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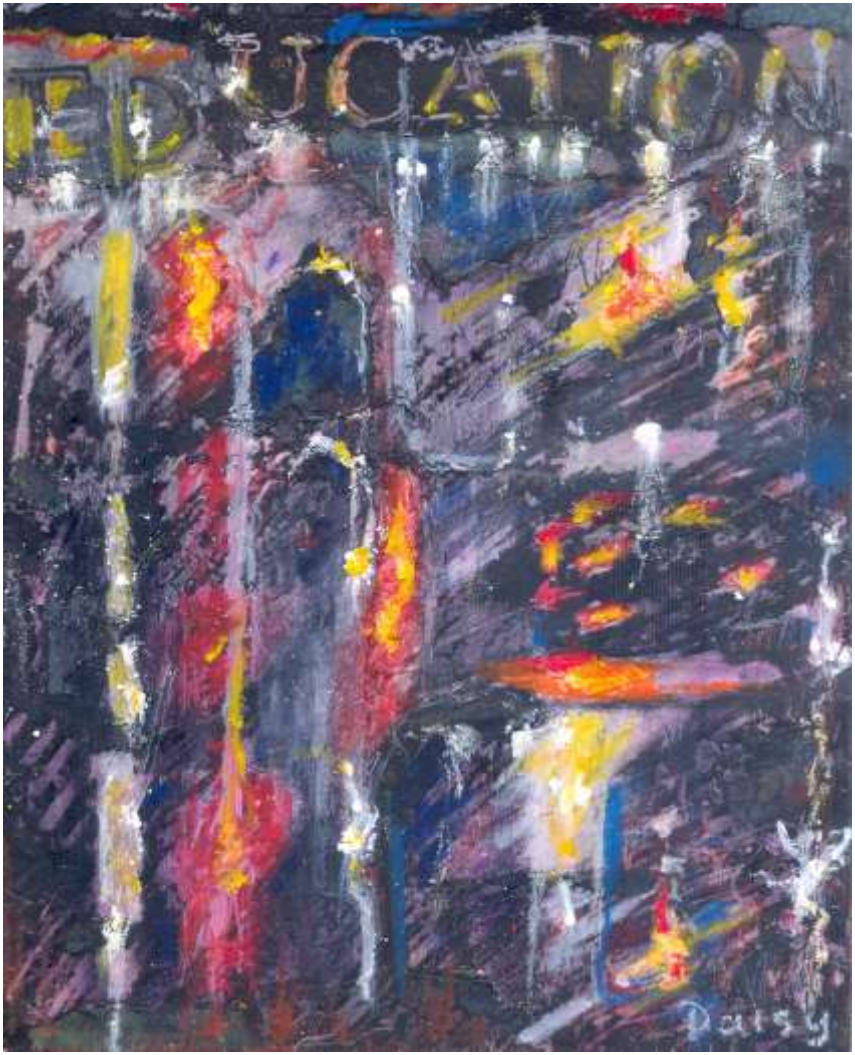
EDUCATION AT THE CROSSROADS



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*Alter*nation

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Education at the Crossroads

Guest Editors
Michael Samuel
and
Suriamurthee Maistry

2014

CSSALL
Durban

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Editorial: 'Brother Sun and Sister Moon: I can hear your tune, so much in love with all I survey'

Michael Samuel
Suriamurthee Maistry

St. Francis of Assisi and Michel Foucault may have more in common than ordinarily meets the eye. In the challenge he faced with onset of blindness, the Italian spiritual revolutionary began to see with greater clarity the interconnections with 'Brother Sun and Sister Moon': the interconnection to rise above one's own personal miseries; to extend beyond the dogmas of ritual and convention; to challenge the hierarchies of officialdom such as the organised Catholic Church; to question the crass materialism which fetishises human existence; to assert the ability of the individual to defy subjugation; to engage the power of collective action and to see the glory all around. Power does not survive except in contexts when individuals permit it to diminish their spirit. This leader of a new missionary spiritual order believed that collective power has a capability to disrupt ritual and normatising conventions, but the greater good is established when that awakening awareness is felt within the heart and soul, hearing the tune of 'Brother Wind and Sister Air' – to then realise our interconnections with the fragility of the planet and its creatures within our care, embrace our ethical role, sow love where there is hatred, grant pardon where there is injury, promote faith when there is doubt, engender hope in times of despair, generate light in darkness, bring joy amidst sadness. St Francis's song concludes that 'I am God's creature, of Him I am a part. I feel His love awakening my heart. Brother Sun and Sister Moon, now do I see you. I can hear your tune, so much in love with all I survey'.

Presumably Foucault would not have promoted such a religious and spiritual abandonment to a divinity since he would himself regard this as a

capitulation to another form of power. Rather than polarising of opposites, Foucault (1990) saw the complimentarity of co-existing dichotomies. Foucault, in his attempts to challenge the infantilising of our human existence at the feet of disciplined power, campaigns for 'autonomy': the giving of the law to oneself, recognising that such independence can never be complete or exhaustive since we are all, as Bert Olivier reminds us in his first paper, inserted into a network of society. Our human existence is programmed within a pattern of hierarchies and subjugations, margins and peripheries, but our agency and autonomy can be asserted discursively to disrupt these very patternings.

In a footnote to his first paper in this anthology, Olivier presents a gem that should not go unnoticed. The very possibility of education as an enterprise for realising the potential of individuals and autonomy comes into question. Olivier poses the question about whether it is possible at all to educate the young since we as educators perhaps do not sufficiently grasp the 'structural complexity of human beings'. This questioning of the possibility of education is raised in the context of whether our goals for schooling have become instrumentalised and commodified within the neoliberal discourse to the point where it is unable to truly grant freedom of will and direction. This argument is again raised in more depth by Maistry in his paper in this anthology. In the footnote just mentioned, Olivier expands Lacan's view (Lee 1990; Olivier 2005a) of what this complexity of human subjectivity entails in the following terms:

> a person has a 'sense of self' (imaginary), a sense of where and how he or she fits into society (symbolic, through language), and a sense of things that surpass herself or himself in such a way that one has no control over them (the unsymbolisable 'real') – this much may be learnt through literature, myths and even folk wisdom. The point is that all of these aspects of being human have to be considered by educators for 'true' education to take place.

This anthology serves as a questioning of what we have come to expect as the goals of true education. What is possible? feasible? do-able? intractable? The title of the Colloquium, 'Education at the Crossroads', from which the presented papers draw their theme, was intended to raise questions about whether we are facing a crisis within the education system. The Colloquium

asked whether the hallmarks of quality education have become hijacked on the road of instrumentality – the road of the commodification agenda, of an efficiency rationale that equates performance on assessment scores as equivalent to 'quality education'. The Colloquium invited presentations as follows:

> The introduction of a political system based on democracy in 1994 presented a rare opportunity to re-look, re-think and re-organise education provisioning in South Africa. Guided by master narratives of transformation, equity, quality and good governance, education was repackaged, underpinned by good intentions and grand designs. The outcomes were spectacularly dismal, both in depth and breadth, with pockets of success in state schools. Responses have included modifications to the curriculum, a proliferation of policies and retraining of teachers. Student achievements, however, have not matched the massive inputs to improve education for the previously disadvantaged and dispossessed or for the rising middle classes. International studies confirm that South African student performance lags behind those from poorer and less resourced systems in Africa, that numeracy and literacy skills are below par and that few students are sufficiently skilled for higher education. Sixteen years after the demise of apartheid we are at the crossroads. Whereto from here? Can we continue with knee-jerk tinkerings of the curriculum? What vision for the future? What can and must be done? How can researchers disrupt current thinking about education with new possibilities, new practices and renewed optimism? Is it not time for scholarship to reclaim a space as a key influence to educational reform? (3rd Annual Educational Research Colloquium, 6-7 October 2011, Call for papers).

This Colloquium thus sought to instigate academic discussion about who we are, what we teach, whom we teach, and what they learn. Several presenters in this anthology have grappled with this theme, asking whether these very questions are in themselves framed within an instrumentalist efficiency discourse. Iben Christiansen asks, for example, whether education alone will provide an alleviation of the complex challenges of our times. Among the key factors facing our present society she points to issues of health and nutrition,

urging that we need a more holistic response to the ensuring of 'quality education' which includes the need for education and schooling to address the context of our financial and environmental crises. The concerns of 'people, planet and profit' often compete for supremacy, and in the shadow of this agenda those on the margins of society are often unable to exercise sufficient agency to generate a dignified livelihood. She proposes that environmental education should be more than just *about* the environmental issues, arguing that should extend to campaigning *for* the environment. This level of agenda, she argues, is what is needed to revitalise the education system with 'fundamental ways of thinking' which include deductive thinking, a sense of cause and effect, temporality and situatedness of practices, of a kind that would begin to re-examine historical ways of thinking. She sees the need for an education that fosters critical thinking that goes beyond than mere appearances and works to create meaningful connections – not just reconfiguring outward practices, but re-ordering the pre-occupations of our minds. Liberation from oppression and poverty must lead onwards to realisation of our interconnectivity with overarching global and planetary agendas. Christiansen argues that the crossroads metaphor is perhaps too restricted. She calls, rather, for a U-turn – which then raises a further question: what will we be turning back towards in this U-turn? The closing section to her paper suggests that it should be a renewed commitment to a deep teacher professionalism that include more than performativities and accountabilities. She believes that a teacher professional is one who challenges the road signs along our journey, who embraces the notion of being an 'organic intellectual' beyond the Gramscian notion simply of a class-driven agenda. Instead an organic intellectual is one sensitive to the call of the community within which she works, responsive to the specificities of their needs and the responsibilities of sustainable interventions that comprehensively take heed of social justice (equity), environmental and economic necessities.

It can be seen from the first four papers of this collection that the philosophical and theoretical agendas driving educational change have renewed precedence. It is a welcome shift of emphasis in our education discourses to see a return of philosophical and theoretical exploration in a special issue of this academic journal. In the initial decade of our new democracy educational research tended to be dominated by 'policy implementation analysis', with the constraints of context and reversal of our

historical situatedness occupying the foreground in our research deliberations. Perhaps all that we learnt has been that policy alone is an insufficient prerequisite for deep quality change in education and schooling.

The first four papers (two by Bert Olivier, plus those by Maistry and Christiansen) open up a debate about how philosophical considerations could help us make sense of why we are at the place we are, standing somewhat perplexed that our laudable policy intentions have not been realised, and that teachers and the education system have not been able to rescue our democracy. This debate is not a matter of falling back simplistically on issues of blame, admonishing teachers who fail to embrace the stipulated directives or accusing them of lacking competence or capacity to put envisaged policy into practice. Rather, suggests Olivier, it is the democratic voice of the populace that is being seduced by a superficiality and 'causality of ignorance'. Citing Hardt and Negri (2001; 2009), Olivier shows how we are 'living in the age of the Empire'. This is not, as he explains, a geographic or nationalistic imposition on the subjugated of any single colonial force of power. This 'Empire' is an insidious infiltration of values, ethics and practices into the hearts and minds of the subjugated where they (the marginalised) end up being complicit in their own oppression. Through the pervasive influence of technology, the tentacles of Empire infiltrate our minds and choices in relation to the things we choose to value. Superficial cultural habits and routines invade our spaces, or more to the point, they anaesthetise our powers of resistances. One chief agent of the Empire is the entertainment industry (with all its power in the marketplace) which provides a set of superficial targets and role models of what constitutes quality of life or even quality of education. Through the networks of Empire we lose our capacity to engage projectively into the future. We remain locked in an earthy rootedness of materialistic pursuits, rejecting the possibility for otherness, unable to seek out deep meaningful choices for our existence and unable to see the finitude of our present practice. Olivier points us to Kristeva (2000) in suggesting pathways of revolt.

Maistry's paper explores one of the myths that dominate the Empire-speak. He argues in his paper that the odds are stacked against developing world economies that are unable to sustain meaningful resistance to the dominance of forces like the International Monetary Fund, the World Bank or the captains of capital. It is these powerful forces, however, which promote a common sense worldview that a productive economy will result in economic

growth and that in its rising tide it will lift up the plight of the poor, the boats stranded in low tide. Education for economic growth is a myth, Maistry argues, as is patently evident in measures of our post-apartheid education system. Despite numerous interventions at state level, our educational achievement records show that the economically deprived or marginalised still sit at the bottom rung of achievements, that poverty is the greater marker of educational achievement. The neoliberal agenda of more testing and more demands of accountability from its workforces will not simply yield an alternative remedy. Maistry turns to Nussbaum (2011) and her human development approach as an alternative. Her analysis suggests that the vocationalism and narrowness of the educational enterprise are characteristics of the way neoliberalism has subverted the quest for attainment of full human potential. As expressed in a quote Maistry gives from Nussbaum, 'cultivated capacities for critical thinking and reflection are crucial in keeping democracies alive and wide awake' (Nussbaum 2010:10). Maistry ends his paper with a listing of Nussbaum's ingredients for an alternative human capabilities approach to producing critical citizenry. These are the signposts at the crossroads which move us beyond a marketisation discourse towards a human rights, social justice and equity agenda. Wayne Hugo (2013), in a critique of Melanie Walker and Monica McLean's (2013) article 'Operationalising higher education and human development: a capabilities-based ethic for professional education', has argued that it is not clear whether the capabilities approach

> can actually work at the level of specific professions… 'Capabilities' are too generic a set, even if you provide realisable functions…One always has to be careful when an ethical approach like Capabilities suddenly finds itself with a massive groundswell of support , especially from the establishment. It could be because it has articulated something new that answers an increasingly pressing question facing our modern generation; or it could be that it resonates with the dominant forces of network capitalism currently running rampant through our world; or it could be a little of both. (Hugo 2103: 2).

We are not convinced that the capabilities approach is indeed complicit with network capitalism (the Empire). Evidence of this complicity would indeed

be most insightful. Nor do we think that 'the establishment' has indeed embraced any capabilities tenets since, by their very conception, capabilities are infused with the seeds of challenge to hierarchies, dominions and unjust powers. Walker and McLean offer the following list of professional public-good capabilities: informed vision, affiliation (solidarity), resilience, social and collective struggle, emotional reflexivity, integrity, assurance and confidence, knowledge, imagination and practical skills. Surely these are anathema to the Empire?

How then the capabilities approach finds resonance with or challenges the forces of global and economic capital is a question that remains unanswered. Are the forces of Empire too subversive, too invasive, too insidious? Is the human capability approach merely a critique of the neoliberal discourse or does it offer a concrete alternative? This is what readers must establish.

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The next group of papers reflect on pedagogic practice and alternative educational delivery discourses in higher education and address the need for change in traditional approaches. Saras Reddy examines how the training of medical doctors has shifted to a problem-based learning approach in response to the need for a more context-driven pedagogy. Increasingly, practitioners were concerned about the lack of ability of newly qualified medical graduates to deal with the multiple contextual realities facing the practising medical doctor in complex hospital settings, in underresourced clinics and in rural practices. Introduction of a problem-based learning (PBL) approach was intended to enhance 'contextual relevance'. However, the practitioners who were required to mediate the PBL curriculum were proponents of the strongly 'content-based' former approach which foregrounded strong theoretical input by lecturers transmitting the codified knowledge of the medical discipline. PBL therefore challenged their interpretation of 'quality education' and training for medical doctors. Using a Bernstein (2000) theoretical lens, Reddy examines how the intentions of the PBL curriculum came to be re-interpreted and perhaps subverted in practice. The paper notes that although the new curriculum fulfils the objective of alternative educational practice it might nonetheless have unintended consequences. The students came to display a highly committed and contextually sensitive disposition for medical practice,

but their lecturers and ward mentors insisted that this was inadequate, since their disciplinary foundational knowledge was interpreted as lacking, raising a measure of doubt about the medical graduates' own interpretation of their readiness for practice.

In the exploration of a more sensitive pedagogy from the 'killer courses' of the Engineering discipline, Mogasurie Moodley highlights the potentialities and limitations of an alternative approach. It is well known that there are some courses/modules within each discipline which repeatedly have poor throughput. This researcher looks at a pedagogy initiative which promoted a greater degree of peer mentoring and a more dialogical interaction between staff and students in a large element of the programme delivery. The findings, as with Reddy's study, indicate a generally positive response from the students who reported that they felt appreciated and listened to – that they had a sense of involvement in producing and making sense of their modules' subject matter. However, from the lecturer's perspectives, this kind of learning did not go far enough even though it correlated with better pass rates in the modules. Lecturers were more sceptical about whether 'higher-order skills' of the disciplinary content were indeed being developed through this process. This paper points to the need for alternative pathways that take account of throughput/output issues, of lived interactive emotive support when students are engaging in the learning process, and of the habituated practices of lecturing staff who are resistant to new directions. It is not enough for alternative pedagogical approaches be confined to promoting an emotively positive curriculum experience; they must also ensure deep engagement with content knowledge of a discipline. Broadly, the question is whether deep content knowledge input can be pursued in ways other than the traditional teacher-led lecture pedagogy that seems to be advocated by some lecturer participants in this study. What exactly were the traditional lecturers upholding as standards of quality education?

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The third group of papers focuses on curriculum issues within teacher education preparing trainee teachers to implement the school curriculum. The introduction of Life Orientation as compulsory subject in the school curriculum has had numerous implications both for schools' ability to

effectively deliver on this new subject concoction and on teacher education institutions' ability to provide a teacher education Life Orientation curriculum that would equip teacher trainees to effectively teach this multi-faceted school subject. Mthiyane presents an account of how trainee teachers engage with the various dimensions of Life Orientation through cooperative learning strategies. She argues that short, year-long capping programmes like the Postgraduate Certificate in Education are inadequate to effectively prepare pre-service teachers for the complex and sensitive components of the Life Orientation curriculum, and that the success of the subject and its teachers will depend on the ability of teacher education institutions and schools to effectively partner with one another to establish appropriate credibility for the new school subject. Also focusing on the issue of credibility is Dube's paper investigating the status of Tourism as another new subject in the South African secondary school curriculum. Describing the dilemma that this discipline and the learners who subscribe to it are likely to encounter, she points out that while Tourism as subject may have vocational potential in helping to drive entrepreneurship and poverty alleviation it is not valued as an entrance requirement by higher education institutions in South Africa because the subject has not gained sufficient currency as an academic discipline. This raises doubt as to whether adding it to the school curriculum was a realistic decision on the part of the education authorities. Similarly, curriculum innovation in other school subjects like Accounting necessitate adaptation of existing pedagogical and assessment practices. Ngwenya's article reflects on the challenges that teachers in deprived rural contexts encounter when teaching a highly specialised discipline like Accounting. She argues that however commendable the teacher's intentions may be, teaching a subject like Accounting from conceptually weak foundations has profound implications for the kind of learning that is likely to occur. She makes a strong case for context-specific continuing professional development.

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The next two papers address the intersection between gender issues and the education system. In her paper on why female trainee teachers take up cigarette smoking when they are at university, Shakila Singh shows, by getting into student mind-sets, how external acts of practice often have deeper signifying messages. From her interviews with female smokers, she is able to

show how their smoking codes a set of beliefs that govern their understanding of their gendered selves. She shows how the students are sophisticated readers of the world of university life, able to generate particular insights into how they will be interpreted and re-interpreted as young women because of choosing to smoke. She reveals that these women students see university life as a space where new forms of femininity can be enacted, challenging the traditional roles of conventional femininity in their own personal homes, families and school settings. They see the university as a space where these new-found freedoms can be exercised, and that smoking is one of the ways they can enact this freedom and independence in an assertion of their sense of self. The students are aware that university is a transitional and temporary space and that they are perhaps unlikely to continue their smoking indefinitely. However, Singh points to the paradoxical freedom of space for their sense of self which they exercise in contradistinction to the potential hazardous health consequences or potentially addictive nature of the habit. However, their knowledge of the effects of nicotine does not prevent them from exercising their different forms of their identities. Much more than the act of smoking is at stake. The health and identity constructions pose for Singh a crossroads of decision making.

Vijay Hamlall is one of the few voices in this anthology coming from the schooling sector. This is perhaps a consequence of the Colloquium's mandate to draw on researchers from within the three participating institutions of the University of Free State, the North West University and the University of KwaZulu-Natal in this annual event. The voice of the academic researchers practising in higher education consequently dominated the submissions for this special edition. It remains a question therefore as to how we incorporate the voices of our young/novice postgraduate students into the world of academic publishing, or the voice of practising teachers in secondary and primary schooling. Or is it that the agenda for publishing and academic writing for the novice school-based researcher, has different currency from that offered and expected of higher education practitioners? This raises the different question, of course, about why academics engage in the pursuit of academic research, presentations, dissemination and publishing in the first place: is it simply producing 'academic output' (fuelling a notion of a commodification of the educational enterprises as driven by these measurables), or is it writing and publishing articles to ride the opportunity of 'academic tourism' (travelling to destinations away from one's own

institution to present or imbibe other cultural contexts of academic thinking), or is it 'academic writing to produce new knowledge' (seeking to extend the body of knowledge)? Or do elements of all these forces push or pull them in this force field of possibilities?

Vijay Hamlall's paper provides a useful parallel with Shakila Singh's paper. While Singh explored how female students chose to mark their identities through selected practices, Hamlall reveals how the construction of masculinities within a school context is marked by a host of contextual regimes. He argues that school boys' masculinities are constructed in the context of a strong presence of a school discipline culture which itself is violent and aggressive, and promotes particular conceptions of masculinity. While he argues that no single notion of masculinity emerges as a result of these school-disciplined environments, he shows nonetheless how the school climate can legitimise and normalise enactments of violence. This is despite the overt public rhetoric of school policy platforms condemning violent behaviour. Through in-depth interviews with boys and school teachers, Hamlall shows that blustering intolerance and assertive responses to boys' violence in schools paradoxically habituates violence. He recommends breaking the cycle through alternative, more caring, discourses of engagement which challenge aggressive masculinities. Not to do so would be to insidiously promote the caricature of aggressive masculinity.

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This anthology of education at the crossroads does not chart out any single new direction. Instead it suggests that we are forever at the crossroads making decisions about directions for educational change. This is not a sign of weakness, but rather of heightened awareness about options. But our crossroads are not a four-way intersection, or a 'divergence of two roads in the woods' (Robert Frost 1874-1963: *The Road not Taken*). Our choices are not simply dichotomous alternatives, or 'roads less travelled' (Frost), rather the pathways from the crossroads lead in multiple and winding configurations, sometimes back to the point of origin. We should, like Alfred Lord Tennyson's 'Ulysses', embrace eternal quest:

> I am a part of all that I have met;
> Yet all experience is an arch where through

> Gleams that untravelled world, whose margin fades
> For ever and for ever when I move.
> How dull it is to pause, to make an end,
> To rust unburnished, not to shine in use!
> ('Ulysses': Alfred Lord Tennyson 1809-1892.)

