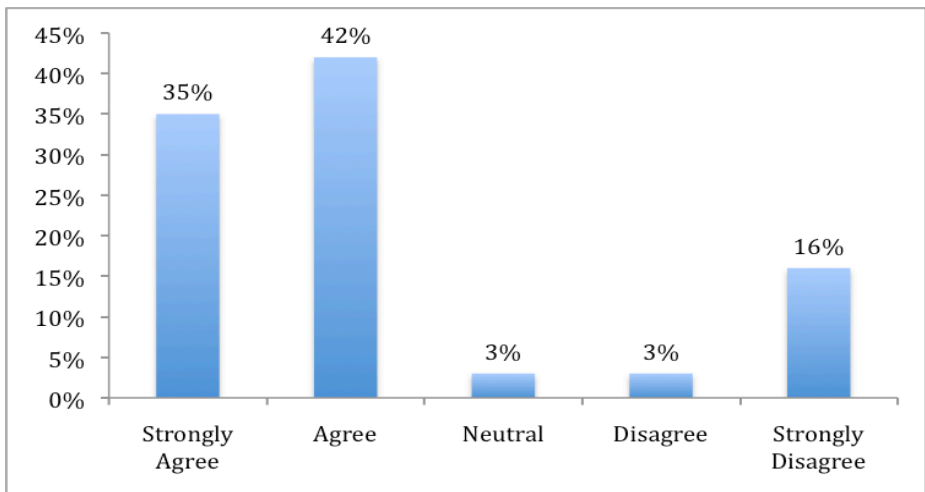
Figure 2: It was beneficial having international collaboration

Figure 2 above indicates that most students (77%) agreed that having international collaboration was beneficial in that working with team members from another country enriched their learning experience.

A study by Wallin, Hildebrandt and Malik (2008) also reports that international collaboration is enriching for the students involved. A small percentage (19%) of our research cohort appeared not to see this instance of

international collaboration as beneficial. Such a perspective, however, may be symptomatic of issues relating to teams and operational challenges, discussed below. This may also be a reflection of personal learning styles and students' preferences for specific pedagogical approaches. Interestingly, the responses are somewhat bimodal in distribution, reflecting that students will either enjoy or not enjoy international collaboration. This points to the likelihood that the responses are impacted by students comfortable with team learning.

When students were asked whether the international collaboration enriched their learning experience (Figure 3), 61% agreed or strongly agreed. Once more, this demonstrates that from the student perspective, even though team and other challenges are intensified in virtual environments, the perceived benefits are also greater.
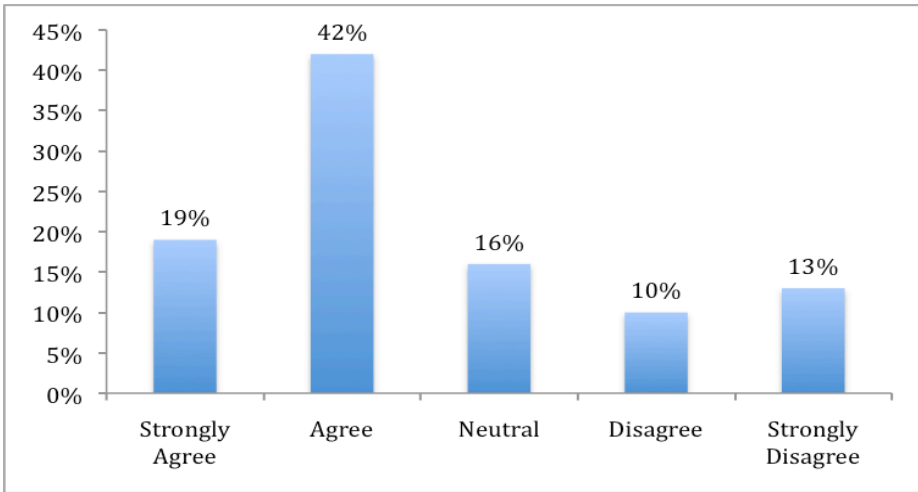
Figure 3: Working with team members from another country enriched my learning experience

When the students were required to make a judgment on the impact of collaboration on their learning it is apparent that there is a better spread of responses in Figure 3 than in Figure 2. Other factors may account for this, such as how much effort team members put into the work, or perceptions regarding the value of team members. These additional factors, not

surprisingly, have prompted some students to be more cautious in their assessment of collaboration.

As has been mentioned, it is likely that underlying personal preferences about group work are being reflected in these results. Students were questioned about this issue in an attempt to assess their underlying preferences about group work. Students were asked to respond to the following statement: 'I feel there should be more individual work and less group work.' The results were not conclusive about whether students preferred group work or working individually: about 48% preferred individual work, 16% were neutral and 35% supported group work (Figure 4). Numerous factors could influence student opinion in this regard and it is possible the mechanism used to select groups played a significant role. In this case, students were grouped according to how much they participated in weekly activities. Students who participated a great deal were grouped together with equally active students, and those that did not participate were
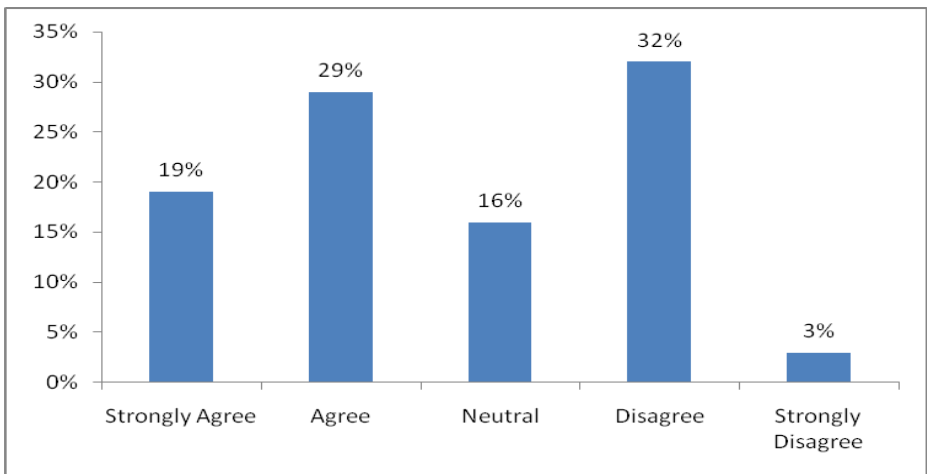
Figure 4: I feel there should be more individual work and less group work

grouped together with inactive students. While activity may be an indicator of a student's level of engagement with the course, it cannot be seen as an indicator of content skills or team skills.

Some students did experience challenges working in virtual teams, as highlighted by some of the comments made (as shown below)[1]:

> I would suggest that any group should not exceed three guys. Another issue was working with people you could not see. I would always try to imagine the character of each of my group members and especially ones from UKZN. Communicating always using texts to me was even worse. In normal circumstances i prefer talking over the phone than using texts. I tried to cope because this came as the only cost effective way to communicate. In addition, communicating and at the same time you are building something is multitasking. OOh my gosh i'm poor in this. However i will continue in this and see how it works for me.

> The collaboration aspect to it went very well but was challenging because text is not the easiest thing to use when trying to give instructions. It was very interesting to see that people could collaborate and understand each other without having to see each other face to fce (sic.).

Overall, while there was a spread of opinions regarding the impact of collaboration on student learning, it did appear that students are keen to engage via online environments and explore potential collaborations. While cognisance must be taken of the learning styles, providing students with opportunities to engage in collaboration brings multiple other benefits such as those related to internationalisation (Quilling & Blewett 2010).

2. Operational Challenges

As mentioned earlier, operational challenges include the time requirements of the module, which are closely linked to academic challenges. Another key challenge was the perceived organization of the module, from the students' perspective.

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[1] All student comments are extracted, unedited, from source transcripts.

2.1 Time

While virtual courses provide many benefits and can engage students at a deeper level, there is no doubt they typically involve a greater time commitment from both lecturers and students. However, what is interesting, as depicted in Figure 5 below, is that 68% of students agreed or strongly agreed that they voluntarily spent more time on this course than they would have if it were a face-to-face course.
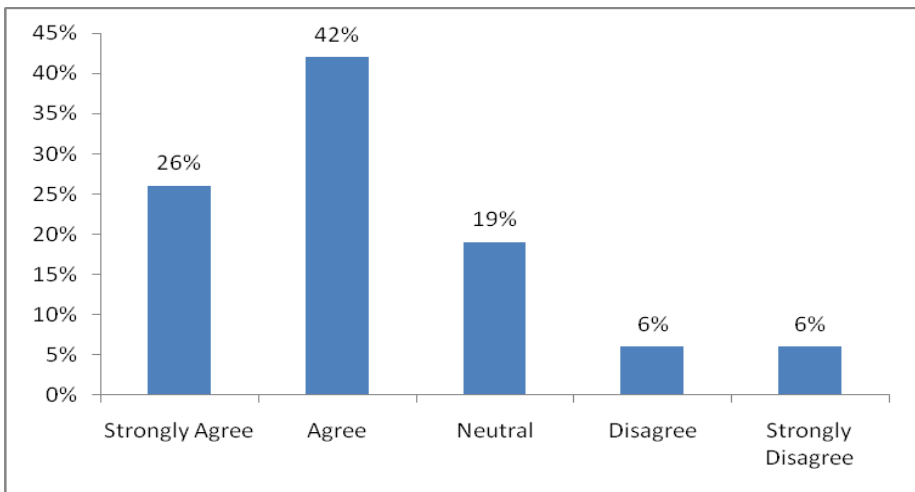
Figure 5: I voluntarily spent more time on this course than I would if it had been face-to-face

One clue to the reason students willingly spent more time in the online environment may have to do with their interest in it. Figure 6 shows that 67% of students agree or strongly agree that the online course stimulated their interest in learning. Oblinger (2003) suggests that Gen Y are very directed towards visual and kinesthetic learning and that they crave interactivity. This may explain why lecturers are seeing their willingness to spend more time on things which they perceive to be actively engaging.
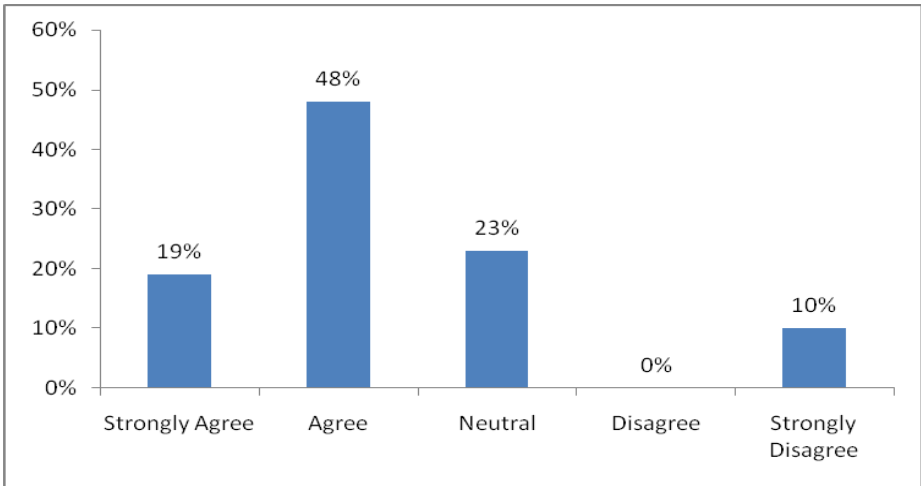
Figure 6: Active participation during online activities stimulated my learning interest

Consistently, however, there are some who disagree that this social constructivist approach is educationally beneficial; in this case it is 10%. This may relate to individual's learning preferences, or educational approaches that they feel most comfortable with, or which they find more familiar.

2.2 Perceived Organisation
Coupled with the beta nature of Web 2.0 technology, the more inductive nature of constuctivist (and constructionist) pedagogies and the new nature of the entire learning experience, it is not surprising that students may expect (and fear) that the module may be badly organized. Figure 7, while showing that 68% of students found the course well organized, indicates that there are some 33% who are either neutral or disagree.

As mentioned earlier, the unstable, changing nature of Web 2.0 platforms requires a course design that is fluid and constantly evolving. However, as Weller (2006:104) states, 'The notion of 'perpetual beta' does not sit very well with some of the support and quality requirements of Higher Education'.
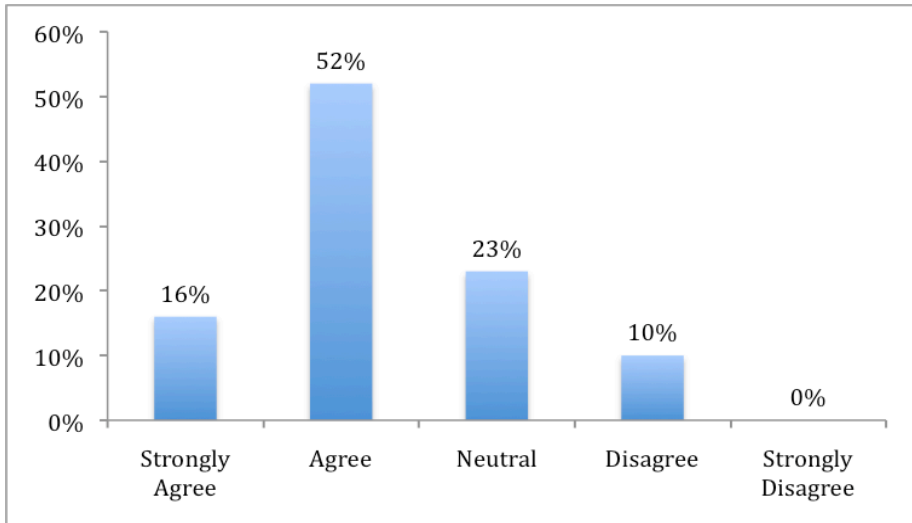
Figure 7: The module is well organized

Key to ensuring that the students perceive the course as being well organized is the principle of making contingency plans early on. Additionally students need to be warned up front about the need for both them and the course to adapt to changing situations. Adequate preparation and communication with students can result in improved perceptions of the course. This may be particularly true when one considers that one of the characteristics of these Gen Y students is the fact that they are seen to be achievement focused and prefer structure to ambiguity (Oblinger 2003). This may appear to be in conflict with the fact that they enjoy active exploration and are experiential by nature. These results also provide some insights into the issues that lecturers should consider when planning.

While the challenges related to maintaining a well-organised course increase in a virtual environment, so too does the potential for the development of problem-solving skills by the students. At least 61% of students agreed or strongly agreed that they had developed problem-solving skills during the course, as depicted in Figure 8 below.
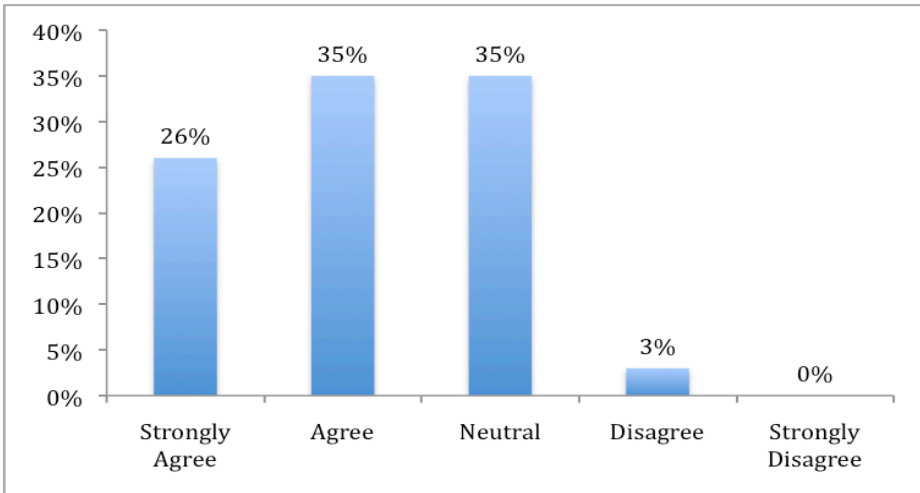
Figure 8: I learnt problem solving skills

While technology can pose a challenge, most students, typical of GenY, rose above the challenges by seeking ways to resolve the issues.

Students did experience challenges in Second Life, including an incident where a hacker came onto the NextEd Island. Included below are four illustrative students' comments:

> O yah or house disappeared twice.............. AAAAARRRRRGHHH !!!!!!!!!!!!! Whenever I set out on a shopping trip I could not seem to get back Nexted Island.

> We sorted out majority of the communal areas as a group , things were going well until the house objects automatically moved around ,some were in the air , some disappeared ….. kinda annoying espically when you put a lot of effort into that object…and to add to this the electricity went of on campus…

> So, we got into it...<student name> (aka <avatar name>) found the perfect house and we found a way to duplicate that house such that we could expand it sideways and upwards. Awesome right?! ;) So we

started with that, and everyone started pimping out the place when, all of a sudden, the mountain engulfs our commune!!! Disaster!

However there was one problem, our house was inside a mountain. Confusing I know. But then the mountain disappeared and our house was now flying............ya I know, don't ask......So we have decided to build our floating house further and once the island becomes more stable we will land the beast. But for the time being we are going ahead with construction. Please feel free to visit our construction site and see it for yourself.

The last comment highlights the fact that students find innovative ways of resolving the issues associated with technology. In addition, this solution also exploits the very nature of the virtual learning environment (floating/flying objects); an option not available in a conventional learning situation. This scenario also demonstrates the extent to which students have immersed themselves in the environment as a programming/development environment: this is an aspect that relates to the disciplinary content of the module in which the study is situated.
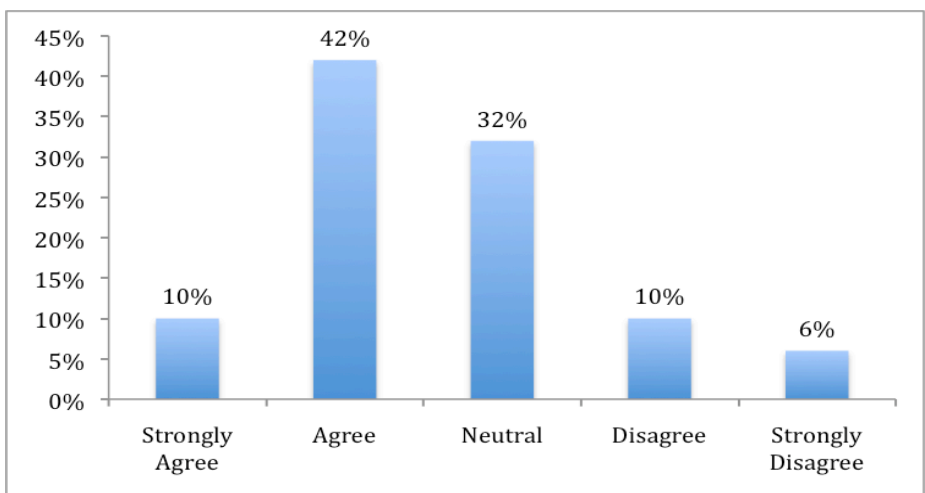
Figure 9: I exert more mental effort when learning in the online environment

Equally positive was the fact that students reported 'exerting more mental effort' in online environments as compared to traditional environments. So while the challenges presented by virtual courses result in students having to solve more problems, they see this as beneficial and acknowledge that it results in a concomitant increase in mental application. Figure 9 below indicates that 52% of students felt that they expended more mental effort in this environment. Only 16% suggest that they did not expend more mental effort.

However, enabling students to solve problems in a viscous beta environment requires careful support for the overall approach to the learning engagement. A more formally scaffolded learning approach (Rose *et al.* 2003), providing opportunities for students to progressively build on their achievements while participating in authentic tasks (Reeves 2008), was adopted in 2010. This seems to have resulted in students feeling more confident about their learning experience as is depicted below (Figure 10).
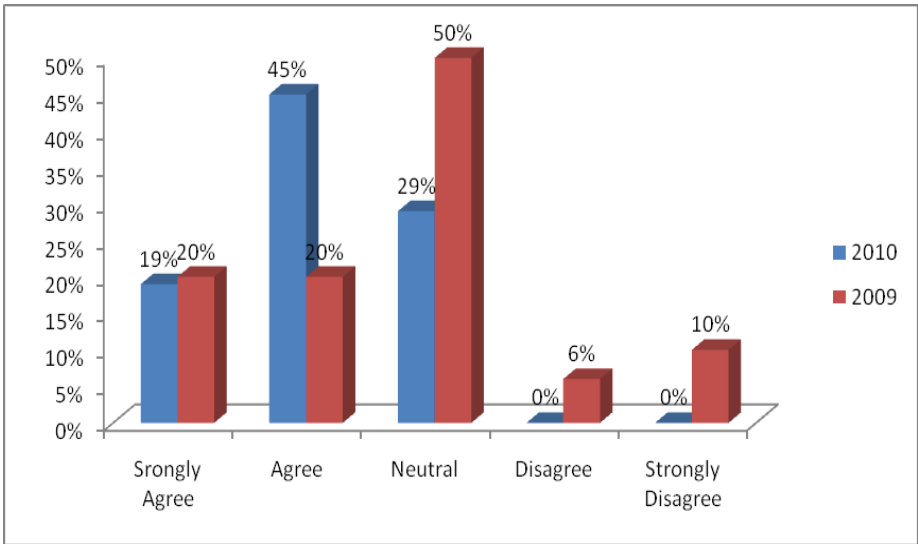
Figure 10: I was given sufficient guidance throughout the module (Results for 2009 & 2010)

The majority (64%) were positive about their support and guidance through the course. This is an improvement over the 2009 course where only 40% were positive about the support provided.

The 2009 iteration of the course did provide support and guidance but had a less scaffolded approach than implemented in 2010. In 2009 students were left to work their way through both technological issues and develop the requisite support skills in the environment via more personal exploration. While it may seem desirable for students to learn to solve problems, care needs to be taken to provide adequate support structures and to scaffold learning. Such provisions ensure that environmental issues like technology or pedagogy don't detract from the actual content knowledge that needs to be acquired.

Drawing on the Cognitive Load Theory (Artino 2008), there are 3 types of cognitive load, *viz.* intrinsic cognitive load, extraneous cognitive load, and germane cognitive load. Intrinsic cognitive load refers to complexity of the material being learned. Extraneous cognitive load refers to impact of instructional techniques or spaces. Germane cognitive load refers to the use of abstractions and elaborations to contribute to learning. One of the key issues with the use of a virtual environment is the impact on the extraneous cognitive load. The Second Life environment, while immersive and engaging, required students to develop skills in navigation, building and communication. This increased, at least initially, the extraneous cognitive load. Hence, during the second iteration of the module in 2010, a scaffolded approach was adopted. This approach enabled students to become familiar with the environment first before engaging them with the actual learning material. The increase in guidance reflects a decrease in the extraneous cognitive load experienced by the students. Issues relating to the overall project management from the lecturers' perspectives may well have impacted at this level also, and will be explored in a future paper.

From an operational perspective students are thus reporting that they voluntarily spend more time on the module and find the active participation useful. They are mostly happy with the structure of the module and the guidance they receive to navigate through it. In addition they self-report improved problem solving skills and that they have exerted 'more mental effort' during the module.

Operational challenges are not unique to technology environments, but are often exacerbated by the introduction of technology to the learning experience. However, despite the challenges, it is encouraging to see that students are prepared to invest more time and are developing their problem solving skills within these environments. By correctly scaffolding the learning process to minimise the impact of the environment on the extraneous cognitive load, it is possible to increase the germane cognitive load and so improve the students' capacity for learning.

3. Technology Challenges

The final area of student challenges relates to technological issues. The potential for technological challenges are great in beta-workspaces and thus we encourage students to see them as part of their education experience. This is an academically sound position in our case, as technology is not only the vehicle for delivery for students, but is also their area of specialization. As a result, students learn much in terms of project management of IT resources, and contingency planning, among other aspects, in addition to the core content of the module. Even in non-technology disciplines, encouraging students to see the technology challenges as part of their learning experience could be supported by using the challenges to help students learn problem solving, project management and other related skills.

Nonetheless, it is important to realize that technology challenges can present a major impediment to students success in courses such as this. Of importance to the planning of the module is the fact that the vast majority of students are still heavily reliant on campus–based resources (see Figure 11).

As a result, student computer facilities become central to students success and so their complaints tend to be related to their feelings of being at the mercy of the campus facilities managements. These challenges need to be addressed at the institutional level as there should be no reason why these facilities should not be more readily accessible to students on a permanent basis.
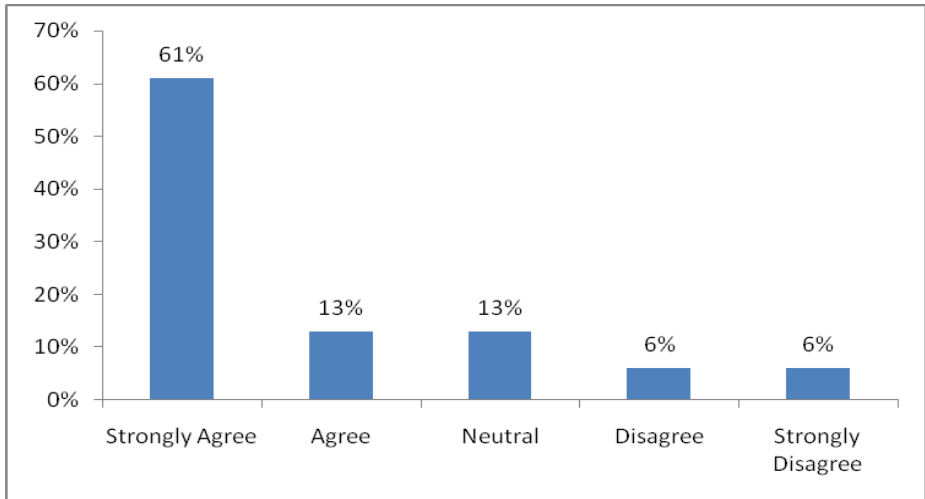
Figure 11: I mainly used on-campus facilities for this course

The following comments by students clearly illustrate their frustration:

> The apple Lan should be available 24 hours because online means to be able to access anything without the limitation of place and time.'