Research into educational practices must not translate into disguised forms of indoctrination. These research endeavours draw from contexts of our practice, from insights about the varied options we would like to pursue. It is noteworthy that many of the papers in this anthology argue for alternative educational enterprises that will provide deeper, richer, fuller understandings of the challenges which face teachers, students and learners both in their classrooms and in more general university and school spaces – choosing pathways for their long-term career prospects within the broader society. Education is about crafting productive citizenry, not mindless ideological adherence, and the alternate pathways often involve ethical and moral re-affirmation – commitment to a collective and common social good. We need clear philosophical education roadmaps to guide the kinds of questions we ask, otherwise we may become manipulated zombies: a living dead; mindless consumers of the words, thoughts and goals of others

The four recommendations made by Olivier in his second paper warrant further endorsement:

1. As educators we need to make our students aware of the precariousness of our planetary ecology.
2. We have to make our students aware of the rampant and dominant infiltration of neoliberal capitalism into our daily lives.
3. As enlightened, fuller human beings, we should exercise our autonomy to live in this world and co-construct its otherness. This can best happen when we understand deep commitment to and connection with the common good.
4. Our creative and imaginative potential to pursue alternative pathways will foster recognition of what is valuable from our past, and while standing rooted in the present, this will enable us to soar above mediocrity into a new tomorrow. We will produce our future.

We give here our own interpretations, merely, of the more erudite contentions

in the papers which constitute this volume. Above all, their authors remain committed to the power that lies within each of us to create the new world order. As social scientists, Bert Olivier reminds us, our responsibility is not simply to *describe* the world as it is, but to *re-interpret it as it ought to be*. This would involve, as Kristeva (2000) suggests, a perpetual re-turning, a revolt of conscience. This is an embracing of power, but as Foucault puts it (1990: 84), 'There is no power without potential refusal or revolt'. We can hear the tunes, but do we listen to the voices of re-turning and re-direction: our new pathways?

With regard to the cover of this issue of *Alternation*: depictions of Education in South Africa are often dark and gloomy. Failure, deficiency and negativity abound in many interpretations of the present state of schooling and Education. However, opportunities for disruption exist. The cover presents a view that working outside the confines of categorical trajectories as constructed by fixed pathways or tracks might constrain innovation and hope for alternatives. By blurring boundaries we allow for glimmers of hope, sparks of inspiration as depicted in the articles of this anthology. Various vantages are likely to co-exist or collide. The artist, Daisy Pillay, depicts momentary flashes which burst out alongside the crossroads of inter-disciplinarity, moving the gloom to glitter.

References

Bernstein, B. 2000. *Pedagogy, Symbolic Control and Identity: Theory, Research and Critique*. London: Rowman and Littlefield.

Foucault, M. 1990. Politics and Reason. In Kritzman, L.D. (ed.): *Michel Foucault: Politics, Philosophy, Culture. Interviews and Other Writings 1977-1984*. New York: Routledge.

Hardt, M. & A. Negri 2001. *Empire*. Cambridge, Massachusetts: Harvard University Press.

Hardt, M. & A. Negri 2009. *Commonwealth*. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

Hugo, W. 2013. Editorial. *Journal of Education* 57: 1-5.

Kristeva, J. 2000. *The Sense and Non-Sense of Revolt: The Powers and Limits of Psychoanalysis. Volume I*. Herman, J (trans.). New York: Columbia University Press.

Lee, J. 1990. *Jacques Lacan*. Amherst: University of Massachusetts Press.
Nussbaum, M.C. 2010. *Not for Profit: Why Democracy Needs the Social Sciences*. New Jersey: Princeton University Press.
Nussbaum, M.C. 2011. *Creating Capabilities: The Human Development Approach*. London, Belnap Harvard.
Olivier, B. 2005a. Lacan and the Question of the Psychotherapist's Ethical Orientation. *South African Journal of Psychology* 35,4: 657-683.
Walker, M. & M. McLean 2013. Operationalising Higher Education and Human Development: A Capabilities-based Ethic for Professional Education. *Journal of Education* 57: 20-29.

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Education at the Crossroads: Looking Back; Looking Forward (Part 1): Democracy, Autonomy, Capitalism and Ecology

Bert Olivier

Abstract

Setting out from the etymological meaning of the concept 'education', this paper is an attempt to conceptualise the contemporary educational terrain in so far as it is inescapably situated within the broader cultural landscape of 21st-century globalised society. The priority granted to technical rationality in modern and postmodern societies is noted, and the related 'disciplinary' character of modernity is explored via Foucault. This is elaborated on through the work of Hardt and Negri on Empire, or the new form of sovereign power in the world, in which the 'multitude' is called upon to rescue democracy from its current crisis. Returning to Foucault, the preconditions of autonomy in a world where we are reduced to 'docile bodies' are outlined, and the urgent need for recovering such autonomy in the current global situation of deteriorating ecosystems is examined in relation to the dominant economic system of neoliberal capitalism.

> If humans are born humans, as cats are born cats…it would not be…I don't even say desirable, which is another question, but simply possible, to educate them (Lyotard: *The Inhuman* 1991:3).

Keywords: autonomy, disciplinary society, Empire, neoliberal capitalism, democracy

Most educationalists probably know that the etymological meaning of the verb, 'to educate', is 'to lead out of'. Lead out of what? Presumably, out of a state of ignorance, and presumably by those who are not ignorant. Whether

the latter assumption is still justifiable (if it ever was), is debatable, but what can be stated with certainty, in light of much of recent intellectual work on the condition of so-called postmodern, globalised society, is this: The world – that is, the more or less known relations between human societies, on the one hand, and between these and the planetary biosphere known as 'nature', on the other – has never been more complex, and moreover, been more complexly understood by social and natural scientists than at the present time. Hence, it appears that educationalists might be forgiven if they do not possess the kind of advanced knowledge that such scientists have. However, lest we too easily jump to the conclusion that especially the natural sciences should inform education (and unwittingly replicate the famous 19th-century debate between Matthew Arnold and T.H. Huxley on this topic), I believe we should take note of an important observation, in this regard, by Václav Havel (1996):

> the relationship to the world that modern science fostered and shaped now appears to have exhausted its potential. It is increasingly clear that, strangely, the relationship is missing something. It fails to connect with the most intrinsic nature of reality, and with natural human experience. It is now more of a source of disintegration and doubt than a source of integration and meaning. It produces what amounts to a state of schizophrenia: Man as an observer is becoming completely alienated from himself as a being. Classical modern science described only the surface of things, a single dimension of reality. And the more dogmatically science treated it as the only dimension, as the very essence of reality, the more misleading it became. Today…we may know immeasurably more about the universe than our ancestors did, and yet, it increasingly seems they knew something more essential about it than we do, something that escapes us. The same thing is true of nature and of ourselves ….
>
> And thus today we find ourselves in a paradoxical situation. We enjoy all the achievements of modern civilization that have made our physical existence on this earth easier in so many important ways. Yet we do not know exactly what to do with ourselves, where to turn. The world of our experiences seems chaotic, disconnected, confusing …. Experts can explain anything in the objective world to us, yet we understand our own lives less and less. In short, we live in

> the postmodern world, where everything is possible and almost nothing is certain.

Taking Havel at his word – and I, for one, believe that we have every reason to – one might ask what it is that the present generation of humans populating the planet has lost, or forgotten, or perhaps unwittingly 'murdered', of our legacy from the past. I use this metaphor to allude to the encounter between the mythical Oedipus and his father, King Laius of Thebes, at a (triple) crossroads, which ended in Oedipus's unwitting murder of his father – an act that led further to his unwitting marriage to his mother, Queen Jocasta, and her eventual death by suicide, all of which tragic series of events was held together by what one might call the 'causality of ignorance' on Oedipus's part. Is it not perhaps the case that educators worldwide today, stand at a crossroads where they run the risk of unwittingly 'murdering' what is most valuable in their cultural heritage, and which, in a manner of speaking, 'fathered' or 'mothered' them? What would be a candidate for such parentage? I shall return to this question.

Modernity and Panoptical 'Discipline'

It is worth taking one's cue from Karsten Harries about our most immediate cultural progenitors. In his monumental study, *The Ethical Function of Architecture* (1997), which is just as much a study of the costs as well as gains regarding the transition from modernity to postmodernity, as it is of the present condition of architecture, he makes it very clear that modernity is inseparable from the centrality of reason and technology (1997: 7):

> … modernism and postmodernism would seem to be much more than just important aesthetic events. At issue is 'the legitimacy of the modern age' [Blumenberg]. Both movements are born of concern with the shape of the modern world, as postmodernism represents a phenomenon of modernity's bad conscience, of its self-doubt. Such self-doubt has long centered on the hegemony that we have allowed scientific rationality and technological thinking – over our lives, our thinking, and our practices ….

Needless to stress, these 'practices' include education, which is just as much

subject to the prioritisation of scientific and technical rationality as other practices, burdened as it is by amnesia regarding the fact that the natural sciences and technology cannot, by themselves, give any guidance on the axiological manner in which human beings should orient themselves in the world. The natural sciences describe the natural world as it is in scientific (often mathematical) terms, and not as it ought to be – something that is axiologically and culturally embedded in all languages, and need not be sought in ideologies[1]. But if modernity cannot be separated from what one might, following the critical theorists of the Frankfurt School, call technical rationality[2], it is equally bound up, according to Michel Foucault (1995), with a certain 'disciplinary' approach, institutionalised in the modern punitive practice of imprisonment. For Foucault, the latter, in turn, is paradigmatic of a pervasive tendency in modern society, which he characterises as 'carceral' and as being subject to 'panopticism'. The latter term alludes to the ideal prison, described by Jeremy Bentham in the 19th century, where prisoners would monitor their own behaviour in their cells because of their constant visibility to warders in a central tower. Similarly, for Foucault, the three pervasive mechanisms of 'hierarchical observation', 'normalising judgement', and 'the examination' have a 'normalising' effect in contemporary societies, in the process turning individuals into what he calls 'docile bodies' (Foucault 1995: 170-194). In a nutshell, this means that individuals today lack what is known in philosophy as 'autonomy', or the ability to 'give oneself the law' (Olivier 2010).

Does this sound familiar? It should, for today such infantilising practices have developed much further than at the time of which Foucault

[1] In the work of Lacan, among others, there is a clear indication that language, or the symbolic register, is a repository of universalistic values which, with minor cultural variations, apply to all cultures – for example the incest taboo. See in this regard Olivier 2005a. While Lacan as poststructuralist psychoanalytic theorist leans on Freud and on Lévi-Strauss regarding his conception of language as repository of (unconscious) cultural values, even a modernist Hegelian such as Jürgen Habermas (1971: 196-310) points to the fact that cultural values are inseparably conjoined with both the historical-hermeneutic *and* the critical social sciences.

[2] For a sophisticated formulation of this concept, specifically as a 'technical guiding interest' driving the natural sciences, see Habermas (1971: 196-310).

was writing. If the three panoptical mechanisms he identified are still very much with us – in the shape of 'line managers observing academics' 'performance' with hierarchical effect, and the latter having to 'observe' students' performance in the same way, combined with the 'normalising' effect of all kinds of tests and measurements, which come together in the 'examination' as the repository of measurements (that form the basis of exercising power over the individuals concerned) – others have been added to exacerbate the overall disciplining result[3]. What else is the whole system of 'Outcomes Based Education'[4], university audits, and the promotion of an ethos of 'compliance' worldwide, than a systematic reduction to anaesthetising conformity of what might (perhaps) otherwise have been an educational approach which would optimalise the creative potential of every child and student within the context of an ecologically responsive, humanistic set of values?

In this respect (specifically regarding the actualisation of creative potential on the part of individual students) one could point to Aristotle's notion of a fourfold causality – material, formal, efficient and final or teleological[5] – which articulated the essence of all development, including that which is peculiar to education, in a complex causal model. The 'final cause' or 'telos'– that which everything strives to actualise, be it a fully grown oak tree from an acorn, or a responsible, critically aware citizen from a student – is the mode of causality relevant to education, and for centuries educationalists and philosophers have understood this; to pretend that any educational system which emphasises 'outcomes' is anything original is a

[3] It is impossible to go into all those current social and cultural practices that arguably constitute novel instances of 'infantilizing', 'normalizing' and 'disciplining' practices and discourses. Here I shall only mention those most relevant to educators. However, other practices, such as those clustered around social networking sites like Facebook, arguably participate in the reduction of individuals to 'docile bodies', albeit covered up by the accompanying 'fun' and 'cool' of such activities. See Olivier (2011) in this regard.

[4] See in this regard my argument concerning the failure of OBE in South Africa (Olivier 2009).

[5] See in this regard Norman Melchert's (1991: 154-157) wonderful explication of Aristotle's doctrine of the four causes.

display of lamentable ignorance of the history of thought, apart from which the panoply of smothering administrative procedures in which much of it is usually embedded is enough to squash the spirit of most teachers and lecturers – in fact, it is overkill, and only benefits those in positions of authority who do not wish to see any innovative teaching, which might, after all, just succeed in cultivating a spirit of creative and critical thinking on the part of students. Not that one can ultimately merely hold individuals in positions of authority accountable for an education system that actively discourages innovative, critical thinking and practice. Such a system is a function of a worldwide system, where political governance and dominant economic practices dovetail into a veritable cratological straitjacket of 'compliance', aimed at constantly reinforcing the new world order of an alliance between dominant states and neoliberal capitalism (especially in its corporatist embodiment) so clearly uncovered in Hardt and Negri's trilogy, *Empire* (2001), *Multitude* (2005) and *Commonwealth* (2009), as well as in Manuel Castells's *The Rise of the Network Society* (2010).

'Empire' and the Educational Task of Recovering Democracy

According to Hardt and Negri's (2001) analysis of the present state of a globalised world, the emergence of 'Empire' can be tied to the 'irresistible and irreversible globalisation of economic and cultural exchanges' (2001: xi). Specifically, their use of the term refers to a new global order or a novel form of sovereignty. 'Empire', they go on to say, 'is the political subject that effectively regulates these global exchanges, the sovereign power that governs the world'. While they grant that, as many commentators have argued, the sovereignty of nation-states has declined – no contemporary nation-state is a sovereign authority any longer – this does not mean that sovereignty as such does not exist any longer. Hence the fundamental hypothesis of their book, namely, that sovereignty has assumed a new form, consisting of a series of national and trans-national structures which obey the same 'logic of rule'. This novel type of sovereignty is precisely what they call 'Empire'.

From this alone it should be apparent that what Negri and Hardt have in mind is nothing like the imperialisms established by modern European powers. These were essentially territory-bound in so far as nation-states exercised their central and centred rule over geographically expanded

domains. They point to the increasing inability of nation-states to regulate economic and cultural exchanges as one of the symptoms of the advent of 'Empire'. In contradistinction to modern imperialism, Empire has no centre of power in a territorial sense, nor does it have any geographical boundaries. Instead, it is 'a *decentered* and *deterritorializing* apparatus of rule that progressively incorporates the entire global realm within its open, expanding frontiers' (2001: xii). In contrast to the putative (but illusory) stable identities and fixed hierarchies of modern imperialism, Empire is characterised by hybrid identities and flexible hierarchies that operate hand in hand with multiple exchanges along rhizomatic global networks of power.

The advent of Empire signals a new stage in capitalist production, which goes beyond the industrial phase of production by means of factory labour, even if this still exists in reduced format. The actualisation of the world market is inseparable from it, but far from implying trade between discrete geographical territories, the spatial boundaries between First and Third World have become fluid, resulting in their continual intermingling. This has been made possible by, among other things, a transformation of the dominant processes of production. According to Negri and Hardt the postmodernised global economy prioritises labour of a cooperative, communicative and affective kind, and inclines increasingly towards so-called 'biopolitical production', or 'the production of social life itself, in which the economic, the political, and the cultural increasingly overlap and invest one another' (2001: xiii). As may be expected, such social reproduction tends towards, but (because of hybridisation) never actually attains, cultural, social, technological and political homogeneity.

What precisely it is that they have in mind becomes clearer in light of their insistence that, as a concept, Empire entails the absence of boundaries or limits. Moreover, it presents itself as an 'order' that would 'suspend history' (2001: xiv), by fixing a certain socioeconomic structuring for all time to come. It is not difficult to detect echoes here – in the character of Empire as analysed by Hardt and Negri – of Francis Fukuyama's triumphalist claims about the 'end of history' in the wake of the collapse of East-bloc socialism. Two additional conceptual characteristics of Empire are important: that the 'object of its rule is social life in its entirety', and that it is unfailingly devoted to universal peace, although, as they put it, it 'is continually bathed in blood' (2001: xv).

In the face of a Leviathan such as the one sketched (in the merest out-

line) here, what possible hope for liberation could Negri and Hardt hold out to those among the human race who would always resist forces of domination, whatever form they may assume, even if they masquerade as an omnipresent economic system capable of satisfying al human needs? This question becomes all the more important when one realises, as you read on, that their discourse is fundamentally informed, not only by Marx and the collaborative efforts of Deleuze and Guattari (especially their *Anti-Oedipus* and *A Thousand Plateaux*), but also by Foucault's discourse-analytical claim that, where (hegemonic) discourse functions, the possibility for counter-discourse is created. But how to resist something that appears to have become 'total', encompassing, down to the lowest registers of the social order? Do not despair, argue Negri and Hardt in true Foucaultian fashion, for although Empire possesses prodigious capacities for 'oppression and destruction' (2001: xv), the very polymorphous, variegated processes of globalisation which characterise Empire create novel opportunities for liberation.

The political challenge facing the champions of liberation is to reorganise and redirect these processes, instead of resisting them. The multitude – their term for Marx's proletariat – on which Empire depends for its functioning, is also able to create a counter-Empire as a political alternative, with rhizomatic global networks and flows similar to those which constitute and sustain Empire. Foucault in Hardt and Negri again: the struggles against Empire will not come from outside, but have already begun to appear within the domain of Empire itself. It is up to the multitudes to 'invent' new democratic forms through the struggles that are already enacting themselves – along this road, Hardt and Negri believe, the world will one day move 'beyond Empire'. Interestingly, although their genealogical reconstruction of Empire is, for contingent historical reasons, largely Eurocentric, neither its present functioning nor the forces that oppose Empire are restricted to Europe, America or any other region. The latter, they point out (2001: xvi), 'prefigure an alternative global society [and] are themselves not limited to any geographical region'.

The power of the postmodern multitude (elaborated in *Multitude*: 2005) consists, for Negri and Hardt, in the final analysis, in the capacity of and exigency for posing once again, like St Francis of Assisi, the joy of being, of biopower, of productive bodies and cooperative intellectual effort, against the misery of the power of Empire. This enables a kind of revolution that no Empire, no corporate, multinational power can ultimately control. But

make no mistake – for them, too, humanity is at a crossroads where one either has to act 'in common with' the 'multitude', or promote the interests of the new sovereign power of Empire, albeit without any illusions of this power being 'democratic'. In fact, their elaboration, in *Multitude* (2005: 272-273), on what they see as the 'crisis in representation' worldwide, is simultaneously an indication of the deep crisis of democracy (even in those countries that smugly regard themselves as bastions of democracy). The worldwide protests (that they identify) against the global political and economic system can therefore be understood as a sign that 'democracy cannot be made or imposed from above' (2005: 237). They list three principal elements which recur constantly across the board in all the global demands in question as preconditions for democracy, namely (2005: 269-270): 'the critique of existing forms of representation, the protest against poverty, and the opposition to war'. Regarding the 'crisis' of representation, does it not sound sickeningly familiar to South Africans where they write (Hardt & Negri 2005: 270).

> The false and distorted representation of local and national electoral systems has long been a subject of complaint. Voting seems often to be nothing more than the obligation to choose an unwanted candidate, the lesser of two evils, to misrepresent us for two or four or six years. Low levels of voter turnout certainly undermine the representative claim of elections: those who do not vote serve as a silent protest against the system.

But how to revitalise democracy, or what they see as governance that 'arise[s] *from below*', as 'the rule of everyone by everyone' (Hardt & Negri 2005: 237): governance with the participation of the people (who would thus be both the 'rulers' and the 'ruled')?

Recovering Autonomy

My first suggestion in this regard returns to Foucault, but this time not in the shape of a diagnosis of the problem of being reduced to 'docile bodies', but rather embodied in an affirmative elaboration on the conditions for a retrieval of individual autonomy – which, according to Foucault, is sadly lacking in extant, infantilised, society. In the third volume of his history of sexuality,

namely, *The Care of the Self* (1988), Foucault focuses on the eponymous practice in the Hellenistic age, which he regards as the 'golden age' (1988: 45) of the cultivation of such an 'ethic of self-mastery' on the part of individuals. The upshot of this study is that individuals during this time – and no doubt partly under pressure of the uncertainties of living in the far-flung Roman Empire (Foucault 1988: 41) – evidently experienced the exigency of developing a sense of autonomy that one can only envy in our age of manipulation of 'consumers' by and through the all-pervasive media.

But what is meant by 'autonomy', described earlier as 'giving oneself the law'?[6] Consider, first, that humanly speaking, 'autonomy' can never be complete or exhaustive – we are all inserted into the network of society through what Lacan calls the symbolic register[7], and that means that we are subject to language and to 'the law', let alone the fact that even comparatively autonomous or 'independent' individuals do have to depend on others for certain needs some of the time. Hence, the most one can strive for is what may be termed 'relative autonomy'. This is a poststructuralist, and not a postmodernist, conception of autonomy, which means that *both* one's dependence on others, and on other discourses, *as well as* one's ability to adopt a position *vis-á-vis* such others or the discourses that they represent,

[6] See in this regard Olivier (2010), for an investigation of the implications of Foucault's work on 'the care of the self' for the question of (relative) autonomy.

[7] Needless to stress, without having a grasp of the structural complexity of human beings, no educator could really set out to 'educate' the young. Although one cannot expect teachers at primary and high schools, nor even university lecturers to be well versed in psychoanalytic theory, there are many more popular avenues along which one can learn that what Lacan (Lee 1990; Olivier 2005a) calls the registers of the imaginary, the symbolic and the 'real', together, comprise human subjectivity. In popular parlance one might say that a person has a 'sense of self' (imaginary), a sense of where and how he or she fits into society (symbolic, through language), and a sense of things that surpass herself or himself in such a way that one has no control over them (the unsymbolizable 'real') – this much may be learned through literature, myths and even folk wisdom. The point is that all of these aspects of being human have to be considered by educators for 'true' education to take place.

can be simultaneously affirmed. As Foucault puts it (1990: 84): 'There is no power without potential refusal or revolt'. Lyotard (1992: 15) formulates the same 'both/and' logic of poststructuralism in terms of the creation of artworks: 'The artist and the writer therefore work without rules and in order to establish the rules for what *will have been made*'.

Secondly, recall that the geographically extensive nature of the Roman imperial political domain, within which the practice of achieving relative autonomy through the 'care of the self' was situated, corresponds, *mutatis mutandis*, with the geographically even more extensive globalised space of the contemporary world, dubbed 'Empire' by Hardt and Negri (2001). Nevertheless, apart from a superficial emphasis, today, on 'personal fulfilment' of a popularly understood, fashion-aware kind (found in glossy magazines), which corresponds with the ancient interest in individuals' relations with themselves, and on 'lifestyle', there is hardly any sign, today, of a comparably strong interest in the attainment of personal autonomy and independence from political and other institutional agencies (for instance the media), as will become clearer later. Instead, the vast majority of contemporary subjects are almost exclusively heteronomous in the sense of obediently bending to state, corporate, religious and other ideological imperatives that they neither fully comprehend nor really embrace, but nevertheless yield to for lack of any self-directedness.