> The Lan access was a problem, we couldn't get to be on the world whenever we want, it was not 24/7 but it was just 8 hours a day.

> The building experience on Second Life was a mixed experience. Sometimes exciting, sometimes annoying but mostly very frustrating on PMB campus because of the lag and slow PC's.

Conclusion

This research project set out to determine what challenges students in multi-country virtual collaborative learning environments experience. It focused on a month-long collaboration between a South African and a Kenyan Honours

class addressing human computer interaction issues as they occur in 3D virtual worlds, from both the developers' and users' perspectives.

Students felt positive about working in a virtual environment. From an academic perspective, students also felt able to adapt to the virtual platforms and felt enriched by participating in international collaborations and saw them as a valuable part of their learning. From an operational perspective, students spent more time on the module, commenting positively about the structure and scaffolding of the module content. They also suggest that their problem-solving skills have been enhanced and that they have exerted more mental effort during the module. From a technological perspective they are reliant on campus resources and have expressed the need for greater access.

The students' comments would seem to be consistent with what could be expected of a group of GenY students participating in a postgraduate computing–related module. Clearly though, they are providing signals about their reactions to a module which in many ways typifies the beta-mindset of the web 2.0 environment. In addition, it is clear that students reacted more positively with a more scaffolded approach.

In a course of this nature the platforms, content and operational conditions are likely to be fundamentally unstable and subject to change. While the students show signs of being able to adapt to these shortcomings, and to some extent even appear to embrace them and be able to identify the value they have gained, this pilot study does not show a sufficiently detailed picture for the results to be considered conclusive.

While this paper has focused on the student challenges, it is also useful to reflect on the process from a lecturer perspective. A 'debriefing' meeting, specifically to reflect on the virtual collaborative learning course, took place between the lecturers from both institutions on 13 April 2011.

While overall the sentiment was one of optimism, there were certain key areas where concerns were expressed. The first had to do with the enthusiasm of staff to engage in this type of collaboration. Numerous attempts were made by both parties to involve other collaborators in the project, but these were largely unsuccessful. It was felt that high workloads, no obvious reward, and demanding research requirements, contributed negatively to finding potential collaborators. This means that the future success of these projects may well be student-driven rather than lecturer-led.

The results and comments from students in this study are encouraging, however, some form of College commitment will be vital if future collaborations are to be effective.

The second concern was the readiness of the institution to meet the technology requirements of the platforms. This was particularly true for Second Life, which revises the minimum technical specifications regularly in order to provide increasingly richer user experiences. Even if the institution has the correct platforms one year, it is vital to check platforms, ISP bandwidth specifications, and other requirements each time a course is launched.

The final area of concern is student preparation for the environment. While we have already mentioned issues relating to scaffolding when using the environment, it is equally important to ensure that students have the appropriate prerequisite knowledge. Some of the students were not technologically ready, so despite the scaffolding provided in the environment they were still finding it difficult to use Second Life.

In conclusion, it could be observed that the strength of these environments is that they are suited to implementing pedagogically sound social constructivist methods across multiple sites. Notwithstanding the potential challenges this can pose, the study demonstrated two affirmative prospects for the future. The first is that by developing fluid, adaptive courses on shifting, advancing technological platforms, various challenges could be minimized. Secondly, the obvious strengths of virtual learning environments could be maximized in ways that students can embrace, especially as they feel that they stand to benefit ultimately.

Acknowledgements

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Diversifying and Transforming the Doctoral Studies Terrain: A Student's Experience of a Thesis by Publication

Callie Grant

Abstract
While a PhD 'by publication' in the Human and Social Sciences Faculties is not a new phenomenon in Scandinavian countries, it is a less popular approach in other parts of the world where it is often viewed with skepticism and its uptake is limited. Faculties of Education and Humanities in South African universities are no exception. This article reports on my own experience of completing a PhD by publication and foregrounds my voice, as a University of KwaZulu-Natal (UKZN) student, in this doctoral learning process. Central to a PhD by publication is the notion of connectedness, and this article focuses on my 'logic of connectivity' which operated at five levels in the PhD. These levels include the clustering of the articles (which I refer to as chronicles) according to the research questions to guide the synthesis process; the literature thread throughout the chronicles; distributed leadership as the theoretical framing for the thesis; the design of the PhD as a mixed research synthesis study and, finally, the insights gathered as a result of the synthesis process. The article offers a critique of the PhD by publication, highlighting the concomitant benefits and challenges and concludes by arguing that the advantages of undertaking a PhD by publication outweigh the disadvantages.

Keywords: Doctoral education, PhD by publication, 'logic of connectivity', mixed research synthesis study, meta-inference

Setting the Context: Newness and Difference

This article reflects upon my experiences of undertaking a PhD by publication as a collection of seven journal articles and a book chapter in an Education Faculty. Its purpose is to raise awareness of this non-traditional form of the doctorate and to contribute to debates surrounding this relatively new form of doctoral education practice in the human and social sciences in the South African Higher Education terrain.

Since joining the university as an academic in 2002, my research began with a focus on the voices of school-based educators, both Post level 1 teachers and School Management Team (SMT) members about their perceptions and practices of 'teacher leadership' in a range of school contexts in KwaZulu-Natal (KZN).

Motivation for work in this under-researched area came from my increasing interest in the leadership practices of teachers in terms of their capacity as 'agents of change' in schools. Teacher leadership challenges traditional understandings of school leadership and, when fully developed, has the power to make a critical contribution to transformation at the level of the school, while at the level of higher education, it has the potential to problematise the terrain of education faculties where the concept straddles two fields in the making, 'Education leadership and management' (ELM) and 'Teacher education and professional development' (TEPD). As a consequence, it may create discomfort in those academics who value clear and rigid boundaries between fields and, in the field of ELM particularly, it offers a radical departure from traditional research which foregrounds the school principal as leader by virtue of his position. Thus, the likelihood is that teacher leadership will 'trouble' the leadership terrain, at both the school and the higher education levels, and challenge the status quo with a view to effecting inclusivity and transformation.

In 2004, I set up a small qualitative research study together with the tutors on the Bachelor of Education (Honours) programme I was coordinating. At that point in time, I had no idea that this initial research project would become a part of my doctoral work. At that juncture, I was certain that I would never do a PhD and was quite vocal about this to both my family and colleagues. As a novice researcher, I was content to develop my research experience in a fairly contained manner by involving myself in small independent research projects and then publishing the findings. This, I

could manage, while balancing my university teaching with my home commitments as mother and partner. In retrospect it was indeed an irony that whilst I was so resistant to doing a PhD, that initial study became the first of six research projects underpinning the eight articles which constituted the core of my thesis. But I must reiterate that there was no formal signaling of the publication-based study in 2004 and there was certainly no formal research design at that stage.

The possibility of a thesis by publication unfolded as I involved myself in research and explored an array of questions in relation to teacher leadership; the central one being how teacher leadership was understood in a South African schooling context. As each research project concluded, I reflected on the findings and where possible took into account the new learning when designing the next study. Thus, mine was an emergent research journey in which succeeding steps were based on the results of steps already taken, implying 'the presence of a continuously interacting and interpreting investigator' (Lincoln & Guba 1985:102).

As my research continued, salient elements began to emerge, insights grew and theory began to be grounded in the data obtained (Lincoln & Guba 1985). My approach was therefore open-ended and, with hindsight, I adopted theoretical sampling which is the process where 'data are collected on an on-going, iterative basis' (Cohen, Manion & Morrison 2007:492). As researcher, I kept on adding to the sample until there was sufficient data to describe what was going on in the situation under study and until 'theoretical saturation' (Cohen *et al.* 2007) was reached. Through this process of theoretical sampling, I extended my research design until I gathered sufficient data to create a theoretical explanation of how teacher leadership was understood and practiced in the South African schooling context and could thus determine what contexts supported or hindered the take up of teacher leadership.

Thus the thesis by publication was retrospectively conceived when, in 2008, five research projects which explored teacher leadership within a distributed leadership framing were completed, three articles were published while two articles and a book chapter were in the process of publication. I realised then that there was the possibility of bringing the various projects and articles together in a connected whole for the purposes of knowledge contribution. It was only at this endpoint that I was able to count up the

research projects (there were six) and become 'empirically confident' (Glaser & Strauss 1999: 61) that my category was saturated. While this moment served as the 'endpoint' to the data collection process, it also served as the 'formal starting point' for the doctorate. It was at this juncture that I registered for the PhD by publication, became a part-time student and, at this point in time, approached two colleagues to supervise me. They agreed to do so.

A PhD by Publication: Diversifying and Transforming the Terrain of Doctoral Education

Doctoral research, as Green (2009) argues, is knowledge work. However, he goes on to observe that 'the traditional PhD is no longer the sole object of concern nor the singular sign of value' (Green 2009:240). Lee (2010) concurs and contends that the space of doctoral education is a contested space because the PhD 'is changing and metamorphosing rapidly into a wide variety of different forms of output and different 'routes' to the attainment of a doctoral qualification' (Lee 2010:13). While Nyquist acknowledges that re-assessing and re-envisioning the PhD is not something new, she believes that 'this time round, the reconsideration of the purposes and future of the PhD degree seems to differ significantly from past assessments in several ways' (2002: 13).

Within this contested space of doctoral education, this article focuses on the PhD by publication as one of the routes to the attainment of a doctoral qualification. A PhD by publication, Lee argues, is not a single monograph or book-length dissertation but rather 'a series of shorter pieces, which are assessed by a range of different readers and reviewers before they are submitted for a final examination' (2010:13).

While the PhD by publication is common in Scandinavian countries, in other countries the notion of a PhD by publication 'is sometimes seen to be problematic – counter-intuitive, even' (Lee 2010:26). In the United Kingdom, for example, while the model of PhD by publication is not new, its uptake has been limited (Robins & Kanowski 2008). In South African universities, a PhD by publication in the Human and Social Sciences Faculties is a relatively recent phenomenon. For example, in the Faculty of Education where I was employed, I was one of the first candidates to register

for a thesis by publication and the first to complete. This alternative mode of PhD is still in its inception, particularly in the Education and Humanities faculties, and the rules for a publication-based study have only recently been accepted at the level of the University Senate.

As a consequence, when I embarked on a PhD by publication, there were no education theses of this type in the libraries for me to peruse and neither was there a detailed set of guidelines which I could follow. I turned to other faculties within the University and found a few publication-based studies in the sciences but these were not particularly helpful because connectivity of the articles did not seem to be a central focus. Thus, mine was a pioneering journey, at times a lonely one, filled with uncertainty in respect of process and format.

With little to guide me, my PhD registration process in early 2008 was directed by rule DR9 of the university's handbook entitled 'General academic rules and rules for students', which outlined the format of a PhD thesis. Part C of this rule pertains to a thesis by publication and reads as follows:

> A thesis may comprise one or more original papers of which the student is the prime author, published or in press in peer-reviewed journals approved by the Board of the relevant Faculty, accompanied by introductory and concluding integrative material (University of KwaZulu-Natal 2007: 27).

In the Swedish context, Lee (2010:12-13) describes the requirements for the PhD by publication as four journal articles in international peer-reviewed journals brought together into

> a compilation for examination with an exegesis or 'cover story', that gives an account of the collection, the research that informed the production of the articles, and the 'doctoralness' of the body of work submitted in the portfolio for examination

Similarly, writing from the context of Australia, Robins and Kanowski (2008) advise that, typically, three to five research articles are required to constitute a PhD thesis, accompanied by introductory and concluding chapters.

In accordance with University of KwaZulu-Natal (UKZN) rule, my thesis consisted of eight academic, peer-reviewed, independent pieces of work (seven peer-reviewed journal articles and one book chapter) which satisfied the condition of *quantity* in the above statement. Draper prompts us here to bear in mind that a conventional PhD may result in between one and three journal papers so 'any PhD by publication that submits more than three papers has easily satisfied the quantity implicit criterion' (2008:3). However, Kamler (2008:284) reminds us that doctoral publication is not a given and only flourishes when

> it receives serious institutional attention, and skilled support from knowledgeable supervisors and others who understand academic writing as complex disciplinary and identity work.

In terms of the *quality* condition within the UKZN rule, six of my pieces of work were published in academic peer-reviewed journals, one was published as a chapter in an edited book while the final piece had been submitted to an academic journal and was in the process of peer-review. Accordingly, the thesis thus satisfied the condition of quality in the above statement.

The final part of the UKZN rule refers to the inclusion of introductory and concluding integrative material. To my mind, this condition is critical to a thesis by publication as it requires the student to synthesise the independent papers (or in my case chronicles) into a coherent whole and, in the process,

> make a distinct contribution to the knowledge or understanding of the subject and afford evidence of originality shown either by the discovery of new facts and/or by the exercise of independent critical power (University of KwaZulu-Natal 2007:25).

For me this was the intellectual challenge of my doctoral work. How was I to bring all the papers together into

> a thesis, i.e. a single coherent argument, with all the components (empirical work, research design, literature review, critical self-evaluation) all subordinated to, related to, and serving to support, this single argument (Draper 2008:3)?

How was I to develop my 'cover story'?

In Sweden, Lee (2010) explains how agreement is reached on the criteria for the 'cover story' through public debate in each department within the university where the PhD by publication is seen as a collective responsibility. However, this was not the case in my institution. I worked independently on my 'cover story' and drew on the expertise of my two supervisors when necessary. To achieve the requisite integration in my 'cover story', I developed what I called my 'logic of connectivity'. Here 'logic' denotes reasoned thought while 'connectivity' implies a form of linking, joining or relating. My 'logic of connectivity' in relation to the additional integrative material worked at a range of levels and guided the development of the various chapters of the thesis. These five levels of connectivity are listed below and then each is briefly discussed:

1. The development of three research questions and the clustering of the chronicles according to these questions to guide the synthesis process;
2. The literature thread throughout the chronicles;
3. Distributed leadership as the theoretical framing for the thesis;
4. The design of the PhD as a mixed research synthesis study; and
5. The insights gathered as a result of the synthesis process.

The First Level of Connectivity: The Retrospective Use of Research Questions and Clustering

On the issue of connectivity and coherence in the thesis, the doctoral process was driven by a broad aim and research questions which were generated retrospectively from the eight articles, which I called chronicles, in the thesis. The aim of my study was to 'trouble' the terrain of teacher leadership – at the level of both theory and praxis, in the South African schooling context through the synthesis of the chronicles. To assist in this synthesis process, the chronicles were clustered according to their ability to best answer the research questions which were:

1) How is teacher leadership understood and practiced by educators (teachers and SMT members) in mainstream South African schools?

> 2) What are the characteristics of contexts that either support or hinder the take up of teacher leadership?
>
> 3) How can we theorise teacher leadership within a distributed leadership framing?

Research question one was the primary question. However, this question presupposed the possibility that teacher leadership was already understood in contexts other than South Africa, and indeed it is, and I made reference to this extensive body of literature on teacher leadership in the thesis. Research question two was the secondary question which proceeded from the responses received to the first research question. It explored the characteristics of contexts which enhanced the take up of teacher leadership as well as two contexts which hindered the take up of teacher leadership: i) gender within a rural context, and ii) the context of HIV/AIDS. Finally, research question three aimed to develop a theoretical dimension to our understanding of teacher leadership for mainstream South African schools by locating it within a distributed leadership framing. While developing a theoretical dimension to one's research is a standard criterion for a PhD, I argued that in order to ensure connectivity across the eight chronicles in my publication-based study, the explicit inclusion of this question was critical.

However, while the research questions were crucial to the connectivity of the thesis, I argued that this logic of connectivity was insufficient on its own. As a consequence, further levels of connectivity were sought across the chronicles.

Literature Review as the Second Level of Connectivity

The second level of connectivity operated in relation to the literature relevant to the study. The chronicles which informed the publication-based study were initially written as stand-alone articles and they conformed to the typical journal requirements of empirical research articles of the journals in which they were published. As such, each chronicle had a part which discussed a feature of the literature on teacher leadership pertinent to the argument it raised. However, discussion of the literature in each of these parts was constrained, in line with the journal limits on article length. The purpose of the literature review in the doctorate was therefore to generate an

updated literature review which incorporated the literature from each of the chronicles into a coherent body of work and merge it, together with additional literature on teacher leadership, into a consolidated literature review. To assist with the process of connectivity I made extensive use of footnotes to indicate connections between the literature review sections in the chronicles and the PhD literature review chapter.

Connectivity through the Theoretical Framing

A further chapter in the thesis introduced the theoretical framing of distributed leadership as a means to achieve the third level of connectivity across the chronicles. Common throughout the eight chronicles was that each was framed by distributed leadership theory. At an intuitive level, I was convinced that any research about the leadership practices of teachers had to be framed by distributed leadership because I argued that teacher leadership beyond the classroom could not be enacted without a distributed leadership practice in place in the school. Here I defined distributed leadership as a social practice which centres on the dynamic interactions between multiple leaders who interact with followers in particular situations (Spillane, Halverson & Diamond 2004; Spillane 2006). In other words, the theoretical framing of distributed leadership provided the conceptual tools from which to begin to understand, describe and explain the practice of teacher leadership. Understood in this way, teacher leadership was but one manifestation of the practice of distributed leadership.

Thus, I made the decision to privilege distributed leadership because it offered a set of ideas which formed the starting point of my research. For this reason, I dedicated a chapter in the thesis to distributed leadership as the theoretical framing for the study. The additional concepts and theories which were adopted in the individual chronicles were not discussed in this chapter but were introduced and discussed in relation to the three insights chapters later on in the thesis. As with the literature review chapter, I made use of footnotes to demonstrate the connectivity of the chronicles to each other and to the argument in the theoretical framing chapter.

Methodological Framing as a Fourth Level of Connectivity

As already mentioned, the eight chronicles which I elected to include in the

study were originally written and published as stand-alone entities and were underpinned by six individual, context–independent research projects or 'strands' (Teddlie & Tashakkori 2006) on teacher leadership. Because five of the research strands were qualitative and the sixth a quantitative strand, I turned to mixed methods research and, in particular, 'mixed research synthesis studies' (Sandelowski, Voils & Barroso 2006) to locate my study.

  'Mixed research synthesis studies' refers to the mixing of methods across *studies* (my emphasis) where the data are 'the *findings* (authors' emphasis) of primary qualitative and quantitative studies in a designated body of empirical research' (Sandelowski *et al.* 2006: 29). In line with Sandelowski *et al.* (2006), my aim was to 'sum up' the findings of my own research into teacher leadership in mainstream South African schools in the hope that 'the sum of the data collected will be richer, more meaningful, and ultimately more useful in answering the research questions' (Preskill in Johnson *et al.* 2007:121). To achieve this aim, I adopted a contingent design which involved three phases, guided by the research questions.

  However, in the initial stages of the writing process, I grappled with the purpose and design of the methodology chapter. I was unclear about the relationship between the PhD research design and the research designs of the six individual research strands. Because I was so familiar with the research strands which underpinned the chronicles, I kept privileging them in the presentation of the chapter and I was unable to distance myself sufficiently from them in order to be able to present the methods used in the synthesis process of the thesis. It was only once I had begun the synthesis process in practice that I truly perceived the importance of the PhD design, was able to articulate the process properly and grant it the privilege that it warranted in the chapter.

  On reflection, I believe that a mixed methods approach was most suited to my work because of its ability to embrace the multifaceted and complex character of my study and the multiple paradigmatic traditions underpinning it. Adopting a mixed methods way of thinking within a post modern positioning afforded me a platform from which to use 'multiple approaches and multiple ways of knowing' (Greene 2008:20), each of them inevitably partial, in my exploration of the practice of teacher leadership. In so doing, I believe that my research afforded me the opportunity for 'respectful listening and understanding' and engaged me with 'difference and

diversity in service of both better understanding and greater equity of voice' (Greene 2008:20).

The Insights as a Final Level of Connectivity

The PhD insights, which formed the final level of connectivity in the thesis, evolved out of a secondary analysis of the findings in each of the chronicles, a 'meta-inference' (Tashakkori & Teddlie 2003), guided by the research questions. The purpose of the synthesis was one of 'expansion' (Greene, Caracelli & Graham 1989) rather than convergence in the classic sense of triangulation. This enabled me to acknowledge and listen to the participant voices, both consenting and dissenting, across contexts in the pursuit of 'multiple comparisons' (Glaser & Strauss 1999) and 'multi-nodal dialogic explanations' (Mason 2006).

Mine was an iterative, back and forth process across chronicles and between chapters as I struggled to organise and make sense of the data in response to the research questions and then endeavoured to design chapters that were relevant and meaningful to the study. It was the findings from each cluster of chronicles, in this back-and-forth process which informed 'the emerging conceptual scheme' (Morse 2003:199) and contributed to theory generation of teacher leadership within a distributed leadership framing for mainstream South African schools and constituted an original contribution to the existing knowledge in the field. Thus my theorising of 'distributed teacher leadership' (see Grant 2010) fulfilled one of the core competences of successful PhDs as outlined by Nyquist who asserts that 'disciplinary knowledge – what is known, plus creative and adventurous ways of discovering new knowledge' (2002) is the foundation of the PhD. However, let me explain at this juncture that the phenomenon of teacher leadership could have been researched following the traditional PhD route (see for example Forde 2011). It was a strategic decision to elect the PhD by publication route primarily because of my completed research and publication record on the topic.

As a consequence of the complexities and back-and-forth maneuvering of the retrospective design process of my doctorate, there were moments when I yearned for the security and relative simplicity of a preplanned research design. There were instances when it felt like I was

forcing a fit between the chronicles and the research questions in the 'unnatural circumstances' of the synthesis process. I lived through times of incredible self-belief when I confidently claimed the scholarship to design the thesis as I deemed best and other times when I felt completely disempowered by the daunting task ahead of me.

Furthermore, because connectivity in this type of thesis is central, I was also aware of the danger of too much repetition. It became clear to me that for my logic of connectivity to work, with as little repetition as possible, the purpose of each chapter had to be unequivocal. It therefore took me multiple drafts involving multiple layers of re-thinking, re-reading, re-writing and re-tensing before the construction of the meta-inference and the construction of the chapters were complete. It was only at the end of this post modern process that I was able to argue more confidently that the insights, the meta–inference that emerged from the study, were greater than the sum of the individual findings from the chronicles and offered an original contribution to knowledge and scholarship in the sub-field of teacher leadership. My experiences led me to recognise my doctoral experience as a journey, an 'internal process of increased understanding; and as 'trading', producing a product of original knowledge to contribute to the academic community' (Leonard & Becker 2009:72).

Developing my Doctoral Voice and Doctoral Identity

Writing, as Lee and Aitchison (2009) suggest, is part of the business of being an academic. Given that I had successfully published prior to registering for my doctorate, I was accustomed to the external review process and the way scholarly work was produced. I had been exposed to the process of repeated review and criticism of my academic writing from my university colleagues in an informal writing group I belonged to as well as from anonymous peers outside of my institution in the various journal review processes.

However, as a consequence of my struggles around the retrospective design of the doctorate, I lost my 'writerly capacity' (after Lee 2010) and began to doubt my ability to become a doctoral graduate. There was a period where I struggled to write in my own voice tending, instead, to adopt the words of published authors to speak on my behalf. Whilst my colleagues and supervisors reminded me that I had already established an academic voice

and publication profile through the eight chronicles, it was indeed an irony that there were times when I was unable to develop my voice and agency in relation to the thesis – I could not find my doctoral voice.

At some point in the struggle to reclaim my voice and agency, I came across the work of Richardson which helped me to navigate the writing process. She argues that the mechanistic or static writing model of traditional quantitative research 'ignores the role of writing as a dynamic creative process' (1994:517). She challenges us to put ourselves in our own texts, 'nurture our own individuality and at the same time lay claim to knowing something' (Richardson 1994:517). I realised some time later as I revisited my methodology chapter that I was searching for the 'single' way of writing an academic text – the one truth – I was searching (in vain) for the voice of someone who had 'got it right'. In essence I was colluding with the positivists who claim the existence of a one universal truth, one 'right' way of knowing and doing. I was struggling with what Bell Hooks (1990) calls a 'politics of location':

> Within a complex and ever shifting realities of power relations, do we position ourselves on the side of colonizing mentality? Or do we continue to stand in political resistance with the oppressed, ready to offer our ways of seeing and theorizing, of making culture, toward that revolutionary effort which seeks to create space where there is unlimited access to pleasure and power of knowing, where transformation is possible (cited in Fine 1994:71).