In stark contrast to the present state of affairs, Foucault draws attention to three interconnected things encountered in Hellenistic-Roman society: the 'absolute value attributed to the individual in his singularity', the 'positive valuation of private life', and, most importantly (1988: 42),

> the intensity of the relations to self, that is, of the forms in which one is called upon to take oneself as an object of knowledge and a field of action, so as to transform, correct, and purify oneself, and find salvation.

It is in this context that Foucault (1988: 43) alludes to the development of a 'cultivation of the self', which reached its apogee around this time in antiquety, and which was guided by the precept that one should 'take care of oneself'. To be sure, this was a very old idea in Greek culture – among the Spartans, and above all associated with Socrates's supposed practice to remind humans of the priority to be given to the condition of their selves (Foucault

1988: 44). Fact remains though, that this interest in 'cultivating the self' was resurrected by Hellenistic philosophy, in the guise of the 'art of existence'.

Lest anyone should think that the kind of self-mastery at stake here is an easy matter, it should be stressed that such 'cultivation of the self' in antiquity was aeons removed from the kind of preoccupation, if not obsession, with the self, encountered in popular media of today. Foremost among these are the narcissistic indulgences that occur non-stop on the social networking sites (with a demonstrable 'disciplinary' function in contemporary society; Olivier 2011), and of popular magazine articles on the latest fashion in self-enjoyment, ranging from reflexology, aromatherapy and lessons in tantric practices to Reiki for the leisurely rich. By contrast, the attainment of autonomy in the Hellenistic world was difficult, austere and demanding by comparison, insofar as it was aimed at a kind of mastery of the self in the face of any of the eventualities, no matter how disruptive or painful, that may confront one unpredictably in the course of one's life. What should be added is that the 'care of the self' as systematic practice in the Hellenistic-Roman era, was predicated on human fallibility, finitude and comparative powerlessness regarding forces that vastly exceed one's own resources of power. At the same time, however, these practices signalled a belief in the capacity of individuals to develop their own 'power' in the form of self-mastery, on the assumption that it would enable one to endure whatever sufferings life might inflict on them, and presumably also to resist such overwhelming forces to a certain extent.

The imperative *epimeleia heautou* is encountered in many of the philosophical teachings of the time. For example, Seneca (quoted in Foucault 1988: 46) demands that individuals dispense with other occupations, and through 'varied activity' 'develop oneself', 'return to oneself', and 'transform oneself' in the quest for the relative autonomy in question here. Such 'varied activity' was to be practised with the utmost dedication and discipline – something that indicates the difficulty involved in developing the (relative) autonomy of which one is capable. It is no easy matter, but entails, in terms of Foucault's discourse theory, the painstaking acquisition of a new discourse or discursive regime, keeping in mind that a 'discourse' entails the intertwinement of language and action, such that anyone subject to discursive power is able to affirm *or* resist it (Foucault 1990: 84**;** Olivier 2003). In his turn Epictetus – who represents, for Foucault (1988: 47), the apogee in the philosophical development of this theme – emphasises that such care of the

self is a 'privilege-duty, a gift-obligation that ensures our freedom while forcing us to take ourselves as the object of all our diligence'.

I believe that – in light of what was said earlier about living in the age of 'Empire' – unless we as educators today show ourselves capable of laying the groundwork, at least, for the further cultivation of a comparable capacity for relative autonomy, we are failing our children and students. It should be clear at this stage that, among the ancestors that our societies have 'murdered', Oedipus-like, are true democracy (if it ever existed), and a capacity for relative autonomy. But there is more.

Zombies at the Crossroads

To be able to give greater concreteness to this tentative answer, phrased in terms of 'relative autonomy', to the question regarding the recovery of democracy via education, and at the risk of belabouring the metaphor of 'crossroads', I shall turn to one more telling instance of its use, this time in cinema. In Zack Snyder's remake of the horror zombie film, *Dawn of the Dead* (2004)[8], the metaphor of a crossroads, together with the metaphorical significance of the figure of the zombie (or 'living dead'), plays a central role, which highlights one of the possible reasons why education, too, faces a crossroads today. Briefly, the film narrative revolves around the inexplicable[9] appearance in an American town, apparently from nowhere, of zombies which proceed to attack people in their homes, in the streets and even in shopping malls. One such shopping mall is the location for most of the action in the film narrative, being the ostensibly fortified space where the handful of survivors of the initial onslaught by the zombies retreat to, only to be besieged by hundreds (if not thousands) of the undead, milling about outside the mall. Appropriately, this mall is called the Crossroads Shopping Mall,

[8] I owe my familiarity with the film to one of my 4th-year Philosophy of Culture students, Lyndon Brand, who wrote an essay on it, interpreting the zombies, persuasively, to my mind, as the (metonymic) embodiment of consumerism. They are, literally, consumers.

[9] Inexplicable, except for the vague suggestion that their condition is caused by a 'virus' of sorts, which would make such a virus another telling metaphor for what may be interpreted as the malady of 'consumerism'.

suggesting that humanity as a whole finds itself at a point of decision, or defining moment, in its history; hence its suggestiveness for the theme of education being at a crossroads of sorts.

Although the film can be seen, at one level, as just a zombie movie, a more nuanced interpretation allows one to perceive in the zombies the metonymic embodiments of 'consumers' (which is what zombies are) impelled to behave, once they have been 'bitten' – by implication, by the 'virus' of consumerism in the economic sense – in an utterly predictable, monodimensional fashion, and not simply cinematic creations designed to horrify cinemagoers as much as possible. From this perspective, the fact that this is a 'zombie' film merits some attention. The term denotes, as said before, the 'living dead', or 'undead' – or, as one of the characters who finds temporary refuge in the mall says, beings who are 'dead-ish'. Zombies literally 'consume' living people, killing them in the process, but also transmogrifying them into something else (more zombies), which behaves as if it is alive, but which lacks the defining characteristics of the living, such as being relatively autonomous or self-directed, being able to distinguish between actions that must be prioritised and those which can wait, and so on. In contrast, a zombie is possessed by only one craving, namely to 'consume' the living members of the human race. Jeff Collins's (1996: 21) remark, that 'Zombies are cinematic inscriptions of the failure of the 'life/death' opposition' sums it up well, and already reveals why one is led to see in them the embodiments of what we know as consumers.

The name of the mall – Crossroads Shopping Mall – with its implication of a turning point or place of decision, is crucially important here. So is the fact that those characters hiding from the zombies in the mall start behaving like typical (economic) consumers at a certain point in the narrative (trying on clothes, trying out gym equipment, and so on), together with the tell-tale gathering of zombies on the open space next to the mall, as if they sense that this is where they 'belong'. Taking all of this together, it is difficult not to interpret the figure of 'the zombie' in this film as representing 'the consumer'. The logic of this interpretation seems compelling to me, and casts the 'consumer' in a very revealing axiological light in so far as the multi-faceted nature of what Kaja Silverman (2000: 10; 25) understands as one's distinctive, partial 'look' at things, makes way, in the zombie, for a 'one-track look', bent on consumption (in the film, literally) at all costs, which aptly symbolises the reductive, one-dimensional mode of behaviour of millions of

people in global society today. In brief, the film can be understood persuasively as giving horrific metaphoric visual incarnation, through an extended elaboration, to the homogenising function of consumer capitalism in contemporary global culture, and issues an implicit warning that this culture stands at a crucial juncture – a crossroads, precisely – in its history.

Snyder's film therefore reinforces Havel's observation (above), that postmodern society seems to have lost its way, in a certain sense, in contrast to our ancestors who, despite lacking our 'scientific' knowledge, had a sense of orientation, of knowing their place in, the universe (further emphasised by Foucault's investigation into Hellenistic ethical practices). And it underscores the urgent need for recovering a modicum of autonomy, *a lá* Foucault, in the face of the widespread tendency, to relinquish autonomy at the altar of consumerism[10]. But why is consumer capitalism implicated here? Is it not – as conventional beliefs seem to confirm – the most 'successful' economic system in humanity's history? It all depends on what one understands by 'successful', and further, more importantly, on whether it can be demonstrated that this economic system is causally implicated in severing the bond with a set of ancestral principles or beliefs (the 'father' and 'mother' that we, like Oedipus, may have unconsciously killed at the crossroads) which (in a different sense of 'success') 'successfully' guided humanity for centuries. Here Joel Kovel is an invaluable critic.

Education, Ecology and Capitalism

In *The Enemy of Nature* (2002) Kovel demonstrates, to my mind convincingly, that the current ecological crisis is largely attributable to the imperative of endless (economic) growth through profit, inseparable from the capitalist economic system. Needless to say, the idea of limitless growth within a finite ecological system is an absurdity, but the evidence adduced by Kovel that, in the 21st century, nature is in a precarious state, confirms Havel's point about contemporary humans having lost what their ancestors

[10] While I have paid attention to Foucault's characterization of modern society as one where, through various 'normalizing' mechanisms, people are reduced to 'docile bodies', one could heed Deleuze's (1992) claim, that we are already beyond that, in 'societies of control'.

'knew', which here concerns the awareness of an intimate connection with nature in all her variegatedness[11]. Moreover, although the elite Club of Rome called for a limit to economic growth in the late 20th century already, today 'even the idea of limiting growth has been banished from official discourse' (Kovel 2002: 5)[12]. Kovel continues:

> Further, it has been proved decisively that the internal logic of the present system translates 'growth' into increasing wealth for the few and increasing misery for the many…'growth' so conceived means the destruction of the natural foundation of civilization. If the world were a living organism, then any sensible observer would conclude that this 'growth' is a cancer that, if not somehow treated, means the destruction of human society, and even raises the question of the extinction of our species. A simple extrapolation tells us as much, once we learn that the growth is uncontrollable. The details are important and interesting, but less so than the chief conclusion – that irresistible growth, and the evident fact that this growth destabilizes and breaks down the natural ground necessary for human [and non-human; B.O.] existence, means, in the plainest terms, that we are doomed under the present social order, and that we had better change it as soon as possible if we are to survive.

[11] Elsewhere (Olivier 2005; 2007 and 2010a) I have elaborated on this theme of interconnectedness between humanity's social ecosystems and natural ecosystems in different contexts.

[12] Various publications list the geo-signs of environmental degradation, and even implicate industrial activity in relation to global warming, yet few of these point a finger directly at capital or capitalism. When they do, it is largely because of industrial activity associated with it, and shared, moreover, with socialism and communism. See for instance *National Geographic* (2004: 11), where editors Appenzeller and Dimick quote Jerry Mahlman of the National Center of Atmospheric research as saying that controlling the rise in heat-trapping gases 'would take 40 successful Kyotos …. But we've got to do it'. At best, therefore, capitalism is indirectly implicated.

Unlike most books on the ecological crisis today[13], Kovel connects all the obvious signs of environmental degradation and ecosystemic breakdown relentlessly with the social and economic system referred to above, pointing out (2002: 6),

- That the 'reigning system' in question is capitalism, the dynamism of which, capital, is a strange beast indeed, not at all accessible to common sense, and extending far beyond its usual economic implications.
- That the 'growth' in question is essentially capital expressing its innermost being.
- That this is incorrigible; thus to seriously limit capital's expansion throws the system into deep crisis [and there are many such instances, such as September 11, 2001; B.O.]. For capital, it must always be 'Grow or Die!' It follows that capital cannot be reformed: it either rules and destroys us, or is destroyed, so that we may have a lease on life.

To illustrate, Kovel (2002: 28-38) discusses the notorious Bhopal industrial accident of 1984[14] in India as paradigmatic instance of the causal functioning

[13] Thomas Berry (1996; 1999), for instance, approaches the ecological crisis from a theological point of view, while Carter (2001) adopts a political-theoretical perspective. Berry does sometimes make the connection with capitalism, but not in a sustained analytical way (as Kovel does) – remarking, on occasion (1999: 110), that neither socialism nor capitalism, given their industrial exploitation of planetary resources, is acceptable to the ecologically minded. Although Carter (2001: 66-67) also addresses capitalism and its relation to the environment – notably in the context of socialist claims that capitalism's destructive technologies and consumerist ethos are responsible for the ecological crisis – he does not pursue the matter in a sustained manner either.

[14] On 29 November 2004 a radio news report (SAFM) stated that Dow Industrial, with which Union Carbide has merged since Bhopal, has denied any further responsibility for either the people still suffering from the after-effects of the 'accident', or the natural environment still being adversely affected by the continuing leaking of toxic materials from the remains of the factory, 20 years after the event.

of capital. This concentrates the causality in question into a single, but multi-layered event which foregrounds the structural dynamics of capital in relation to global eco-destruction. Bhopal confronts one with all the signatures of capital's characteristic functioning, most centrally, the need to minimise costs and maximise profits. For this reason Kovel's reconstruction of the disaster[15] (where thousands of people perished when 46.3 tons of a pesticide called methyl isocyanate [MIC] were released from a factory owned by multinational Union Carbide Corporation; Kovel 2002: 30), is intended to uncover the intricate causal connections that resulted in its occurrence. This includes the existence of the factory and the workers at the Bhopal facility as well as the corporation itself which was responsible for the factory being built there, all of which function causally at specific levels – instrumental,

[15] It is worth noting that, in *Risk Society* (1992: 12-13), Ulrich Beck already pointed out that in the contemporary society of 'risk production', in contrast to the society of 'wealth production' that preceded it, the 'logic' of risk production dominates that of wealth production, and no longer the other way around. 'At the center', he says, 'lie the risks and consequences of modernization, which are revealed as irreversible threats to the life of plants, animals, and human beings ... these can no longer be limited to certain localities or groups, but rather exhibit a tendency to globalization which spans production *and* reproduction as much as national borders, and in this sense brings into being *supra*-national and *non*-class-specific *global hazards* with a new type of social and political dynamism…' What Beck demonstrates, is that the gains in power, from techno-scientific and economic progress, are increasingly being overshadowed by the production of (often invisible) risks to the life of all living things on the planet. Carl Sagan (1997: 156), too, wrote eloquently about the invisible risks confronting humans today: 'We are at risk. We do not need alien invaders. We have all by ourselves generated sufficient dangers. But they are unseen dangers, seemingly far removed from everyday life, requiring careful thought to understand, and involving transparent gases, invisible radiation, nuclear weapons …' In this book (1997: 71-138) Sagan also elaborates on the consequences of global warming, and on what needs to be done to ameliorate the risks involved.

efficient, and so on[16]. Crucially, however, he demonstrates (2002: 35-37) that all of these were constrained to function causally as they did (and still do in the dominant global economic system) by the encircling 'force field' of capital. He elaborates (2002: 38):

> The 'giant force field' is a metaphor for capital, that ubiquitous, all-powerful and greatly misunderstood dynamo that drives our society. The established view sees capital as a rational force of investment, a way of using money to fruitfully bring together the various features of economic activity. For Karl Marx, capital was a 'werewolf' and a 'vampire', ravenously consuming labour and mutilating the labourer. [Recall Snyder's film! B.O.]. Both notions are true, and the second one, applied to nature as well as labour, accounts for the ecological crisis in all essential features.

Kovel points to the tendency (2002: 38) of capital '*to degrade the conditions of its own production*' (through perpetual cost-cutting in the guise of staff-retrenchments, for example) and its imperative to '*expand without end in order to exist*' (through the pursuit of innovation, efficiency, new markets and the inculcation of consumer-dependence). From this it follows that the growing ecological crisis is 'an iron necessity' (Kovel 2002: 39), the piecemeal attempts within the system to control individual disasters notwithstanding. At the core of capital it is a self-reproducing expansion process[17], infiltrating every nook and cranny of the human life-world. This

[16] Kovel (2002: 30-35) provides an account of Union Carbide's explanation of the accident in terms of 'individual blame' (never substantiated by the corporation), as well as a summary of massive counter-evidence to the effect that, far from a disgruntled saboteur having been responsible for the disaster, it was a complex set of neglects and cost-cutting measures on the part of Union Carbide which finally led to the fatal event. Ironically, after paying the Indian government much less in damages than the latter had asked for, Carbide shares rose to such an extent that its shareholders made a handsome profit (Kovel 2002: 37).

[17] In the *Grundrisse* (quoted in Kovel 2002: 41), Marx observes that 'capital is the endless and limitless drive to go beyond its limiting barrier. Every boundary is and has to be a barrier for it'.

includes nature to the extent that humans enter into relation with it, for the sake of the accumulation of money (through profit) and development of new markets, without regard for the fragility of ecosystems or the thought that humans are, in fact, a crucial part of these. The case of Bhopal illustrates this in exemplary fashion, where the interests of both people and nature took a back seat to the ever-present capitalist prioritising of lowering costs for the sake of more profit[18]. In the process the medical profession, traditionally underpinned by the Hippocratic oath (which pledges medical healing skills to all those who need them) is transformed (or perverted) into a capitalist business primarily interested in profit for its shareholders[19].

It is easy to forget that capital is not itself a living organism, but rather a 'kind of relationship' (Kovel 2002: 39) set up between humans and their environment. Once locked into this relation, humans unavoidably violate nature's ecological integrity by establishing endlessly self-replicating structures, regardless of their effects on this environment. It is of crucial importance to educators concerned about the well-being of the youth (which implicates that of nature) to note that this does not happen without conspicuous effects on the individuals who are the agents of capital. 'It is humans living as capital', Kovel reminds us pointedly (2002: 39), 'people who become capital's personifications, who destroy ecosystems'. The reason for this has to do with the way individuals are 'shaped' by capital (Kovel 2002: 38):

> People who are genuinely forthcoming and disinterestedly helpful do not become managers of large capitalist firms. The tender-hearted are pushed off far down the ladder on which one ascends to such

[18] The extent of the cynicism – or perhaps rather complete indifference – on the part of capital and the individuals shaped by it regarding the fate of people and nature is evident from the fact that when Kovel's book appeared (2002: 30) the Carbide factory ruins still disfigured the city, and toxic materials were still released into the environment.

[19] Fifteen years after the accident people were still dying at a rate of 10–15 a month. In South African private hospitals (such as the Netcare Group) this indifference to people as human beings manifests itself in the refusal to admit patients unless a substantial deposit is paid, or medical aid membership *and* creditworthiness are proved.

> positions of power. For capital shapes as well as selects the kind of people who create these events [such as Bhopal; B.O.].

Understandably, therefore, once introduced into a society, capital functions like a virus (or Snyder's zombies), transforming it systematically into what is known as 'capitalist' society, which manifests itself in three domains, namely the temporal, the existential, and the institutional (Kovel 2002: 52). Small wonder that, increasingly, people's lives globally are predicated on capital's terms. This is what Hardt and Negri (2001: 22-41; 364-365) call 'biopower' and 'biopolitical production' – the fundamental construction of human life under certain (capitalistically) predetermined economic, social, and political conditions. This entails that the temporal rate of consumers' lives continually accelerates, and their world is incrementally structured by interconnected institutions which ceaselessly extend and secure the rule of capital.

Of course it is only the exception to the rule among consumers who would find anything wrong with this (complacency is an attitude determined by capitalist 'biopolitical production'). But, as Kovel (2002: 52-76) argues at length, the structure of the human and natural 'life-world'[20] is radically altered in the process. Recall the recent BP oil spill in the Gulf of Mexico, or what happened at Bhopal, the consequences of which will be felt far into the future[21].

Given what has been argued so far regarding the need for autonomy in the face of pervasive social mechanisms that tend to reduce people to being 'passive' consumers, it is imperative that educators heed Kovel's unmasking of a crucial aspect of capital cultivating 'capitalism' as a state of social being. He draws attention to capital's invasion of life-worlds by introducing (2002:

[20] This is a term coined by Husserl to indicate the world of one's primary, 'unreflective' experience. It is employed by, among others, Habermas to critique the 'colonization' of the life-world by 'technical imperatives'.

[21] Kovel refers to many other examples of such disintegration of life-worlds which cannot be discussed at length here (see especially 2002: 52-58). There are reports of frightening social and 'natural' instances of this to be found in many other publications, of course, including the *National Geographic* (2004) cited earlier.

52) 'a sense of dissatisfaction or lack[22] – so that it can truly be said that happiness is forbidden under capitalism, being replaced by sensation and craving'. The craving, which again recalls Snyder's depiction of consumers as all-consuming zombies, is for commodities that fleetingly satisfy carefully 'constructed' needs on the part of 'consumers' (by the colossal machinery of capitalism, chiefly advertising). With keen insight, Kovel indicates that, where such craving for commodities perverts life-world conditions, a twofold modification happens: commodities (such as caffeine-laced soft drinks, leaf-blowers, or four-wheel-drive SUVs) are eco-destructive as well as profitable (stimulating further technological innovation for need-creation and its satisfaction). Moreover, the people who crave and use them are themselves 'anti-ecologically' transformed, which means that they are assimilated by the zombie-movement of capital and are therefore blind to its eco-destructiveness (Kovel 2002: 53). Lest people forget this, Kovel reminds one that 'ecology' pertains not only to nature, but to society too, given that certain aspects of social life are analogous to the interrelatedness of natural ecosystems, such as history, community or tradition. Capital accumulation can only proceed at optimal rate if these are negated, 'torn up'. 'Hence capital's relentlessly forward-looking attitude', he says (2002: 53), 'and its iron lock on the logic of modernity'.

The point of this 'excursion' on capitalism and ecological degradation should be clear. The extent of eco-destruction, driven mainly by the insatiable appetite of capital, today is such that it ought to be central to school and university education everywhere. Not only is it imperative for the survival of all life-forms on the planet, but also an urgent ethical imperative. This should be obvious, especially in an international educational context. Perhaps education is the best place to start addressing these problems. It cannot be emphasised too strongly: *unless the leading powers of the world*

[22] Note that this sense of 'lack' systematically cultivated by capital(-ism) presupposes a more fundamental 'lack' as fertile soil for its superimposition of an artificial dissatisfaction, namely the 'lack' that Jacques Lacan singled out as the most fundamental characteristic of the human subject. Human 'desire', for Lacan, is an expression of this lack, but ironically individuals who understand that 'lack' is a fundamentally unalterable human condition, would be most resistant to capitalism's false promises of finally fulfilling all desires and removing all lack (see Olivier 2004a).

take the ecological crisis seriously enough to start implementing an alternative to energy-through-oil, for example, and put everything into play to limit economic growth in a judicious manner (which does not threaten livelihoods), it is a real possibility that humanity will have to take responsibility for the utter devastation of all natural life on this planet, as well as of the human cultures that have developed in dependence on nature. Think of the rate at which forests are being destroyed for economic gain today, which simply ignores the fact that these forests are the 'lungs' of the planet, and no financial profit could ever replace their indispensable function for the survival of all life on earth. It is worth noting that in a recent book ecological thinker Thomas Princen (2010: 1) quotes the following dire warning from the 2008 Living Planet report (words that resonate with Kovel's indictment of capital): 'Our global [ecological] footprint now exceeds the world's capacity to regenerate by about 30 per cent. If our demands on the planet continue at the same rate, by the mid-2030s we will need the equivalent of two planets to maintain our lifestyles'. If this does not give educators pause, I don't know what will.

Not that it would be easy to resist the economic *status quo* through education at school or university level. Gilles Deleuze has pointed out that contemporary society is already beyond what Foucault conceived of as disciplinary society (referred to earlier), where the familiar 'examination' is one of the chief mechanisms for inducing docility on the part of subjects by means of its hierarchising and normalising functions. In Deleuze's words (1992: 5): 'Indeed, just as the corporation replaces the factory, *perpetual training* tends to replace the *school*, and continuous control to replace the examination. Which is the surest way of delivering the school over to the corporation'. Any university lecturer today can testify to the tendency of introducing 'continuous control' into the teaching curriculum in the shape of, for instance, frequent testing – to such an extent that students arguably no longer have any time for true 'learning' (which requires time-consuming, critical reflection on what one has heard in class or read in textbooks). In other words, the spirit of the corporation has already entered the university, and few university teachers have the wherewithal to resist it effectively. To be able to do so, one has to understand what is happening in contemporary society, and thinkers such as Foucault and Deleuze, but also the others drawn on in this paper, are invaluable sources of discursive transformation in this regard. Within schools and universities this battle of transforming people

(students) can take many forms – introducing students to the theories in question is just one of them. At a more practical level something such as 'ecological literacy' – which already features at many schools in different countries, including South Africa – is indispensable for sensitising students to the inseparability of human or social ecosystems and natural ecosystems. A strong argument could be made that this is even more important than the kind of critical philosophical theory I am defending here; for example, teaching students the actual practice of permaculture as an increasingly valuable alternative to a life of capitalist consumption and soil exhaustion may prepare them for an immeasurably more eco-sustainable way of life. This can be done even within cities (Hasse 2012).

Wouldn't it be the greatest irony if the very beings (human beings) capable of 'taking responsibility' for nature as her *guardians*, turned out to be its (and their own) *destroyers*? This would be the gravest Oedipal error of all, to 'murder' that which has generated all life. And does this not point to the greatest international educational and ethical priority of all, namely to inculcate in the youth a realisation of what is at stake, and find ways to help them develop a degree of autonomy, to be able to say no to useless capitalist imperatives and dedicate themselves to a worthwhile cause? Instead of calibrating educational institutions worldwide for the promotion of optimal economic development through 'growth', such development should be pursued in such a way that it does not impact so negatively or destructively on ecological conditions as to place the very survival of life on earth in peril. (These thoughts are pursued further in Part 2 of this article.)

References

Beck, U. 1992. *Risk Society*: *Towards A New Modernity*. Ritter, M. (trans.). London: Sage Publications.

Berry, T. 1996. The University: Its Response to the Ecological Crisis. Paper delivered before the Divinity School and the University Committee on Environment at Harvard University, April 11 1996. Available at: http://ecoethics.net/ ops/berrybio.htm.

Berry, T. 1999. *The Great Work*. New York: Bell Tower.

Carter, N. 2001. *The Politics of the Environment: Ideas, Activism, Policy*. Cambridge: Cambridge University Press.

Castells, M. 2010. *The Rise of the Network Society*. Second Edition. Oxford: Wiley-Blackwell.

Collins, J. & B. Mayblin 1996. *Derrida for Beginners*. Cambridge: Icon Books.

Deleuze, G. 1992. Postscript on the Societies of Control. *October* 59: 3-7.

Foucault, M. 1988. *The Care of the Self. The History of Sexuality*. Volume 3. Hurley, R. (trans.). New York: Vintage Books.

Foucault, M. 1990. Politics and Reason. In Kritzman, L.D. (ed.): *Michel Foucault: Politics, Philosophy, Culture. Interviews and Other Writings 1977-1984*. New York: Routledge.

Foucault, M. 1995. *Discipline and Punish*. *The Birth of the Prison.* Sheridan, A. (trans.). New York: Vintage Books.

Habermas, J. 1971. *Knowledge and Human Interests.* Shapiro, J.J. (trans.). Boston: Beacon Press.

Hardt, M. & A. Negri 2001. *Empire*. Cambridge, Massachusetts: Harvard University Press.

Hardt, M. & A. Negri 2005. *Multitude. War and Democracy in the Age of Empire*. New York: Penguin Books.

Hardt, M. & A. Negri 2009. *Commonwealth*. Cambridge, Massachusetts: Belknap Press.

Harries, K. 1997. *The Ethical Function of Architecture*. Cambridge, Massachusettss: MIT Press.

Hasse, A. (dir.) 2012. *Edible City – The Movie.* Available at: http:// http://ediblecitythemovie. com/. (Accessed on 13 July 2013.)

Havel, V. 1996. The Search for Meaning in a Global Civilization. In Anderson, W.T. (ed.): *The Fontana Postmodernism Reader*. London: Fontana.

Kovel, J. 2002. *The Enemy of Nature. The End of Capitalism or the End of the World*? London & New York: Zed Books.

Lee, J. 1990. *Jacques Lacan*. Amherst: University of Massachusetts Press.

Lyotard, J-F. 1991. *The Inhuman. Reflections on Time.* Bennington, G. & R. Bowlby (trans.). Cambridge: Polity Press.

Lyotard, J-F. 1992. An Answer to the Question, What is the Postmodern? In Pefanis, J. & M. Thomas (trans. & eds.): *The Postmodern Explained*. Minneapolis: University of Minnesota Press.

Melchert, N. 1991. *The Great Conversation. A Historical Introduction to Philosophy*. London: Mayfield Publishing Company.

National Geographic 2004. Global Warming – Bulletins from a Warmer World. *National Geographic* September.
Olivier, B. 2003**.** Discourse, Agency and the Question of Evil. *South African Journal of Philosophy* 22,4: 329-348.
Olivier, B. 2005. Nature, Capitalism, and the Future of Humankind. *South African Journal of Philosophy* 24,2: 121-135.
Olivier, B. 2005a. Lacan and the Question of the Psychotherapist's Ethical Orientation. *South African Journal of Psychology* 35,4: 657-683.
Olivier, B. 2007. Nature as 'Abject', Critical Psychology, and 'Revolt': The Pertinence of Kristeva. *South African Journal of Psychology* 37,3: 443-469.
Olivier, B. 2009. Why OBE has not Worked in South Africa. Posted on the *Mail & Guardian Online* 'Thought Leader' site www.thoughtleader.co.za 5 September 2009.
Olivier, B. 2010. Foucault and Individual Autonomy. *South African Journal of Psychology* 40,3: 292-307.
Olivier, B. 2010a. AVATAR: Ecopolitics, Technology, Science and Myth. *South African Journal of Art History* 25,3: 1-16.
Olivier, B. 2011. Facebook, Cyberspace and Identity. *Psychology in Society* 41:40-58.
Princen, T. 2010. *Treading Softly: Paths to Ecological Order*. Cambridge, Massachusetts: MIT Press.
Sagan, C. 1997. *Billions and Billions. Thoughts on Life and Death at the Brink of the Millennium*. London: Headline.
Silverman, K. 2000. *World Spectators*. Stanford: Stanford University Press.
Snyder, Z. (dir.) 2004. *Dawn of the Dead*. Universal Pictures.

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Education at the Crossroads: Looking Back; Looking Forward (Part 2): Technology, the 'Fourfold' and Revolt

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> Disobedience is the true foundation of liberty. The obedient must be slaves (Henry David Thoreau).

Abstract

This paper explores the possibility of a politics of technology, before turning to the question regarding a compass of sorts for education. In this regard, Heidegger offers the notion of the 'fourfold' as a touchstone for a truly human mode of living, which can therefore also serve to orient education. Unless, through education, a new generation of post-conventional citizens were to be made possible, we might end up like the zombies/consumers in Snyder's *Dawn of the Dead*. To launch an educational project like this, however, we should remind ourselves of Lyotard's notion of the inhuman, which (paradoxically) could be a source of rescuing our humanity. This is related to what Kristeva calls the exigency for 'revolt' at a time when the entertainment industry distracts people from what is at stake. The paper concludes by alluding to Benjamin's notion of 'empty' time, as opposed to a time when this emptiness can be transcended by seizing the moment and 'turning' history in a different direction, as it were. This, and nothing less, is required at present as far as education is concerned.

On a previous occasion[1] the question of technical rationality in modern and

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postmodern societies, as well as the related 'disciplinary' character of modernity, according to Michel Foucault, was pursued. The work of Hardt and Negri on 'Empire', the new form of sovereign power in the world, and their appeal to the 'multitude', which is capable of rescuing democracy from the depredations of Empire in this time of crisis, were also discussed. Returning to Foucault, the preconditions for attaining autonomy in a world where we are reduced to 'docile bodies' were outlined in relation to his investigation of the quest for autonomy in the Hellenistic era. Finally, attention turned to the urgent need for recovering such (relative) autonomy in the current global situation of deteriorating ecosystems, and it was argued that this situation is causally inseparable from the dominant economic system of neoliberal capitalism.

Keywords: fourfold, inhuman, revolt, politics, technology

Education and Technology

One cannot ignore the indissoluble link between capitalist development (see footnote 1) and the rapid development of technology. For capitalism to flourish, it is committed to continuous technological innovation (Harvey 1990: 180). And yet, judging by the work of Andrew Feenberg in this regard, if the hegemonic economic position of neoliberal capitalism is considered in the light of the most recent events in the history of technology, it may be that the latter has contributed to an effective politicisation of technology which, in principle, could paradoxically contribute to challenging the global hegemony of capitalism.

Feenberg (2004) takes stock of where humanity has come from, where we are now, and where we are heading in an increasingly technologised environment. He compares two important, but divergent 'utopian' novels, both of which represent imaginative responses to the state of the society that the writers were living in at the time of writing their respective books – Edward Bellamy's utopian sci-fi novel of 1888, *Looking Backward: 2000-1887*, and Aldous Huxley's dystopian novel, *Brave New World* of 1932.

The two novels depict widely divergent worlds. Bellamy's is set in a socialist utopia, which – judging by the book's best-selling status – embodied

what Feenberg calls 'the hope in a rational society for several generations of readers'. Perhaps it was because Bellamy's utopia, while collectivist, displays a dual character: part of its imagined social structure is organised along scientific–technical lines, but the other part makes provision for individual personal fulfilment – essentially (something similar to what Marx envisioned), a society where technological advancement would create ample leisure time for individual '*Bildung*' in the arts and sciences (something recently resurrected by Peter Joseph in the third *Zeitgeist* movie, *Moving Forward*). Feenberg remarks on the historical irony, that the kind of socialism (communism) that emerged in the Soviet Union only a generation after the appearance of Bellamy's novel, did not allow for this benign combination of technological rationality and personal enrichment, where (in the novel) social collectivism is posited as the precondition of a high degree of individualising development. On the contrary, according to Feenberg (2004: 95), 'this bipolarity is precisely what did not happen in the twentieth century under either socialism or capitalism. Instead, total rationalisation transformed the individuals into objects of technical control in every domain, and especially in everything touching on lifestyle and politics'.

Huxley's dystopic vision, on the other hand, articulated the vision of a hyper-rationalised society where human beings are mere functionaries of a mechanised world. Instead of Bellamy and Marx's hope, that humans would be freed by a technology that they have mastered, Huxley's novel depicts a humanity that has become 'mere cogs in the machine'. Feenberg does not mention that Huxley's novel also contains interesting insights into eco-friendly approaches to 'waste disposal', as well as a powerful critique of such a thoroughgoing mechanisation of society via the eyes of those characters who prefer the discomfort of an 'outside' to instrumentalised society. This pessimistic conception is echoed by much of twentieth century thought on society and technology, from Max Weber to Martin Heidegger and Herbert Marcuse, except that in the latter's work – apart from an endorsement of Heidegger's view that humans have become mere 'resources' for a technological mindset – there is also a hope for a new kind of 'technology of liberation', which would leave the integrity of humans and of nature intact. Feenberg regards this as still being a 'worthy', but 'receding' goal.

These 'dystopian philosophies of technology', Feenberg (2004: 97) points out, had a remarkable influence during the 60s and 70s, as shown in the technophobia of the 1960s, which was further fuelled by the war in

Vietnam and the 'arrogance of technocracy'. What started out as a literary and theoretical critique of modernity, turned into a populist movement where technology became a political issue for the New Left. Feenberg (2004: 98) reminds his readers that the French worker and student rebellion of May 1968 was an 'antitechnocratic movement, as hostile to Soviet-style socialism as to advanced capitalism'. While the 1960s events were antitechnocratic, motivated by dystopian convictions, as the 20th century wore on such dystopianism made way for a new kind of utopian thinking. Feenberg makes it clear that, in contrast to Bellamy and Huxley's hope (or despair) concerning the use of technology in their respective visions of the future, the new utopian projections of 'bioengineered superhumans' are not very credible, insofar as they generally amount to mere 'horrific speculation'.

However, these flimsy creations have been counterbalanced by scholarship predicated on the irreversible immersion of humanity in a technological world, and focusing on the social implications of technology. Among such 'posthumanist' scholars Donna Haraway and Bruno Latour are probably best known for their enthusiastic embrace of a kind of 'cyborg' (cybernetic organism) future in which humans have accepted technology and promote its 'benign' development. Perspicaciously, Feenberg (2004: 99) notes that the influence of these writers would not have been what it is today had it not been for the internet affording millions of people first-hand experience of technology-enabled social interaction. Remarkably, such networking has undermined dystopian sentiments, and not surprisingly, given the way its apparently 'non-hierarchical and liberating' interactivity counteracts the loss of individuality that occurred in the face of the earlier mass media of the 20th century. The internet represents a kind of technology that encourages initiative rather than being inimical to it, and has enabled even those who may feel otherwise alienated in large, impersonal cities, to participate in (virtual) social interaction.

But although he shows a thorough awareness of the social advantages of the 'information highway', Feenberg simultaneously cautions against the McLuhanesque expectation of a world-village utopia in which everyone will work from home, and do everything comprising social life from behind their computer, to boot – in a sense, just a more 'refined' version of humans being assimilated to machines. In an era when 'the public' has become so large and unwieldy that it cannot, as in former times, gather on the 'agora' or village square for participative political deliberation, the political potential of the

internet lies, for him, in its capacity to contribute to the creation of a 'technical public sphere', however difficult that process might be. Importantly, the fact that the internet cannot be conclusively controlled by those in power, but instead provides ample opportunity for resistance against 'strategic' control, points, for Feenberg, to a step beyond dystopianism as well as posthumanist technophilia (2004: 104): 'But the dystopians did not anticipate that, once inside the machine, human beings would gain new powers they would use to change the system that dominates them. We can observe the faint beginnings of such a politics of technology today'. I would suggest that this remark, against the backdrop of the useful overview regarding technology which one gains here, points in a valuable direction for educators: do not behave as if the internet is only a medium for information transfer and largely vacuous social-networking interaction. It is potentially a space where autonomy may be cultivated in the interest of resisting Empire in all its guises, from the economic to the political. And educators are in a position to promote this process.

Education and the 'Fourfold'

So, what should educators take their bearings from, apart from what was suggested earlier (see footnote 1), namely the diverse ways of cultivating a measure of autonomy on their own part, and on their students' part, in the face of the disempowering, infantilising forces and seductions of 'Empire'? In my judgement, one can hardly do better than to turn to Martin Heidegger's concept of the 'fourfold', which comprises a constellation of four interrelated concepts (distinctive values), namely 'earth', 'sky', 'mortals' and 'divinities'. Together, Heidegger tells us, they constitute a means of orientation in the world for human beings (1975:149-151). This implies that, if one or more of these are absent as 'compass' to find axiological direction, one would not be living a truly 'human' life, which is why Heidegger remarks that the four together have to be regarded as 'a simple oneness'. 'Earth' he names as the bearer of (human) life, but in the most primordial sense conceivable: the earth as condition of the possibility of life, but also as that which resolutely resists humans' penetrating, objectifying, controlling (and ultimately violating) scrutiny. In Heidegger's words, it is the 'serving bearer, blossoming and fruiting, spreading out in rock and water, rising up into plant and animal'

(Heidegger 1975: 149). 'Sky' is the 'vault', or the source of both seasonal blessings and inclemency, but simultaneously marks the limit that reminds humans of their finitude. 'Mortals' are humans whose nature makes them 'capable of death' (1975: 151), and 'divinities' are the 'messengers of the godhead' (1975: 150), who are awaited in hope by mortals, regardless of whether they reveal or conceal themselves.

Karsten Harries (1997:159-162), elaborates in an illuminating manner on Heidegger's 'fourfold'. He observes that the 'earth' as the 'given', or as 'material transcendence', is a 'gift' uncreated by human understanding. As such, it limits the 'world' or sphere of intelligibility – something that Heidegger unpacks in greater detail in his essay, 'The origin of the work of art' (1975a), where he articulates its 'material' resistance to human scrutiny in the context of an artwork such as a Greek temple. 'Earth' (in this case, for instance, the marble textures in the columns of the temple) manifests itself precisely as that which appears within the openness of 'world' as self-withdrawing: although the form of the columns can be architecturally interpreted, the marble just 'is', and therefore resists assimilation to human interpretive designs.

Harries further points out that what 'opens' humans to 'earth' in this sense, is the body, and urges his readers to remember that (1997: 159):

> the embodied self is a caring, desiring self. To be in the presence of the earth is inevitably to be affected, moved, claimed. Earth thus…refers to the elusive affective ground without which all talk of essences, meaning, values, or divinities is ultimately groundless, merely idle talk.

That which ineluctably limits 'world', therefore – the linguistic sphere of a cultural tradition – is the 'ground' or 'earth' which fundamentally affects humans as caring, affective, desiring beings, prompting them to articulate their desires, fears and projects. These projects belong to the open cultural space of what Heidegger refers to as 'world'. The 'earth' is therefore that which inescapably affects the human, embodied self, and any discourse or language game that does not somehow acknowledge this is, as Harries points out, 'merely idle talk', an expression that carries all the connotations of inauthenticity and empty 'everydayness' that Heidegger gives it in *Being and Time* (1978). Seen in this way, 'earth' is, despite its inscrutability, ultimately

inscribed as such, not only in artworks (for instance the marble of the temple's columns) but also in language itself (in the sense of 'discourse') every time personal or collective interest, preference or rejection is linguistically registered, as that which motivates humans to traverse the realm of openness or 'world' in a certain 'value-oriented' manner. From this it follows that anything of human making, including an institution like education, has to make room for the demands of 'earth', lest it lack something essentially human.

It is worth noting that Gilbert Germain (2004) enlists Baudrillard, Virilio and Merleau-Ponty to make a similar point about the urgency of waking up to the consequences of the increasing distance between humanity and the earth being created by cyber-technology. He shows at length that the 'reality' of cyberspace is incompatible with the earthly reality correlative to human embodiment and perception – where distance and mediation via the body are inescapable – and argues persuasively that this technological drive towards a 'reality' that is wholly of human making ignores the paradoxical truth that the experience of nature, or the earth, as 'other' is a precondition of a meaningful existence. Should this realisation not form a cornerstone of education today – given the headlong rush, by all and sundry, into social networking spaces which resemble a realm entirely of human design and manufacture (a domain which alienates humans from their ineluctable bond with the earth) with hardly any constitutive features acknowledging the 'otherness' of the earth? Paradoxically, humans are both immanent and transcendent to the earth – it is our 'originary' spatio-temporal home, but as such 'different' from us. The more our consciousness coincides with a substitute cyber-world, however, the more we lose our salutary, embodied, 'human' contact with the earth-bound world.

Returning to Harries's interpretation of the 'fourfold', his (1997:160) account of 'sky' reminds one that it is metaphorically linked to the ability of humans to surpass the 'here and now', the fact that they are always 'ahead of' or 'beyond' themselves. According to Harries, this is partly what the spiritual dimension of being human entails. It is also related to Heidegger's contention, in *Being and Time* (1978: 458), that humans are not merely characterised by 'thrownness' (the facticity of being-in-the-world), but also by 'projection', even if they further tend to be subject to 'falling' (back into conventional ways of doing things). 'Projection' here means the capacity of individuals to appropriate a given situation and transform it creatively, even if

the tendency to 'fall' back into the comfort zone of custom, tradition and fashion – for example the valorised discourses of capitalism and bureaucracy – always exerts its gravitational attraction on them. 'Sky' therefore suggests the creative ability to transform or revitalise cultural traditions or the 'normalising' discourses surrounding one in the face of their inherent tendency to limit one's actions within certain constraints.

There is a connection, as Harries (1997:160) reminds one, between 'mortals' and Heidegger's existential analysis (in *Being and Time*) of *Dasein's* ability to accept its death resolutely as precondition for an 'authentic' existence. For as long as one fails to reconcile oneself with the 'uncertain certainty' of death, one is not free to live a culturally creative life. 'Mortals' is therefore a reminder that we have only a limited time on earth, and that unless we accept our mortality, we may not have the strength or motivation to live a constructive, socially responsible life.

It is not hard to understand why Harries (1997: 160-161) regards Heidegger's notion of 'divinities' as being the most questionable of the 'fourfold', given the secularism of the present age. Nevertheless it represents the deepest source of meaning for humans, but not in the sense of the gods or 'God' of any specific tradition. It names precisely the divine as *unknown*, Harries avers, because naming it would violate, for Heidegger, what is essential about 'the many-voiced ground of all meaning and value' (Harries 1997:161). Accordingly, the term 'divinities' ultimately denotes the most profound, but also most ambiguous (albeit pervasive) source of justifying cultural activities on the part of humans, including the cultural practice of educating those in need of education. 'Divinities' therefore implies that, whatever one may understand by the divine or a deity, everyone (even atheists) who can cope with the demands of living, has a (usually unconscious) 'ground' of meaning in their lives. Heidegger's important claim is that, taken together, the forces represented by these four concepts provide the evaluative means for assessing whether a human practice, whether it is art, architecture, literature, science, politics or education, is capable of being appropriated and understood by individuals in a meaningful, life-enriching manner. Lacking resonance with the axiological orientation of the 'fourfold', a practice or institution such as education would be fundamentally in conflict with the very being of being-human, where the latter concept ('being-human') should be understood precisely in terms of the unity comprised by the four 'members' of the 'fourfold' as explained above. That is, unless one

comprehends the being of humanity as being rooted in the *earth*, as well as being subject to all that *sky* implies, while being able to accept the human finitude implied by *mortals*, and simultaneously being mindful of the many-tongued voice(s) of *divinities* (in whatever manner this is conceived), the 'being' of being-human would be distorted or even perverted.

Education, the 'Inhuman' and 'Revolt'

Against this backdrop, I shall return to the epigraph from Lyotard that provides a clue to my argument in this two-part paper. Lyotard alludes there to the truism that humans, unlike animals, require education. This allusion is embedded in a far-reaching argument about two kinds of 'inhuman' that humanity has to reckon with today – first, the 'inhuman' (in the sense of excluding humans) system of (technological) development (which he sees as the current global ideology), and second, an 'inhuman' in each member of the human race, which has to be presupposed by every act of rebellion, of criticism, and, in fact, every creative cultural action. Why?