I found my subconscious positioning of myself on the side of the 'colonizing mentality' in relation to my PhD writing process exceedingly ironic given my claimed identity as a critical education leadership theorist and my standpoint on the transformative power of teacher leadership to bring teachers from the margins into the process of leadership. It therefore came as a relief to me to read Richardson's work and be reminded that one is allowed 'to know 'something' without claiming to know everything' (1994:518). I did not have to have 'all the answers' on teacher leadership and neither was there one 'right' way of synthesising the chronicles. It was up to me to own the synthesis process and insert myself – my voice – into my work as I re-interpreted the chronicles and organised them into a coherent whole.

I also came across Govender's (2009) use of the term 'logic of discernment' which assisted me in finding a way forward. For her, 'logic' denotes reasoned thought while 'discernment' implies good judgement. Govender (2009:113) explains how her 'logic of discernment' draws from,

> the authoritative guidance of scholars (external guiding logic) and my total (both sub-conscious and conscious) imprints of my own experiences and intuitive sense (an internal guiding logic).

Claiming my own 'logic of discernment', the liberty was mine to discern the way forward and I had to trust my own insights and perceptions in weaving the chronicles together in a creative and imaginative way. In doing so, however, I had to remember that my purpose was not to homogenise and suppress individual voices (Richardson 1994) but rather to extend, in a trustworthy manner, the scope, breadth, and range of inquiry into teacher leadership through the eight chronicles in the search for multi-nodal dialogic explanations. This was a critical moment in my journey, a turning point, and it served as a catalyst to restart the writing process. It was as a result of this critical moment that I developed the courage to claim my doctoral voice and, in so doing, developed my 'doctoral capabilities' (Lee 2010) and my doctoral identity.

The Supervisory Role

The role of the supervisor(s) in a PhD by publication requires mention because of the fundamental importance of supervisory support to doctoral students registered for this route. As Robins and Kanowski (2008:7) suggest, students considering doing a PhD by publication

> should establish the perspectives of potential supervisors prior to appointment, and may need to consider changing supervisors if they are unable to resolves opposing views about the appropriateness of undertaking a PhD by publication.

As already mentioned, at the time of my registration for the PhD, I approached two colleagues in my faculty to request them to supervise me. I selected the main supervisor primarily because she had experience of

examining PhDs by publication from other faculties and other universities and also because she had engaged with the rule generation process for this form of the degree at a faculty and senate level. I selected the co-supervisor because of his disciplinary knowledge in the field of education leadership. These two colleagues were willing to supervise me and were formally appointed following my registration.

Given that mine was a retrospective research design because of the already published and in-process articles, it is self evident that my supervisors only needed to support me in the development of my cover story as I developed my logic of connectivity and embarked on the synthesis process. Thus, at some level, their work was made easier because they were not required to support me in the publication of the eight chronicles which, as Lee (2010) maintains, is likely to be one of the tasks of the supervisor of this form of the degree. In this regard, Robins and Kanowski (2008:15) warn,

> the process of PhD by publication is likely to add to the workload of supervisors across the PhD, depending on the extent to which they are prepared to support their students in pursuing publication.

As it is well known, in the traditional PhD the supervision process essentially takes place between the student and the mentor/supervisor. Here the supervisor 'poses critical questions, offers counterarguments, models the discipline's specialised logic, and otherwise helps the student find a voice, identity, and location in the community's conversation' (Pare and colleagues quoted in Lee & Aitchison 2009:93). I received this type of support from each of my supervisors as they assisted me in the content (co-supervisor) as well in the format and coherence (primary supervisor) of my integrative material. Given that I published the articles without formal supervisory support, I agree with Lee and Boud (2009:22) that 'the iconic student-supervisor relationship is subsumed into a diverse matrix of opportunities, resources, monitoring processes and expectations'. None-the-less, I would have been unable to complete the PhD without the creative ideas and counterarguments that my supervisors challenged me with.

The PhD by Publication: A Critique
My experience of having completed a PhD by publication has stood me, as

an academic and a PhD supervisor, in good stead to engage with this mode of PhD. The PhD is now a minimum requirement for a university lecturer at our institution and there is mounting pressure on academics to obtain this degree. As a consequence, this mode of PhD is currently becoming 'in vogue' in many education faculties as academics engage with this option and, in many instances, consider it a more manageable and viable alternative.

Would I advise students to do a PhD via this route? Perhaps. The PhD by publication opens up the possibility of choice for prospective students – it offers an alterative route of study – and choice within a high stakes qualification such as the doctorate can only be beneficial. I would advise all candidates to engage with the alternative forms of a PhD open to them, explore the benefits and challenges of each of the forms and make an informed (and deeply personal) decision in the light of this exploration, prior to registration. However, the experience of Robins and Kanowski (2008:4) suggests that

> the existence of a choice between undertaking a traditional PhD or a PhD by publication is not always made apparent to students by their institutions or their supervisors; nor are the likely advantages and disadvantages of adopting a particular approach.

My experience has led me to believe that the PhD by publication is a fascinating, creative and viable option which approaches differently the knowledge generation journey and, in the process, challenges the student imagination because of its post modern underpinnings. This is in line with the view of Lee who contends that this form of doctoral degree opens up the space for 'new and flexible forms of knowledge products' (2010:15). Publishing progressively, as in the PhD by publication, provided me with proof of progress which, inevitably, built my self-confidence (see also Kamler 2008; Robins & Kanowski 2008) as I developed a credible profile in my chosen area of teacher leadership. An additional benefit to this form of PhD, which Kamler (2008:292) argues, is that

> if students publish in their formative years, they are more likely to do so as established academics or informed professionals in their chosen fields of practice.

However, having indicated my support for this alterative route, I do not believe that this form of doctorate would necessarily suit all prospective students. I think it has particular benefits for people, such as academics, who are immersed in organisations with a research culture and who are expected to publish their research as part of their job description. South African universities are following the trend in the United Kingdom and Australia where

> publications are increasingly used in universities to measure personal and institutional performance, and as a criterion for achieving academic promotion and competitive research funding (Kamler 2008:283).

Similarly, Robins and Kanowski describe the strong impetus within higher education institutions in Australia and the United Kingdom to increase the low publication output through 'the implementation of university funding models which reward publication and research student completions' (2008: 3).

Pursuing a PhD by publication may well be an attractive option for academics like me, who cannot bear the thought of embarking on a great tome of work. Its strength lies in the fact that the publication of journal articles towards the doctorate is a far less threatening option. This is because, as Robins and Kanowski (2008:11) explain, the PhD by publication

> effectively partitions what is a large undertaking into smaller, more manageable pieces of work, and helps to establish boundaries around the relevant bodies of literature.

The student is tangibly rewarded, at intermittent stages during the doctoral journey, for work published. Thus, even if the student elects not to complete the degree, aspects of her work which she published are recognised and rewarded accordingly.

However, this form of the doctorate is not without challenges. The lack of specificity of the University of KwaZulu-Natal DR9 rule for a PhD by publication, with regard to the purpose and length of the cover story, i.e. the integrative material, constitutes the first problematic. Is the purpose of

the integrative material merely to insert an introduction and conclusion to hold the substance of the thesis, the publications, together? In this instance, the conceptualisation is that the new knowledge is located within the publications and, as a consequence, the integrative material is short. Here, as Lee (2010:18) explains in the Swedish context,

> the article *is* the dissertation, the published work is addressed to an international scholarly readership as well as to a set of examiners and, along its way, to peers within the department, through seminars and conferences.

Alternatively, is the purpose of the integrative material to generate new knowledge? If this is indeed the case then the thesis is conceptualised as being greater than the sum of the parts (the publications) because the substantive part of the PhD lies in the integrative material which holds the thesis together. In this instance, the integrative material constitutes an extended piece of work, as was the case in my thesis where the purpose of the integrative material was to generate knowledge out of the synthesis of findings of the eight chronicles and constituted 220 of 346 pages. Thus, I sought to ensure an in-depth analysis and coherent argument in my cover story, given the relatively discrete nature of my chronicles and my retrospective design. As a consequence, while my doctorate was a compilation, the Swedish term for a PhD by publication (Lee 2010), it also exhibited many of the norms of the monograph, the Swedish term for the traditional PhD. This lack of specificity regarding the integrative material in the UKZN rule constitutes the first problematic and I argue that this requires urgent deliberation at a faculty level.

The design and format of the PhD by publication constitutes the second problematic. Should a PhD by publication follow the conventional PhD format or should alternative formats be acceptable? In responding to this second problematic, I align myself with Draper (2008:6) who contends that

> PhDs by research should surely be about recognising attainment: about judging the outcome and product, regardless of the means and process by which it was arrived at.

Thus, in a thesis of this nature, the product, rather than the process, is significant. From this standpoint, there is no need to mandate the process and format to be followed. Instead, I want to argue for the creative freedom of the student to craft the PhD together in the way best suited to his/her unique piece of work and therefore contend that imposing the conventional format onto a thesis by publication may well be counter productive and lead to unnecessary repetition. This form of the PhD by publication should encourage innovation and must therefore allow for flexibility in its design and format. This second problematic also necessitates debate at the faculty level.

Aside from the problematics identified, which require resolution at a faculty level, I have some advice for students who have elected to do a PhD by publication. This advice centres on the retrospective / prospective use of publications. As mentioned earlier in this article, my purpose in embarking on a thesis by publication was to employ and synthesise my existing published research in the sub-field of teacher leadership in order to develop a coherent body of work and, in the process, make an original contribution to knowledge. Thus, my thesis was retrospectively conceptualised.

However, the retrospective multi-level connectivity process was complex and cumbersome. While the research questions formed the pillars of the study and directed the initial phases of the synthesis process, the process was a difficult one because the breadth of findings of some of the chronicles related to more than one research question and there were often overlaps between chronicles across the artificial clusters. This impacted on the research design and the original clustering of the chronicles. As a consequence, there was much back-and-forth maneuvering as I attempted to match the sometimes disparate findings with the various research questions. As an academic and PhD supervisor, I would advise students to think carefully before embarking on a retrospective design.

Nevertheless, having said this, I am persuaded that my retrospective use of publications, whilst not the easiest of designs, was feasible because of one fundamental condition. My research was driven by my passion to find out as much as I could about the phenomenon of teacher leadership and particularly how it was understood and practiced in South African mainstream schools and this sustained interest underpinned all eight chronicles. It was this prolonged interest in 'a central topic' (see Robins & Kanowski 2008) together with the conceptual coherence across the

chronicles which enabled the synthesis process. Each of the eight chronicles cohered in relation to the broad aim and research questions I posed, the related literature and the theoretical framing. I am of the firm opinion that it would be far more difficult, and perhaps close to impossible, to design a publication-based study retrospectively without this conceptual coherence. Thus, the critical point for prospective students intending to use their publications retrospectively towards a doctorate is that their publications should cohere conceptually through their sustained interest in and pursuit of a central topic.

I imagine that a less complicated thesis by publication route would involve the design of the thesis prior to the publication of articles. In this approach, the process would be more logical and forward thinking where articles can be conceptualised and written up in direct response to the questions and the requirements of the research design. It is my belief that a pre-planned research design would offer the researcher a simple, yet effective tool – almost like a compass - for moving ahead in the safest possible way. The safety of the tool would stem from the fact that it is far easier to plan forwards than to plan backwards. However, publication of an individual article is seldom a straightforward process; it is time-consuming (see Robins & Kanowski 2008) because it can sometimes take up to two years to get one article published. Should a student wish to include five published articles in her doctorate, the degree could well be a protracted process.

Concluding Comments

Undoubtedly the field of doctoral education is experiencing a major transitional phase as doctoral scholars are

> seeking to broaden the scope of intellectual expression and presenting for examination what are, for many 'old-timers', challenging and innovative portrayals of knowledge, learning and insight (Green 2009:241).

The PhD by publication is one such example. My experience of undertaking a PhD by publication leads me to agree with Robins and Kanowski (2008) that the advantages of undertaking a PhD by publication outweigh the disadvantages. Despite being troubled by a range of challenges in relation to

my levels of connectivity in the thesis, I benefited in many ways from electing this PhD route. Firstly, the thesis was completed in a much shorter period of time (18 months from registration to examination) when compared with the average time taken for a traditional PhD thesis. This was because much of the work had been completed in the four years prior to registration.

Secondly, as an academic in a higher education institution, I had the privilege of working with students, tutors and colleagues who collaborated with me during a few of the research strands and in the writing up of some of the chronicles prior to and during the PhD. These relationships are ongoing and have contributed to the development of an 'academic community' (Robins & Kanowski 2008) or what Kamler (2008) refers to as a 'discourse community' of interested researchers in the sub-field of teacher leadership in the higher education arena.

Thirdly, although daunting, it was exciting to pioneer this alternative PhD route in the faculty. I enjoyed the challenge and hope my choice of doctorate has contributed, particularly in South Africa, to what Nyquist calls 'the weaving of a new tapestry in doctoral education' (2002:15). In conclusion, I agree with Kamler that the issue of doctoral education, and particularly PhDs by publication in South Africa, requires 'serious pedagogical attention from the higher education community' (2008:293). I believe that in faculties such as Education and the Humanities, the PhD by publication challenges academics and students to think creatively and differently about knowledge generation and doctoral work.

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Critique and Care in Higher Education Assessment: From Binary Opposition to Möbius Congruity

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Abstract

Using a poststructuralist lens, this paper interrogates, theoretically, the battle between two discourses of assessment in higher education namely, care and critique, a context generated binary structure. This apparent incongruity emerged as students considered critique they received from me as uncaring, and I interpreted their responses as a lack of care for intellectual growth. In this paper, using discourse analysis strategies, I unravel the emergent discourses by drawing on Žižek's rearticulated notions of the Lacanian Real. Superficially, it appears that critique and care are oppositional stances, but a deeper interrogation reveals the hidden aspects of care in critique and critique in care, and demonstrates that language constructs differences and masks the nature of reality of a singular phenomenon and, more specifically, its paradoxical nature. I argue that a Cartesian plane masks the inherent violence and beneficence of both critique and care and is inappropriate in capturing the fiction of difference. Hence, a metaphor, based on the special characteristics of a Möbius strip is deployed to represent the complex reality of discourses of care and critique.

Keywords: Higher education, assessment, discourse analysis, critique, care

Introduction

As a teacher in a higher education setting, teaching at Master's level can be both intellectually exhilarating and inhibiting. Unlike work with youngsters in school, postgraduate students are often mature, learned, and competent,

and they can and do question teaching practices, challenge explanations, and dispute assessment of oral and written outputs. Disputes about assessment in particular have the potential to erupt and to rupture relationships between teacher and student in unanticipated ways. The contestation around assessment is not unexpected as it is a record of learning and has serious implications that can impede a student's success. This means that when a dispute is not resolved because the explanations for a grade are unconvincing, or the criteria are spurned, or the assessor's ethics are viewed with suspicion, then there is potential for antagonisms to arise. In this paper, I reflect on an antagonistic occurrence concerning assessment and how I tried to make theoretical sense of it.

The occurrence concerns students' reactions to the assessment of the first assignment submitted for a research module. Students linked the critique of the assignment to a lack of care whilst I, the assessor, linked critique to intellectualism. The dissatisfaction set up care and critique as an oppositional binary, not in the way that is usually understood, for example, as pure and impure or male and female; rather it is a context-generated binary structure, or as MacLure (2003:10) might describe it, an 'unfair pair'. In this paper, I interrogate the discursive realities of the responses to assessment from a poststructural perspective.

The particular poststructural perspective shaping arguments in this paper has been described as 'a thorough disruption of our secure sense of meaning and reference in language' (Williams 2005) and regards meaning making as an elusive, impermanent endeavour, circumscribed by language with a 'floating surplus of meaning and undecidability' (Andersen 2003:51). To describe it differently, words are not eccentric or concentric meaning holders. Meaning is dispersed radially or along a range of perspectives, contexts, and contingencies. Clarity of communication is assumed by senders rather than realised by recipients. Consequently, a poststructural approach searches for and identifies surplus ascriptions of meaning with the intentions to disrupt and disturb the ways in which language constructs and structures reality. In this instance, the agenda is to destabilise the taken for granted positive values imputed to the language of care and the language of critique with respect to assessment in a higher education environment.

Premised on the idea that language is insufficient to convey unambiguous meaning or to capture reality, I argue that reality is experienced

in multiple, contested, diverse and partial ways by individuals and, furthermore, sets up a terrain for a discursive combat to destabilise the meaning ascribed to care and critique. The struggle to fix meaning to discourses of care is contested and destabilised by discourses of critique, and *vice versa,* and following the discourse analysis strategies of Laclau and Mouffe (1985) and Žižek (2002), I propose that language, which gave the semblance of critique and care as a binary, masked their oneness and added a level of complexity to my relationship with students. Consequently, this paper uses the dissatisfaction voiced by students to provide deep insights into the thinking of an assessor. What follows then are not descriptions and explanations of what assessment is, what kinds of assessments were deployed, how assessment was practiced or how content was related to assessment. Instead, it theorises the initial reactions to assessment by five students as a nodal point of constitutive discourse. There is no data for this paper. The event is deployed here as an opportunity to theorise the nature of expressed realities from diametrical positions of a teaching and learning relationship. Thus it is an analysis of moments that are transitory, ephemeral and ambiguous.

The importance of pursuing theoretical explanations is linked to a dearth in the literature about conflict and contestation between assessors and students. Though there is recognition that assessment has both cognitive (Bloom & Krathwohl 1956) and affective (Krathwohl, Bloom & Masia 1964) components, the bringing together of the two for discourse analysis is uncommon. That is not to say that conflict with regard to assessment is not researched, rather it is the propensity for resolution and reducing dissatisfaction (Sharpe, Reiser & Chase 2010; Smith 2009) and for problem solving approaches (Kramer 2009) without examining the nature of reality portrayed by conflict that distinguishes the offering here as well as the contribution it proffers to scholarship in the field of higher education assessment. More common in the literature are studies about student perceptions of assessment (Fernandes, Flores & Lima 2010), feedback (Hendry, Bromberger & Armstrong 2011) and refining of assessment tools (Hessler & Taggart 2011; Sharpe, Reiser & Chase 2010). There are also studies that indicate that assessment is connected to gender (Murphy 1991; 2000), and though the conflict theorised in this paper involves female students and a female assessor, this line of theorisation is not pursued. The

explanation, I believe, extends beyond gender. What this paper offers through the reflections of an assessor is a description of the nature of the conflict from multiple perspectives, the discourse analysis thereof and discussion beyond practice, policy and psychology of assessment in higher education.

Background and Context of the Care and Critique Binary

The students who took the module Discourses in Educational Research comprised seventy-six, including many successful professionals, holding positions of authority, leadership and status in education or allied fields. One can assume that they are outstanding learners as the criteria for admission to the degree requires evidence of prior learning accomplishments.

I have been teaching the module for five years and have been co-teaching it with a male professor for the past two years. We regard this module as the most challenging of the three research modules we co-teach. Students were alerted to academic writing requirements and the challenges of mastering research discourses during the early stages of the module as well as the multiple opportunities to resubmit tasks to improve their grades. The ability to critique published works and discussions in class were a key outcome of the module, which explains the reason it emerged as one component of the care and critique binary.

Students were required to complete a compulsory assignment. The task required an essay-type answer demonstrating an ability to craft an argument substantiated by evidence from practice and published scholarly work. Assignments were assessed by both teachers and returned with written comments and marks. Approximately half the class received an assessment below fifty percent, meaning they failed to satisfy the performance criteria. Five students consulted me individually to discuss the comments made on their scripts. This was followed by phone calls and a barrage of emails accusing me of 'not caring', which became the second component of the care and critique binary.

In summary, the content of all communications from the five students made reference to their previous successes both in studies and in their professional capacities. They held me accountable for the low assessment and ignored both the written critique of the task and discussions

thereof. The responses were discussed in class without revealing the exact words or who the complainants were with the aim of demonstrating how a teaching and learning incident can be theorised. Many expressed surprise, in particular, at my stance to intellectualise the discussion and my intentions to present an analysis at a conference, further evidence, perhaps, of my uncaring attitude.

Though my colleague and I assessed the assignment with remarkably similar statistics of a fifty percent failure of scripts assessed, none of his 'failures'[1] complained to him about the grade they received. One explanation is that I was the primary teacher of the sections that comprised the foci for the first assignment. I was also the person who provided feedback on the assessment. With regard to gender, all five complainants were female. The literature indicates that assessment is gendered and perhaps there is greater expectation for leniency and caring from female teachers (Murphy 1991). Choosing not to rely on Murphy's explanation, I considered instead, the possibility that this group of students represented a wider dissatisfaction with grades received which, perhaps, were not articulated for various reasons. There are many reasons for students' silences, for example, lack of agency, asymmetrical relations of power, cultural differences, acceptance of the authority of lecturers, or fear of reprisals. It seemed unfair, therefore, to base an analysis on the most obvious category and inspired a search for explanations that transcended gender. My suspicion of widespread dissatisfaction was substantiated by the attendance of many students at two presentations at conferences[2] where I presented early versions of this paper. I invited them to use the opportunity to critique my reflections. Their critique of my biases was used substantially to refine this paper.

For a while anger, prevented the five students from exercising the option to rework the task and to resubmit it for assessment. Eventually, they did rework the task and 'passed' the assignment and the damaged

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[1] The notion of failure is used guardedly and I acknowledge its contested nature, which is not possible to discuss in depth within the scope of this paper.
[2] The first presentation was delivered at UKZN's Fourth Annual Teaching and Learning Conference. The second presentation was made at The Faculty of Education's Annual Research Day.

relationships were harmonised. In this paper I focus only on the initial responses through Laclau and Mouffe's (1985) discourse analysis strategies and Žižek's (2002) conceptions of the Real. In the next section I provide an outline of discourse analysis and the Real.

Discourse Analysis and the Real

The discourse analysis strategies deployed in this paper have been influenced by the oeuvres of Laclau and Mouffe (1985) and Žižek (2002). These were chosen in the first instance for meta-analytical and theorisation possibilities and, in the second instance, because their approaches to discourse analysis is anti-essentialist, discursive, disavowing of determinism and draws on Lacanian psychoanalysis and critical Marxist traditions (Andersen 2003; Phillips & Jørgensen 2006). Coherence is therefore conceivable. Furthermore, Phillips and Jørgensen (2006) regard the combining of components from a variety of different discourse analysis perspectives as appropriate. They argue thus:

> *(M)ultiperspectival* work is not only permissible but positively valued in most forms of discourse analysis. The view is that different perspectives provide different forms of knowledge about a phenomenon so that, together, they produce a broader understanding (Phillips & Jørgensen 2006:4 italics in original).

A detailed discussion of discourse and the Real is beyond the scope of the paper. Below, I explain the elements deployed for analytical purposes.

Discourse and the Real

The Real and discourse are interconnected through associations and mediations of language. Discourse is an effect of language and plays a key role in the generation of illusions because the language that is available is inadequate to articulate reality accurately. Indeed, ways of talking 'do not neutrally reflect our world, identities and social relations, but, rather, play an active role in creating and changing them' (Phillips & Jørgensen 2006:1).

Creating reality can be interpreted to mean that talking is more than communication or expression, it is a 'constitutive force' (MacLure 2003:4). There are, however, power differentials that arise, resulting in a struggle to establish a hegemonic reality, which are supported by subject positions. The subject position, for example, of an expert tips the balance in her favour to hegemonise meaning. Changing reality, it seems, is possible '*(o)nly by achieving a revolution in language*' (Williams 2005:134 italics in original).

Discourse then is closely linked to the notion of hegemony. Laclau and Mouffe's (1985) notion of hegemony, though influenced by Gramsci (1977), digresses at the level of operation. Their aim is to uncover hegemonic relations at the level of systems rather than individuals. Hence the idea is not to demonstrate that the students or tutor exercises hegemony. Instead through strategic analysis, 'the general hegemonic relationships in society, and conditions for the transformation of hegemony' (Andersen 2003:55) is revealed.

Discourse is also connected to Žižek's notion of the Real, appropriated from Lacan (1981), positing that defining reality, meaning or intention is not possible as language, which as an order of symbols, is a confounding medium (Butler, Laclau & Žižek 2000). From this perspective, communication changes reality, meaning and intention, and creates a schism between the reality of thought and the reality conveyed by speech. Žižek's notion of the Real is best captured in this description:

> In the endless complexity of the contemporary world, where things, more often than not, appear as their opposites – intolerance as tolerance, religion as natural common sense, and so on ... (Žižek 2009:1).

His standpoint is that there are limitations to accessing the Real. To substantiate the claim of inaccessibility, Žižek (2002) deploys two conceptions of the Real, namely, the Desert of the Real and the Passion of the Real. The former refers to lack and emptiness that is not so easily discernible in the use of terms and concepts. In his words,

> On today's market, we find a whole series of products deprived of their malignant properties: coffee without caffeine, cream without fat,

> beer without alcohol .... And the list goes on: what about virtual sex as sex without sex, the Colin Powell doctrine of warfare with no casualties (on our side, of course) as warfare without warfare (Žižek 2002:11).