Put as simply as possible, Lyotard's fundamentally psychoanalytical argument is that the very practice of education presupposes something that is 'not-yet-human' in the full sense of that term, and even, 'inhuman' in a sense. And importantly, he raises the question, whether the education of children erases this initially inhuman 'element' completely. This is his answer (Lyotard 1991: 3):

> If this were the case, it would be inexplicable for the adult himself or herself not only that s/he has to struggle constantly to assure his or her conformity to institutions and even to arrange them with a view to a better living-together, but that the power of criticizing them, the pain of supporting them and the temptation to escape them persist in some of his or her activities. I do not mean only symptoms and particular deviancies, but what, in our civilization at least, passes as institutional: literature, the arts, philosophy. There too, it is a matter of traces of an indetermination, a childhood, persisting up to the age of adulthood.

To some, this might sound like gobbledygook, to others' ears it would be strangely attractive music. I believe that, at least to educators, it would make

sense to say that Lyotard is reminding us, first, that we would not go to the trouble of 'educating' a child if children were born, virtually 'fully programmed', like cats – allowing for the hunting and other skills that cats may learn from their mothers, which do not amount to 'education'. The latter always involves the acquisition, through language, of values and virtues well in excess of mere 'skills'. More importantly, however, he is also reminding us that even the slightest inclination, on the part of humans, to 'improve' their own situation, to break down the obsolete or to build the new, let alone rebelling against unconscionable conditions (think of recent, and ongoing, events in Tunisia, Egypt, Libya and Syria), only make sense if one assumes or presupposes a kind of 'remainder' of the 'savage soul of childhood', which cannot ever be fully 'rationalised' by any conventional system of education or training. This is nothing to lament, however; paradoxically, it is this 'inhuman' that constantly makes it possible for humans to resist, and overcome, conditions that are, in a different sense of the word, 'inhuman'.

Julia Kristeva may help one grasp this better where she argues passionately for the need to 'revolt' on the part of human beings – not necessarily in the form of political rebellion, but in the etymological sense of 'revolt', namely to 'turn', or 'return' to, or to question and probe something that has become too familiar, or has been forgotten, repressed, allowed to be covered over by what is currently fashionable, and so on. This practice of revolt enables one to engage in renewal and transformation of some, usually creative, kind. What she has in mind here is eloquently articulated in the following passage (Kristeva 2000: 7):

> Happiness exists only at the price of a revolt. None of us has pleasure without confronting an obstacle, prohibition, authority, or law that allows us to realise ourselves as autonomous and free…on the social level, the normalizing order is far from perfect and fails to support the excluded: jobless youth, the poor in the projects, the homeless, the unemployed, and foreigners, among many others. When the excluded have no culture of revolt and must content themselves with ideologies, with shows and entertainments that far from satisfy the demand for pleasure, they become rioters.

The last sentence in this quotation touches on something that is extremely important for the question of decision in the face of a crossroads: the

dominant culture, globally, is neoliberal capitalist consumer culture, and it is arguably unequalled in the efficacy with which it anaesthetises 'consumers' – thousands of spectators at soccer or rugby matches, millions of television viewers, absorbed in the kitsch world of soapies – anaesthetising the potential for revolt (Lyotard's 'inhuman') that still exists in the interstices of people's psyches[2]. From her allusion to 'ideologies … shows and entertainments' in the above excerpt, it is apparent that Kristeva is acutely aware of this, but notable that, while insisting on the ability to say no, she does not reject the media outright (Kristeva 2002: 82). Moreover, it is highly relevant to the question of education that she approaches the issue of receptivity to dogmatic religious fundamentalism on the part of disillusioned, unemployed (French-Algerian) young people in France in a way that stresses the need for communication and creative educational engagement with them, lest they become victims of dogmatism (Kristeva 2002: 106):

> An open mind, a mind set on revolt as I understand it, could become a permanent voice on a level of esthetics [sic], literary creation, discussions, art and the communication which has to be established with these young people. It is this type of liberated form of representation of revolt that I am looking for. This implies that a new cultural space will open up that will not become a space for religious [and one may add: political] dogma, but one that understands the spiritual anxiety driving religious dogma. In this scenario it is via education, culture and creativity that this need for revolt could be

[2] See in this regard Olivier (1998), for a related investigation into contemporary consumer culture's 'entertainment solutions' for problems anticipated by Freud regarding the 'discontent' on the part of humanity, caught between the need for pleasure or fulfilment, on the one hand, and the demand of civilization, on the other, that these needs be repressed. As for what she says about people becoming 'rioters', instead of being still capable of satisfying or fulfilling 'revolt', perhaps contemporary society is witnessing a kind of turning point between mindless 'rioting' and regaining the capacity for 'revolt', judging by what Hardt and Negri (2005: 268-288) have argued about the contemporary symptoms of resistance, on the part of 'multitude', against the global forces of what they call 'Empire' (Hardt & Negri 2001).

> expressed, without strangling itself in dogmatism and fundamentalism.

Kristeva therefore puts educators squarely before the imperative that educational ways be devised to invite, if not challenge, the young to channel their readiness to revolt along creative channels, instead of yielding to another kind of revolt, a politically and socially destructive variety, for lack of creative options. Knowing what frustration is inculcated in (especially young) people under conditions of economic deprivation, and ostensibly faced with a dearth of alternatives to the one-sidedly elitist economically empowering system of neoliberal capitalism, a novel educational focus on the needs of society within the context of deteriorating social as well as natural ecosystems, is a deserving cause to promote. But this would be to no avail unless the custodians of education policy find the means to counteract all the mechanisms in our society which effectively stand in the way to individuals' ability to acquire a certain measure of (relative) autonomy.

Understandably, this would be difficult to achieve in the kind of society which, as already indicated, undermines such autonomy in many ways, not least through the systematic creation of consumerist dependence, as Kristeva is well aware. Noëlle McAfee (2004: 107-108) observes that, in this respect, Kristeva follows thinkers such as Guy Debord, author of *Society of the Spectacle*, who argued that, in contemporary societies, 'life' is represented as a series of 'spectacles' or shows, which serve the dominant economic order in so far as people's needs and 'desires' are manufactured for them by means of certain 'desirable' spectacles. All the major agencies of the dominant order – advertising, branding, 'entertainment', 'information' and capitalist propaganda (capitalism is also an ideology, although it subtly hides this fact) – combine their forces to this end. McAfee (2004: 108) puts it well: 'in the society of the spectacle, people are tools of the economy; their desires are not their own; desires are manufactured as surely as are the commodities meant to fulfil them'. Is it at all surprising that, in *New Maladies of the Soul* (1995: 8-9), Kristeva (a practising psychoanalyst) elaborates on the 'loss of soul' on the part of contemporary (consumerist) people, who do not even know of this loss because they are 'swept away by insignificant and valueless objects…[l]iving in a piecemeal and accelerated space and time'. It is easy to read this remark as an allusion to the frenetic pace of everyday existence through the reduction of social 'reality' to the perpetual, but ephemeral

'schizophrenic' present of an endless series of tantalising, money-invested images, urging the consumer to 'Spend, spend, spend!!'

Conclusion

I have already pointed to Heidegger's notion of the 'fourfold' as a kind of 'compass' for orienting oneself in a complex, confusing world. One final hint of how this may be achieved, this time from Book II (377b) of Plato's *Republic* (Bloom 1991: 54), where Socrates, speaking on education, says,

> Don't you know that the beginning is the most important part of every work and that this is especially so with anything young and tender? For at that stage it's most plastic, and each thing assimilates itself to the model whose stamp anyone wishes to give to it.

To be sure, by and large people would agree that young minds are tender and impressionable, and would probably also agree, in conversation, that this points to the need for sound education of young children. But if this is the case, it would seem ironic, and of unfortunate consequence, that in the US, indications are that children as young as two years have already developed 'brand loyalties' (Steger 2003**:** 77); their tender minds are left to the mercy and cynicism of advertisers, which could hardly be regarded as a source of sterling moral education. Instead of the *Iliad* and the *Odyssey*, among the ancient Greeks, or any other imaginatively uplifting literary or philosophical works (as well as music) across a wide cultural spectrum informing the education of the young, in contemporary households, where the parents mostly also lack a sense of existential orientation that would resonate with Heidegger's 'fourfold', television programmes seem to do most of the (pseudo-) educating these days.

For this reason, educators other than parents have to step into the breach, making use of all the literary, cinematic, philosophical and scientific means at their disposal, to 'enlighten' the young as far as their path through this complex world of ours is concerned. By way of summary, the field that they have to be introduced to – which, because it is unavoidably discursive, will be axiologically oriented, albeit not in ideological terms – is the following, starting with the broadest frame of reference: *Firstly*, students have to be made aware of the precarious state of the planetary ecology, and of

the fact that it is an indispensable condition for the survival of all life on earth that anthropogenic climate change, as well as other sources of eco-destruction be urgently addressed. This should have the effect of conscientising them.

Secondly, they have to be made aware of the indissoluble connection between such anthropogenic eco-destruction and the dominant economic order of neoliberal capitalism, which is predicated on the untenable principle of limitless growth. *Thirdly*, they have to be educated as far as the prerequisite for enlightened action is concerned, namely how to be (relatively) autonomous. *Fourthly*, they have to be made aware of the many creative avenues that are open to them to pursue an enlightened mode of citizenship when they enter a working career – there is hardly any career or profession in which people will *not* be able to contribute meaningfully (that is, socially, culturally and if necessary, politically) to change in ecological, economic, educational or cultural ways. If educators could rise to this 'fourfold' task, they may just – to return to the metaphor of Oedipus – be able to lead the young to the point where they are able to take over the reins from the older generation, like any appropriately (in psychoanalytic terms) Oedipalized child, and do so with a sense of responsibility for recovering what has been lost.

And lest anyone should think that I have omitted what many still regard as being of central importance today, namely to address the sources of racism in society, the latter is intimately linked to all those things that I have singled out here. It never ceases to amaze me that no one points to the historical link between colonialism, racism, and capitalism. In fact, I would go as far as saying that racism is a social and political function of capitalism. Think of the slave trade, of the abuse of indigenous people's labour in 19th century colonies such as the Belgian Congo, and of cheap black labour on the gold mines in the erstwhile Transvaal of South Africa. Hence, addressing the issues that I have singled out does not preclude addressing the sources of racism – on the contrary, it would go right to the heart of the matter.

But no one should make the mistake of believing that this is an easy matter. One has to seize the moment when the opportunity presents itself; instead of dogmatically believing in the 'law' of *progress* (as if anyone still can!) – which, according to Walter Benjamin (1969: 261), is tied to a conception of time as 'homogeneous' and 'empty' – one has to 'blast open the continuum of history' (Benjamin 1969: 262). This moment, which corresponds to Kristeva's moment of 'revolt', is tied, for Benjamin, to an

'explosive', revolutionary 'leap', and constitutes time as the possibility of the appearance of something qualitatively different from 'empty' time: it marks 'the present' as 'Messianic' (Benjamin 1969: 263-264), as the epiphany of the possibility of redemption, of a qualitative 'turning' of history. Our present, too, is 'shot through with chips of Messianic time'. It is up to us, either to consign it to the 'empty time' of the ruling elites, or to seize it 'in order to blast a specific era [the present] out of the homogeneous course of history' (1969: 263). And educators are in a position to do so.

References

Benjamin, W. 1969. Theses on the Philosophy of History. In *Illuminations*. Zohn, H. (trans.) New York: Schocken Books.

Bloom, A. (trans.) 1991. *The Republic of Plato.* Basic Books.

Feenberg, A. 2004. Looking Backward, Looking Forward. In Tabachnick, D. & T. Koivukoski (eds.): *Globalisation, Technology and Philosophy.* Albany: State University of New York Press.

Germain, G. 2004. The Human Condition in the Age of Technology. In Tabachnick, D. & T. Koivukoski (eds.): *Globalisation, Technology and Philosophy*. Albany: State University of New York Press.

Hardt, M. & A. Negri 2001. *Empire*. Cambridge, Massachusetts: Harvard University Press.

Hardt, M. & A. Negri 2005. *Multitude. War and Democracy in the Age of Empire*. New York: Penguin Books.

Harries, K. 1997. *The Ethical Function of Architecture.* Cambridge, Massachusetts: MIT Press.

Harvey, D. 1990. *The Condition of Postmodernity*. Oxford: Basil Blackwell.

Heidegger, M. 1975. Building Dwelling Thinking. In *Poetry, Language, Thought.* Hofstadter, A. (trans.) New York: Harper Colophon Books.

Heidegger, M. 1975a. The Origin of the Work of Art. In *Poetry, Language, Thought.* Hofstadter, A. (trans.). New York: Harper Colophon Books.

Kristeva, J. 1997. *The Portable Kristeva.* Oliver, K. (ed.). New York: Columbia University Press.

Kristeva, J. 2000. *The Sense and Non-Sense of Revolt: The Powers and Limits of Psychoanalysis.* Volume I. Herman, J. (trans.). New York: Columbia University Press.

Kristeva, J. 2002. *Revolt, She Said. An Interview by Philippe Petit*. O'Keeffe, B. (trans.). Los Angeles: Semiotext(e).

Lyotard, J-F. 1991. *The Inhuman. Reflections on Time*. Bennington, B. & R. Bowlby (trans.). Cambridge: Polity Press.

McAfee, N. 2004. *Julia Kristeva*. New York**:** Routledge**.**

Olivier, B. 1998. Freud and Lyotard on Civilization. *South African Journal of Philosophy* 17,2: 126-141.

Steger, M.B. 2003. *Globalization: A Very Short Introduction*. Oxford: Oxford University Press.

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Education for Economic Growth: A Neoliberal Fallacy in South Africa!

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Abstract

In the last three decades, the enduring debate on purpose of education has been coloured by a distinct market-driven discourse (Aronowitz 2009; Giroux 2009). South African education is at a crossroads: differing constituencies jostle for ideological dominance, with capitalist market discourses competing with social democratic citizenship discourses. In this paper I examine how neoliberal discourse in particular is influencing and shaping education. I examine the rationale for neoliberalism's dominance and the implications of a neoliberal agenda for education in South African. Whether or not South African society understands and appreciates the gravity of the ideological options is debatable, but the elusive and insidious nature of neoliberalism also raises the question as to whether South Africans are even aware that ideological positions are in fact being chosen for them. The paper takes issue with the uncontested doctrine and rhetoric of 'education for economic growth' and its fallacious assumption that 'a rising tide lifts all boats'. I argue for an exploration of an alternative approach to education, namely, the human development approach (Nussbaum 2003; 2006; 2010; 2011), which has as its fundamental premise, the need to assess and respond to human capabilities. Nussbaum builds on Sen's (1999) notion of human capabilities in which the focus is on the individual in terms of human development, namely, that certain conditions have to prevail for people to achieve functioning.

Keywords: Neoliberalism, capabilities, education, economic growth, ideology

Introduction

In an interesting observation on the relationship between education, the eco-

nomy and the state in the United Kingdom, Stronach comments that

> Education and the economy are in a kind of failing marriage, with government as a rather fixated counsellor, forever on the lookout for magic remedies (2011: 39).

In this paper I want to argue that South Africa faces a similar dilemma in the relationship between education and the economy. My approach to the theme of 'Education at the Crossroads' is accordingly to explore the discourse that informs the purpose of education in South Africa, namely, education for a more productive economy. I examine the commonsense notion that a more productive economy will result in economic growth which will in turn yield benefits for all the country's inhabitants. I caution that this instrumental rationale and its potential for alleviating socioeconomic ills in present-day South Africa should be approached with a degree of scepticism.

While hoping to avoid an unhelpful tone of outright advocacy in this paper I nonetheless believe that it is important to engage an alternative to the agenda that I critique, and with this in mind I propose to explore an approach to education that focuses on the development of human capabilities.

A Brief Account of Local and Global Socioeconomic Realities

Exacerbating already serious concerns about national socioeconomic well-being, few would deny that South African education is also in a state of grave crisis (Fleisch & Christie 2004; Shindler & Fleisch 2007), manifest not least in embarrassingly low secondary-school pass rates and poor quality performance for secondary learners who do pass, especially in poor and working-class communities.

At the same time, South Africa's socioeconomic ills are all too apparent in wanton xenophobic violence, banal acts of cruelty to animals (even for profit), rampant violent crime and the squalor of mushrooming informal settlements, while unemployment rates that have persistently remained above 30% for the last two decades and deepening income inequality are accompanied by shameful educational and health provisioning for the indigent classes (Forslund 2013; Pillay 2013).

South Africa is not alone in the socioeconomic challenges it faces. Commenting on the moral significance of global poverty, Thomas Pogge (2010) notes the irony that it occurs 'in the context of unprecedented global affluence …. The global poor are not participating proportionately in global economic growth' (2010: 12). A key factor at the global level is that international institutional arrangements make it difficult for less-developed nations to cross the development threshold, building capacity to meet and sustain the basic needs of their citizens in relation to food security, health, sanitation and education. Pogge reminds us that the

> [f]undamental components of international law systematically obstruct the aspirations of poor populations – the World Trade Organisation, The International Monetary Fund and World Bank are designed so that they systematically contribute to the persistence of severe poverty (2010: 26).

Such international institutional capitalist arrangements and the crisis that they create have never been more overt than in the last decade (Bauman & Rovirosa-Madrazo 2010). While economic growth is important for any nation, the development economics literature indicates unequivocally that economic growth does not automatically lead to a better life for all, inclusive of better education. Tikly and Barrett contend that for economic growth to translate into wider and higher wage earning, a strong macroeconomic and labour market needs to exist, which is not the case in less-developed countries of the global south (Tikly & Barrett 2013).

A state of crisis requires a nation to make sense of the processes that generated the crisis, reflect on or even change their contexts, ask new questions, interrogate existing theoretical frameworks, and trouble, disturb and disrupt established historical and mental discourses. It calls for profound introspective review of the forces that have come to shape current conditions. Zizek (2011), in his analysis of the crisis in global capitalism – the forthcoming 'apocalypse' as he puts it – invokes Elizabeth Kubler-Ross's five stages of grief that follow when one learns, for example, that one has some terminal illness. He contends that the first stage is *denial* : an ideological denial that there is any fundamental disorder, a disbelief and refusal to accept or entertain the thought that a tragedy is about to occur. In the second stage there is *anger* which we explode into and vent when we can

no longer deny the fact and we begin to question how this could be happening to us. The third stage of grief is *bargaining*: we continue as normal, making minor adjustments and hanging on to the hope that we can somehow postpone or delay the inevitable or that it may somehow go away. The fourth stage, *depression*, is a realisation that there is no escape, which gives rise to despair and a sense of hopelessness and withdrawal. In the fifth stage there is *acceptance*: recognition that we cannot fight this, so we may as well prepare for it. Zizek notes that individuals pass through a 'zero-point': a turning point where the situation is seen no longer as a threat, but as the chance of a new beginning. In capturing this reawakening, he quotes Mao Zedong: 'There is great disorder under heaven, the situation is excellent'. He argues that the cognitive shift to an 'emancipatory enthusiasm' is only realisable when the traumatic truth is not just accepted in a disengaged way, but is fully lived (2011: xii). This is a powerful analysis as it offers an explanation of why individuals, groups and even nations react or respond to the crisis that global capitalism has created. It also speaks to the Foucauldian notion that the present is contingent and to an understanding of how the power that has come to create the present enables us to better position ourselves to disrupt what looks fixed and unsurpassable (Foucault 1979). Similarly, Bourdieu implores us to seek out and explore alternatives to economic efficiency discourses and economic growth discourses, especially in relation to their marginalisation effects on the social (Bourdieu 1998).

Education as Economic Instrumentalism and Neoliberal Common Sense

Although it is commonly recognised that economics and education are intricately connected, opinions differ as to the optimal extent, nature and form for this connection. It remains an issue as to why nations continue to see the primary purpose of education as serving the needs of the economy and how this has come to be regarded as common sense. Torres argues that

> common sense becomes naturalised in the lives of people as something normal that we do or ought to do … [it is] a generalised truth about something; it is the normal way to do things, the normal way of becoming human beings (2011: 181).

The assumption is cumulative and reified and has a degree of variability according to context. It also has inherent hegemonic force that shapes policy direction. Torres suggests that there is a need to examine how the new neoliberal common sense has come to be and how it has 'percolated' into education. He argues that this neoliberal common sense has replaced the old traditional liberal progressive model of education. As far back as the 1960s Dewey (1966) cautioned against a narrow instrumentalist agenda, arguing that there should not be narrow technical education for the masses at the expense of traditional cultural education that would include ethical and moral dimensions. Dewey's notion of liberal, progressive education entailed experiential learning that focused on the welfare of society, sensitivity to capitalism's potential for creating inequality and inequity in society, and orchestrating policy in the service of democracy and citizenship (Aronowitz 2009; Torres 2011). While Torres cautions though that liberal–progressive common sense is not without defect especially as it relates to hegemony that it also creates, he contends that 'Liberalism has been displaced by neoliberalism, deeply affecting education and social policies' (Torres 2011: 184). In recent decades economic instrumentalism appears to have become the new common sense (Stronach 2011). The vocationalising tendency in education–economic discourses that find their way into educational policy stem from pseudo-economic educational discourses ('educationomics') which posit the instrumental connection between education and the economy (Stronach 2011: 176). Neoliberal economic imperatives such as individualism, competition, commodification of knowledge and the marketisation of education have been driving the strategic direction of education systems across the world (Harvey 2007; 2010b; Nussbaum 2010; 2011).

The roots of neoliberalism can be traced back to the West: more specifically, Britain and the United States (Harvey 2007; 2010b). The rise of neoliberalism in the US and UK in particular was a response to Marxist community-oriented approaches and state interventionist approaches as espoused by Keynesian economic theory (Harvey 2007). Two of the most aggressive protagonists were Margaret Thatcher in the UK and Ronald Reagan in the US. Both set out to curb the powers of labour, deregulate industry, agriculture and resource extraction, and liberate the powers of the financial sector. Harvey describes neoliberalism as

> a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterised by strong property rights, free markets and free trade (Harvey 2007: 2).

Whereas classic liberalism sought to liberate the market from regulations in the hope that a free market without restrictions would bring wealth to everyone, with the state responsible only for providing a social safety net effect, neoliberalism sees the state as taking an active role in the construction of markets, especially in previously social domains such as education and health. Neoliberals vociferously argue that it is not possible for the state to 'compete with the accuracy and rectitude of free market signals' (Parker 2011:438) and that it should therefore allow market freedoms to play themselves out 'naturally'. Neoliberalism unambiguously pushes the state to adopt the role of creator of the ideal conditions for capital accumulation, but thereafter to withdraw to minimally involvement in determining the form of economic activity or the terrain in which this activity should happen. The state should create and preserve an appropriate institutional framework that can guarantee the integrity of money, and the proper functioning of the markets. In the absence of markets or if markets do not exist, then these must be created – as can be witnessed in burgeoning markets for electricity, water, education, health care, social security, personal security, communication and transport (Harvey 2006; 2007; 2010a; 2010b). The individual (firm or entrepreneur) should be at the centre. Apart from personal wealth ambitions, individuals are to be accountable and responsible for all aspects of their lives, from education, to housing, health and even personal security and social welfare. Neoliberalism starts from the premise that *individual* freedom is paramount in society. Individual advancement comes through entrepreneurship and individual endeavour. Neoliberalism supports a value system grounded in 'self-discipline (with punishment for lapses), self-reliance and the accompanying pursuit of self-interest' (Parker 2011: 438). Success or failure is attributed to the *individual's* ability or inability to utilise the opportunities available. The burden of *individual* personal responsibility culture has been deliberately imposed on all members of society, according to which competition is promoted as an acceptable moral value and incentives

drive individual success. One may argue that aspiration and individual personal responsibility are in fact worthy values. They do however become tainted when competition is excessive and the playing field is unfairly tilted in favour of some and not others. It follows, then, that citizens who are less capable, for whatever historically determined reason, are relegated to barren hinterlands coldly and deliberately demarcated by institutional structures to maintain their subjugation.