The result is fuzziness, and the use of false terms that obfuscate thinking. What meanings do terms convey and what meanings are not conveyed? And what explains the substitution of the actual with its appearance? And how is it that appearance is not detected for its falseness? One explanation may be that terms are empty signifiers (Laclau 2000) deprived of their accompanying meanings such that anyone can attach their own, resulting in a battle for hegemony. This 'absent fullness' (Laclau 2000:192) arises from the Real, which, as has been explained, is impossible to define through the medium of language.

In combination with the Desert of the Real, the Passion of the Real, which Žižek appropriates, with a twist, from Badiou (Žižek 2002), is the desire and eagerness expressed by individuals to know 'real' reality. The twist is the subversion of desire as a false desire. For Žižek, the desire is an illusion, masking fears and avoidance:

> The problem with the twentieth-century 'passion of the Real' was not that it was a passion for the Real, but that it was a fake passion whose ruthless pursuit of the Real behind appearances was *the ultimate stratagem to avoid confronting the Real* (Žižek 2002:24) (italics in original).

So, how are discourses of care and critique understood within the context of antagonistic stances of assessment? In this section I argue that both these concepts have essentialised meanings garnered through disciplinary power, namely, care in psychology and critique in philosophy. The conscription of these terms by disciplines reflects their hegemonised status and it is their hegemonic status that I challenge, and their meanings that I disrupt.

Care and the Critique of Care

The imbrications of care in education have a long history, having been

extolled as a necessary and desirable value (see e.g. Branden 1994; Maslow 1954; Noddings 1984; 1992; Purkey & Novak 1984; 1988). Specifically, psychological theories attest to the pivotal need of caring for those we teach. Humanist theorist Maslow (1954), who developed the hierarchy of needs, argued that all persons have needs, and that human needs are not homogeneous as there are crucial basics that are peculiar to each person for the attainment of self-actualisation. From Maslow's perspective (1954), four categories of needs have to be met for self-actualisation, namely, physiological, safety, love and belonging, and esteem. Self-actualisation is exemplified by personal growth and free will. For example, a strong concept of self can only be attended to after basics like nutrition, safety and security are met. Thus self-esteem and confidence are results of feelings of belonging and love. Based on the responses of the students I taught, one can infer that they needed the experience of care to engage critique.

Caring experiences are also supported by the work of Noddings (see e.g. 1984; 1992). She asserts that the role of caring is vital in education. Noddings' donation of the concepts of engrossment, motivational displacement and receptiveness (1984), has influenced educational practice and emphasised caring as the basis for education with special sensitivity for the feelings of those we teach. In general there is consensus that good teaching is exemplified by caring. The negation of caring, by implication is undesirable in teaching situations.

At face value, and from a dissenting perspective, the tyranny of care of the majority as experienced by the assessor appears impossible to counter. Confiscated[3] by psychology, packaged and presented as a human value and conscripted to service education, what critique can be lodged against care? Let me attempt an explanation.

Many of the theories of caring were developed for children and

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[3] The notion of confiscating a concept, to hold it hostage for a particular interpretation is appropriated from Schmitt's (1996) deployment thereof. He explains the effects of confiscation apropos the example of humanity thus, 'To confiscate the word humanity, to invoke and monopolize such a term probably has certain incalculable effects, such as denying the enemy the quality of being human and declaring him to be the outlaw of humanity' (1996:54).

youth attending schools. Its universalisation and extension to higher education may appear logical, but a closer look reveals paradoxes. One must ask how it is possible that students taking a masters class are not at Maslow's (1954) level of self-actualisation. Is self-actualisation always deferred, never attainable because of a never-ending reliance on others? Perhaps it points to self-actualisation as being context-dependent; implying that a positive sense of self is not transferrable from one context to another. Furthermore, as the humanistic approach is subjective in nature, there is no control over how individuals choose to experience the care that is offered. Additionally, the students taking masters level study are themselves teachers who have to care for children and should, one assumes, understand the tensions of an assessor's role. So what explains their demand for caring? It appears that the subject position of learner is resurrected and that of teacher is sublimated. Or that caring is symbolic and symptomatic of a communication meant for the assessor not captured by discourses available to students. In that case caring comprises surplus meanings outside its everyday use.

However, the issue of subject positioning is more complicated from Atherton's (2010) perspective. Atherton draws attention to a three-way relationship comprising teacher, subject (discipline/content) and learner, and how the dominance of one of the three changes depending on the approach, which should, by implication, not lead to regression to child-subjection positions. Atherton's model looks at three conceptions of dominance and the teacher-learner-subject triad. First, the traditional, cognitive approach is dominated by disciplinary content which is interpreted by the teacher for the learner. Second, in the apprenticeship approach, the teacher is a dominant influence selecting and choosing content and skills to be acquired by the learner. Finally, teaching advanced learners, as in the case at hand, requires a dominance of the learner and the subject with the teacher guiding the learning process. Thus, the relationship between student and discipline is stronger at this level and of far less consequence than is the relationship between teacher and student. This is not to say that caring is devalued in higher education. It may just be as Attwood reports, that higher education is not characterised by 'sheer carelessness' (2010) or as O'Brien (2010) posits, that university teachers care but are seldom able to communicate caring effectively.

Much has been made of a caring relationship in the literature as if

there are only two individuals in this relationship. Perhaps this is the influence of family psychology and the appropriation of the parent-child as a metaphor to frame the bond between teacher and student. Should the same metaphor apply in a higher education setting, particularly when assessing learning competence and trap mature, adult students in a child-subject position in need of love? It may be prudent at this juncture to question the assumptions governing teacher-student relationships.

Suppose that this relationship in the first instance is between ideas, not people. That is to say that the assessment of the task is not an appraisal of the person, but of the ideas they present. Secondly, all tasks are externally moderated which means that the invisible presence of another is part of the relationship, albeit as a surveillance measure to assess the assessor. In effect, this means that there is a double surveillance, by students and moderator and a double assessment, of student and assessor. Thirdly, the relationship is simultaneously (a) comparative and developmental as students compare their assessment with peers, and, it is assumed, learn and develop; (b) public and personal as everyone is aware of everyone else's performance and of their own and, (c) surveilled and self-reflective. The relationship of care, from this perspective, appears to be far more complex than the literature suggests. The complexity arises from gaps created by theorising care in education as a decontextualised, ahistorical and universal value. It is not a straightforward relationship between persons only, and more importantly, it makes apparent that caring has to be broader to include a caring for thinking, not just narrowed to human emotionality.

One can conclude that the demand for care masks the violence within, a violence marked by an eternal need and dependence on externals, a need that cannot be satisfied. Care then comes across as a tyranny, with a hegemony framed by emotional discourse and a marginalisation of, and an uncaring for, the discourse of the intellect. These claims can only be made if one accepts that the discussion to this point is clear and unambiguous. There are, however, indications that the demand for care is discursive, multiple and complex. The result is fuzziness around the meaning of care, and a disruption of its identity.

Care of and Critique of Critique

The notion of critique deployed in this context is drawn from the

philosopher, Immanuel Kant and the theorist, Michel Foucault. Kant sees critique as a form of critical inquiry into conditions with the aim to

> discover the source of this condition and expose the condition of its possibility and at the same time to clear and level a foundation for the scientific edifice (Kant 1999:12).

Kant's approach exposes the limits of ideas, weak arguments, lack of evidence and unsubstantiated claims. Kant considers it vital that the gaze of the critique is not so much on what is, as much as 'what ought to be' (1999:12). In other words, the ideas students presented in the assignments were intended to open up thinking to differences, possibilities, scrutinising assumptions and doxa, and moreover, to consider the conditions and effects of possibilities. From Kant's point of view, the comments given in the assignments were meant to develop thinking abilities and refine their academic writing skills. The demand for and focus on critique was interpreted as a tyranny of 'what ought to be' and ignored what was given. It is not surprising therefore, that critique was reduced to its semantic neighbour 'critic' in the minds of students.

If Kant's deployment of critique appears generous despite its narrow focus on 'what ought to be', then Foucault's (1994) version of critique, as contestation from contingent positions and values, is radical. Foucault views critique as a means of contesting, and in some instances, rejecting what is, that is, what has become an established truth (Rabinow 1984). Critique allows such established and received truths to be interrogated for the underlying assumptions, knowledge bases and practices to expose not only how power operates, but how the limitations of not knowing the hidden forces results in practices and beliefs of colonised minds, which Foucault refers to as governmentality. Critique is not in search of harmony, its mandate is to expose the conditions and practices of oppression and subjugation. Critique, in this instance, can have emancipatory effects for those oppressed and debilitating effects for oppressors. Let us examine then how Foucault's notions play out in the arena of a classroom in a higher education context.

There is undoubtedly an unequal power relationship between teacher and students with power tipped in favour of the teacher. It is the teacher who

chooses the contents of the module, designs the tasks and defines the criteria for assessment. It is the teacher who works with ideas of critique, and determines what counts or does not count as critique. Writing about the power issues of teaching the language of English, which applies to assessment as well, Peim (1993:48) asserts,

> [T]he valorization of certain kinds or forms of writing above others is likely to indicate that other forms are being excluded or devalued. The grounds of inclusion are hardly ever likely to be explicit.

Despite the concerns of power raised, one could argue that there is a greater good at work and, therefore, the expectation by teachers that students recognise and value the communicated truths of assessment can be justified. The justification, nevertheless, does not explain why critique is received as a negation of the self, as an attack on the person, and as wilful lack of care. Why, one could ask, is its utility value sublimated? Goleman (1996) in *Emotional Intelligence* suggests that passion and reason are interconnected and that the artificial separation of the functions of both obfuscates the symbiotic relationship between them. It is his contention, that reason is more valued in some places, like school, and that the importance of passion has been 'hijacked' (Goleman 1996:13-29) by educational agendas to the detriment of intellectual development. His argument is clear and emphatic, passion is as important as and an equal of reason. Goleman is not rejecting reason in favour of passion as he concedes that critique is necessary and desirable, but he promotes a notion he terms 'artful critique' (1996:153), a message that he argues

> has the opposite impact of destructive criticism: instead of creating helplessness, anger, and rebellion, it holds out the hope of doing things better and suggests the beginning of a plan for doing so (Goleman 1996:153).

Here one sees a semantic slide from critique to criticism, enabling recognition of the hegemony of an interpretation that highlights its negative characteristic and veils what I regarded as the hidden work of caring in critique. Once again, as in the discourse of care, the normalised, taken-for-

granted interpretation of a particular connotation eclipses other interpret-tations. As long as assessment is connected to meeting care needs rather than intellectual needs, the core outcome, learning, is marginalised. Yet, if, we accept Goleman's thesis, the enhancement of the intellect apropos critique should simultaneously raise the happiness level of the individual. The dis-course of critique suggests otherwise. The dominance of emotional responses subverts the intellectual project of assessment and becomes the core around which discourse is organised. But what if emotions are crucial, and more importantly, absolutely necessary for intellectual development? I turn to the work of neuroscientist Antonio Damasio (1994) to provide insight.

In his work with individuals who are brain damaged Damasio shatters the myth of a separation between cognitive and sensory or emotional processes. Carefully selecting individuals who cannot feel emotion but whose cognitive abilities remain intact, Damasio was able to demonstrate that cognitive functioning cannot be separated from emotional involvement. Research subjects could objectively and rationally analyse choices but could not make decisions. What Damasio's work revealed is that intellect works in 'convergence zones' (1994:182) where cognitive and sensory structures intersect rather than in isolated cortices. From this perspective, the demand for students to receive critique unemotionally is counterproductive, ironically working against the intentions to develop students' intellectual abilities.

On reflection now, there appear to be a number of reasons for students' responses to critique. Firstly, the notion of critique was not communicated theoretically. Whilst in my mind I worked with a Kantian perspective, the students were responding from a Foucauldian one. Secondly, the criteria for what counts as critique were not as clear as I thought they were. Thirdly, critique has an endemic violent characteristic resulting in its semantic relative, critic, to be mistaken for and identified with critique, especially when appraising the quality of a piece of work.

Thus students' participation, worth and evaluation of learning were governed by an authoritative other with power to 'pass' or 'fail' students. Indeed, within the context of a higher education environment, with a professor and a doctor representing knowledge power, what were the possibilities for student emancipation through critique? And what were the possibilities for students to critique the notion of critique? Undoubtedly, these questions relate to issues of power which is entangled with and

complicates assessment, especially as critique appears to be what it is not.

The Passion of the Real on a Cartesian Plane

Discourses, as explained earlier, are effects of language that are neither neutral nor essentialist, and are fundamentally discursive. Here I consider the possibilities having cast a gaze at an issue arising from assessment, and thereby, examine, retrieve, and expose the nature of discursive reality. What has been established thus far is that care and critique appear to be what they are not. Due to the hegemony of meanings ascribed to both, care was received as good, desirable and useful, whilst critique was cast as harmful, undesirable and negative by students. There was, similarly, hegemony of meanings by the assessor viewing critique as useful and care as harmful to develop students' intellect. Depending on which side of the binary one supports, it is not apparent that inherent in care is an element of violence, and in critique, an element of caring. Consequently, notions of care and critique were essentialised and fixed in the minds of students and teacher.

The antagonism between the students and myself, it seems, operated on a false Passion of the Real (Žižek 2002). The students' need for emotional comfort and my need to develop their intellect resulted in identical effects, that is, negative perceptions of each other fuelled by meanings fixed to care and critique. By basing our demands on what each considered to be desirable, and denying the hidden violences inherent in care and critique, we engaged each other in ways that impaired the teaching and learning relationship. The denial displayed by both sides of the antagonism is a classic example of Žižek's (2002) argument that it represented nothing more than avoiding the Real. The Real that students were avoiding was the consequences of the gaps and limitations of their thinking and acknowledging their failure to demonstrate competency while I used an aseptic, impersonal stance packaged as professionalism to avoid acknowledging the pain I caused to students.

This false Passion of the Real was coupled by a desire for the Desert of the Real (Žižek 2002). The students and I understood the aims of the course, that is, to develop them into critical thinkers and researchers and the emphasis on critique as a core skill and value in educational research. There was, seemingly, a desire to acquire these skills and values by students, and to

teach skills and evaluate their competencies by myself. However, the antagonism made apparent how our desires exemplified the Desert of the Real. Let me explain.

Real critique is painful, and Real caring is merciful. Students wanted competency in a way that preserved their emotional well-being and I wanted them to accept critique in a way that recognised its potential for intellectual development. This meant that the students and I sought 'decaffeinated'[4] versions of critique and care. In other words, critique deprived of its malignancy and potential to hurt feelings, and caring deprived of its emotional elements and presented as concern for the intellect. Decaffeinated critique would valorise work done, ignore gaps and limitations and produce the illusion of competent learners. By contrast decaffeinated caring would deny the need to be merciful. Decaffeination would, therefore, be the means to cleanse care and critique of their dangerous elements.

Decaffeination and the False Passion of the Real do not take into account that there is an alternative explanation. It is possible that in asking for care, students were engaging in a critique of the way the task was assessed, and, perhaps, even challenging the unstated rules of 'good critique'. My response to intellectualise the discussion could have been, likewise, a display crafted to mask my emotions.

On a Cartesian plane, the binary operates as a duality of the mind comprising reason (critique) and emotion (care). The analysis indicates that this duality is an illusion as critique is a form of care and the request for care is a form of critique. As a false duality it has the potential to confound communication and fractures relationships between students and teachers. With respect to assessment, should students and teachers remain on the Cartesian plane, the impasse between them will not be transcended in the classroom. For that purpose a topography, different to a Cartesian plane, is required as will be argued in the next section.

From Binary Opposition to Möbius Congruity

The paper began with students and assessor positioned on opposite sides, a

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[4] Žižek (2008) used the description 'decaffeinated' to describe a watered-down version of Marxism.

binary opposition. The paradoxes arose because critique and care were set up in discourse as essentialised notions, whilst discourse analysis revealed that care and critique are alike in many ways and resemble each other. Both are tyrannical when demanded, harmful in some respects, and useful in other respects. They are, in a sense, synonymous as caring and critique can be retrieved in both. Furthermore, based on Damasio's (1994) work, caring and critique are not isolated functions located in discrete sectors of the brain as all thinking that is activated operates in interconnected ways within the brain. The arguments suggest that the Cartesian plane is inadequate to capture this reality. Consequently, a topographical metaphor based on the unique characteristics of the Möbius strip is a suitable alternative to capture the nature of reality (see also Agamben 1998; Žižek 2005; Amin 2010) presented by the complexities and paradoxes of care and critique.

The Möbius Strip is a special surface that comprises one side and one edge only formed by a single twist of a strip before joining the ends. This surface, I argue, represents in a visual form the reality of the discourses of care and critique. The Möbius surface is appropriate because its 'fixed' points are ambiguous and arbitrary enabling the arbitrariness of language to be represented. The arbitrary nature of language is rendered invisible by hegemonic and monopolised interpretations that simultaneously veil and sublimate alternatives. The surface of the Möbius unfixes essentialised meanings and interpretations. For example, to establish whether a point is on the inside or the outside of the strip, traversing its length is necessary and reveals its singularity because inside and outside are fictions, they do not exist on the special topography of the Möbius strip. Likewise, differences between critique and care are fictions invoked in and through language. Harmony and antagonism about assessment are, similarly, fictions, appearing to be what they are not. So what could this mean in practice?

Assessment is necessary as a measure of learning, as an evaluation of teaching and as a vital procedural requirement for obtaining credentials. The uses of assessment in higher education are unlikely to change in the foreseeable future. One can conclude that there are perplexities related to assessment bedevilling those who teach and those who come to learn in higher education spaces as assessment can produce a complex web of challenges with potential to generate conflict in general and to antagonise the relationship between students and teacher in particular. Crucially, learning

can be destabilised if we continue to regard assessment as an objective, neutral and unemotional set of procedures. Thus there is an urgent need to reconcile the uses and the perplexities of assessment. Moving away from a Cartesian plane and working with the Möbius topography, I want to argue, may provide the means to harmonise the incompatibilities of critique and care in assessment.

Harmonisation begins with acknowledging that good intentions of assessment are often not communicated unambiguously and that ideas cannot be conveyed objectively as recipients make meaning subjectively. The Möbius terrain is a reminder of the vulnerability to ambiguity of words like care and critique, reflecting a poststructural reading as captured by Peim (1993: 54):

> Words may mean things, none of them contained in the words themselves without reference to other words – other chains of meaning. According to the logic of this position all meanings are always deferred: that is they are not present in the statements that produce them, but are generated by a movement or 'play' – an interplay between the present word(s) and the absent, but invoked 'meanings'.

The task, it appears, is to close the gap between the use of language and the interpretation of language by opening up discussions for sharing multiple interpretations and, perhaps, to begin a dialogue about how different interpretations can be incorporated in assessment. Furthermore, it is evident that binaries create traps of fixed ways of thinking, and since assessment lends itself to creating binaries, e.g. pass and fail or good and bad, assessors will need to consider how binary structures can be destabilised without compromising the importance of assessment in teaching and learning. The Möbius Strip has potential for use as a tool for dialogue and to destabilise fixed points of views.

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Producing Better Quality MCQs at First Year Level: Are Guidelines and Templates Enough?

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Abstract

Largely owing to high student numbers and the constraint of having to operate a common curriculum over two campuses (Westville and Pietermaritzburg), the School of Information Systems & Technology (IS&T) at the University of KwaZulu-Natal (UKZN) has adopted multiple choice questions (MCQs) as its primary assessment method at first year level. In this paper, the authors reflect on initiatives undertaken within the School to improve MCQ construction against a backdrop of considerable student and staff diversity, particularly in terms of language. These initiatives centre on the use of a set of MCQ guidelines and an MCQ template, together with a structured cycle of review and feedback. This reflection on current practice forms part of the first stage of an action research programme of MCQ construction improvement in the School. The use of the template and guidelines has been beneficial since they have made staff more aware of quality issues. In addition, however, issues such as staffing, the time needed to develop questions, the importance of assessment, and question review also play a significant role in producing quality MCQs. The paper concludes with suggestions for further work.

Background and Context

First Year Information Systems and Technology at UKZN

The School of Information Systems & Technology (IS&T) operates over two campuses (Westville and Pietermaritzburg). Despite this divide, the School strives for near complete commonality in its four first year modules. Module outlines, learning outcomes, prescribed textbooks, lecture plans, practicals, tutorials and, most importantly, assessments are therefore identical across both campuses. The language of instruction and assessment is English.

Each module is divided into multiple topics, each coordinated by a Topic Leader who is responsible for drawing up a topic outline, including lecture plans and learning outcomes for each lecture, and ensuring that the topic's tutorials and practicals (if applicable) are prepared on time. Each topic therefore has both a Topic Leader on one campus and another staff member to lecture on the topic on the other campus. Topic Leaders report to the overall Module Coordinator, who is usually situated on the Westville campus. In Pietermaritzburg, there is also a Module Coordinator who addresses issues that arise on that campus.

The modules and their roles in the IS&T curriculum are summarised in Table 1.

Module Code	Module Name	Role in Curriculum
ISTN100	End User Computing	Service module for non-IS&T majors
ISTN101	IS&T for Business	Compulsory for all B.Com students
ISTN102	IS&T Development Fundamentals	Compulsory for IS&T majors
ISTN103	Development & Applications Fundamentals	Compulsory exit course for Accounting majors; elective for other non-IS&T majors

Table 1: First year IS&T modules

In this paper, the authors concentrate on the two second semester modules,

ISTN102 and ISTN103, as both authors were intimately involved in these modules.

In an ideal world, with lower student numbers, one would assess student learning using various constructed response assessment methods. However, with larger student numbers, even though this situation is not ideal, the School has adopted MCQs as the preferred means of assessing large classes, primarily for logistical reasons (large classes can be assessed more quickly and faster feedback can be given). With the exception of IST102 (which has a short answer component, part of which was assessed in 2010 via a practical programming test), assessment in all modules occurs entirely via MCQs. It is therefore critical that the School focuses on constructing MCQs that are of acceptable quality and fair to a large and diverse student population. In attempting to do so, the School operates within several key environmental constraints, as outlined below.

Student Numbers and Diversity

The School is responsible for upwards of 2000 students per semester across its first year modules. The average student numbers for each module per campus between 2008 and 2010, are summarised in Table 2.

Module Code	Semester 1		Semester 2		Total Examinees
	West.	Pmb	West.	Pmb	
ISTN100	262	137	383	138	920
ISTN101	1187	416			1603
ISTN102			426	152	578
ISTN103			872	305	1177
Total students	**1449**	**553**	**1681**	**595**	**4278**
Total students/semester	**2002**		**2076**		

Table 2: Average first year IS&T student numbers (2008 – 2010)

First year students in the School come from a wide variety of cultural and educational backgrounds and speak a wide variety of languages. Students across all the modules in 2008, 2009 and 2010 spoke between 19 and 25 home languages (see Table 3). On average, 50.8% of these students had English as a home language, while 41.0% had Zulu. For ISTN102 and ISTN103, an average of 52.2% and 58.1%, respectively, had English as a home language.

	2008	**2009**	**2010**	**Average**
All first year IS&T students				
Total no. of home languages	19	25	19	21.0
Percentage with English as home language	51.6%	51.4%	49.6%	50.8%
Percentage with Zulu as home language	40.8%	41.0%	41.2%	41.0%
ISTN102 students				
Total no. of home languages	14	13	14	13.6
Percentage with English as home language	50.6%	50.7%	55.3%	52.2%
Percentage with Zulu as home language	41.0%	41.8%	34.9%	39.2%
ISTN103 students				
Total no. of home languages	10	18	16	14.6
Percentage with English as home language	61.6%	56.3%	56.4%	58.1%
Percentage with Zulu as home language	33.9%	37.5%	35.1%	35.5%

Table 3: Home language diversity amongst first year IS&T students (2008 – 2010)

The student body is not only diverse in terms of language. The modules draw students from the Faculties of Management Studies; Science and Agriculture; Law; and Humanities, Development and Social Sciences, which means that there is considerable diversity in terms of the skills that they bring into the modules.

Staff Numbers and Diversity

In addition to a diverse student body, the staff members who assess first year modules are also numerous and diverse. There can be upwards of 10 staff members involved in any of the modules during a semester and staff members assigned to first year modules tend to be newer and/or less-experienced. In both 2008 and 2009, there were eight staff members who each had less than two years lecturing and assessment experience contributing to the assessments. In 2010, as no new staff members joined the group of first year lecturers, there were only four lecturers in the group with less than two years experience (see Figure 1). Although there is a School
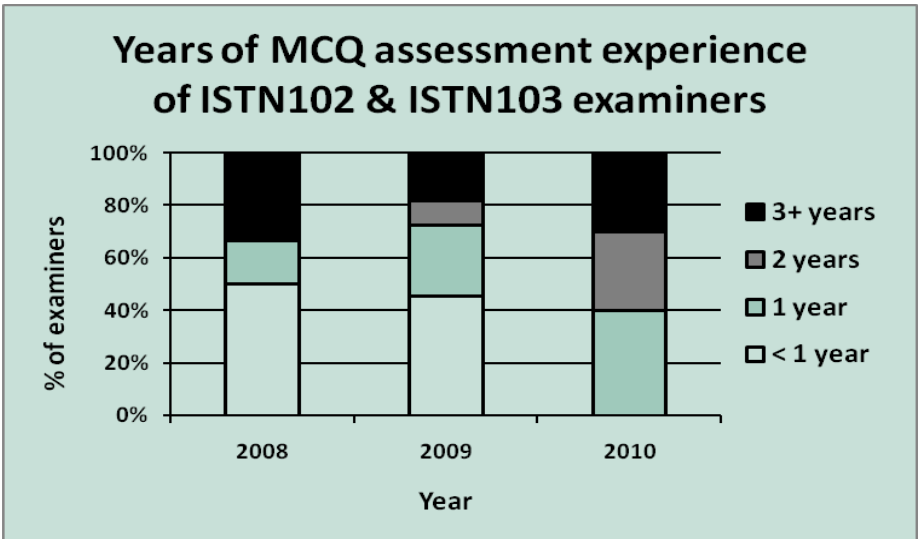
Figure 1: MCQ assessment experience of the ISTN102 & ISTN103 examiners (2008 – 2010)

policy that all lecturers should teach at first year within a two-year cycle, this has not been fully implemented as some lecturers' expertise is needed in other modules. The modules had 19 different examiners between 2008 and 2010, with only four being involved as assessors over all three years. With high rates of diversity and turnover amongst staff, it is naturally difficult to build, retain and pass on the capacity to construct MCQs of acceptable quality from year to year.