Neoliberalism's influence on the educational sector is complex. In an overt, unchallenged ('common sense') way, it legitimates an instrumental agenda for education: namely, to serve the economic growth needs of the nation. Wealth creation and the accumulation of economic profits are valued, although their distribution is an issue that neoliberals are reluctant to engage with. At a more complex level, neoliberalism signals a move to subject various aspects of education to the principles of the market. In response, a growing body of critique challenges issues such as corporate-style educational governance at school level and in higher education in which performance and accountability regimes are given priority by means of national and international standardised testing that fuels the rankings culture (Hursh 2000; Lingard 2010; Thomas 2005; Wong 2008).

Neoliberal Moves in the South African Landscape

While elements of neoliberalism may well have been present before the advent of democracy in South Africa, post-apartheid South Africa has seen firm and decisive shifts towards performativity and neoliberal market-driven discourses. Harvey (2007) notes that developing nations and relatively new democracies such as South Africa appear to have wilfully, unquestioningly and almost blindly 'bought' the neoliberal doctrine and are serving this ideology in strong doses to their unsuspecting citizens. This marks a departure from the human emancipatory agenda that pre-apartheid South African liberation movements like the African National Congress (ANC) aspired towards. The current ANC government, with its history of struggle politics, follows a contradictory economic agenda, and it does this, as Bond provocatively puts it, by 'talking left and walking right' (Bond 2011: 11) – maintaining a development rhetoric but creating a climate for unprecedented capital accumulation by traditional and emerging capitalist classes. Thus we

find the Minister for Higher Education, (who is also Secretary General of the South African Communist Party) urging comrades to be vigilant against corruption and 'tenderpreneurship'[1] while the state remains helplessly obtuse in its reluctance to act against these societal ills.

A typical strategy of a neoliberal state is to make aggressive moves to neutralise trade union activity. This neutralisation occurs in a somewhat unique way in the South African context. While the capitalist-controlled media tries to portray an image of overly powerful trade unions in South Africa and although the country ranks first in the world in terms of labour and civil unrest per capita (Bond 2011), the figures show that since 1994 a larger portion of the nation's surplus or 'profit' has accrued to the owners of capital than it has to labour (Tikly 2011). This calls in doubt the real extent of labour-movement power in South Africa. The recent Marikana disaster in which 34 protesting mineworkers were killed by police is an issue of how 'global capitalism … shows up in South Africa in a racialised form, embedded in a minerals-energy-financial complex based on cheap labour' (Pillay 2013: 1).

The embedded status of COSATU in the tripartite alliance is further testimony to the paradox which Bond (2011) has alluded to. Pillay (2013) warns that COSATU is in danger of being co-opted by the political elite and argues that the 'cosy' relationship between NUM union leaders and mine management was a key trigger in the 2012 mineworker strike. Although attempts to neutralise trade union power and to dampen and frustrate trade union activity are rife in South African politics, the alliance between the ruling party and COSATU has remained solid through what has now been almost two decades of post-apartheid governance. But what this also reflects is the increasingly familiar pattern of trade union leaders aligned to liberation

[1] 'Tenderpreneurship' is a new and original South African socioeconomic construct which derives from the process of fast-tracking new entrepreneurship development by awarding lucrative state contracts to persons from previously disenfranchised communities through corrupt tender processes in which those who tender and those awarding the tenders (both of whom are usually connected to the ruling political party) are equally complicit. It often happens that a single individual (or 'tenderpreneur') rapidly amasses wealth through being awarded a multiplicity of lucrative tender contracts.

movements and agendas 'naturally progressing' to high-profile leadership roles in government. Trade union rhetoric abounds on the ineptness of the state in delivering on its mandate, but it remains mere rhetoric, a kind of 'forked-tongue' discourse that veils the deception that takes place. This embedded relationship between the state and labour unions is fertile soil for neoliberalism. While the major trade union movement in SA signalling its discontent with the privatisation of state-owned and run institutions, the new neoliberal South African state has engaged in rampant privatisation of historically state-managed strategic functions like water, power, health services, etc. In essence, the neoliberal state moves towards systematic deregulation and simultaneously time creates a climate for capital accumulation. As can be expected, the 'economically' fittest in society are best placed to thrive under such conditions, and thrive they do – so much so that it has become very difficult to dislodge the hegemonic position of what has become a very powerful and coercively influential middle class (Harvey 2010b). The benefit of economic growth seldom accrues to the indigent classes in any substantive way. Citing the Argentinian crisis of 2001 and the world financial crisis of 2008, Torres aptly reminds us of lessons to be learnt:
Neoliberalism has utterly failed as a model of economic development [and has] brought the world capitalist system to its knees. Paradoxically, the capitalist state, so vilified by prominent globalisers, was called upon to intervene, rescuing a de-regulated capitalist system from its own demise. Yet the irony is that the politics of culture associated with neoliberalism is still in force and quite strong because it has been able to formulate this new common sense that has percolated deeply into social consciousness of many sectors of the population, particularly professional middle classes (Torres 2011: 193).
Hursh concurs that

> Neoliberal policy discourse has become so dominant in the public sphere that it has silenced the voices of those calling for alternative social conceptions (Hursh 2000: 3).

He argues that such neoliberal discourse has ramifications for education, giving rise to performativity, standardised testing and accountability and audit regimes that have intruded on the lives of teachers and students.

South African Education and Neoliberal Tinkering

A new curriculum policy took effect in South African schools in January of 2012. The accompanying Curriculum and Assessment Policy Statement (CAPS) states unequivocally that

> The National Curriculum Statement Grades R-12 serves the purposes of: providing access to higher education; facilitating the transition of learners from education institutions to the workplace; and providing employers with a sufficient profile of a learner's competences (Education 2011 : 6).

While the document also makes reference to social justice issues, these are captured in a single point under the purpose of education. The strong market agenda for education in SA is alarmingly explicit but appears as an unassuming, innocent and noble will of the people. Its disturbing undertones are eloquently masked by the social justice rhetoric that permeates the policy document – another perplexing instance of the 'talk left, walk right' tendency already alluded to. Motala notes that in seeking to improve quality of education South Africa has taken its cue from global trends,

> paying increasing attention to curriculum delivery … detailed prescription of what teachers should do … [and] a much greater emphasis on accountability and performance management (Motala 2013: 232).

There is still little understanding as to how these moves play themselves out.

Neoliberal performance-driven regimes have started to take root and are now usurping the agenda for education in South Africa at both school and higher education levels (Maistry 2012). A recent instance of this trend was the 2011 two-day joint Umalusi, Higher Education South Africa (HESA) and Higher Education Learning and Teaching Association of Southern Africa (HELTASA) seminar where the predictive value of the National Senior Certificate (NSC) for success in higher education and its vocational potential were discussed. Key thought leaders in education appeared to share a common understanding that school education should serve an instrumental role either preparing students for the world of work or providing them with a 'licence' to enter higher education.

Arguably the most significant market-influenced strategic policy move in South Africa has been the state's decision to regularise the market for public school education by encouraging public schools to levy compulsory school fees. Motala notes that this runs counter to international models that advocate free access to compulsory schooling, and that the outcome has been a 'two-tiered education system in South Africa, one catering for the wealthy (the partly deracialised middle class) and one catering for the poor (which remains mainly black)' (Motala 2013: 228).

South Africa's achievement in mathematics ranks among the worst in the world, according to a recent TIMMS report (Howie 2004), and even though mathematics has been designated as high-priority subject area for development, trauma to the human spirit will continue when 'failure' in mathematics is perennial. Should neoliberal lobbyists continue on the mathematics and science crusade at the expense of the 'softer' sciences? How do we ensure that strategic education and curriculum decisions strengthen our democracy in South Africa and move us to a deeper and nuanced understanding of what it means to participate in a democracy – understanding of a kind that moves beyond the rights that derive from legislative enshrinement towards what Waghid refers to as deliberative democracy and citizenship (Waghid 2010), understanding that foregrounds sustainability for all rather than a selected few.

High-stakes testing and strong accountability regimes have their roots in neoliberalism (Lingard 2010), with standardised testing and teacher accountability regimes gaining particular currency and legitimacy during the Reagan and Thatcher regimes in the US and UK respectively. It was during this period that neoliberal performativity discourses began to feature in educational discourses, as in the emergence of new naming/labelling protocols and new categorisations for public consumption and comparison (Stronach, Corbin, McNamara, Stark & Warne 2002). Arguably the most profound and defining characteristic of neoliberalism is its tendency to bring all human action into the domain of the market (Harvey 2007; 2010). Ball cautions about new neoliberal policy technologies that translate into school and policy choice shaped by market rationality (Ball 2008). According to Mathison (2008), implicit values in neoliberal market-oriented models for education include the notion that accountability is a valued expectation, that

> simple parsimonious means for holding schools accountable are also

> good, that choice or competition will increase quality and that it is morally superior to seek employability over other purposes of education (Mathison 2008: 532).

What's Wrong with 'Education for Economic Growth'?

In an intriguing book entitled, 'Not for profit – why democracy needs the humanities', Martha Nussbaum (2010) alerts us to the essentialist, instrumentalist rationale for education that society has internalised. She describes world education as being in a state of crisis with insidious neoliberal insurgence spreading 'like a cancer' with debilitating effect (Nussbaum 2010 :1). Drawing inspiration from Dewey, she argues that the purpose of education should be to lead citizens towards living a life rich in social significance. She urges us to challenge the notion that economic growth invariably leads to a better quality of life, suggesting that the relentless search for economic profit through economic growth may well be at the expense of skills needed to strengthen democracy. She further contends that when society begins to place emphasis on the vocational potential of school subjects, we are likely to churn out incomplete citizens, unable to empathise with others' sufferings and achievements. Human aspects of the sciences and social sciences are being eroded to make way for curricula that contain 'useful and highly applied skills suited for profit making' (Nussbaum 2010: 2). These changes are profound and often unsolicited by the ordinary citizen. Critical thinking and imagination, philosophy and the arts are being replaced with scientific and technical education and testable skills that will enable *workplace* success. If workplace success becomes the key objective of schooling, it is bound to have effects on curriculum and pedagogy.

I want to argue I that heightened sensitivity to the way a neoliberal value system is starting to manifest will enable us to effectively respond to what appears 'natural' and 'normal' (Bourdieu 1998). How do we respond to what Nussbaum calls the 'silent crisis' (2010)? When neoliberal market imperatives drive the education agenda it clouds the ability to see others as human beings rather than as instruments for profit. Education's narrow obsession with market-driven science and technology looks at face value like worthy aspirations but there is abundant literature in development economics which shows that such an agenda for education is unsustainable (Sen 2009).

What is likely to happen is that worthy values like the ability to think critically and to 'imagine sympathetically the predicament of another person' (Nussbaum 2010: 7) are likely to be eclipsed. How then do we educate young people for democratic participation – to address crucial issues in our diverse society? Nussbaum unambiguously declares that 'cultivated capacities for critical thinking and reflection are crucial in keeping democracies alive and wide awake' (Nussbaum 2010: 10).

Education that has a narrow focus on increasing the per capita Gross National Product persists as a flawed measure for quality of life, in that political liberty, health and education are negatively correlated with economic growth (Nussbaum 2010; 2011; Sen 1999; 2005). For a country like SA, relatively impressive development indices (when compared to the rest of Africa) mask the educational and health challenges experienced by the poor and working classes. South Africa is ranked 45 out of 134 nations in terms of 2009-2010 global competiveness rankings (Schwab 2010). Internationally, empirical studies have shown that economic growth does not automatically translate into progress and development in health and education for all (Bauman & Rovirosa-Madrazo 2010; Pogge 2010). If anything, neoliberal-driven growth increases the gap between the rich and poor and accentuates the Gini coefficient[2] in the developing world, as has been the case in post-1994 South Africa (Tikly 2011). The traditional model of education for economic growth relies on basic skills, literacy and numeracy and computer science and technology. This may succeed in increasing GNP per capita but may not succeed in the distribution of education in qualitative ways to the poor, especially the rural poor. It can however rapidly create competent technology and a new business elite class. Ideas of equal opportunity and equal access get lost in the euphoria of aggregate economic growth mantras.

So the question is will it serve a neoliberal agenda to develop a critical citizenry? Will critical thinking be important in an education for economic growth? The arguments presented above suggest that the answers to this question are not clear. It does not however serve the interests of the business elites to create spaces for freedom of mind – obedient, skilled, technically trained labour is what is needed for production and profit maximisation. For neoliberals, creative thinking is useful in as far as it is directed at creating new products and services in the most efficient way possible. Maximising

[2] Gini coefficient refers to the measure of income inequality in an economy.

efficiency in and of itself is a valuable exercise – maximising profit (economic growth) without demonstrable attempts at equitable distribution thereof is worthy of interrogation. We cannot simply trust that those in power will apply their energies to education that favours egalitarian values. Education for economic growth may not take seriously social justice issues of class, gender, race and poverty (Tikly 2011).

A new nationalism focused on sport and aggregate economic wealth clouds issues of poverty and unequal access to education. At every turn, South Africans are fed the doctrine of education for economic growth, while distributional equality, especially in education, remaining at the level of empty rhetoric (Tikly 2011). The neoliberal mantra is pervasive, repetitive and constantly reified: if the nation is doing well (on average), then its citizens must be doing well even if they are extremely poor. Putting a human face on poverty may expose a different perspective on the education for economic growth rationale. Proponents of education for economic growth fear critical thinkers because a

> cultivated and developed sympathy is a particularly dangerous enemy of obtuseness, and moral obtuseness is necessary to carry out programmes of economic development that ignore inequality (Nussbaum 2010: 24).

How we re-centre the human-subject (Rothenberg 2010) is indeed a challenging prospect that requires radical rethinking and the raising of complex questions.

There is thus a need to engage alternative discourses on the purpose that education should serve. The human development paradigm, for example, offers a different perspective on what this could be. It supports a focus on ***opportunities*** or ***capabilities***, which

> each person has in key areas ranging from life, health, and bodily integrity to political liberty, political participation, and education (Nussbaum 2010: 23).

This approach values the notion of human dignity that all individuals possess and emphasises that such dignity must be respected. While such aspirations are plainly enshrined in South Africa's national constitution, the alarming

reality is that they have been overtaken by greed, nepotism, and desire for personal enrichment by certain members of the national leadership, the recent revelation of flagrant fraud and deception by South Africa's Communications Minister being one example.

I close with a brief sketch of the insights for education offered by the human development approach.

Human Capabilities Theory

In their research on conceptualisations of education quality, Tikly and Barrett note that in the global south, human capital theorists pursue a market-led approach where economic growth is the key rationale for investment in education. This approach posits that creating greater choice and competition between schools will pressurise schools to improve outcomes (results), thereby generating greater accountability through the public display of school performance achievement scores. They note, however, that in parts of India, a market-led approach that saw the introduction of low fee schools to encourage competiveness between schools, proved counterproductive and served to exacerbate inequality between schools, regions and individuals. Human rights approaches to education on the other hand suggest that individuals in society are differently able and that institutional structures serve as barriers to fair participation (Tikly & Barrett 2013). One such approach to education is the *capabilities approach*. Nussbaum (2010) starts from the premise that capabilities are fundamental constitutional entitlements which every person should have and which are non-negotiable. She makes the following suggestions for what school education should do to produce citizens in and for a healthy democracy (Nussbaum 2010:45):

- Develop students' capacity to see the world from the viewpoint of other people, particularly those whom their society tends to portray as lesser, as 'mere objects'.

- Teach attitudes towards human weakness and helplessness that suggest that weakness is not shameful and the need for other not unmanly; teach children not to be ashamed of need and incompleteness but to see these as occasions for cooperation and reciprocity.

- Develop the capacity for genuine concern for others, both near and distant.
- Undermine the tendency to shrink from minorities of various kinds in disgust, thinking of them as 'lower' and 'contaminating'.
- Teach real and true things about other groups (racial, religious, and sexual minorities; people with disabilities), so as to counter stereotypes and the disgust that often goes with them.
- Promote accountability by treating each child as a responsible agent.
- Vigorously promote critical thinking, the skill and courage it requires to raise a dissenting voice.

What is particularly compelling about the above suggestions is that they are not loaded with the popular jargon and political rhetoric that characterises education policy documents in South Africa. They outline a basis for developing critical citizens and should not have to be explicitly detailed in policy to be regarded as feasible. They embody inherent, enduring human values, emanating from a deep common sense that goes beyond legislative specifications in a curriculum (Torres 2011).

References

Aronowitz, S. 2009. Against Schooling: Education and Social Class. In Darder, A., M.P. Baltodano & R. Torres (eds.): *The Critical Pedagogy Reader*. New York: Routledge.

Ball, S.J. 2008. *The Education Debate*. Bristol: Polity Press.

Bauman, Z. & C. Rovirosa-Madrazo 2010. *Living on Borrowed Time*. Cambridge: Polity Press.

Bond, P. 2011. What is Radical in Neoliberalist-nationalist South Africa? *Review of Radical Political Economics* 43,3: 354-360.

Bourdieu, P. 1998. *Acts of Resistance: Against the Tyranny of the Market*. New York: The New Press.

Education, DoB 2011. *Curriculum and Assessment Policy (CAPS)*. Pretoria: SA Government Press.

Fleisch, B. & P. Christie 2004. Structural Change, Leadership and School Effectiveness/ Improvement: Perspectives from South Africa. *Discourse: Studies in Cultural Politics of Education* 25,1: 95-112.

Forslund, D. 2013. Mass Unemployment and Low-wage Regime in South Africa. In Daniels, J., P. Naidoo, D. Pillay & R. Southall (eds.): *New South African Review 3: The Second Phase - Tragedy or Farce*. Johannesburg: Wits University Press.

Foucault, M. 1979. *Discipline and Punish: Birth of the Prison.* Sheridan, A. (trans.). New York: Vintage.

Giroux, H.A. 2009. Critical Theory and Educational Practice. In Darder, A., M.P. Baltodano & R. Torres (eds.): *The Critical Pedagogy Reader*. New York: Routledge.

Harvey, D. 2006. *The Limits to Capital*. New York: Verso.

Harvey, D. 2007. *A Brief History of Neoliberalism*. Oxford: Oxford University Press.

Harvey, D. 2010a. *A Companion to Marx's Capital*. New York: Verso.

Harvey, D. 2010b. *The Enigma of Capital*. London: Profile Books Limited.

Howie, S. 2004. A National Assessment in Mathematics within an International Comparative Assessment. *Perspectives in Education* 22,2: 149-162.

Hursh, D. 2000. Neoliberalism and the Control of Teachers, Students and Learning: The Rise of Standards, Standardisation, and Accountability. *Cultural Logic* 4,1: 1-8.

Lingard, B. 2010. Policy Borrowing, Policy Learning: Testing Times in Australian Schools. *Critical Studies in Education* 51,2: 129-147.

Maistry, S.M. 2012. Confronting the Neoliberal Brute: Reflections of a Higher Education Middle-level Manager. *South African Journal of Higher Education* 26,3: forthcoming.

Mathison, S. 2008. *Handbook of Social Justice in Educational Evaluation*. Columbia: University of British Columbia Press.

Motala, S. 2013. Equity, Quality and Access in South African Education: A Work Still Very much in Progress. In Daniel, J., P. Naidoo, D. Pillay & R. Southhall (eds.): *New South African Review 3: The Second Phase - Tragedy or Farce*. Johannesburg: Wits University Press.

Nussbaum, M. 2003. Capabilities as Fundamental Entitlements: Sen and Social Justice. *Feminist Economics* 9,2: 33-59.

Nussbaum, M. 2006. *Frontiers of Justice*. London: Belknap Press.

Nussbaum, M. 2010. *Not for Profit: Why Democracy Needs the Social Sciences*. New Jersey: Princeton University Press.

Nussbaum, M. 2011. *Creating Capabilities: The Human Development Approach*. Cambrige, Massachusetts: Belknap Press.

Parker, L. 2011. University Corporatisation: Driving Edefinition. *Critical Perspectives on Accounting* 22: 434-450.

Pillay, D. 2013. The Second Phase - Tragedy or Farce. In Daniels, J., P. Naidoo, D. Pillay & R. Southall (eds.): *New South African Review 3: The Second Phase - Tragedy or Farce*. Johannesburg: Witwatersrand University Press.

Pogge, T. 2010. *Politics as Usual: What Lies behind the Pro-poor Rhetoric*. Cambridge: Polity Press.

Rothenberg, M.A. 2010. *The Excessive Subject: A New Theory of Social Change*. Cambridge: Polity Press.

Schwab, K. 2010.*The Global Competiveness Report 2009-2010*. Geneva: World Economic Forum.

Sen, A. 2009. *The Idea of Justice*. London: Allen Lane.

Sen, A.K. 1999. *Development as Freedom*. Oxford: Oxford University Press.

Sen, A.K. 2005. Why Exactly is Commitment Important for Rationality? *Economics and Philosophy* 21: 5-13.

Shindler, J. & B. Fleisch 2007. Schooling for All in South Africa: Closing the Gap. *Review of Education* 53: 135-157.

Stronach, I. 2011. *Globalizing Education, Educating the Local: How Method Made us Mad*. London: Routledge.

Stronach, I., B. Corbin, O. McNamara, S. Stark & T. Warne 2002. Towards an Uncertain Politics of Professionalism: Teacher and Nurse Identities in Flux. *Journal of Education Policy* 17,1: 109-138.

Thomas, R.M. 2005. *High Stakes Testing: Coping with Collateral Damage*. Mahwah: Lawrence Erlbaum.

Tikly, L. 2011. A Roadblock to Social Justice? An Analysis and Critique of the South African Education Roadmap. *International Journal of Educational Development* 31: 86-94.

Tikly, L. & A.M. Barrett 2013. Education Quality and Social Justice in the Global South: Towards a Conceptual Framework. In Tikly, L. & A.M. Barrett (eds.): *Education Quality and Social Justice in the Global South: Challenges for Policy, Practice and Research*. London: Routledge.

Torres, C.A. 2011. Public Universities and Neoliberal Common Sense: Seven

Iconoclastic Theses. *International Studies in Sociology of Education* 21,3: 177-197.

Waghid, Y. 2010. Education, Performance and a Cosmopolitan Imaginary: Towards Enhanced Democratic Reflexivity in South African Education *South African Journal of Higher Education* 24,6: 1055-1064.

Wong, J.L.N. 2008. How Does the New Emphasis on Managerialism in Education Redefine Teacher Professionalism? A Case Study in Guangdong Province of China. *Educational Review* 60,3: 267-282.