Similar to the student body, there is also language diversity amongst the staff. In the ISTN102 and ISTN103 modules, 45% to 75% of the lecturers who contributed examination questions had English as a home language (see Figure 2).
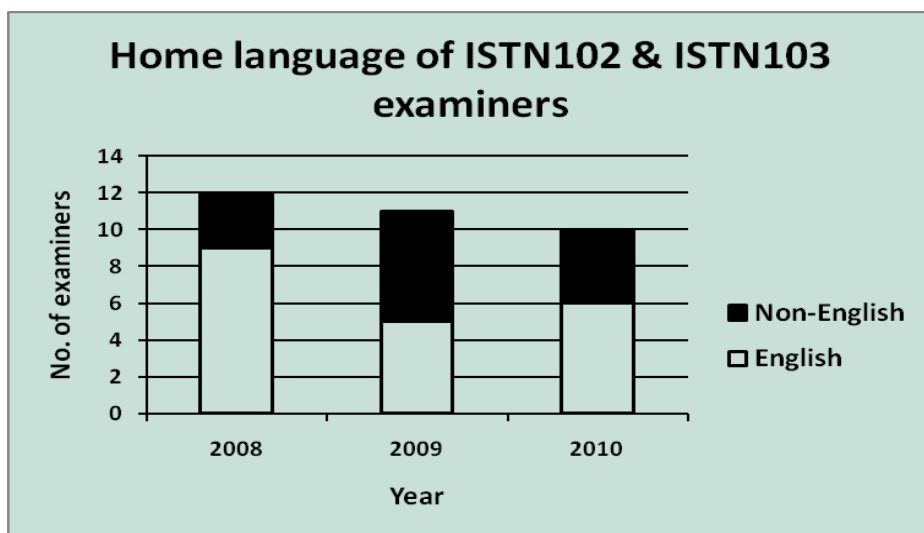
Figure 2: Home language of ISTN102 & ISTN103 examiners (2008 – 2010)

School Interventions: The MCQ Template (2005) and the MCQ Guidelines (2008)

In 2005 the ISTN101 moderator highlighted several problems with the MCQs. As a result a training course was held to improve the lecturers' MCQ

construction skills. Over 20 staff members attended, although by 2008 only four remained in the first year lecturing team.

Also in 2005, the MCQ template was instituted, which contained the MCQ itself, and a table showing its solution, the learning outcome, Bloom's taxonomy level (i.e. whether it is a 'Recall', 'Comprehension' or 'Application' type question), where the solution could be found, and the question developer's name. An example of this template is provided in the Appendix.

The MCQs favoured by the School are typically the best-answer variety. These have a stem which describes the problem to be solved, a single correct or 'best' answer, and several distractors (incorrect answers) (Clegg & Cashin 1986:1; Hansen & Dexter 1997:94; Tarrant *et al*. 2006:663). There are typically between two and four distractors for each question.

In 2008, as a result of regular question writing flaws still occurring, a set of MCQ guidelines was drawn up and circulated to staff. The guidelines cover several broad areas in MCQ construction, including academic content, formatting, writing the stem, and developing distractors. The School has also focused on the project management aspect of assessment compilation as part of its drive to construct better quality MCQ assessments.

Characteristics of Acceptable Quality MCQs

Based on the literature, a MCQ is deemed to be of acceptable quality when:

- questions are testing a learning outcome and not some obscure content (Haladyna *et al*. 2002:312; Jozefowics *et al*. 2002:158; McCoubrie 2004:709; McCoubrie & McKnight 2007:507).
- a range of learning outcomes are being tested (Clegg & Cashin 1986:2; McCoubrie 2004:709-710).
- students' content knowledge is being tested, and not their knowledge of the content *and* the English language (Farley 1989b:11; McCoubrie 2004:709-710; Stupans 2006:62).
- students' content knowledge is being tested, and not their ability to write MCQ tests (McCoubrie 2004:709-710).
- questions are phrased unambiguously and clearly (Thompson *et al*. 2002:7).

- there is one correct or best answer to each question (Farley 1989b:12; McCoubrie & McKnight 2007:507).
- there is a uniform format to the questions (Ware & Vik 2009:241), as well as a lack of grammatical errors (Clegg & Cashin 1986:3; Haladyna *et al*. 2002:312), so that the student is not distracted from answering the questions by oddities which might increase their test anxiety, or given clues as to the answer.

A survey of the literature relating to MCQs follows.

Literature Review

MCQ Usage in Higher Education

MCQs have been used as an assessment method in a variety of disciplines, including the medical professions, such as nursing (Masters *et al.* 2001:25; Clifton & Schriner 2010:12), medicine (Downing 2005:134; Ware & Vik 2009:238), pharmacology (Stupans 2006:59) and radiology (McCoubrie & McKnight 2007:506). MCQs are also used in the humanities (Riecker & Makhoba 2009), to assess business subjects (Gatfield & Lamar 2006:107), computer programming (Simkin & Keuchler 2005:74) and IT (Woodford & Bancroft 2004:948). MCQs are used to assess learning at a variety of levels of education, from first year (Riecker & Makhoba 2009) to final year 'high stakes' assessments, the outcome of which assesses students' readiness to move into a profession or not (McCoubrie & McKnight 2007:506; Tarrant & Ware 2008:199; Ware & Vik 2009:238).

The Disadvantages of MCQs

There are numerous disadvantages of MCQ assessments. Using MCQs to assess learning should only take place when it does not matter how well a student can put together their own response (Clegg & Cashin 1986:2; Schuwirth & van der Vleuten 2003:643). Not all learning outcomes can be tested via MCQs. For example, one cannot test whether a student can draw a particular diagram; one can only test whether a diagram can be interpreted. Because one MCQ option is correct, students could guess the answer (Clegg

& Cashin 1986:2), thereby circumventing the purpose of the test, which is to assess what knowledge the student has gained. Some students find MCQs disempowering, as they cannot state the response in their own words, but have to choose from the options given to them (Paxton 2000:114).

The Benefits of MCQs

There are several benefits of using MCQs to assess student learning. They can test a wide range of content in one assessment (Clegg & Cashin 1986:2; McCoubrie & McKnight 2007:506). They can be used to test all levels of learning (as defined by Bloom 1956 – see Figure 3), from 'Knowledge' or 'Recall' to 'Evaluation' (Clegg & Cashin 1986:1; McCoubrie & McKnight 2007:506).
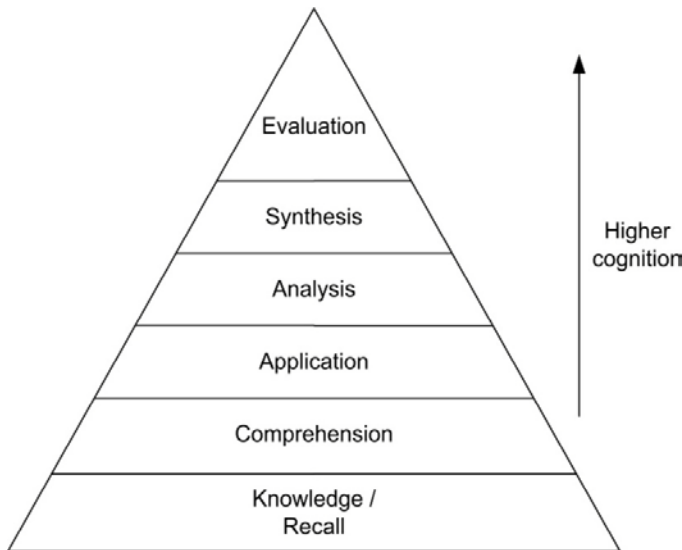
Figure 3: Bloom's levels of cognition (Woodford & Bancroft 2004:948)

MCQs take relatively less time for students to answer (Clegg & Cashin 1986:2). Since marking can be undertaken by a machine, marking is quicker and is more uniform (Clegg & Cashin 1986:2), especially when compared to the marking of short answer questions and essays (Schuwirth & van der

Vleuten 2003:644). These factors make it easier to assess more students at a time, and give the students their test scores back quicker (Simkin & Kuechler 2005:75). Some students, whose home language is not the language of assessment, prefer MCQs as they do not have to worry about the spelling and grammar of their response (Gatfield & Larmar 2006:109).

Issues in MCQ Construction

While it is fairly easy to construct an MCQ that assesses knowledge (or recall) (Clegg & Cashin 1986:1), it takes a long time to generate better questions of higher taxonomic levels (Clegg & Cashin 1986:1; Tarrant *et al*. 2006:669). The amount of time that it takes to create MCQs is generally underestimated (Clegg & Cashin 1986:2). This could explain why there is an abundance of recall MCQs asked in tests (Jozefowics *et al*. 2002:159; Stupans 2006:60; Tarrant & Ware 2008:200) and found in textbook question test banks (Masters *et al*. 2001:27). Van Hoozer *et al*. (1987:280) estimate that developing a single question could take a professional item writer over an hour. Schuwirth and van der Vleuten (2004:977) estimate that a novice question compiler could take up to three hours to develop a context-rich question.

In order to implement MCQs successfully there are several pre-conditions (Clegg & Cashin 1986:2). Firstly, the question developer should have mastered the subject matter thoroughly. This includes not only the course content, but common misconceptions and fallacies about the subject. Secondly, a set of educational objectives must have been developed and used for the course material. This enables one to assess the learning gained for specific outcomes, and also the level at which the learning has been gained. Thirdly, one needs to understand the examinees' educational backgrounds and intellectual abilities so that the difficulty or complexity of the questions can be adjusted accordingly. Finally, the question developer should be excellent at writing simply and concisely in language which the students can understand. This is particularly important for those students whose first language is not the language of assessment (Paxton 2000:115; Tarrant *et al*. 2006:668). Cassels and Johnstone (1984:613-615) found that students' marks improved when questions were stated more clearly or briefly, when using

common words, phrasing the question in a positive way, and using the active voice. In a workshop on assessment, Dempster (2010) recounted how learners from African schools in South Africa ignored options which contained words they did not understand (even if the option was correct). In an article on the same study, Dempster and Reddy (2007:919) reported that higher sentence complexity negatively affected the learners' ability to answer questions correctly. From an assessor's point-of-view, Tarrant *et al.* (2006:668) comment on the large number of unclear or ambiguous questions in the test bank they were reviewing: they surmise that this might have been due to the large number of contributing teachers who do not speak English as a first language.

'If tests are not well-constructed, assessments of student performance may be invalid' (Tarrant *et al*. 2006:664). This means that questions must be free of flaws. Multiple choice question flaws include issues like giving word clues, grammatical clues or logical clues in the stem or options, implausible options, making the correct option markedly shorter or longer than the incorrect options, and having no correct answer, or several correct answers. When a question includes a flaw, it either makes the questions easier or harder than they should be (Downing 2002:S104; Downing 2005:141; Tarrant & Ware 2008:198-199). This sometimes affects whether borderline students pass or not (Downing 2005:141); it could also affect whether a student gets a distinction or not (Tarrant & Ware 2008:203).

There are many guidelines available which describe well-formed questions and how to avoid common flaws, e.g., books such as Case and Swanson (2001) and Haladyna (2004); also articles, such as Clegg and Cashin (1986); Hansen and Dexter (1997); Haladyna *et al.* (2002); Masters *et al*. (2001); Tarrant *et al*. (2006); McCoubrie and McKnight (2007); Tarrant and Ware (2008); Ware and Vik (2009). In spite of these guidelines being easily available, flawed questions are still being included in tests and examinations (Downing 2002:S103; Downing 2005:140; Tarrant *et al*. 2006:667; Tarrant & Ware 2008:202; Riecker & Makhoba 2009). In many cases, the question's flaw could be removed by re-wording the question (Tarrant *et al*. 2006:667).

The content of an assessment steers students to what they should learn (Swanson & Case 1997:74). If students are only tested on recall questions, they will spend their time cramming facts into their heads (which

will probably soon be forgotten). In fact, Boud (2009) asserts that no recall questions should be included in summative assessments if students are to be encouraged to gain habits of life-long learning. If students are to have learned skills of content recall, comprehension and application by the end of the module, these skills need to be assessed (Tarrant *et al.* 2006:663). There is no research that shows appropriate proportions of recall / comprehension / application questions to include in tests for different years of study (Masters *et al.*, 2001:26). However, it is thought that for higher years of study, there should be fewer lower level questions (Tarrant *et al*. 2006:669). A quality MCQ assessment, therefore, is made up of questions which do not have flaws, which assess the student's knowledge of the range of learning outcomes and assesses the student's knowledge at different cognitive levels.

A possible reason MCQs in tests and examinations have so many flaws and are often asked at the lower levels identified by Bloom is the relative importance that academics place on lecturing compared to assessment (Jozefowics *et al*. 2002:157; Tarrant *et al*. 2006:669). Failing to pay enough attention to assessment means that not enough time and effort is given to the development of questions, and the process of developing questions is not begun early enough (Clegg & Cashin 1986:3). This attitude towards assessment fails to take account of the fact that if the examination questions are flawed, then the examination may not be valid, and all the effort put into lecture development and delivery has been a waste of time.

The following consolidated list outlines several key principles which, if followed, should yield better quality MCQs:

- Seek training in the writing of MCQs. This has been shown to help improve developers' questions (Hansen & Dexter 1997:96; Jozefowicz *et al*. 2002:159; Schuwirth & van der Vleuten 2003:644).
- Make sure that the person responsible for the assessment is an expert in the subject (Clegg & Cashin 1986:2).
- Use learning outcomes for the course, and then assess the students based on those learning outcomes (Clegg & Cashin 1986:2; McCoubrie 2004:710). No questions should test obscure facts or knowledge (McCoubrie 2004:710).

- Use a test blueprint to outline which of Bloom's levels each topic should include in the test (Farley 1989a:4).

- Start early with question generation (Clegg & Cashin 1986:3). Time is needed to think of questions, and time is also needed to review the questions (both self-assessment and peer review). If necessary, time may also be needed to improve the question or to replace it. Time is also needed to practice writing good questions (Farley 1989b:39).

- Concentrate on developing higher order questions (on the Bloom's hierarchy), as lower level questions are easier to develop. Avoid using textbooks' test banks as a source of possible questions, as they tend to contain a high proportion of recall questions (Masters *et al*. 2001:27; Tarrant *et al*. 2006:668).

- Write using simple English (Tarrant *et al*. 2006:668). Do not include unnecessary text in the question (Haladyna *et al*. 2002:312). Make sure that knowledge is being tested, not knowledge *and* English skills (Stupans 2006:62).

- Note the Bloom's taxonomy level and other data about the question (e.g. the developer's name and the learning outcome it is testing), so that these can be included in the test blueprint (Tarrant *et al*. 2006:665).

- Assess your own questions against the guidelines. Give your questions to others to review (Jozefowics *et al*. 2002:160). Accept feedback and improve or replace questions as necessary (Tarrant *et al*. 2006:669; Clifton & Schriner 2010:16).

- Assess the test for uniformity of format (Ware & Vik 2009:241). List MCQ options vertically (not horizontally), as this is easier for the examinee to read. Use capital letters for the options. Check that the correct answer is distributed over the options (Clegg & Cashin 1986:4).

- After the students have written the test, perform distractor analysis on the questions to see if the distractors need improving or replacing (Farley 1990:9; Downing 2002:S104; Tarrant *et al*. 2009).

Methodology

This paper forms the first (i.e. diagnostic) phase of an action research programme (Baskerville 1999:6) of improving MCQ construction in a first year IS&T context against a backdrop of considerable student and staff diversity. This phase involves reflecting on current practice before designing, introducing and studying future interventions (Baskerville 1999:6). The authors approach the subject as Teacher-Practitioners (Pollard *et al*. 2005:9) using an interpretivist lens.

MCQ Construction at UKZN IS&T

This section describes the School's existing MCQ construction strategy (implemented in 2008) as envisaged by the Coordinator(s). Actual practice will be reflected upon in the next section.

At the start of each module, the Module Coordinator circulates the MCQ guidelines and MCQ template to all staff members (see Figure 3). The Coordinator also circulates a schedule indicating when questions must be sent to Topic Leaders, the number of questions required from each staff member for each topic, the nature of questions required (MCQ or short answer) and what percentage of questions should be 'Knowledge' ('Recall'), 'Comprehension' or 'Application' type questions (Bloom 1956). It is expected that every staff member use the template and guidelines to prepare their allotted number of questions before the deadlines.

The MCQ guidelines outline principles which staff members can use to assess the quality of the MCQs they and their peers construct. The guidelines cover issues such as academic content, formatting, stem construction and developing distractors.

The MCQ template is primarily an administrative intervention to ensure that all questions are received in a similar format to aid in the compilation of the paper. It is also useful for creating the model answer and for examining Bloom's levels and whether solutions are well distributed among the options.

The first level of quality assurance is self-reflection, i.e. carried out by the staff member him/herself. The questions are then forwarded to the Topic Leader (and any other staff members involved in that particular topic)

for the second round of review. Questions which need attention are edited or replaced. When the Topic Leader is satisfied that all questions for the topic are of a suitable quality, they are sent to the Module Coordinator, who is responsible for the compilation of the full paper. After a final quality check by the Coordinator, the full assessment is circulated to the entire lecturing team for comment.

Once a draft version of the assessment has been finalised, all staff members attend a review meeting where every question is re-checked. Only once the question paper has passed through the review process and the issues flagged are addressed is it considered ready for moderation (both tests and examinations are moderated). The School takes the position that all staff members involved in the module share the responsibility for the quality of the assessment.
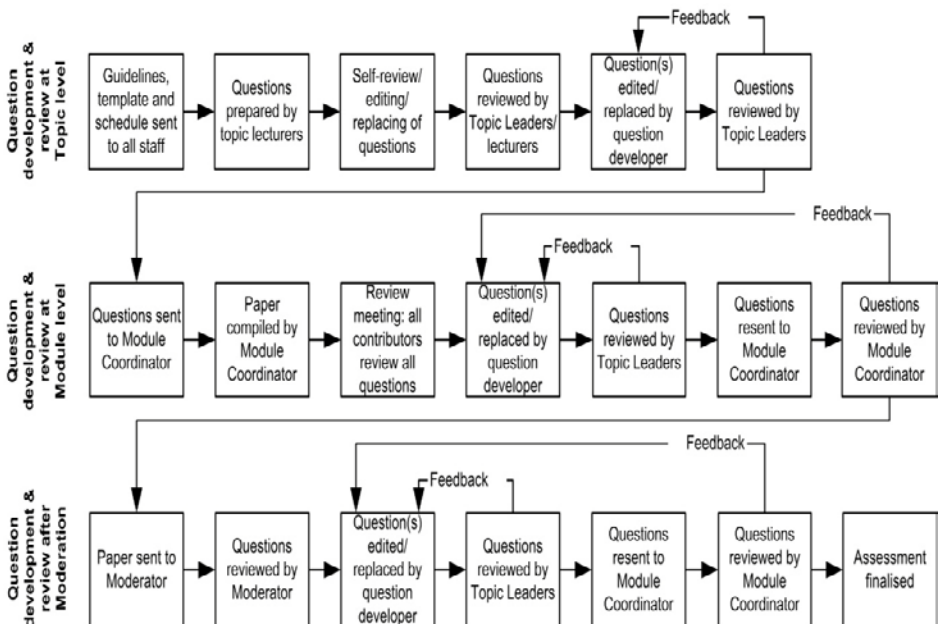
Figure 4: The MCQ construction process of UKZN IS&T

In summary, the template and guidelines have several desired outcomes. The template ensures a uniform 'look and feel' for every assessment that students encounter during a module. The template also allows the Module Coordinator to review the paper to ensure that an appropriate mix of Bloom's taxonomy levels is used in the assessment. The guidelines allow staff members both to self-assess their own work, as well as assessing that of their peers. Using the guidelines helps to ensure that all MCQs are understandable and unambiguous for a large and diverse student group. The template and guidelines also serve as a developmental tool, particularly for newer members of staff.

The Authors' Reflections on MCQ Construction in Two First Year Modules

In this section, the authors reflect on their experiences and observations of the construction of MCQs in two first year modules between 2008 and 2010. This reflection concentrates on the second semester courses, ISTN102 and ISTN103, after the template and guidelines were introduced. Both authors are content specialists (and not educational experts). The first author was a Topic Leader in both modules in 2008 and 2009, and lectured in both modules in 2010; the second author was the Pietermaritzburg Module Coordinator for both modules for 2008 and 2009 and lectured in both modules in 2008; he also moderated the tests and examinations in the modules in 2010. These reflections do not necessarily represent the opinions of other first year lecturers.

Layout and Formatting

The impact of the template and guidelines has largely been positive and drastically reduced paper compilation time. As the Module Coordinator sometimes delegates the compilation of a test or examination to other academic staff members, more people are appreciative of how much time the template saves.

Topic Leaders have been encouraged to return questions not conforming to the template or guidelines to the question developer

immediately. This does not always happen, particularly when the Topic Leader is junior to his/her colleague. However, formatting issues are usually addressed at the review meeting. The grammar, spelling and formatting of the final papers have generally improved. The template and guidelines are a constant reminder to staff to think about the quality and format of their questions. They have also proved useful for newer staff members, who can quickly learn the expected question layout.

Evolving Module Content and Recurriculation

Since IS&T is a highly dynamic discipline, the School is frequently faced with the need to recurriculate and update its modules in line with the latest developments in technology. This means that the School has limited capacity to build up a catalogue of acceptable quality MCQs that can be used from year to year. It also means that staff members do not become 'experts' in certain areas. This again impacts negatively on the quality of the MCQs, as staff tend to fall back upon more superficial or 'Recall' questions.

Timing and Deadlines

Staff members, especially those who are new to lecturing and/or to a particular topic, tend to underestimate the amount of time needed to construct MCQs of acceptable quality. Construction is often started too late, which means that initial question submission deadlines are missed. This, in turn, reduces the time available for effective review, moderation, and modifying/replacing questions, which has implications for the quality of the final product. Often staff members have reduced time to respond to the Moderator's comments. As new staff members become more experienced, their delivery on the initial deadlines tends to improve.

The timing of the MCQ construction process is further exacerbated by the number of staff members involved in these modules. When more people are involved there is greater potential for delays. This implies that deadlines for initial submission of questions should be set earlier; however, this might mean that lecturers have to construct MCQs long before they have actually started to lecture on their topic. While this may be easy for a seasoned lecturer, a novice lecturer may find this quite difficult.

Review

Having reviewed the paper beforehand, all staff members involved in the module attend the review meeting. During the meeting each MCQ is reviewed, any necessary clarification is sought, and suggestions for improvements are made. It is the question developer's responsibility to make the changes, and the Topic Leader sees that all questions for his/her topic are suitably edited or replaced before they are re-sent to the Module Coordinator (see the middle row of Figure 4). It is at these meetings that issues which make a quality MCQ are addressed.

Issues such as clarity, ambiguity, conciseness, poor grammar, formatting, the Bloom's taxonomy level and question difficulty are raised. If one person on the lecturing team does not understand the question, it is likely that at least one student will not understand it either. A student writing a test is stressed, and has no time to ponder ambiguities or meaning. These issues therefore need to be addressed. It is usually at the review meeting that the grammar and language of questions are addressed (if not addressed before the meeting). In these meetings the Bloom's taxonomy level is also reviewed and adjusted. It has been noted that the more a question has been reviewed, edited or changed before the review meeting and moderation, the less likely it is to have change requests at the review meeting or moderation stage of the question construction process. It is often the questions about which there was uncertainty or differing opinions prior to the review meeting that are flagged by the lecturing team or Moderator for attention.

It is difficult to accept critique of one's questions, especially in the first review meeting one attends. Also, junior or less experienced staff members are sometimes loathe to offer critique on their senior colleague's questions. However, the review meetings present a learning opportunity for staff members on how to improve their questions. It has been encouraging to see increased engagement by the first year lecturing team at recent review meetings.

In the review meeting, if there is an issue on which there is more than one opinion, this is left to the Moderator to resolve. The less experienced the lecturing team is at constructing MCQs, the more work the Moderator has, to suggest changes or request replacements, which makes this task more onerous. It is the authors' opinion that another review meeting and/ or another moderation needs to take place after each question developer has

responded to the Moderator's comments. (Some lecturers find themselves wondering if their replacement phrases or questions are worse than the original.) However, this would require additional time, which means that the delivery of initial questions needs to be made earlier.

It should be noted that the reviewing process is very time consuming. Questions have to be reviewed, and reviewed again each time a change is made (at topic level, module level and paper readiness level). The amount of time required for this is generally underestimated.

Quality of Questions
With the increasing experience of the staff members on the two modules, and the increasing engagement with the guidelines and template, the quality of the questions in the assessments has generally improved. The more a question has been reviewed, the better it is likely to become. This means that staff need to allow enough time for question development, reflection, feedback and improvement of their MCQs.

Discussion and Conclusions
All first year IS&T courses at UKZN are primarily assessed via MCQs. The language of instruction and assessment is English, which can prove challenging for 49% of students, whose home language is not English. This paper does not debate the merits of conducting assessment through MCQs. Rather, its aim is to reflect on how MCQs of acceptable quality can be constructed, so that the diverse student body is not disadvantaged.

In order to construct MCQs of acceptable quality, the School has introduced an MCQ template and a set of MCQ guidelines, together with a cycle of review and feedback. The template and guidelines assist staff members to construct MCQs which are more easily understood by students without trivialising the learning outcome being tested. In addition, they provide a starting point for lecturers to engage with understanding the fundamentals of constructing MCQs of acceptable quality. The template and guidelines also assist staff members who construct MCQs to create a uniform-looking assessment. A uniform style is a criterion of quality that Ware and Vik (2009:241) also strive to achieve.

Although the template and guidelines do contribute to the construct-

tion of better quality MCQs, these alone will not necessarily yield a high quality overall assessment. It is believed that staffing issues, MCQ development time, stressing the importance of assessment (relative to lecturing), and MCQ review also need to be addressed in order to improve the overall quality of MCQs in assessments.

As mentioned, the staff complement at first year is made up of new or less experienced lecturers. However, as Clegg and Cashin (1986:2) state, it is important for the MCQ developer to be an expert on the topic in which they are developing questions. This could be addressed in several ways. Firstly, MCQ construction training needs to be given to staff (Jozefowics *et al.* 2002:159; Downing 2005:142; Tarrant *et al.* 2006:669; Tarrant & Ware 2008:202; Clifton & Schriner 2010:16). Even though staff members believe they know how to construct MCQs, they still need training (Clifton & Schriner 2010:15). Training has been found to improve the quality of MCQs in assessments (Hansen & Dexter 1997:96; Jozefowics *et al.* 2002:157). Related to training is the issue of the grammar and style of questions, i.e., the question developer's skill in the language of assessment (Tarrant *et al.* 2006:669). Thirdly, a more even mix of experienced and inexperienced lecturers needs to be teamed up to teach first year modules on the two campuses. If a new topic is being introduced, or an existing topic reworked, at least one of the lecturers allocated to such a topic needs to be someone who has the ability to develop appropriate learning outcomes and good MCQs. More experienced MCQ writers also need to be available to help those who are less experienced (Clifton & Schriner 2010:16). Finally, defining, and then assessing learning outcomes needs to be stressed, so that assessment questions do not concentrate on trivia, but on the main issues which need to be learned (Farley 1989b:10; Jozefowics *et al.* 2002:158; McCoubrie 2004:710; McCoubrie & McKnight 2007:508).

Echoing the findings of Clegg and Cashin (1986:3), the amount of time it takes to develop high quality MCQs is underestimated by most staff members. Whilst it is fairly easy to develop MCQs that test 'Knowledge' (or 'Recall') (Clegg & Cashin 1986:2), it takes much longer to construct high quality questions at high taxonomic levels (Clegg & Cashin 1986:1; Clifton & Schriner 2010:12). This can, in part, be addressed by ensuring that there is an expert in the topic area team, who is able to start and guide the commencement of the MCQ construction process earlier. Good project

management is also an important factor, as a late start often means a delay in the delivery date. An early start, together with frequent peer feedback or mentoring, would also help each staff member to develop higher-order questions timeously. Time also needs to be allocated to self-assessment of questions and peer review, as well as question improvement or replacement (Clegg & Cashin 1986:3; Tarrant *et al.* 2006:669; Clifton & Schriner 2010:16). In addition, examiners whose home language is not English may need to start the MCQ construction process earlier than their English first language counterparts, so there is more time for review.

The importance of assessment, compared to lecturing, is the third area which needs to be stressed. If the assessment is flawed, much of the lecture preparation and delivery efforts (which form a large part of a lecturer's life) could be wasted. Perhaps lecturers think of themselves as lecture preparers and deliverers because their title is lecturer, not assessor? However, in the allocation of workload and in the process of the semester's work, assessment needs to be highlighted as an integral part of the lecturer's duties (Jozefowics *et al.* 2002:157). The importance of assessment could be emphasised by a discussion of the MCQ tests' difficulty and distractor analysis (Farley 1990:8-9; Downing 2002:S104; Tarrant *et al.* 2009). Mentorship in good practice would also be beneficial.

Lastly, the review of questions which have been developed needs to be emphasised. Numerous authors have noted the importance of the review process in producing MCQ assessments which do not contain question flaws, and which are valid assessments of the course's learning outcomes (Jozefowics *et al.* 2002:158; Tarrant *et al.* 2006:669). The more times that questions have been self-assessed or peer-assessed and improved by the time they are submitted to the Module Coordinator, the more likely it is that a higher quality test or examination will be produced, which in turn will mean a fairer assessment for students. This approach of improving the quality at the source and reducing time wastage is what is advocated in quality improvement initiatives (Christopher & Rutherford 2004:26). In the case of IS&T, when poorer quality questions were submitted to the Module Coordinator, the participating reviewers and the Moderator had to work harder to ensure that the assessment was of an acceptable quality. It is pleasing to note, however, that the School does plan time for review, unlike instances reported in the literature (Jozefowicz *et al*. 2002:158).

In this review process, it needs to be remembered that the purpose of the review is to detect if there are ambiguities in the questions (which would confuse students in the examination), or confusing instructions or options. The discovery (and improvement) of these before the examination greatly enhances the validity of the examination (Tarrant *et al.* 2006:668). As relatively few staff members participate in this review, this increases the workload (in terms of reviewing and giving feedback) of those who do participate. Appointing an MCQ expert, who is not involved with the module, as an external question reviewer and mentor to those who are developing questions would be beneficial. This would ease the workload of the current participators, as well as providing a learning opportunity for those whose questions need improving. It would also help more lecturers who are reluctant to comment on the work of their colleagues, especially when these colleagues are considered experts (Jozefowicz *et al.* 2002:158).

While assessment through MCQs is arguably not ideal, MCQs have become the preferred assessment method in the School and in other disciplines with large student numbers. At UKZN, MCQs may also be preferred because of the quick turn-around time between the final examinations and supplementary examinations. If constructed properly, MCQs can test a wide range of content in a single assessment (Clegg & Cashin 1986:2; McCoubrie & McKnight 2007:506). Well-prepared MCQs can also be used to test all levels of learning, as defined by Bloom (1956), from 'Knowledge' (or 'Recall') through to 'Evaluation' (Clegg & Cashin 1986:1; McCoubrie & McKnight 2007:506). While it is imperative to have guidelines for good quality MCQ construction and a template to aid formatting consistency, they alone are not sufficient to ensure the development of a quality assessment.

Although this paper has been written in the context of IS&T, there is no reason why its principles cannot be applied in all modules that deal with large and diverse student populations. The paper's principles arguably become less generalisable for more senior years with fewer students, fewer staff members and the scope for different types of assessment.

Recommendations for Further Investigation

This paper expresses the opinions of the authors, based on observation, experience and anecdotal evidence. This forms part of the first phase (i.e.

diagnostic) of an action research programme to improve MCQ construction within the context of a diverse student body and staff complement.

There are several opportunities for further investigation. Even though assessments have been developed for the past three years using the MCQ template and guidelines, MCQ writing flaws are still present in these assessments. One could assess the extent to which IS&T MCQs contain writing flaws. One could also investigate the extent to which writing flaws are present in IS&T textbooks' test banks, and the proportion of questions on the lower levels of Bloom's taxonomy. One could also research the recommended percentages of Bloom's taxonomy levels for questions in tests at various years of study, as there are currently no guidelines for this (Masters *et al.* 2001:26). One could also examine past IS&T MCQs to compare question categorisation using the old and revised Bloom's taxonomy (Anderson *et al.* 2001). An exemplar for a range of IS&T topics at different levels of Bloom's taxonomy could be developed. This is important, as some authors believe that MCQs cannot be developed for higher levels of Bloom's taxonomy (Masters *et al.* 2001:26; Simkin & Kuechler 2005:91). A comparative 'before' and 'after' question analysis showing how questions can be improved after intervention would also be useful as a pedagogical guide. This could include the type of analysis undertaken by Dempster and Reddy (2007), to see if students are guessing the answers, based on which words in the options are understood, or which words appear in both the stem and the options.

The effect that training in MCQ writing has on reducing MCQ construction flaws could also be investigated. Finally, insights from MCQ developers who have used the template and guidelines could be explored.

Acknowledgements

C. Sue Price and Mitchell Hughes

Appendix – The UKZN IS&T MCQ Template

1.   Gigabyte Technologies is developing a telecommunication system. They want to know the maximum number of users the system can handle before it starts giving network failure problems (like dropping calls). Which test should they use?

[A]   Integration testing

[B]   Acceptance testing

[C]   Unit testing

[D]   Volume testing

[E]   Beta testing

Q	Solution	Lecture & Learning Outcome	Source of Content: Chapter/Notes & Page	Bloom's Taxonomy: R or C or A	Examiner
1	D	SAD, Lec 2, LO 4	Stair *et al.* (2008: 450)	A	JJ

Note: Bloom's taxonomy key: R = Recall (or Knowledge); C = Comprehension; A = Application.

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Accountability for Student Learning: Views from the Inside Out and the Outside In

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Abstract

Because of an inherent and desirable diversity of opinion regarding what constitutes quality in postsecondary education, most quality assurance processes rely on institutions to define quality on their own terms in congruence with their missions. This approach allows for considerable autonomy and innovation but makes it difficult to convey to various constituents what specific institutions and the higher education sector as a whole contribute to society at large and to individuals and communities. This essay explores practical and conceptual issues related to increased demand for accountability for student learning outcomes through the U.S. lens of experience and offers a framework for a constructive approach to public accountability applicable to both the U.S. and South African contexts.

Keywords: accountability, Higher Education, educational quality, institutional effectiveness, organizational performance, educational policy.

Introduction

Higher education institutions worldwide face increasing demands to demonstrate quality, educate a more diverse array of the world's population and contribute to the economic and social development of the state. These demands reveal the increasing importance of higher education to both individual and societal well-being. But they have also engendered a more diverse array of financial and political sponsors with varied interests and values in higher education. As a result, there has been a shift in some

oversight responsibilities and governance prerogatives from traditional self-regulation of the academy to an array of institutional management and external public and private sector interests.

Growing external demands on and interests in the work of higher education institutions overlay traditional intrinsic higher education values for preserving history, advancing culture, cultivating the life of the mind, and advancing scientific and technological frontiers. Academic administrators and administrative professionals find themselves navigating between two competing sets of interests and values: leveraging external demands to stimulate internal improvement while preserving autonomy and self-regulation important to academic professionals.

Despite significant differences among their histories and cultures, higher education institutions throughout the world experience these demands in markedly similar ways. Santos (2010) has characterized these competing demands in terms of three demands that arise from a specific value conflict: Production of high culture, critical thinking and exemplary scientific and humanistic knowledge for the training of the elites v. the production of average cultural standards and instrumental knowledge. All three demands are useful in the following ways. One demand is for training of the qualified labor force demanded by capitalist development. Another calls for hierarchization of specialized knowledge through restrictions of access and credentialing of competencies v. political demands for a democratized university and equal opportunity for children of the working class (or traditionally underserved populations). The third highlights the need for autonomy in the definition of unique values and objectives versus holding institutions to the same criteria of efficiency, productivity and social responsibility that private enterprises face. In South Africa, the most salient value conflict is between developing world-class, globally competitive research universities and higher education's role in redressing decades of oppression and exclusion among the African majority population.

The present analysis explores the tensions and paradoxes inherent in the current press for accountability and improvement in higher education institutions and systems primarily as experienced in the United States. The U.S. experience helps to bring into sharp relief the underlying tensions. On top of these the South African system experiences an even more vital and direct connection to the country's economic and social equity development.

Several organizing concepts are used to gain insight into the current context. In addition, a set of principles is offered to guide constructive approaches to navigating the turbulent social and political waters within which postsecondary institutions operate and seek support.

Perspectives on Higher Education Quality

> Three factors distinguish top international universities from their competitors. The first: a high concentration of talented teachers, researchers and students …. The second factor … [is] their sizable budgets …. The third factor … is a combination of freedom, autonomy, and leadership …. [T]heir status is conferred by the outside world on the basis of international recognition[1].

> Learning—that is, the knowledge, skills and competencies a student gains by taking a college course or programme— really needs to be recognized as the primary measure of quality in higher education. Right now, that is simply not the case[2].

These two quotations about quality higher education contrast a traditional 'resources and reputation' view with a progressive 'student learning' perspective. Higher education institution leadership, professionals who guide academic programmes and support processes, and policy makers who seek to advance more effective accountability for higher education institutions will recognize in these perspectives some of the seemingly contradictory pressures that characterize public scrutiny of higher education. These perspectives apply especially in the United States, but increasingly throughout the world. Such perspectives raise the following questions. How important is it to improve an institution's position in popular rankings? Does doing so undermine difficult but critical efforts to promote attention to student learning outcomes? How can we improve degree completion rates

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[1] Jamil Salmi, Tertiary Education Coordinator, World Bank (Salmi 2009).

[2] Jamie P. Merisotis, President, Lumina Foundation (Merisotis 2009).

while providing access to under-served segments of the population? Can we simultaneously develop improved capacities for research and innovation, and high quality learning experiences for more diverse learners? How can we keep college affordable when demands for advanced technologies, improved infrastructure, and higher service levels abound but public funding is increasingly scarce?

The 'resources and reputation' and 'student learning' perspectives appear to stand in stark contrast to each other. However, scratching below the surface reveals more nuanced issues related to reaching consensus on how colleges and universities should be accountable for the quality of their programmes, processes and outcomes. Consider the following statements:

> Virtually everyone who has thought carefully about the question of assessing quality in higher education agrees that 'value added' is the only valid approach. By value added we mean what is improved about students' capabilities or knowledge as a consequence of their education at a particular college or university[3].

> [Value added] implies that a student is doing just as well at an institution that graduates at the middle level of accomplishment (but with lots of improvement) as the student would do at an institution that graduates at the top level of accomplishment (but with less improvement)[4].

> [I]t should be obvious that quality is about content and intellectual innovation. If we are serious about having a high quality higher education system, then we have to start asking questions about content, avoiding the risk of suggesting that there is one standard way of measuring this[5].

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[3] Douglas C. Bennett, President Earlham College (Bennett 2001).

[4] John V. Lombardi, President, Louisiana State University System (Lombardi 2009).

[5] Ferdinand von Prondzynski, President, Dublin City University (Von Prondzynski 2009).

St. Ignatius Loyola … thought that the real test of higher education was what happened to the students—intellectually, socially, morally, and spiritually—under Jesuit tutelage. A university that measures its 'greatness' by application numbers and endowment rather than by the character of its graduates is a school with a decidedly secular notion of greatness[6].

[T]he conversation about 'quality' has been centered on the wrong things. Institutional accreditation processes, despite their recent emphasis on assessing student learning and development, deal largely with resource and process measures. Government oversight as manifested in license requirements and programme review mechanisms, in turn, continues to emphasize regulation and procedural compliance. Third-party judgments of 'quality' such as media rankings continue to focus on such matters as student selectivity and faculty credentials. None of these gets at the heart of the matter: the investments that institutions make to foster proven instructional practices and the kinds of activities, experiences, and outcomes that their students receive as a result[7].

These statements provide a modest sense of the underlying diversity of opinion regarding what constitutes quality in postsecondary education. As a consequence, most institutional quality assurance processes rely on institutions to define quality on their own terms in congruence with their missions. Although this approach allows for considerable autonomy and innovation, it makes it difficult to convey to various constituents what specific institutions and the higher education sector as a whole contribute to society at large and to the individuals and communities they serve.

After nearly 50 years of increasingly intensive attention to this issue, we appear to be no closer to reaching consensus regarding how to characterize quality in higher education. This is not because we lack ideas as to what quality is, but because our diverse ideas, purposes, and interests

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[6] George Weigel, Senior Fellow of the Ethics of Public Policy Center (Weigel 2005).

[7] National Survey of Student Engagement (2009).

make it difficult to establish standards and thereby to communicate effectively about higher education quality within our institutions as well as to a growing number of vested audiences.

Motivations for Improving Quality

Why should members of the academy engage in efforts to evaluate and improve their programmes and processes? One answer we hear often is 'because we have to'. Beyond this reaction to the external pressure is a more fundamental reason: professional responsibility. Given the specialized knowledge and expertise required, academic staff have the rights and responsibilities of professionals to identify and hold themselves accountable to standards of competence and morality (Schön 1983). The strong and often confrontational calls for accountability from external sources emanates from mistrust and perceptions that members of professions are more self-serving than self-regulating. As a profession gains influence over the quality of life for individuals as well as for the state, the focal point of accountability shifts from members of the profession to the clients and their representatives.

This shift in focus for U.S. higher education is evident especially over the last 25 years. Although there were various 'clarion calls' for reform before this time, two seminal reports—*A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education, 1983) and *Involvement in Learning: Realizing the Potential of American Higher Education* (Study Group on the Conditions of Excellence in Higher Education, 1984)—touched off what has been a fairly continuous and increasingly acute focus on higher education accountability. Criticism regarding inadequate evidence of student learning, the focus of these reports, has been compounded by concerns about spiralling college costs and attendant concerns about affordability, opportunity, and gaps in participation and completion between traditionally served students and those from under-served populations. Over this same time period, a college credential has become recognized as increasingly important for both short- and long-term personal economic gain and higher education institutions recognized as increasingly critical to the technological, economic and social advancement of society through research, scholarship, and advanced professional education. Other societal trends, such as the increasing diversity of the

population and growing 'consumer sensibilities,' have added layers of complexity to the competing interests for accessibility and affordability on the one hand, and improved physical, technological and programmatic resources on the other.

The most recent decade, and especially the last five years was marked by a series of critical reports, regional and national commissions (e.g. the U.S. Secretary of Education Spellings' Commission on the Future of Higher Education), state and federal laws (e.g. the 2008 Higher Education Opportunity Act) and non-governmental organization initiatives to rein in higher education. In response to these pressures, academic associations and organizations have become further energized to both protect the academy and to advocate for reform from within. These associations and organizations seek to re-capture professional control and re-establish the trust necessary to work autonomously as self-regulated practitioners. Advocates for reform within the academy reason that the best way to support external improvement is to conduct systematic evaluation of academic programmes and student outcomes and use the results of that activity for programme improvement. For example, Ewell (2008a: 16) concludes that 'a genuine commitment to improve represents the best and most convincing evidence of accountability'.

Unfortunately, as Ewell also points out, conducting assessment for improvement purposes entails a very different approach than does conducting assessment for accountability purposes. Assessment for improvement entails a granular (bottom-up), faculty-driven, formative approach with multiple, triangulated measures (both quantitative and qualitative) of programme-specific activities and outcomes that are geared towards very context-specific actions. Conversely, assessment for accountability requires summative, policy-driven (top-down), standardized and comparative (typically quantitative) measures that are used for public communication across broad contexts. Information gleaned from assessment for improvement does not aggregate well for public communication and information gleaned from assessment for accountability does not disaggregate well to inform programme-level evaluation.

One could deduce from these differences that these two types of assessment should be pursued as independent activities. Unfortunately, decoupling assessment for improvement from assessment for accountability has undesirable consequences. Student learning assessment scholars and

practitioners have argued that assessment for improvement is most effective when it is embedded within the curriculum, and so has a direct connection to student learning. For example, Gray (2002: 61) notes, '[p]referred evaluation methods are those that are authentic, in that they fit naturally within the purpose and structure of a course … instead of only being used to grade students, the method also provides information to guide the improvement of both teaching and learning'. Curriculum embedded assessments are both practical and effective, since they do not require 'add-on' processes that have little or no value or meaning to students. Similarly, if assessment for accountability has little or no connection to assessment for improvement, then it is an 'add-on' process that adds significant overhead (and therefore contributes to escalating costs) without producing actionable results. Since improvement is the ultimate goal of assessment, it would be unproductive to decouple the two processes.

Paradoxically, assessment for accountability can undermine assessment for improvement, due to an inherent conflict in perspectives between the core audiences. Shulock (2005) describes this as an 'accountability culture gap'. Policy makers desire relatively simple, unambiguous information that provides clear evidence as to whether basic goals, such as programme completion and preparation for the workforce, are achieved. In contrast, Shulock (2005: 4) notes,

> The academic community finds bottom line approaches … threatening and inappropriate. [They] fear that such an approach can be punitive and can narrow society's concerns to those aspects of higher education that can be readily measured, at the expense of dearly held values. They fear legislative intrusion into matters of educational expertise …. They question how educational quality and equity can be quantified and assessed in a neat and tidy way and worry that quantitative measures create perverse incentives. They fear one-size-fits-all measures that ignore different missions, demographics, student bodies, resources, and factors outside their control. Most importantly, they resist legislative involvement in the measurement, or assessment, of student learning, which they believe to be a faculty responsibility.

Because of this culture gap, members of the academic community can be easily dissuaded from engaging with assessment for improvement when they see the kinds of measures of institutional effectiveness used within the accountability realm. For example, the strong emphasis in the U.S. on graduation rates among traditional students does not connect well with many members of the academy because of high levels of student mobility between institutions as well as connotations for lowering standards for performance. Although the mythical professor who tells students on the first day of class 'look at the students sitting to your right and left' to make the point that two of three students will fail the course is overstated, there is still a core value among members of the academy that students must earn their grades and that those who do not make the grade should not receive a degree. The senior academic administrators and professional staff that work to develop a culture of assessment within the institution can leverage core academic values to promote assessment for improvement. But their efforts are undermined by external emphasis on measures like graduation rates and their credibility can be challenged if they communicate these pressures either explicitly or through their resource allocation decisions.

Institutional leadership and faculty also find frustrating the ostensible conflict among the teaching/learning, research/scholarship, and outreach/service aspects of institutional mission. Various presses for improvement in each domain highlight the discrepancies and misalignments and downplay mutually reinforcing aspects, both of which are inevitable when pursuing multiple, complex missions. Although it is quite appropriate to question the appropriate balance in priorities and pursuits, the exclusive emphasis of any one aspect of mission and neglect of others contributes to the tensions that undermine credibility in pursuing improvement and accountability.

Ewell's (2008a) characterization of the two paradigms of assessment – improvement and accountability – helps us to understand the different pathways that need to be pursued in both domains and the accountability culture gap describes the chasm over which bridges need to be built to connect those pathways. To build those bridges and link accountability with improvement, we need to understand better and accommodate more effectively the relationship between the improvement and accountability domains. If not, we run the risk of engaging in costly, time-consuming

processes that do not effectively address either improvement or accountability objectives and only serve to widen and deepen the culture gap.

Several reports and studies in the U.S. have highlighted the important role of regional and specialized accreditation in stimulating the development of institutional assessment capacities (Aper, Cuver & Hinkle 1990; Harvey 2004; Wright 2003). Ewell (2009) describes how the shift of external stimuli over the last 20 years from state government to regional and specialized accrediting agencies provided a buffer between government agencies and institutions that promoted assessment practices more effectively to serve accountability and improvement simultaneously. However, he and others have noted that the relationship has not adequately satisfied public calls for accountability (Ewell 2008b; Ikenberry 2009; Neal 2008). In a recent U.S. survey of assessment practices, regional and specialized accreditation is described as the most important catalyst and motivator of assessment efforts, but current practices generally fall short of providing sufficient evidence for both accountability and improvement purposes (Kuh & Ikenberry 2009).

Because accountability is the primary stimulus for assessment but can also create significant barriers to effective practice, it is critically important for senior institutional leadership and the faculty and professional staff who coordinate and support assessment efforts to understand well the roots and manifestations of the relationship between the accountability and improvement functions. Campus leadership sets the tone for responding to demands for accountability as well as the need for assessment as a professional responsibility. As Ewell (2009: 15) notes, this can be approached as a compliance requirement or a common cause.

> Instead of seeing assessment as an aspect of higher education's responsibility to its funders—legitimate though this may be—both faculty and academic leaders need to see it as part of our accountability to ourselves. This is, after all, how we operate in the realm of research, and it is why mechanisms like independent peer review are so important to maintaining scholarly integrity. It needs to happen in teaching and learning as well.

Paradoxical Tension and the Accountability/Improvement Dilemma

The accountability and improvement paradigms of assessment can be viewed as two sides of a coin: opposite yet inseparable. This idiomatic metaphor captures the existence dependence between the two domains of activity but does not represent how accountability pressures serve as both a catalyst for and a barrier to developing assessment for improvement capacities. The concept of 'paradoxical tension' provides further insight into the improvement/accountability relationship.