Žižek, S. 2011. *Living in the End Times*. London: Verso.

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Come Hell *and* High Water: Education at the Crossroads, or U-Turn Ahead?

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Abstract

In this explorative position paper, I make three related points. First, based on results from a recent large-scale study in KwaZulu-Natal and other empirical research reports, I argue that educational initiatives alone are not going to get learners out of poverty; it is vital to combine them with an effort to improve health and nutrition. This is particularly the case in the light of the climate changes we are facing globally, which are linked to the two other large global crises, the financial and the environmental crises. Second, I use the sociology of worth to unpack the common linking of school effectiveness to poverty eradication and social justice. I then propose an environmental order of worth, and discuss how environmental education may be seen as a process of disagreement and compromises with other orders of worth. Third, I link this to a need for broad engagement with educational goals and practices in ways which recognise teacher professionalism. These arguments pull together to make the point that we are at more than a crossroads; we are in need of a U-turn, and it is our responsibility as educators and new 'organic intellectuals' to put up the road signs and draw attention to them. In addition, the paper reflects the first steps in my own process of engaging the possible relevance of the sociology of worth to education, and I hope it will be read as such.

Keywords: Order of worth, environmental education, environmental crisis, teacher autonomy, curricular compromises, organic intellectuals, learning, disadvantage, poverty

Introduction

This paper is based on a presentation at the 'Education at the Crossroad' symposium at the University of KwaZulu-Natal in 2012. The symposium was

framed, in the call for papers, by the absence of significant results from the substantial curriculum, textbook, school-intervention and teacher-development initiatives aimed at improving learner performance with the proclaimed goal of disrupting the cycle of poverty. There are three assumptions reflected in this way of describing the current educational situation, namely:

(a) that improved learner performance is linked to reducing poverty;

(b) that curriculum, textbook, school-intervention and teacher-development initiatives will improve learners' performance; and

(c) that education should primarily be concerned with school effectiveness.

In the section below, I engage the first two of these assumptions, and in the following sections I link this to the need for broad environmental education and to the 'order of worth' which I argue should replace the efficiency principle.

Data from the developed context ('world') indicate that each year of education increases future earnings by 3-6% (Jensen & Aaltonen 2012). Nonetheless, despite improved access to schooling across Africa, ours remains the rich continent with shrinking GDPs and increasing numbers of people living in poverty (Maathai 2011; Rice 2005). And material poverty is linked to other poverties (van der Merwe 2009): participation poverty refers to diminished opportunities as well as diminished capacity to participate in civic organisations or democratic debate, while identity poverty includes aspects such as loss of voice, loss of hope. The famous Coleman report found that learners' attitudes, importantly shaped by the extent to which they feel some measure of control over their own destiny, can to a degree overcome an adverse school situation, and that this relates to the background and aspirations of other learners in the school (Coleman, Campbell, Hobson, McPartland, Mood, Winefeld & York 1966:22, 23, 321). These considerations have been condensed into the notion of the learners' 'foreground', which refers to learners' interpretations of their future possibilities (Skovsmose 1994; 2012). This seems a viable notion in our context – what *is* our learners' foreground? What expectations *do* they have –

can they reasonably have? What possibilities *do* they see for themselves? If the 'future researchers' Jensen and Aaltonen (2012) are right, and globalisation will lead to production to some extent moving from Asia to Africa, such a shift, even taking into account the widespread blight of corruption and misrule in Africa (Rice 2005), will shift learners' foregrounds, with undoubted consequences for their learning performance.

Factors Leading to Improved Learner Performance

If, for a brief moment, we assumed that improving learner performance on standardised tests is indeed the key goal, we would need to consider to what extent the various policy and teacher-development interventions facilitate this. It is therefore relevant to look at research into which factors correlate with improved learner performance.

In 2009, we collected data from 39 rural and urban schools in KwaZulu-Natal relating to Grade 6 learner performance in mathematics, teachers' content knowledge and style of teaching, learner and teacher background and school factors (Aungamuthu, Bertram, Christiansen & Mthiyane 2010). The results in many ways confirmed what previous studies showed. First, in terms of how the learners and teachers performed: the mean performance of learners was 26.9 (out of 100), and most of the teachers could correctly answer fewer than half of the questions on the teacher test[1].

The second way in which our survey confirmed previous studies was in terms of the correlations we found between learner performance and other factors. First and foremost, differences in socioeconomic status among individual learners faded into insignificance in comparison to differences between schools. This does not mean that learners' home situations do not affect their school performance[2]. Indeed, material poverty makes a bigger difference to learner performance in South Africa than in other SACMEQ countries (van der Berg, Burger, Burger, de Vos, du Rand, Gustafsson,

[1] Admittedly, our sample of teachers was small, but we found no statistically significant difference in teacher test scores between teachers with and without a formal qualification.

[2] I note that international studies indicate that the socio-economic status of learners is more significantly related to learner performance than school factors (Hattie 2003; van der Berg *et al.* 2011).

Moses, Shepherd, Taylor, van Broekhuizen & von Fintel 2011)[3]. But the key factor appears to be the socioeconomic status of the community as a whole in the area in which the school is located (Howie 2003): schools in well-to-do communities tend to be well-resourced and well-run, and this factor, rather than individual variations in learners' socioeconomic status, appears to be a principal determinant of learners' performance. This explains why, in South Africa, more than in other African countries, variation in performance is greater between schools than within them (SACMEQ II 2010).

With respect to the teacher's role, the important achievement-facilitating factors appear to be: discipline/classroom management, feedback, frequency of homework, learners feeling secure/safe in the school[4], curriculum coverage, and the posing of questions making high cognitive demands of learners. Teaching methods appear to make less of a difference – according to our own study and others (Reeves 2005; Spaull 2011; van der Berg, *et al.* 2011)[5]. 15% of the differences in learner performance was accounted for by the teacher actually being present in the classroom, by the language of instruction (Christiansen & Aungamuthu 2012), and by the learners feeling safe.

The factors of security and teachers being at their posts may be related to the issues of discipline and the proper management of the school. van der Berg et al. see these factors as strongly correlated to learner performance but add that it is not easily determined whether schools with learners who do well are easier to manage or whether schools which are well

[3] The Southern and Eastern Africa Consortium for Monitoring Educational Quality. Currently, SACMEQ consists of 15 Ministries of Education in Southern and Eastern Africa: Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zanzibar, and Zimbabwe.

[4] An alarming number of learners do not feel safe in the school environment. Violence amongst learners and by teachers is not uncommon, but learners also fear violence from the surrounding community, such as rape or abduction on the road to and from school. This is why a solid demarcation of the school area is one of the characteristics of resilient schools (Christie 2001).

[5] For reading, the availability of textbooks also makes a difference, but this does not apply to mathematics textbooks (Spaull 2011).

managed produce better learner performance. Christie's work (2001) seems to indicate that leadership is a large part of what makes some South African schools succeed against the odds. This view is further developed in a later work, where Fleisch and Christie argue that 'the establishment of [political] legitimacy and authority is a precondition for sustainable effectiveness and improvement' (2004: 95). And forming part of any such strategy of amelioration would be an 'ethics of care' (Grant, Jasson & Lawrence 2010).
There are also many indications that interventions in poorer schools or schools with under-achieving learners do not have much, if any, impact; dysfunctional schools do not manage to turn an augmentation of resources into an educational advantage; and the more disadvantaged a school is, the less difference will a teacher's knowledge base make (personal communication, Paul Hobden).

Teacher knowledge or style of teaching does not appear to be strongly correlated to learner performance; in the SACMEQ III study, 'a 100 point increase in teacher scores was associated with … an average change of 4.8 points' in learner performance in Mathematics (van der Berg, *et al.* 2011:5). Factors which according to van der Berg et al. do correlate to learner performance are curriculum coverage, feedback[6], frequency of homework (also showing up as a significant factor in our study), class size (in 'African' schools only), and parental involvement (in English and Afrikaans medium schools only). Of course, the practices and procedures most advantageous to learner performance are most likely to be found in well-run and affluent schools.

What we had hoped to see strongly reflected in our study was the effect of pedagogy, in particular the much acclaimed Pedagogical Content Knowledge (PCK). We were disappointed: while some of the teachers demonstrated a range of PCK in the observed lessons, our study found no significant correlation between that and the learners' performance (Ramdhany 2010). This does not necessarily mean that PCK does not matter; it only indicates that if it does, it is overshadowed by other factors in the schools we surveyed. Taking this result together with findings from more in-depth studies of pedagogy (Ensor, Hoadley, Jaklin, Kühne, Schmitt, Lombard & van den Heuvel-Panhuizen 2009; Hoadley 2007), it could indicate that

[6] In line with the findings of Hattie and colleagues (Hattie 2003).

PCK cannot be considered in isolation from framing, pacing and classification issues[7].

In summary, we see struggling learners in struggling schools in struggling communities,

- Where these conditions detract from rather than support learning;
- Where there are no second sites for learning outside of schools (a function served in more affluent communities by museums, the home, TV, additional reading, libraries, and even shops);
- Where pedagogy reproduces social inequality;
- Where learners' foregrounds may function as a further disincentive to learning; and
- Where teachers themselves often battle, and are found wanting in some respects.

Additionally, as is clear from case studies (cf. Clark & Linder 2006), the State-school educational sector in South Africa is weighed down by a great inertia which, seeping into the schools, demotivates teachers and limits their choices.

In the light of the above, it is clear that to rely on interventions in the education system to overcome social inequality and improve learner performance is to disregard what the research findings tell us. It is similar to the myth that social inequality can be reduced by increasing economic growth, liberalising trade, and strengthening private investments. Poverty eradication must be addressed from all angles, and this involves addressing issues of disease, sanitation[8] and nutrition as well as the less tangible ones of

[7] These careful analyses of how pedagogy reproduced inequality through determining access to the regulating principles of mathematics have stronger explanatory power than sweeping statements, such as those made by Schollar (2008) blaming the continued failure of our school system on Outcomes Based Education.

[8] One can question the exact numbers in the recent publication 'Taps and Toilets,' but water and sanitation is central to improving the conditions of millions of people in Africa (Eshbaugh, Firnhaber, McLennan, Moyer & Torkelson 2011).

participation and hope. These are matters I shall touch upon in the next section, being guided in my discussion by the notion of 'orders of worth'.

Orders of Worth

'Orders of worth' is a notion introduced by Boltanski and Thévenot (2006).

> An order of worth can be thought of as a hypothetical model of a good society constructed on a singular basis of merit that acts as the sole standard for determining what matters or what is worthy within that hypothesised society (Annisette & Richardson 2011:231-232).

Boltanski and Thévenot focus not on collectives but on situations (2006: 16), and they limit themselves to 'behaviours confronted by an imperative of justification' (Boltanski & Thévenot 2006: 347) as opposed to behaviours directed by power or love. Thus, the basic claim is that in such social situations, people act in ways which they already consider justified, rather than providing a justification after the fact (Boltanski & Thévenot 2006: 37). The choice of the term 'worth' reflects back on individuals, as each order of worth has different relations of worth, i.e. measures of success, as they are applied to individual subjects, will differ from order to order. Whereas orders of worth describe situations that draw on notions of the common good, individuals can generally 'move in and out of' orders of worth depending on the situations in which they find themselves.

Based on their analysis of texts and data, Boltanski and Thévenot postulate six different orders of worth, or 'worlds': the inspired, the domestic, one dominated by fame, the civic, the industrial, and the market. These several worlds operate with different standards of justice and fairness, different notions of what is 'for the common good', and different measures of worth. For instance, the industrial world is characterised by efficiency, performance, mastery, is tested by measurable criteria, and a successful subject is one who is a professional or an expert in something. The market world, on the other hand, is characterised by competition, possession of goods, consumption, consumer goods, etc. and a successful subject is one who has acquired desirable possessions (Annisette & Richardson 2011:233). Contrast this with the civic world, which assumes that people can enter a 'state in which they

are concerned not with their own interest but with the interest of all' (Annisette & Richardson 2011:110); this order is accordingly characterised by a focus on civil rights, democracy, and solidarity, and the successful subject is one to whom is delegated representative responsibility.

Clearly, these different worlds would view – and harness – education in different ways, and this issue needs a great deal of careful analysis[9]. Still, the contrast between the proclaimed goal of social justice and the plans for improving school effectiveness, as currently conceived, is obvious; and indeed the public services and certification of skills are mentioned by Boltanski and Thévenot as examples of compromises between the civic and industrial worlds (Boltanski & Thévenot 2006: 330-331): 'Public services offer another example of compromise between the civic world and the industrial world when measures intended to increase work efficiency are justified, especially to the staff, by a concern for the common good of the users.' (Boltanski & Thévenot 2006: 331). Extending this outlook to the South African education system describes the current view regarding the link between school effectiveness and social justice: while it is proclaimed that improving school effectiveness will increase the worth of the learners, in terms both of enhancing civil rights and of reducing financial poverty, this is an expectation I have already challenged, as the operative assumption appears to be that it will happen by magic. What drawing on Boltanski and Thévenot's framework makes clear is that, under current notions of improving school effectiveness, the measure of worth slips from the civic order to those of the industrial or market worlds.

In the sphere of education, this 'public services' compromise submits teaching to performativity, and in the process reduces the teacher to a 'technician' rather than a professional. In consequence, 'School effectiveness and its decontextualisations [are aligned] with the reconfiguring of the social and its elision with the economy and market and the related dominance of individualism' (Lingard, Hayes & Mills 2003:407). It is a world where

[9] Contrast the effective and competitive education systems of the industrial and market worlds with the child-friendly pedagogies of the inspired world, with its focus on inspiration, originality, art, the unconscious, the emotions, taking risks, questioning, bringing out the uniqueness of each child, and being on a 'journey'. It becomes clear that different approaches to education reflect incommensurable value systems, or orders of worth.

putting in the effort and investment to generate what are considered more efficient systems come at the cost of worth – in education this is reflected in the notions of 'life-long learning' and the 'reflective' teacher who must always strive for improved performativity. In the Grade 6 study I mentioned earlier, learner performance was measured by the number of correct answers on a multiple choice mathematics test. And so it is with many reports on 'effective education'; they talk about what is effective, but do not engage with what it is they are effective at, or if the objective aimed at represents the most desirable effect (Kohn 2011). That is the case, as Boltanski and Thévenot point out, because while a compromise presupposes a common good, definitions of common good are often incommensurable, and thus an 'effort to define the common good that is supposed to sustain a compromise may actually shatter the compromise and shift it back into discord' (2006: 336). Ideally, 'a compromise, in order to be acceptable, must be based on the quest for a common good of a higher order than the ones the compromise attempts to reconcile.' (Boltanski & Thévenot 2006: 20). So perhaps there is a seventh order of worth to consider in relation to that quest – an order of worth that promises (or threatens, depending on how you look at it) to challenge the other six, on the basis that if the common good of survival is not aimed at, all other notions of the common good are rendered meaning-less.

The Interconnected Crises – The Case for Environmental Action and Education

What is the global change for which Africa is the least prepared, but which is likely to hit this continent the hardest? The answer is perhaps obvious. The environmental changes we are experiencing now, and which all predictions say will accelerate in the near future, will affect this continent the hardest, at least seen from a human perspective (Hare 2005). Despite the world overall being expected to get wetter[10] (Tebaldi, Hayhoe, Arblaster & Meehl 2006),

[10] Which is why I called this paper 'Come Hell *and* High Water' – though the situation in Southern Africa sounds more like it will be 'hell and too little water'.

mathematical models predict that the anticipated global changes 'will significantly affect present surface water access across 25% of Africa by the end of this century' (de Wit & Stankiewicz 2006:1917). Given that mathematical modelling is highly dependent on the assumptions built into the model, it is interesting to note that when Wang ran data through 15 global climate models he found inconsistencies in some predictions, but the 'models are especially consistent in predicting drier soil over southwest North America, central America, the Mediterranean, Australia, and South Africa in all seasons' (Wang 2005:739), though some variations in predictions do exist (Giannini, Biasutti, Held & Sobel 2008). Of course, drier soil will lead to reduced forest cover (Notaro, Vavrus & Liu 2007). As this prediction also affects rain forest (at least for the 15 years we can still expect there to be any rain forest left on the planet if deforestations continue at the current rate), climate change will only be exacerbated.

We are going to see more extremes in the weather (so far, 2011 and 2012 have confirmed this), and this will have a bearing on human mortality and on the behaviours of species (Tebaldi *et al.* 2006). More particles in the air from the burning of fossil fuels and the fire-clearing of forests are likely to increase the atmospheric black clouds under which 3 billion people find themselves living for at least part of the year, and these again contribute to further climate change (Ramanathan & Carmichael 2008). Climate change could alter the distribution or prevalence of parasitic diseases (Poulin 2006), and could also increase water- or airborne harmful agents, as well as diseases spread by mosquitos (Watson, Patz, Gubler, Parson & Vincent 2005; Zell, Krumbholz & Wutzler 2008). Thus, it is not only water supply and food security we have to be increasingly concerned about, but growing health challenges. On top of that, there are the pressures brought to bear on the environment by an increasing world population, and so it is not surprising that some commentators talk about the environmental crisis becoming the biggest threat to global peace in the not-too-distant future. And those worst equipped to weather the coming changes will, of course, be the poor.

So what are we in South Africa doing about it? Very little, it seems. Even China, notorious for its disregard of environmental best practice, recognises the need to do something and, according to Kumi Naidoo from Greenpeace, who gave a talk at UKZN a few years ago, is now the largest global investor in renewable energy. Well positioned to expand its renewable energy production, South Africa nonetheless appears committed to an

expansion of its nuclear power programme. This is an example of the way in which South Africa fails to engage critically and innovatively with the global crises. And this failure has a bearing upon issues of democracy and education[11].

If we as educators take these challenges seriously, we must make a strong case for environmental education, not only in the interests of our young people, but in the more inclusive interests of an environmental 'order of worth': ultimately, adults need to be able to influence political decisions about priorities and strategies, and politicians need to be reminded that

[11] Nuclear power does not rely on fossil fuels, a fact which has been used in support of nuclear power over more coal or shale gas mining. But there are other concerns which make nuclear power a problematic solution, the more so in the context of a planet with increasing coastal instability, water scarcity and possibly increased human conflict. Not only do we still not have viable solutions to deal with nuclear waste; nuclear power also uses substantially more water per kW produced, is less labour intensive and generates jobs only for the highly skilled; it is not suitable for decentralization; and failure, sabotage or natural disasters affecting a nuclear power plant are fraught with grave risks. It costs billions to build nuclear power plants, and billions to make them safe once they are decommissioned; if the same amounts were spent on solar and wind power, we would have substantially lower-risk, decentralized, renewable energy.

The decision to back coal and nuclear power as our main energy sources flows from the assumption that economic growth is the only route to national development. Higher levels of ('inclusive') economic growth are heralded as the path to overcoming joblessness and poverty. Yes, the Treasury's strategic plan mentions 'green economy initiatives' but these remain unexplored, and although a carbon emissions tax is going to be introduced, its benefits will be diluted by the exemptions it will grant. Initiatives related to global warming appear to be about dealing with the symptoms – as if a few more trees will make any difference – rather than about limiting production or changing ways of production. A commitment to nuclear power reflects this outlook: it is centralized power production for industry. It is an approach that lacks creativity and ignores the fact that despite substantial growth in the South African economy in recent years, poverty remains as stark, and the inequality gap as vast, as ever.

further mindless economic growth is not going to solve the problems it created in the first place. Africa still carries the scars of colonialism, and the despoliation continues under the current dispensation in which, as Rhodes University Vice-Chancellor Saleem Badat has put it, 'crass materialism, corruption, tenderpreneurship and unbridled accumulation, often of the most primitive kinds, run rampant' while at the same time life in the rural areas has become increasingly difficult (Gibson 2011).

Gramsci's notion of 'organic intellectuals' implies the rearing of intellectuals from the working class and the 'restructuring [of] consciousness' (Dimitriadis & Kamberelis 2006) as a contribution to making the intellectual activity of 'the masses' more critical. Today, however, we need a stronger focus on 'organic' in the sense of 'in harmony with the natural environment'. We need to apply sociological imagination (Mills 1959) in order to develop organic societies, in the dual sense of society needing to reinvent itself and needing to do so in ways respectful of all life. If a seventh order of worth is to evolve, it will do so by mobilising the sociological imagination and conjoining it with the principle of caring for the environment.

This seventh world has points of contact with the others: it joins hands with the civic world in calling for the notion of civil rights to be expanded so as to take account of the environmental impact of the rich on the poor; it relates to the industrial world in arguing for minimising waste in production; it highlights the obligation of leaders in the domestic world to reject selfishness and do what is their 'duty' – as when Wangari Maathai (2011) stresses that leadership is needed to make the necessary changes; it challenges the market world to consider the environmental costs of its practices; it embraces the inspired world by calling in question existing behaviours and values; and it dares the famous to earn their fame not only through their resourcefulness and intelligence but also through their position on the environment.

If Africa continues to push for economic growth along traditional lines, it likely implies the degradation of natural resources. In an alternative compromise between the market and the environmental worlds, I wonder if it is possible to skip this material phase and move directly into a post-material one, in which products are increasingly refined and individualised, where having fewer but carefully chosen objects of higher quality is valued, and where access to nature is a prized 'commodity' (Jensen & Aaltonen 2012).

From such a perspective, education comes to be seen as an arena for

both disagreeing and compromising with other orders of worth. If environmental education is to take this direction, it must do so through direct action in local communities, and with a clear agenda that makes no apologies for the behavioural and policy changes envisioned (Andrews, Stevens & Wise 2002).

Educational Goals, Content, and Pedagogy

As a society, we need constantly to revisit environmental issues and learn. And what we can learn from the four types of feedback suggested by Hattie and Timperley (2007) is that the feedback we provide to ourselves must consider the goals we have for education, where we are at, and the processes and self-regulation we need to bring into play to achieve our goals. We need to consider what currently is not taught and perhaps not even valued – 'The null curriculum' (Eisner 1994) – but should be, particularly in a rapidly changing world (Garfunkel & Mumford 2011).

While learning *about* the environment is obviously central to environmental education, education informed by the principles of the seventh order of worth must also be learning *for* the environment (cf. Peden 2006). What this implies is an understanding not just of what kind of knowledge should be acquired but of the importance of critical perspectives, of sociological imagination, and of 'fundamental ways of thinking' that will promote searching analyses of the nature of society and help to facilitate the conscious remaking of it in line with the notion of the 'common good' as that which entails, among other desiderata, environmentally sound practices.

Such 'fundamental ways of thinking' are seen as including: deductive thinking, a sense of the link between cause and effect, the temporality and situatedness of practices understood in terms of their historical origins and evolution (for a more in-depth discussion see Bertram 2012), critical/ reflective ways of looking 'beyond' appearances, an ability to spot, and even create, connections; and most importantly, perhaps, an ability to link these ways of thinking to one's actions (cf. Bourdieu 1990; Negt 1994). While the foregoing desiderata demonstrate clear affinities with the civic sphere, they are broad enough to enjoy a degree of overlap with some of the others, including the seventh order of worth as proposed above. And because these 'fundamental ways of thinking' overlap several worlds, the common ground

among them resulting therefrom opens up possibilities of both negotiated compromises and productive disagreements between the seventh order and some of the others. For unless there is dialogue, inclusive of disagreement and compromise, between the environmental order and others, the remaking of life will in the end be not by choice but by necessity.