Paradoxical tension exists in a relationship when there are both conflicting and converging interests. Wagner (2009) proposes that paradoxical tension is fundamental throughout the biological and non-biological world and is also the basis for power and control over the social and physical world. The 'self/other' dualism is one such paradoxical tension. Individuals involved in a close relationship are often willing to abandon their self-interest in the interests of their partner, sometimes to the extreme that they would sacrifice their life for the safety of the other. Since partners are similarly disposed, neither wants the other to make such a sacrifice. The interests of parent and child are often paradoxically related in instances of protection (self-sacrifice for other) and punishment (inflicting short-term pain for longer-term gain). There are similar paradoxes between individuals and organizations, as between soldier and country: self-sacrifice serves one aspect of self-interest (devotion to country), while serving against another (self-preservation).

Within the realm of higher education, converging and conflicting interests of the self/other dualism are manifest within as well as across the improvement and accountability realms. Within the academy, they are manifest between instructor and student; programme chair and academic deans; academic deans and executive leadership. Within the accountability realm, they are manifest between executive leadership and trustee, between trustee and government agency heads, between agency heads and legislators; legislators and executives. The layers of complexity are particularly deep in the higher education realm, separating considerably the external oversight bodies from the core education and scholarship processes. This complexity helps to shield the processes at the lowest level but at the same time makes transparency extremely difficult as each layer adds a degree of opacity. There

are abundant instances of compatible and incompatible interests within the higher education sector and we don't always know which are which. For example, the relationship between scholarly productivity and undergraduate student learning can be seen as both mutually reinforcing activities and competing priorities.

Another dimension of the self/other dualism that relates closely to the accountability/improvement relationship is the 'actor/observer' difference in attributing causality (Jones & Nisbett 1972; Watson 1982), captured colloquially in the expression, 'I tripped but you fell'. The actor has an 'inside-out' perspective of his or her own behaviour and is likely to focus on external causes, such as a crack in the sidewalk. The observer takes an 'outside-in' view of the actor's behaviour, focusing on the actor's misstep as the cause. When attributing causality or blame in the case of negative results, the actor is more likely to focus on external forces and factors. The observer is more likely to attribute causality to the actor. This difference in perspective is not insurmountable, but it reflects tendencies toward causal attributions especially when actor or observer make only a cursory assessment of the situation without probing more deeply (i.e. taking the other's perspective into account or analyzing the situation more completely).

The actor/observer difference highlights the inside-out perspective of those engaged in assessment for improvement and the outside-in perspective in the accountability realm. Even when interests (aims and objectives) are common or at least compatible, there still can be (and usually is) tension related to differences in how each views responsibility for outcomes. From within the academy, problems are often seen as related to the materials with which and the environments within which the work occurs; that is, the attitude and behaviour of students and the availability of resources. The view from outside focuses on the behaviour of faculty and the quality of programmes and processes they enact.

Wagner (2009) also describes a 'matter/meaning' paradoxical tension that sheds further light on the nature of the accountability/ improvement relationship. This tension is closely related to the seemingly irreconcilable positivist and constructivist epistemologies. The mechanical (positivist) view of the world has had very practical uses in explaining how matter behaves in many circumstances. But there are serious flaws in this view discovered, for example, by quantum physicists. The 'meaning'

(constructivist) perspective, which posits that we create shared metaphors to help understand better what happens around us, is complementary in its ability to explain things that cannot be answered through a matter perspective but it too has limits and flaws. Wagner posits that such seemingly incompatible epistemologies are two sides of the same coin because each depends on the other for its existence (without matter there is no meaning and without meaning, no matter). However, we tend to see them as competing and incompatible views of the world and we use (and judge) them based on their ability to provide insights into what we come across in our lives.

The accountability perspective in higher education (and elsewhere) generally favours the mechanical, 'matter' point of view, presuming that there are basic 'facts' (graduation rates, levels of critical thinking, research productivity) that can be observed and compared across a broad array of contexts. Conversely, the improvement perspective generally takes a 'meaning' focus. Student progress takes on differing meaning depending on the structure of programmes and the concurrent obligations of the student population. Critical thinking is defined within disciplinary contexts or broader value contexts (i.e. local general education philosophies) and is assessed within the contexts from which it derives meaning. Similarly, research productivity depends upon disciplinary standards regarding modes of production and dissemination and any mechanistic view is likely to favour one discipline over another.

It is very difficult to resolve such paradoxical tensions because, as Wagner (2009: 150) notes:

> Neither party to a dispute sees that its entrenched position is just one side of a coin. It raises itself over other, whole over part, body over mind, matter over meaning, or vice versa and denies the other side legitimacy. Nothing may be wrong, except the belief that one of them is the truth.

Advancing our understanding in a world that is rife with paradoxical tensions, according to Wagner, requires that we choose one side for pursuing our inquiries but that we never forget that we have made a choice and that there is not an 'ultimate truth'. He also notes significant benefits to explicitly

acknowledging paradoxes, including the potential mitigation of hubris and the criticism and persecution of others who pursue their activities from different perspectives.

In the arenas within which higher education accountability and improvement play out, there are individuals who operate on the front lines of these paradoxes. Senior campus administrators and policy officials in government agencies; professional assessment and teaching and learning support staff and their counterparts within policy agencies; the leadership and professional staff within higher education associations and consortia and their counterparts at non-governmental agencies are among the front line workers on each side of the culture gap. These groups and individuals are responsible for promoting the pursuit of assessment for improvement and accountability simultaneously. As they promote the work necessary on each 'side,' they must work together to maximize the catalyzing and reinforcing components of the relationship while minimizing interference that arises from incompatible interests and differences in perspectives and approaches.

Promoting Effective Assessment for Both Accountability and Improvement

Dealing effectively with the paradoxical tensions between the accountability and improvement realms requires that we understand clearly the differing viewpoints, accommodate the converging and conflicting interests and recognize the differing activities required to achieve core objectives. Although there is not likely an easy reconciliation, representatives can work together more productively acknowledging that each side has flaws and limits but both are worthwhile pursuits. A more productive engagement can occur by focusing on the integrity of work in both realms through guidelines and standards for effective, professional practice.

Principles for Accountability Frameworks that Promote Improvement

Just as members of the academy should take professional responsibility for assessment as a vehicle for improvement and accountability, so to should

members of the policy domain take professional responsibility for the shape that public accountability takes and the impact it has on institutional and programme performance. Reporting on a forum sponsored by the American Enterprise Institute, Lederman (2009) concluded, 'if a major theme emerged from the assembled speakers, most of whom fall clearly into the pro-accountability camp, it was that as policy makers turn up the pressure on colleges to perform, they should do so in ways that reinforce the behaviours they want to see – and avoid the kinds of perverse incentives that are so evident in many policies today'. If accountability requirements are the primary catalyst for assessment efforts within institutions then they also shape and sometimes distort the tenor and nature of those efforts. Four principles are offered for crafting accountability frameworks that induce more authentic institutional efforts to identify, assess and improve quality.

> Defining Quality. Effective accountability starts with the articulation of specific quality objectives that accommodate the diverse core objectives of higher education (e.g. access and affordability, learning, research and scholarship, community engagement; technology transfer, cultural enhancement and so on).

The quality of student learning was the central focus of the seminal reports that catalyzed the current focus on higher education accountability, as well as many of the reform efforts from within the academy since that time. The traditional ''reputation and resource'' view has been criticized as inappropriate but it has not abated. Some have suggested that media-based rankings promote this outmoded view beyond its usefulness while others suggest that the popularity of these rankings indicate that there is still merit in this view of quality. While this debate continues, advocates of other aspects of institutional quality, such as equity in participation and performance, student character development and the civic engagement of institutions in their communities, seek recognition for their causes. Student learning within undergraduate-level programmes is a nearly-universal and undeniably important enterprise across the higher education landscape that deserves acute attention. Because of its pervasiveness and complexity, it is important to recognize that student learning outcomes cannot be reduced to a few quantifiable measures, lest we reduce incentive for faculty to engage

authentically in assessment processes. It is essential that we accommodate both the diverse range of student learning objectives evident across the US higher education landscape, as well as other mission-critical purposes that differentiate and distinguish postsecondary institutions.

> Accommodating Diverse Learners. Accountability frameworks should explicitly recognize differences according to the population spectrum that is served by institutions and programmes, and should do so in a way that does not suggest that there is greater value for serving one segment of the population over another.

Quality across various higher education functions (e.g. learning, scholarship, engagement and outreach) is further shaped by the spectrum of the population that participates in or benefits from that function. Using common measures and standards to compare institutions that serve markedly different student populations (e.g. a highly selective, residential liberal arts college compared to an open-access, community college with predominantly part-time students, or comprehensive public university serving a heterogeneous mix of students) results in lowered expectations for some types of institutions and unreasonable demands for others. If similar measures are used but 'acceptable standards' are allowed to vary, an inherent message is conveyed that one type of mission is inherently superior to the other. The diversity of the U.S. higher education landscape is often cited as one of its key strengths. Homogenous approaches to quality assessment and accountability work against that strength and create perverse incentives that undermine important societal goals. For example, there is a growing body of evidence that the focus on graduation rates and attendant concerns with student selectivity (the most expeditious way to increase graduation rates) has incentivised higher education institutions as well as state systems to direct more discretionary financial aid dollars to recruit better students rather than meet financial need. This, in turn, has reduced the proportions of students from under-served and low-income families that attend four-year institutions and that complete a college degree (Bracey 2005; Dynarski 2002; Heller 2006; Gold & Albert 2006; Mortenson 2009; Ness & Noland 2007).

Programmes and institutions should be held accountable for their particular purposes and on the basis of whom they serve. Those who view

accountability from a system-level perspective should recognize explicitly how institutional goals differentially contribute to broader societal goals by virtue of the different individuals and objectives the institutions serve. Promulgating common measures or metrics, or at least comparing performance on common measures, does not generally serve this purpose.

> Connecting Performance with Outcomes. Accountability frameworks should facilitate making connections between performance (programmes, processes, and structures), transformations (student learning and development, research/scholarship and professional practice outcomes) and impacts (how those outcomes impact the quality of life for individuals, communities, and society at large).

Once the basis for quality (what for whom) is better understood and accommodated, we can assess for both improvement and accountability purposes, how various programmes, structures, organizations and systems contribute to the production of quality education, research and service. To do so it is helpful to distinguish among three inter-related aspects for our measures and inquires:

a) Performance. How well do the processes, programmes, and structures of an institution perform in relation to professional standards? This is a traditional focus of the accreditation realm, examining the resources available for performance and the policies and processes enacted.

b) Transformation. What happens to people and bodies of knowledge to which these resources and processes are applied within our higher education organizations and systems? Student learning outcomes are one component of this focus as are other transformations sought through scholarly research and public and professional service. Boyer's (1997) model of scholarship provides an integrated description of the range of transformations that individuals and institutions in the higher education sector pursue: discovery; integration, application, and teaching/learning.

c) Impacts. The near-term transformations pursued are, in a sense, intermediary outcomes for longer-range objectives. Better educated students lead more productive lives, economically and civically. Advances in science and technology result in products and professional practices that improve the quality of life. The preservation and advancement of arts and culture contributes in different but equally important ways to the quality of life. The quality of higher education programmes and processes relates closely to how short-term outcomes link to these longer-term objectives as such linkages are not always evident and not always positive.

Although these three manifestations of quality—performance, transformation and impacts—are inextricably intertwined, it is useful to keep in mind the distinctions in formulating assessments for improvement and accountability measures. Efforts to improve higher education require that, within the academy, we understand better how our structures, programmes and processes perform to produce desired transformations that result in positive impacts. Accountability, as an external catalyst for improvement will work best if we reduce the perverse incentives that arise from measures that do not connect appropriately among the aspects of performance, transformation and impact sought by the diverse array of postsecondary organizations and systems that encompass the national and international higher education landscape.

> Validity for Purpose. Accountability measures should be assessed for validity related specifically to their intended use, that is, as indicators of program or institutional effectiveness.

Wagner's (2009) thesis on paradoxical life further informs this discussion as he suggests that, in the biological, social and even hard science realms, we are at a point in history where we need to pay more attention to meaning than to matter. Accountability frameworks tend to focus on measures without sufficient attention to meaning. Measures like graduation rates and expenditures per full-time equivalent student are not consistent and reliable across different contexts but are accepted as the coin of the realm. As we now seek to discover more meaningful measures of student learning and

other important transformations and their impacts, it is critical that we tend to the meaning behind measures.

Reliability and validity are the quintessential criteria for effective measurement. Reliability refers to the mechanical (matter) aspects of measurement, that is, the consistency of a measure or assessment within itself and across differing conditions (Borden & Young 2008). Validity refers to the relationship between the measure and meaning. The concept of validity has evolved throughout the 20th century with more recent focus, as shaped especially by Cronbach (1988) and Messick (1989), on 'how strongly theory and evidence support the interpretations and decisions that are based on a measure' (Borden & Young 2008: 21). By this view, a measure does not have validity in and of itself, but rather only in terms of the assertions made using the measure. For example, one cannot say that a specific measure used as a graduation rate (most commonly, in the U.S. the proportion of first-time, full-time degree seeking college students who complete a degree within six years) is or is not valid. Rather, one can argue that it is or is not a valid measure of institutional effectiveness (or student success) within varying contexts (e.g. at a highly selective, national liberal arts college compared to an open access regional commuter university).

Borden and Young (2008) discuss the current poor state of validity assessment in the realm of higher education accountability measures. They use as an illustrative case the lack of evidence for validity of the value-added measure of critical thinking and reasoning that is included as a pilot project within the Voluntary System of Accountability (VSA http://www. voluntarysystem.org/). According to Borden and Young, there is an important difference between the validity of a test or measure as an indicator of student ability and the validity of the same measure as an indicator of institutional effectiveness (i.e., that the institution positively contributed to the student's ability). In addition, because there is far more variation within than there is across institutions with regard to student performance, the use of an institutional average or value-added score as a measure of institutional effectiveness is inappropriate unless there is direct evidence that institutional programmes and processes influence the transformation of student knowledge, skills and abilities and do so more than other factors that account for score differences across institutions (e.g. differences in student body characteristics, programme mix, consistency of measurement methods, etc.).

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The recent validity report (Shulenberger & Keller 2009) for the three options for standardized measures that can be used within the VSA includes some circumstantial evidence related to use of the measure at the institutional level, specifically that seniors score consistently higher than freshmen, on average, across the exams. However, as Shulenberger and Keller point out, the study did not directly evaluate the value-added score that will be used in the VSA pilot project.

Borden and Young (2008) describe a set of standards for validating accountability measures that begin with a description of the kinds of inferences and claims that are intended to be made with the measure, for example, that students at institutions with higher average (or value-added) scores on a standardized exam learned more than did students at institutions with lower scores. The standards then focus on the conceptual basis for these claims, for example, how is learning construed and expressed through the exam scores? The third standard focuses on the basis of evidence that is sufficient for backing the claims. The last two standards relate to the methods used to collect evidence, that is, whether implementation is appropriate from a technical perspective and whether it is fair, given the contexts within which measurement is taken and potential differences in applicability of the measure to differing groups and populations.

There is generally little if any attempt to ensure that accountability measures support the claims that are intended by their use. This is not surprising, given the processes that are used to develop accountability measures. Often (at best), significant thought, negotiation and technical review go into designing measures. However, there is generally little done to empirically assess the validity of the measures in relation to the inferences and claims that are made using them. Establishing validity of accountability measures is an 'inside-out' perspective that needs to be applied more to the accountability realm. Those who promulgate accountability need to take professional responsibility (and be held accountable by members of the academy) for establishing validity of required measures and methods.

The state of validity assessment within the higher education realm (and education more generally) contrasts starkly to the more stringent requirements for validity imposed within the scientific research and health domains. Because there is a close interdependence between accountability demands and the shape and tenor of institutional efforts to assess and

improve quality, it is critical that accountability frameworks employ the same level of professional competence that is expected of institutional efforts.

Conclusion

It is not possible to completely reconcile the paradoxical tensions between externally-oriented accountability demands and efforts within higher education institutions to meet challenges of educating a broader spectrum of the population and contribute to economic and social developments while containing costs. However, it is possible to advance efforts in both spheres if we recognize the inherent paradoxical tensions and accord the individuals pursuing these efforts the rights and responsibilities for doing so. Members of the academy should accept the imposition of accountability standards, recognizing the increasing importance of higher education to a broader range of vested interests. At the same time, the academic community and others should hold those invoking accountability (government agencies, non-governmental agencies and the media) to professional standards so as to promote positive (and not perverse) incentives for pursuing core objectives. Those seeking more accountability, in turn, should recognize that a 'one-size-fits-all' approach to accountability does not accommodate well the increasingly diverse landscape of higher education providers and the diversity of the populations served.

Although notable attention has been paid to higher education accountability as a general issue (e.g. Leveille 2006; Mortimer 1972; National Commission on Accountability 2005; Vogel 2006), the quality of assessment and measurement in the accountability realm has not received nearly as much attention, especially from the perspective of professional responsibility. The individuals and entities involved in developing accountability frameworks and measures are often embedded within political and policy realms where final decisions are influenced by political agendas and expediencies that do not accommodate complexity and nuance. Similarly, the rankings and ratings that appear in public media are motivated first and foremost by sales, which, in turn, depend on the perceptions of the consuming public regarding what comprises quality and what makes a compelling story. The rapid expansion of available instruments for assessing higher education programmes and services, especially from for-profit

providers, indicates further that assessment is being shaped as a commodity that can be bought and sold.

Addressing the complex challenges required to expand the benefits of higher education to more individuals and more communities requires a careful balancing between pressures to demonstrate effective practices and the latitude and autonomy that promotes innovation and creativity. Ill-conceived and haphazard approaches have not proven effective in either the internal improvement or external accountability domains. Progress is more likely to be achieved through a constructive engagement that leverages the intrinsic motivations of professionals taking responsibility for their own work while acknowledging the valid interests among external constituents for cogent evidence of the value obtained for investment and support.

In the South African context, the nuances of these 'accountability problems' may seem to be relatively trivial matters in relation to the deeper and more intractable societal issues that institutions of higher education are expected to address. However, these accountability demands underlie increasing expectations for demonstrable performance improvements according to the measures used to fund and advance institutional development. South African institutions that can successfully balance these competing societal pressures and demonstrate the value added to student and societal development have a greater chance of being recognized and supported within the country as well as globally, given the relatively small number of institutions within the country relative to its size and visibility. Similarly, the South African higher education system can promote quality improvements more effectively if policy makers and others who set the overall accountability agenda take the professional and constructive approach to defining accountability requirements proposed in this essay.

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Dreamtime and Colonial Power

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Review Article

How can the destructive effects of colonial dispossession and marginalisation be overcome? This question assumes both that it *can* be overcome and that it *ought* to be overcome, a combination of causal and historical deduction and formulation of a moral and political imperative. The moral and political imperative of indigenous rights is recognised in 2007 United Nations 'Declaration on the Rights of Indigenous Peoples'. The UN Permanent Forum on Indigenous Issues reflects the commitment of the UN's member states towards eliminating human rights violations against the planet's estimated 370 million indigenous people. The International Work Group for Indigenous Affairs, funded by the Nordic Ministries of Foreign Affairs and the European Union, promotes indigenous peoples' right to self-determination. Resistance to the principle of self-determination for indigenous groups has come from former colonies and African states concerned with the cost of restitution and compensation, and the threat to territorial integrity. Despite the moral and political imperative to alleviate the marginalisation of indigenous peoples, the peremptory right to self-determination and autonomy can pose a threat to the self-determination of the entire people of an existing State (see Nakata 2001; and Sing'Oei 2007).

One thing that the Left and Right wings of the political spectrum can

agree upon is that the expansion of Europe was the transforming force in human history of the last 500 years. As Immanuel Wallerstein remarks, there is perhaps no social objective that can find as nearly unanimous acceptance today as that of economic development (Wallerstein 1994: 3). From the opening pages of the *Communist Manifesto* (1848), where the achievements of modern capitalism dwarf the pyramids of Egypt, to contemporary *laissez-faire* fundamentalism, development means the efficient (and now sustainable) utilisation of industrial technology. How to realise this potential is the bone of contention amidst echoing claims of realism and charges of utopianism or worse[1]. Attempts to reject the Rosetta Stone of development are presumed guilty of obscurantist nativism and other forms of reckless nostalgia.

In the wake of colonialism the primacy of developmentalism feeds into a vindicatory discourse that confronts the call for indigenous self-determination. In the Australian context the argument is made that Australia – its economy, society and polity – is a construction of European civilisation. John Hirst's *Sense and Nonsense in Australian History* argues that Aborigenes were not civilised, not because they were subhuman (they were not) but rather because they did not constitute a civilisation. Civilisation is about the city (*civitas*) and what cities involve; the concentration of a market, of skills, and incentive for surplus production; administration and taxation; writing and record-keeping; people as citizens united by law, responsibilities and rights. These elements of civilisation were absent from the face-to-face society of hunter-gatherers such as Aborigines. Civilisation came with the arrival of Europeans, and the narrow exploitation of others is an ingredient of greatly increased human capacity. The indigenous social order may well have been more just or egalitarian but it could not match the ability to control and harness natural forces of European civilisation which has brought undreamt-of levels of prosperity and comfort (see Hirst 2009: 60-3).

The argument concedes that certainly the Aborigenes, originating in Asia, were the first to settle Australia, but they constituted separate tribes and did not have a notion of the continent as a whole or their relation to the

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[1] Witness the debate around the United Nations proclamation of the 2015 Millennium Development Goals (see Cheru & Bradford 2005; and Amin 2006); and the recent United Nations Climate Change Conference (COP 17/CMP7) held in Durban.

globe. Europeans explored and mapped the whole globe, their competitive acquisitiveness fuelled by a faith in progress at odds with philosophies adapted to the dominance of nature. History proper begins with the arrival of European civilisation and the clash between incompatible ways of the life and the catastrophic displacement of one form by another. Colonialism is a brutal part of development (i.e. of history), and postcolonial nation-*building* and reconciliation are synonymous with development.

Such is the self- confirming argument, familiar from the dreamtime of other colonial contexts, that glides over the possibility that capitalism contributes to underdevelopment – indeed, according to Rosa Luxembourg, is premised on pre-capitalist formations which it digests but cannot do without (see Luxemburg 1913; and Bond *et al.* 2007)[2]. That Hirst's example of civilisation is the Roman Empire – an example which also inspired British imperialists and Hitler – signals the normalisation of colonisation as violence since the Roman *vici* which grew up around military garrisons, essential for the security of the *civitas*, echoed the settlements of retired troops that manned the *colonae* (Young 1995: 29)[3]. And of course the Roman model does not exclude the question of land reform. For example, in the second century BC Tiberius Gracchus attempted to redistribute public land (claimed by the patricians) to the poor, and was assassinated by the Senate when his land commission seized the wealth bequeathed by Attalus III of Pergamum to fund his *lex Sempronia agraria*. The idea of agrarian reform and democracy

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[2] Relevant here is the argument that colonialism, far from inaugurating modernity in Africa, in fact halted it (see Táíwò 2010).

[3] See Hegel's portrait of Rome as embodying the soulless and heartless severity of abstraction (positive law), a selfish harshness, the cold abstraction of sovereignty and power: the Roman State as resting on the element of force, and culminating in self-destructive despotism; Romulus and Remus were themselves freebooters, a primal robber-community, and the Romans reduced family relations to those of property. Hegel compares the oppression of the Roman people by their own rulers to the oppression of the Irish (Hegel 1831: 278-340). See also Karl Marx (1852) on the invocations of Rome, and Jonathan Sacks (2009: 33) on the ideology of imperialism in which conflict and struggle are muted in an effort to describe a coherent national identity.

resurfaced in the French Revolution with Babeuf's concern with the *loi agraire* (see R.B. Rose 1978: 90-107).

Equivocal terms such as 'civilisation', 'history proper', 'writing', 'law', 'tribes, 'continent', 'globe', 'dominance of nature', 'human capacity', 'prosperity and comfort' are tenuous discursive anchors held in place by the very assumptions they are supposed to confirm. The elements of civilisation enumerated here can as well be seen as the indices and devices of barbarism and dehumanization (see Lévi-Strauss 1955). And yet of course a weak argument is not necessarily incorrect, just as self-serving motives do not necessarily invalidate an argument. The *ad hominem* charge against ideology, reducing everything to self-interest – here that of settler descendants – quickly undermines its own claim to transcend self-interest. Doubtless from the perspective of the accused, those who continually accuse also undermine reconciliation. Hence the deadlock of (non)reconciliation.

On the other hand, when the tide of apology recedes, does anything ever really change?

This is the central issue addressed by Damien Short's *Reconciliation and Colonial Power. Indigenous Rights in Australia*. Short is suspicious of the cult of apologising for the Australian colonial past, and subjects the apologisers to careful scrutiny, tracing the web of consequences that flow from the dramatic gesture. He argues that it is not enough to include Aboriginals in the official cultural fabric of the nation, as symbols of spirituality and connection with the land, and to protect cultural and intellectual property rights, the medicinal use of native flora and fauna, etc. This cultural recognition works simultaneously to indigenise settler culture, and displaces substantive, material restitution for the genocided Aboriginal Australians. Those who apologise might be sincere, but nothing changes[4].

Reconciliation and Colonial Power brings together previously published material concerning Aboriginal Australian human rights, legal disputes and political and legislative history, with particular focus on the question of land rights. While this leads to some repetition of material and argument, the detail of Short's presentation makes this book indispensable for those concerned with colonialism and the paradoxical logic of liberal

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[4] For some of the many South African parallels to these issues see, for example, Normann *et al.* (1996), and Berckmoes (2008).

oppression and its critique. It is at once concerned with the narrative of activism, official responses, and also with theorising human rights in a post-colonial context. Australia, unlike New Zealand and North America, was colonised purely through brute force rather than negotiated settlements or treaties. The campaign for a treaty between indigenous peoples and the Australian state that gathered momentum in the 1980s was more than symbolic and had implications for property rights and nationhood. So far it has failed to produce the desired outcome, for while indigenous land rights have been legally recognised they have also been rendered meaningless and ineffective. How has this situation come about?

Reconciliation and Colonial Power exposes the tenacity and mobility of the forces ranged against the attempt to realise justice and human dignity. It is a story of official obfuscation and betrayal as the government and vested interests divert the treaty campaign into a more equivocal open-ended reconciliation initiative. To betrayal add deception, opportunism, and mendacity permeating the popular media, academic journals, and parliament and law courts. Short sets out to unravel the paradoxical dynamics of this process and apportion blame for the perpetuation of injustice. His aim is to 'develop a sociological understanding' (3)[5] from the committed perspective of the aspirations of indigenous peoples. Looking back to a process of dispossession and genocide[6] begun by the British in 1788, the specifics of

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[5] Hereafter unattributed page references refer to Damien Short, *Reconciliation and Colonial Power. Indigenous Rights in Australia.* England: Ashgate (2008).

[6] Genocide here does not mean just physical extermination but also extends to actions that bring about the disintegration of the culture and social institutions, language and economic foundations of a national group as defined by Raphael Lemkin (1944). Lemkin's proposals, and the coining of the term 'genocide', were based on his research into the Armenian genocide, the massacre of Assyrians in Iraq in 1933, and the persecution of the Jews. He attempted to move beyond the criteria of barbarity and vandalism to consider the intention to annihilate (see Cooper 2008). As far as I can see Lemkin does not include Aboriginal Australians in his catalogue of the victims of genocidal legislation. 'Genocide implies destruction, death, annihilation, while discrimination is a regrettable denial of certain opportunities in life' (Lemkin quoted in Power 2007: 75f).

the Australian dilution of the treaty campaign are set within the imperative of addressing colonial dispossession and its legacy in order to de-colonise the indigenous/settler relationship[7].

At issue are the stability of society and the relation of Aboriginal groups to the land from which they derive their spirituality and identity: 'return of their lands and political autonomy is considered crucial not only to their cultural survival as distinct peoples, but also for their physical and mental well-being' (5). In the wake of the 1997 Human Rights and Equal Opportunity Commission's report, *Bringing Them Home*, Short aims to deepen understanding of the cult of forgetfulness, the great Australian silence, concerning the forcible removal of 20,000 to 25,000 Aboriginal babies and children of mixed descent from their families between 1910 and the early 1970s. *Reconciliation and Colonial Power* argues that the issues of land rights and the Stolen Generations are part of the same process that must be addressed by any meaningful attempt at reconciliation. The fact that they have not, leads Short to claim that Australian reconciliation 'exhibited a subtle yet pervasive nation building agenda that appeared to offer "post-colonial" legitimacy via the "inclusion" of previously excluded Aboriginal peoples, but which actually served to weaken Aboriginal claims based on their traditional "*separateness*" from settler culture' (7). Those who don't apologise threaten the reconciliation between setters and indigenes that is essential for Australian national building.

In other words, the pose of respect for cultural integrity and diversity has been integral to the resistance by dominant groups to any fundamental change to the legacy of colonialism[8]. Exposure of the ruses of cosmetic reconciliation aims to pave the way for reconciliation that would address the problem of internal colonialism. Short welcomes the restorative potential of

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[7] The notion of genocide is used by Genocide Watch to upgrade South Africa to stage 6 on its Countries at Risk Chart. Actual genocide rates as stage 7. The pre-genocide group is identified as Boer farmers, and truculent Julius Malema's singing of *Dubul' ibunu* ('Shoot the Boer') is taken as furnishing evidence of organised incitement to violence against white people (see http://www.genocidewatch.org).

[8] Relevant in this connection is Ahmed's (2011) account of the colonial codification of Indian property law and the invention of tradition.

the reconciliation paradigm that 'has accompanied democratic or less repressive regimes in El Salvador, Brazil, Chile and South Africa: South Africa's TRC was an interesting innovation' (12). Even though the TRC recommended monetary payments, the primary goal of restorative justice remains 'restoration of victims' civic and human dignity by publicly acknowledging the truth of what was done to them' (14); '*repair* the injustice and to effect corrective changes in the record' (15). Other reparation efforts stress the importance of restoring stolen properties that must follow from the acknowledgement of injustice. Despite the cathartic effects of the recognition of injustice, 'in some circumstances, returning the victims actual possessions is perhaps the best form of reparation' (15). Just as the redemptive language of the South African TRC and the confessions of culpability and remorse 'had little effect on popular ideas of redistribution' (16-17), Short adjudges the Australian reconciliation process to have had a negligible lasting impact. Uncovering the reasons for this involves scrutinising the structure of human rights discourse and its legal interpretation.

There is a tension between universal human rights and the recognition of the specific condition of indigenous peoples. In the terms of liberal democracies, individuals rather than groups are nominally the agents from which, and over which, the state exercises power. Where individuals may suffer because their group is persistently neglected or oppressed there can be recognition of group rights. Yet while the politics of recognition of group rights may offer 'a degree of cultural protection unattainable through pure individualism', Short warns that 'beneath the veneer of such substantive liberal equality lays the spectre of colonialism' (18). This double-bind can be formulated as follows: as an individual I am formally without a history, but identified as a member of a substantive group I am trapped in the history of discrimination. Indigenous peoples' claim to cultural exceptionalism, backed by the moral appeal integral to dispossessed first nation status, can be used to undermine the claim to equality. That is, you cannot base your claim to equality on your claim to be exceptional. In this universe of discourse such exceptionalism precludes the right to appeal to universal principles that would call into question the basis of internal colonisation. Considering Aboriginal peoples to be cultural minorities who possess rights to intellectual property rather than an inherent right to self-determination perpetuates the past. No justice without reconciliation.

Short draws the conclusion that '[c]itizenship rights fail to do justice to the unique indigenous status, as, in the eyes of many indigenous peoples, such rights emanate from an illegitimate settler state that has subordinated indigenous laws, autonomy and forms of government' (21), and points to the need to articulate the idea of sovereignty in a way that acknowledges the colonial context. Uncritical acceptance of state granted citizenship merely adds to cultural erosion and assimilation, completing under a liberal guise the violent process of conquest. No reconciliation without justice.

The 1994 United Nations Declaration of the Rights of Indigenous Peoples forms the basis of arguments for self-determination and political autonomy. Although the 1998 session of the Working Group on the UN Declaration, 'fearful of providing ammunition to secessionist movements, suggested that indigenous peoples accept the "reality" before them and limit the concept to that of "internal" self-determination' (21), Short builds a case for the necessity of indigenous sovereign nations as the means to recognise those colonised without their consent. The 'restoration of land and political autonomy [is] key to indigenous cultural survival' (33). The following historical and contemporary factors lie behind the Australian situation.

When European colonisers arrived in Australia there were between 3000,000 and 1,000,000 Aborigines made up of some 500 different regional groups. The process of dispossession was shaped by a system of land tenure whereby settlers were allowed to use land only for grazing while the Aborigines had access to land for traditional practices and other activities. This developed into the concept of pastoral leases created in the 1830s and 1840s to control illicit settler squatting (see 41, and 65-66). Colonial dispossession makes land rights crucial to rectifying colonial dispossession, as Short quotes one activist: '"Land rights as symbol and substance of the fact that some amends to that black blood are due"' (quoted 34). Despite 40 per cent of Aborigines being urban dwellers, while the remaining majority live in remote or rural communities, the symbolic value of land is paramount: 'Aboriginal people I have spoken to while conducting fieldwork have expressed a longing to "reconnect" with their culture' (34 fn 6). And at the heart of their culture is the land[9].

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[9] See Dannenmaier (2008) for an exploration of indigenous property rights and the distinctive connection between people and land in terms of deeper ecological values; culture, spirituality and livelihood.

Despite legal recognition (the 1992 High Court judgement in the case of the Murray Islands) that the colonial doctrine of *terra nullius* (no man's, i.e., nation's, land that can be acquired through occupation, *occupatio*; or uninhabited by civilised peoples, or had never been owned, *res nullius*) was an offensive fiction, and that the British Crown's radical title gave it the right to distribute land but not the right to absolute beneficial ownership of it, native title has not gone uncontested[10]. The form of allodial title known as native title rights have been interpreted as different to private property right; customary law has to meet the requirement of being observable and currently in evidence, and the overarching sovereignty of the Australian state cannot be questioned in proceedings before an Australian court. At most, there has been a recognition that native title *may* continue to exist where there was continuing occupation or relation to traditional land. Short argues that 'we have to look behind the reconciliatory veneer and explore the contributions made by powerful vested interests who constructed a self-serving discourse' (43).

Prime Minister Paul Keating's public acknowledgement of the injustice perpetrated on the first Australians by Europeans sanctioned a new official rhetoric that many expected to have material effects in terms of legislation and legal decisions. In this national crisis industry groups, particularly the mining lobby, aided by the media generated a sense of hysteria regarding the economic consequences of recognising native title. No fewer than twenty-six major landowners are government MPS, Kerry Packer is Australia's seventh largest landowner, and Rupert Murdoch also owns vast quantities of land (69 fn5). Short presents convincing evidence of media distortion and misinformation that fed into settler anxieties: industrial planning will be swallowed by uncertainty, foreign investors will pull out; the future development of the nation will be sacrificed to the selfish interests of a minority, etc. The insecurity of the individual property owner coincided

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[10] The problem with the identification of land and indigenes is that it echoes the colonial perspective that assimilates the colonised culture and nature. In certain important ways, culture and land was what colonialism was all about (see Dirks 1992). See the essays collected by Jeff Malpas (2011) for the attempt to rethink this dynamic. And for the pitfalls of indigenous consciousness see Kunnie and Nomalungelo (2006).

with corporate interests, and political invocations of fairness and balance 'provided a propagandist veneer used to veil the otherwise blatant prioritising of corporate interests' (51, and see 69). Although the legal position was that native title was to yield when in conflict with commercial leases, residential leases, or freehold titles, the irresponsible and vindictive threat was clearly identifiable. Although they number less than 20,000 of Australia's population of 17 million they claim 42% of the continent! For Short this is the fictitious essence of the manufactured national crisis. How did this deception work?

Keating's consultation with Aboriginal representatives cast a selective net that excluded unreasonable elements that might challenge the terms of his engagement. Dissent was simply framed out, and discussion served manipulation. On the other hand, objections to Keating's entertainment of Aboriginal land rights took a form familiar from the critics of the affirmative action policies in the U.S., that is, that restitution is one-sided, reverse-cheating. According to Short, what these attacks, in the Australia and the U.S., share is 'the same empty logic': 'It is now a common retort when proposals for historically sensitive redress policies threaten to breach the "snapshot version of fairness" favoured by those who seek maintain existing inequalities' (55):

> The desire to proportionately accommodate *unequal* interests that have largely arisen out of the situation that is the focus of the reconciliation process itself, namely the act of invasion and dispossession, invokes a 'snapshot' version of fairness that is inimical to reconciliation as a normative concept (63).

As for Keating, such attacks merely served to strengthen the apparent fairness of his approach, and in essence he too adopted the 'empty logic' approach that refused to remedy injustice by perpetuating inequality in the present. The balancing of interests 'conveniently ignored the temporal dimension [of] colonial injustice and its legacy. Keating sought to balance interests solely on contemporary entitlements assessed without reference to a past now washed away by the "tide of history"' (160).

Under the premiership of his successor, John Howard, the commitment to reconciliation was overshadowed by rejection of the

theatrical black armband view of history that spawned the masochistic guilt industry and disparaged the achievements of settlers battling great odds. What Short calls the 'implicatory denial' (168) of settler descendants did not deny the dispossession of the indigenes, but claimed to put it into context:

> The notion of equality and the Australian slogan of a 'fair go for all' were frequently cited throughout all the studies as a reason for resisting 'special' rights and privileges for indigenous peoples. There was little evidence of an understanding of the difference between 'formal' and 'substantive' equality. There was no real appreciation of the necessity, or desirability, of conferring special treatment on a disadvantaged group in order to attain equality of outcome [nor] any propensity to agree to 'special' rights for indigenous peoples based on a notion of compensatory justice for historic mistreatment and contemporary dispossession (123).

Most importantly, no apology was forthcoming. What is there to apologise for? How can we be expected to apologise for others? What real use is an apology anyway? For Short, 'Howard's white blindfold view of history sought to sanitise the past and at the same time disconnect it from the present' (173).

In other words, the empty logic of presentism *and* historical contextualisation serve the same end. Keating's acknowledgement of historical injustice gave way to, or rather unfolded into, what superficially one might expect to be its historicising opposite. The claim that no genocide occurred and there was no intention to annihilate the indigenous population, but rather a (misguided) attempt to bring about their assimilation, is compatible with the claim that gross injustice did in fact occur. But in order to constitute acts of genocide these acts must be part of a plan to destroy all or part of the designated group (see Power 2007). For Short, implicatory denial based on limited acknowledgement that seeks to diminish the wrong with contextualisation serves the same end as its apparent opposite: 'In this case the "contextualisation" involves the claim that "we thought it was in their best interests … we were acting in good faith … the ill effects are an unfortunate by-product of otherwise benevolent policies"' (102; and see

Short 2010)[11]. *Reconciliation and Colonial Power* shows that the prospect of conceding enclaves of cultural diversity certainly provokes fierce, multi-pronged resistance.

What, then, is the solution?

Short argues that since Australian indigenes have not legitimately surrendered their 'indigenous nationhood and sovereignty', the rational and just solution is to achieve reconciliation through 'negotiations "nation" to "nation"' (180). Indigenous peoples should be treated as (stateless) nations 'equal in status to the settler state and consequently the ensuing treaties would be "international treaties", which would open up the relevant international avenues for infringement redress' (180). Recognition that '[a] primary focus on capitalist oriented solutions seems inimical' (166) to a redistributive reconciliation process does not cancel out the hope that:

> Dealing with indigenous nations on an equal footing would involve government ministers and mining executives entering into Aboriginal language, world-views, cosmologies and institutions, and accepting the different kinds of autonomy and modes of decision making among those peoples, rather than continuing the colonial project of arbitrary dispossession and nation building … (181).

Short suggests that such an arrangement may lessen the chance of 'ethno-cultural conflict' (181). However, it is also arguable, I would suggest, that the reverse is as likely: that such balkanisation may increase the possibility of such conflict. The record of how states deal with 'nations within' is a cautionary tale, but Short suggests that the eventual possibility of a treaty or treaties 'becomes more plausible when one considers the population explosion currently affecting the indigenous population' (182). That this explosion may be the result of immiseration rather than the means to its solution is not considered. The invocation of demographic shift smacks of clutching at straws, a trusting to biology as destiny that is amenable to, and confirmation of, the racist world-view instrumental to the perpetuation of the injustice to be remedied.

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[11] For a snap-shot of the Australian Government's version see the entry for 'Reconciliation' at http://www.australia.gov.au.

It seems to me that there are problems with Short's remedy, not least the suggestion that '[s]ignificant tracts of "crown" land and indigenous occupied reserve land could also be returned to indigenous ownership and control' (33). In South Africa, Bantustans, tribal homelands that were effectively labour reserves serving the settler controlled prime economic nodes, were also rationalised via paternalistic arguments for the maintenance of the cultural integrity of the natives. Short, of course, is not proposing Bantustans but as he himself argues it is not so much intentions that matter as results. Given the current distribution of economic, military and political power, what could prevent such an outcome in Australia? Given the power of the global inter-state system, its constraints and interests, can one afford to be sanguine about the ability of international, trans-national organisations such as the UN being able or willing to prevent such abuse (see Bardhan *et al.* 2006)? The connection between land and political autonomy in the Australian case marks it off from the land restitution issue in South Africa where the national liberation struggle aimed at a unified, democratic nation. Indeed the claim for political autonomy for a minority suggests a perverse affinity with secessionist Afrikaner attempts to realise a *volkstaat* independent of the South African nation.

Such a disappointing conclusion to a moving account of a struggle marked by significant victories suggests that more than vested interests and effective propaganda may be to blame for what Short sees as a stalled liberation process. At its best *Reconciliation and Colonial Power* suggests that overcoming the legacy of colonialism involves confronting its objective conditions and economic system that dehumanizes, terrorizes, and renders expendable human beings. Short bears witness to the willingness of people to mobilise in the cause of justice. Ultimately defeat offers its own solidarity in the form of moral authority.

A disappointing conclusion, then, but could there be any other destination within the terms set by the debate? Such an outcome—part of a reformism that shares the guilt for perpetuating the deplorable totality—is unlikely to present a fatal threat to the system that produced the need for such retreats. Is it not necessary to rethink the notion of sovereignty itself, as well place and the connection between indigeneity and racism? Reducing opposing forces to vested interests risks confirming the world-view of an enemy that would like nothing better than to dissolve everything in the

corrosive balm of (biological, cultural, economic, historical) self-interest. And while 'vested' implies vestments or the disguise of interests, a clerical conspiracy, it also alludes to the legal sense of a vested right, a right that is absolute and without contingency, eliciting duty or moral obligation; like human rights. In this sense there are vested interests on both sides of the reconciliation debate and the urgent battle for indigenous rights, and the therapeutic task of revitalising culture, serves as a useful distraction for the most disparate interests

Reading professions of concern for justice and fair play as a veneer for selfishness – predictably attributing predictable hypocrisy and bad faith to one's opponent – is itself a reading that can both conceal and deceive. In the eyes of its opponents the campaign for the preservation of indigenous culture is also a façade, protective and decorative, that cannot see its own hypocrisy (i.e. wanting the benefits of modernity without footing the bill). And as *Reconciliation and Colonial Power* relentlessly shows, being apologetic is as little a sign of progress as being morally right is a sign of victory. In a world where colonialism is simultaneously part of development and under-development, a set of equivalences circulate the secret knowledge that it is the incompatibility between property rights and human rights that stands in the way of undreamt-of levels of basic human well-being for the world's estimated 1.3 billion impoverished (see Sumner 2010). Alternatively, the concern with indigenous rights shelters and confirms the settler myth that private property, initially in the form of land, is essential for self-determination. But can there ever be enough private property for everyone? This terminus results from more than the fact that a polemic is dictated by the way one's opponents phrase the questions, or the limitations of a given juridical context, for it points to the fundamental political question of the conflict between what we know is right and the system we inhabit. It would seem, on the evidence of *Reconciliation and Colonial Power*, that the colonial adventurer's motto is confirmed: 'You have to howl with the wolf, never against the wolf' (Coloane 2008: 26). Is it too soon to say that what doomed the effort was precisely what motivated it?

Thus we are led back to the paleo-settler argument about the European origins of civilisation which is both a claim about the nature of progress and an argument about the nature of law. In terms of law the presupposition is: *ubi societas ibi ius* (where society, there law), which is to

say where there is society (rather than community) there is civilisation. Yet of course this rule can be reversed to claim where there is law there is society; which means that society is a legal category, a category of Roman law, as much as law is a social category (See Rose 1984: 48). So laws can be changed, for example from protecting private property at the expense of justice. But at what price, and to whom?

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Book Reviews

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As Field informs us, his main objective in writing this literary and political biography was 'to narrate and interpret the story of La Guma's literary and political life and work in a more detailed and nuanced context than previous La Guma scholarship [had] attempted' (p. 1). Apart from Field's personal interest in La Guma and the political milieu that shapes his writing he is interested in the 'history of La Guma's reception' and showing that 'La Guma had grown up in a more complex intellectual, emotional and political environment than most studies had hitherto acknowledged and explored' (p. 3). Whether he succeeds in this regard is a moot point. One thing that is clear about Field's study though is that it 'examines a much wider range of material within a more complex analysis of his life' (p. 5) using an eclectic approach.

In terms of its focus, Field's study is arguably the most ambitious and comprehensive in La Guma scholarship to date, covering a wide spectrum of La Guma's life and his artistic interests: namely, painting, drawing, comic strips, poetry, fiction, radio interviews and plays, political writing and travelogue. For this reason, *Alex la Guma: A Literary and Political Biography* will have an enormous impact on future research on La Guma – the lengthy bibliographical references will certainly come in handy for future scholarship on La Guma. Chapters are arranged, largely, in terms

of periods considering whatever artistic production and political work La Guma was engaged in during a particular chosen period. This sequence, or should I say, this distinction, may, while useful for Field who wanted to explore La Guma's oeuvre in terms of La Guma's South African period and his exile years, have had an adverse effect on Field's attempt 'to sustain the combination of narrative detail and analytical depth' (p. 2). For example, Field does not seem to engage as rigorously with La Guma's critics on his work in exile as he does with commentators concerned with the author's writing prior to his departure from South Africa. Central to Field's argument are the different ways in which La Guma grapples with the problem of coloured identity, not only in his early fictional writing but also in political debates in different media, such as *The African Communist* and *Sechaba,* for example – a debate that largely remains unresolved. Field's main objective is to show 'that La Guma's dynamic explorations of coloured identity suggest a subtle, angry, ironic and at times contradictory approach to literature and politics' (p. 141). According to Field, La Guma's early artistic productions and his political work (which are covered from chapters 1 to 5), dealt with the representation of race, specifically in the Western Cape.

Chapter 6 examines La Guma's writing of his father's biography and *And A Threefold Cord.* This is where Field's argument begins to take a different turn. Steinbeck's *The Grapes of Wrath* (1939) is cited as an intertextual referent for *And A Threefold Cord*: '*La* Guma took from *The Grapes of Wrath* some formal elements and a wealth of plausible detail about an economically marginalized family …' (p. 130). But Field does not end it there. Instead, he stops short of accusing La Guma of plagiarism – or does he? While Field provides evidence for the intertextual links the terminology used to discuss this intertextuality (Field prefers the Bloomian phrase 'anxiety of influence') is as curious as it is revealing: 'La Guma's *performance of his anxieties* about narrative debts raises two questions: why he talked about the relationship between himself and other writers and what facts about his fiction he *wanted to hide*' (p. 137). Referring to an interview that La Guma had with Cecil Abrahams, Field insinuates that Steinbeck's *Grapes of Wrath* is one of those '[literary] debts that [La Guma] *wanted to hide* ' (p. 137; e.a.). Having said this he avers 'In *And A Threefold Cord* La Guma *borrowed guiltily* from, and reworked Steinbeck …' (p. 151; e.a.). It comes as no surprise, therefore, when he proffers: 'The public La Guma's

denotative view of literature meant that *to confess* without causing his own death as an author he could do no more than reject the possibility that Steinbeck had influenced him' (p. 152; e.a.). Field continues: 'The desire *to confess without confessing* would soon resurface and then return in his last public works' (p. 152; e.a.). As can be seen, Field's argument is couched in the language of morality that tips the scales towards providing ample justification to accuse an author of 'literary plagiarism' (p. 141). Whether these accusations are justified is, however, an interesting aspect for further research by La Guma scholars.

Reading La Guma against the grain, Field discusses how critics have overlooked or glossed over the modernist or experimental vein in La Guma's writing. Curiously, he attributes La Guma's supposed experimentation with form to 'a desire to imitate work of famous writers' (p. 140). He alludes to Hemingway's influence on La Guma in 'The Lemon Orchard' and 'Coffee for the Road': 'La Guma continued to experiment and copy' (p. 141)[!] He cites multivocality and the fragmentation of the minor stories as evidence of La Guma's experimentation with modernist techniques. According to him, Hemingways's influence on La Guma extends to *Time of the Butcherbird* and the travelogue, *A Soviet Journey.* In his determination to trace La Guma's literary debts, Field goes on to argue that 'Mazisi Kunene's influence on La Guma's exile fiction (read: *In the Fog of the Season's End* and *Time of the Butcherbird*), where heroism, social obligation and a sense of the past play much greater roles is much clear' (p. 165). Regrettably, the evidence provided for this assertion is hardly convincing. Ultimately, it is only *The Stone Country* that is exonerated, albeit partially, from 'the anxiety of influence' that Field claims pervades all the other La Guma literary texts because 'in *The Stone Country* [La Guma] *borrows more from himself than any other writer*' (p. 151; e.a.).

The most useful aspect of Roger Field's study is that, apart from serving as a resource for future scholarship interested in La Guma (as it provides interviews with some of the writer's colleagues and access to manuscripts from the La Guma collection), it has raised the need for a sustained and rigorous study of an intertextual reading of La Guma's oeuvre.

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