While the goals may be clear, the educational content is certainly less so: should we include food security, water harvesting, composting, etc. in the curriculum documents, so that our children are prepared for a harder future? Or maybe self-defence? Pedagogically, the challenge appears to be greater still: hitherto, we have failed in what would seem a much easier job, namely, to ensure that learners acquire basic literacy and numeracy, so successfully developing 'fundamental ways of thinking,' critical engagement, sociological imagination, and the rest, seems incomprehensibly difficult. And the more so when we consider a grossly uneven educational system, in every respect. As previously argued, in the absence of a 'foreground' of realistic expectations for their future, mired in poverty, subject to pedagogic practices that reinforce disadvantage, the great majority of learners in South Africa seem to be facing an impossible task. The same holds true for their teachers.

The transformation I am discussing here, necessary as it is, must learn from the failed interventions of the past decade. The announcement of the 'crossroads' colloquium read: 'Guided by master narratives of transformation, equity, quality and good governance, education was repackaged, underpinned by good intentions and grand designs.' For most teachers, however, this worthy agenda was experienced as a top-down approach to curriculum change, often welcomed (in theory, anyway) but seldom mastered, no matter how many short workshops on outcomes-based education teachers sat in on. On the one hand, many teachers embraced the political intentions of revamping the curriculum in order to improve access, further social justice, and demonstrably distance the new educational dispensation from its apartheid predecessor. On the other hand, the pedagogies required effectively to implement the 'new deal' were generally not aligned with teachers' existing practices (Krishnannair & Christiansen in progress; Naidoo & Parker 2005). Thus, teachers were caught in the mismatch between compliance with the new curriculum and inappropriate, but unmalleable, pedagogical practices.

'Liberation and invention, not reduced to human outputs and balance sheets, need both commitment and autonomy' (Gibson 2011) – perhaps the

very two things the implementation of past curriculum interventions have not furthered. And when teachers fail to implement a new curriculum as intended – as not seldom happens, according to numerous studies – the response has been to provide yet more detailed directives to teachers, down to telling them how to spend every minute of their lesson time. Similarly, when learners fail to learn both higher- and lower-order outcomes, the response has been to simplify the content. It may be true that slow, careful mastery-learning improves performance on simple tasks (Schollar 2008; School of Education and Development at UKZN 2010), lending credence to the suggestion that teacher development should take small steps (Beeby 1966). But such a strategy may be counterproductive if what we seek – and need – is commitment and autonomy, liberation and invention. To make schooling intellectually undemanding is, after all, to reinforce learners' disadvantage and identity poverty, and to place a damaging question mark over their capability. It implicitly limits their access to the democratic process, effectively denying them the opportunity to make informed decisions about the world we live in, and the world (both in the ordinary sense of the word and in the special sense Boltanski and Thévenot (2006) confer upon it) we want to live in. If we are compelled to simplify the education we provide, at least let us do so without losing sight of the greater purpose.

In similar fashion, regulating teachers' practices by providing detailed guidelines without adequately elucidating what the goals of the exercise are, and without developing their autonomy as educators, de-professionalises their work and diminishes their identity – as it does their status. Paradoxically, it is an industrial order of worth that serves to reduce the worth of the teachers by demanding outputs without developing mastery. This is not unique to South Africa; some see it reflected in the Ofsted inspections in the UK where working according to lesson plans dispatched from 'on high' may be seen as more important than adjusting the lesson to learners' actual needs and capacities (personal communication with UK teachers). For all that, the current South African education system is bedevilled by severe weaknesses which, if not unique, are certainly disabling. These include – in addition to the deficiencies already mentioned: high rates of teacher absenteeism, teachers' lack of content knowledge, resistance to changing outdated and/or inappropriate pedagogical practices, a widespread reluctance to spend time on furthering knowledge and skills. While there are many teachers who are strongly committed to their work and see themselves

as agents of change, they find themselves living in a society where, since possession of goods is so unequally distributed and, for the majority, so hard to achieve, such possession acquires exceptional worth and allure. In the developed world, teachers may be better equipped to resist such notions of worth, but in South Africa, the battle is a hard uphill one for many in the profession. The challenge is therefore to engage in compromise with this market world, while creating situations where other worlds can come into play. This is not a systemic intervention, but one that takes place in daily practices of engaging with communities and with teachers. It is an intervention we as organic intellectuals have to be engaged in, whether through action-research initiatives, through networks and forums, through offering free short courses to teachers based on their experiential needs, through creating community forums to which teachers are collectively accountable, or through working with parents. While the objectives of changing teaching practices and teachers' mindsets, and of rebalancing communal priorities, often run up against the inertia of deeply ingrained habits, in particular in overcrowded, underresourced schools with disadvantaged learners, and the more so in situations where colleagues are unsupportive, it is nonetheless through the 'power of individual agency' that change comes about, as illustrated in case studies (Clark & Linder 2006:1).

In the Australian context, there has been a call for 'productive pedagogies'. Lingard *et al.* (2003) describe productive pedagogies as having four dimensions: 'intellectual quality, connectedness, supportive classroom environment, and engagement with and valuing of difference' (Lingard, Hayes & Mills 2003:415): Productive pedagogies,

> describe approaches to teaching that are linked to improved intellectual and social outcomes for all students. Productive pedagogies are intellectually challenging, they recognise difference, they are embedded within a highly socially supportive classroom and they are strongly connected to the world beyond the classroom (Hayes, Christie, Mills & Lingard 2004:520).

This is framed as a pedagogy that goes beyond simply improving learners' test performances; it seeks more broad-based benefits for them by enhancing the entire schooling experience. In order to facilitate productive pedagogies, Lingard et al. argue, schools must become 'learning organisations' where

improved classroom practices ('productive pedagogies') and the resulting improved learner outcomes come about as a result of valuing teachers, their knowledge and their ongoing learning (Lingard, Hayes & Mills 2003:401). Their 'core argument is that pedagogy should be recentred and that responsibility for its quality and alignment with agreed goals for schooling must be shared by teachers, school administrators, education systems and local communities' (Lingard, Hayes & Mills 2003:401). This is 'recentring' of a kind that could usefully be appropriated by the environmental order of worth.

Summary

In this paper, I have tried to link three dimensions: Boltanski and Thévenot's (2006) description of different orders of worth and justification, in particular their understanding of education as an example of a public service compromise between worlds; the global environmental crisis and the educational response this demands; and the need for rethinking pedagogic practices and educational goals. The position that a curriculum is not only about content (the 'what') but also about pedagogy (the 'how') and about educational goals is not new, but it deserves underlining in the light of the severity and interconnectedness of the three global crises referred to at the head of this article: the financial crisis, climate change and the environmental crisis.

What Boltanski and Thévenot's critique (2006) has done for me, is bring me to view education as a product of compromises between orders of worth. It has further enabled me to postulate the possibility of a seventh world of 'care for the environment' as a higher-order principle of common good in terms of which actions can be justified. It has assisted me in re-envisioning environmental education as necessarily entailing disagreements between worlds. And it has pointed to some potential compromises and trade-offs between this seventh world and existing principles and notions of the common good.

As for teachers and teaching, it is not enough, as Hattie (2003) remarks, for teachers to have the relevant knowledge; they must use that knowledge well. One thing that characterises successful teachers, Hattie and his team found, is that they test hypotheses about their teaching: 'successful

teachers have always been autonomous in the sense of having a strong sense of personal responsibility for their teaching, exercising via continuous reflection and analysis the highest possible degree of affective and cognitive control of the teaching process, and exploiting the freedom that this confers' (Little 1995:179). But with the collective challenges we face, the autonomy of individual teachers has to be wedded to a sense of collective responsibility and accountability for the relevance of the content and pedagogy of school curricula; and has to be wedded also to continuous collective reflection and analysis.

With those considerations in mind, the fact is that we face several crossroads: concerning the ways in which we deal with our natural environment and the 'deification' of economic growth; concerning the ways in which we view education and poverty eradication; concerning the ways in which we conceive of the role and substance of curricula; concerning teacher autonomy and, therefore, teacher-education policy and practice. Or perhaps what we really need is not so much to make the right turns as to make a U-turn.

References

Andrews, E., M. Stevens & G. Wise 2002. A Model of Community-Based Environmental Education. In Dietz, T. & P.C. Stern (eds.): *New Tools for Environmental Protection*. Washington: National Academy Press.

Annisette, M. & A.J. Richardson 2011. Justification and Accounting: Applying Sociology of Worth to Accounting Research. *Accounting, Auditing & Accountability Journal* 24,2: 229-249.

Aungamuthu, Y., C. Bertram, I.M. Christiansen & N. Mthiyane 2010.*Grade 6 Mathematics Classrooms in KwaZulu-Natal*. Pietermaritzburg, South Africa: School of Education and Development, Faculty of Education.

Beeby, C.E. 1966. *The Quality of Education in Development Countries*. Cambridge: Harvard University Press.

Bertram, C. 2012. Exploring an Historical Gaze: A Language of Description for the Practice of School History. *Journal of Curriculum Studies* 44,3: 429 - 442.

Bourdieu, P. 1990. Principles for Reflecting on the Curriculum. *Curriculum Journal* 1,3: 307-314.

Christiansen, I.M. & Y. Aungamuthu 2012. Language Issues, Misconceptions and Confusion in Abundance: A Qualitative Analysis of Grade 6 Learners' Responses on a Mathematics Test. *Education as Change* 16,1: 51-67.

Christie, P. 2001. Improving School Quality in South Africa: A Study of Schools that have Succeeded against the Odds. *Journal of Education* 26: 40-65.

Clark, J. & C. Linder 2006. *Changing Teaching, Changing Times: Lessons from a South African Township Science Classroom*. Rotterdam: Sense Publishers.

Coleman, J., B. Campbell, C. Hobson, J. McPartland, A. Mood, F. Winefeld & R. York 1966. *Equality of Educational Opportunities Report*. Washington, DC: US Government Printing Office.

de Wit, M. & J. Stankiewicz 2006. Changes in Surface Water Supply across Africa with Predicted Climate Change. *Science* 311,1126: 1917-1921.

Dimitriadis, G. & G. Kamberelis 2006. *Theory for Education*. New York: Routledge.

Eisner, E.W. 1994. *The Educational Imagination: On the Design and Evaluation of School Programs*. Third Edition. New York: Macmillan.

Ensor, P., U. Hoadley, H. Jaklin, C. Kühne, E. Schmitt, A. Lombard & M. van den Heuvel-Panhuizen 2009. Specialising Pedagogic Text and Time in Foundation Phase Numeracy Classrooms. *Journal of Education*,47: 5-29.

Garfunkel, S. & D. Mumford 2011. How to Fix our Math Education. *The New York Times*. The Opinion Pages website: Available at: http://www.nytimes.com/2011/08/25/opinion/how-to-fix-our-math-education.Html?_r=1&emc=eta1. (Accessed 1 September 2011.)

Giannini, A., M. Biasutti, I.M. Held & A.H. Sobel 2008. A Global Perspective on African Climate. *Climate Change* 90: 359-383.

Gibson, N.C. 2011. Taking Dignity and Democracy Seriously. *Mail & Guardian* August 26 to September 1: 3.

Grant, C., A. Jasson & G. Lawrence 2010. Resilient KwaZulu-Natal Schools: An Ethics of Care. *South African Review of Education* 16,2: 81-99.

Hare, B. 2005. Relationship between Increases in Global Mean Temperature and Impacts on Ecosystems, Food Production, Water and Socioeconomic Systems. Paper presented at the UK Met Office conference: Avoiding Dangerous Climate Change.

Hattie, J. & H. Timperley 2007. The Power of Feedback. *Review of Educational Research* 77,1: 81-112.

Hayes, D., P. Christie, M. Mills & B. Lingard 2004. Productive Leaders and Productive Leadership: Schools as Learning Organizations. *Journal of Educational Administration* 42,5: 520-538.

Hoadley, U. 2007. The Reproduction of Social Class Inequalities through Mathematics Pedagogies in South African Primary Schools. *Journal of Curriculum Studies* 39,6: 679-706.

Jensen, R. & M. Aaltonen 2012. *Porten til fremtiden*. Copenhagen: Tiderne skifter.

Kohn, A. 2011. Teaching Strategies that Work! (Just don't ask 'Work to do what?'). *Huff Post Education*. Available at: http://www.huffingtonpost.com/alfie-kohn/teaching-strategies-that-_b_923229.html.

Krishnannair, A. & I.M. Christiansen. Assessment and Teaching – Compliance or Wont? A Case Study of Five South African Mathematics Teachers. In Progress.

Lingard, B., D. Hayes & M. Mills 2003. Teachers and Productive Pedagogies: Contextualising, Conceptualising, Utilising. *Pedagogy, Culture & Society* 11,3: 399-424.

Little, D. 1995. Learning as Dialogue: The Dependence of Learner Autonomy on Teacher Autonomy. *System* 23,2: 175-181.

Maathai, W. 2011. Challenge for Africa. *Sustainable Science* 6: 1-2.

Mills, C.W. 1959. *The Sociological Imagination*. London: Oxford University Press.

Naidoo, D. & D. Parker 2005. The Implications of Mathematics Teachers' Identities and Official Mathematics Discourses for Democratic Access to Mathematics. *Perspectives in Education* 23,1: 1-15.

Negt, O. 1994. Hvad skal en arbejder vide for at finde sig til rette i verden i dag? In Nielsen *et al.* B.S. (ed.): *Arbejde og Subjektivitet.* (Translation of German text from 1987; Volume 26). Roskilde: Roskilde University: Erhvervs- og voksenuddannelsesgruppen.

Notaro, M., S. Vavrus & Z. Liu 2007. Global Vegetation and Climate Change Due to Future Increases in CO2 as Projected by a Fully Coupled Model with Dynamic Vegetation. *Journal of Climate* 20: 70-90.

Peden, M. 2006. Review of 'Environmental Education: Some South African Perspectives'. *Journal of Education*,39: 170-174.

Poulin, R. 2006. Global Warming and Temperature-mediated Increases in

Cercarial Emergence in Trematode Parasites. *Parasitology* 132: 143-151.

Ramanathan, V. & G. Carmichael 2008. Global and Regional Climate Changes due to Black Carbon. *Nature Geoscience.* Available at: http://knowlandpark.com/Files/CityCouncilHearingDocs/6_Exhibit%20B-Ramanathan. pdf.

Ramdhany, V. 2010. *Tracing the Use of Pedagogical Content Knowledge in Grade 6 Mathematics Classrooms in KwaZulu-Natal.* MEd Dissertation, University of KwaZulu-Natal.

Reeves, C. 2005. *The Effect of Opportunity-to-learn and Classroom Pedagogy on Mathematics Achievement in Schools Serving Low Socioeconomic Status Communities in the Cape Peninsula.* Unpublished PhD Dissertation, University of Cape Town.

Rice, A. 2005. Why is Africa Still Poor? *The Nation* October 24, 2005. Availabel at: http://www.thenation.com/article/why-africa-still-poor#axzz2dMIUtJRW.

SACMEQ II 2010. Visualization of Research Results on the Quality of Education. Available at: http://www.sacmeq.org/visualization-research.htm#visualization2. Accessed in June 2011.

Schollar, E. 2008.*Final Report: The Primary Mathematics Research Project 2004-2007: Towards Evidence-based Educational Development in South Africa*. Johannesburg: Eric Schollar and Associates.

School of Education and Development at UKZN 2010. *What Makes Education Work? A Literature Review: Report 1 of the Provincial Treasury Study on Improving the Quality of Education in KwaZulu-Natal*. Pietermaritzburg, South Africa: Provincial Treasury, KwaZulu-Natal.

Skovsmose, O. 1994. *Towards a Philosophy of Critical Mathematics Education.* Volume 15. Dordrecht: Kluwer Academic Publishers.

Skovsmose, O. 2012. Students' Foregrounds: Hope, Despair, Uncertainty. *Pythagoras* 33,2: 43-50.

Spaull, N. 2011. A Preliminary Analysis of SACMEQ III. *Stellenbosch Economic Working Papers*,11/11). Available at: www.ekon.sun.ac.za/wpapers/2011/wp112011/wp-11-2011.pdf.

Tebaldi, C., K. Hayhoe, J.M. Arblaster & G.A. Meehl 2006. Going to the Extremes: An Intercomparison of Model-simulated Historical and Future Changes in Extreme Events. *Climate Change* 79,3-4: 185-211.

van der Berg, S., C. Burger, R. Burger, M. de Vos, G. du Rand, M. Gustaf-

sson & D. von Fintel 2011. *Low Quality Education as a Poverty Trap*. Stellenbosch, South Africa: Stellenbosch University.

van der Merwe, M. 2009. Development of a Conceptual Framework for the Capacity Enhancement of Development Workers in Botswana. Unpublished PhD Dissertation, Stellenbosch University.

Wang, G. 2005. Agricultural Drought in a Future Climate: Results from 15 Global Climate Models Participating in the IPCC 4th Assessment. *Climate Dynamics* 25: 739-753.

Watson, R.T., J. Patz, D.J. Gubler, E.A. Parson & J.H. Vincent 2005. Environmental Health Implications of Global Climate Change. *Journal of Environmental Monitoring* 7: 834-843.

Zell, R., A. Krumbholz & P. Wutzler 2008. Impact of Global Warming on Viral Diseases: What is the Evidence? *Current Opinion in Biotechnology* 19,6: 652-660.

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Connecting 'knowing that' to 'knowing how': Knowledge Construction of Clinical Skills in a Problem-based Learning Medical Curriculum

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Abstract

Democratic changes in South Africa necessitated revised educational curricula across sectors. While these changes were important and necessary the results were not always positive, which led critics to dismiss the changes as 'knee-jerk tinkerings.' The Problem-Based Learning Curriculum (PBL) introduced at the Nelson R. Mandela School of Medicine came under such criticism. This paper investigates that criticism by analysing experiences with the clinical aspects of the PBL curriculum on the part of the first cohort of students. The findings were analysed using critical discourse analysis, and the contextual differences between traditional and PBL curricula were analysed using Bernstein's theories of classification and framing. The findings suggest that PBL must and should be informed by a deep understanding of the pedagogical underpinnings of such a curriculum as well as sound disciplinary content knowledge of medical skills. These two dimensions are not mutually exclusive. Hence, despite study participants' concerns about the possible gaps in their basic sciences knowledge, they nonetheless expressed strong confidence in their clinical ability to cope with the realities of the severely underresourced South African health care context.

Keywords: Knowledge construction, problem-based learning, medical curriculum, clinical skills, Skills Laboratory

Introduction

In response to the democratic changes of 1994, various educational sectors

made radical changes to their curricula. The higher education sector was no different, and a case in point is the Nelson R Mandela School of Medicine (NRMSM) which replaced a traditional discipline-based curriculum with a problem-based learning (PBL) curriculum early in 2001. PBL shares a teaching philosophy with outcomes-based education, which was perceived to be an agent for the democratisation of education. The apartheid education system was criticised for promoting rote learning and undermining critical thinking (Allais 2003). Hence PBL emphasised not just theoretical knowledge, but how such theoretical knowledge can be used practically – in other words it connects 'knowing that' to 'knowing how.' The theme for the conference at which this paper was first presented, sought to focus on the varied challenges and critique of the new curricula being proposed in the light of the democratisation of the country. Using the PBL curriculum at the NRMSM as a case study, my central thesis in this paper is that 'knee-jerk tinkerings of the curriculum'[1] are not good enough and must be informed by a deep understanding of the pedagogical underpinnings of, in this case, a PBL curriculum, as well as sound disciplinary content knowledge of medical skills. As my findings will show, these two dimensions are not mutually exclusive.

Sketching the Context

Eighteen years into the new democracy, the South African health care system remains in a state of crisis (Dorasamy 2010). Both urban and rural health care facilities are acutely understaffed, under-equipped, and overloaded with patients. There has been a drastic increase in the number of patients being admitted daily into hospitals with tuberculosis and HIV-related illnesses. Due to the high crime rate and the high rate of motor vehicle accidents in South Africa, the numbers of trauma patients admitted to hospitals are also on the increase. Globally, statistics reveal that every minute of every day patients are rushed to hospitals with gunshot wounds, stab wounds and other traumatic injuries (World Health Organisation 2004). This crisis for medical

[1] This phrase was used in the conference call for papers at which this paper was first presented. The phrase refers to the almost reflex pedagogical responses to the democratic changes in the country which often resulted in curricula that may have been perceived to be not well thought through.

and emergency units in South Africa requires responsive doctors who are competently trained, and confident to perform clinical examinations and procedures on patients within the underresourced circumstances of the South African health care system.

It is within this context that the PBL curriculum was introduced at the NRMSM. The PBL curriculum, or Curriculum 2001 as it came to be known,

> consisted of six modules in each of the five years of study. The curriculum content was presented as themes with generally one predominant theme running though a module. Students were also exposed early to clinical situations by undertaking clinical skills' training at the Skills Laboratory from the first year. According to the NRMSM *Faculty Handbook* (2001), the programme was designed to achieve the highest possible standard of education and training by stimulating and encouraging understanding rather than rote learning.

> Curriculum 2001 used a method of learning in which students first encountered a problem, which was then followed by a student-centred enquiry process…. At the start of each theme, the students were given a theme book that served as a guide and consisted of time-tables, details of practicals, skills, large-group resource sessions and, most importantly, the problem for each week. The facilitators[2] were also given these books; however, their books contained the learning goals for the weekly paper cases while the students' books did not. The week was structured so that the paper cases in the small-group facilitation sessions took place early in the week. This meant that the problems would be presented without the student being given prior readings or lectures on the cases (Reddy 2010:22).

Taking as its subject the first cohort of students who registered for a PBL curriculum, this paper critically examines their experiences of learning the clinical aspects of the PBL curriculum and assesses their preparedness to work in underresourced healthcare environments. The focus extends to the participants' construction of medical knowledge and their ability to transfer this knowledge from a simulated clinical environment to the wide array of

[2] **Facilitator:** Non-expert who guided the PBL tutorials through a collegial, non-authoritative process to enable the students to achieve the learning goals for each of the paper cases through the 8-step PBL process.

authentic clinical settings encountered during their clinical education modules. One of the reasons that motivated the NRMSM to shift from its traditional discipline-based curriculum to a PBL curriculum was to address difficulties in the transference of the limited simulated clinical practice to real clinical contexts. The research reported on in this paper focuses on how the participants perceived the difference between the knowledge and practices that were expected by the two different kinds of curricula – traditional versus PBL – and how they reflected on their experiences during their clinical practice as students. Their knowledge of what was expected in the traditional curriculum was transmitted to them by the consultants in the wards who often, as will be seen below, made comparisons between the PBL students' knowledge and what had been transmitted in the previous curriculum.

Transferring from Simulated Clinical Practice to Real Contexts: The Challenges

The literature on medical education indicates that medical schools around the world struggle with the problem of developing authentic clinical practice in their curricula, Geertsma & Van Der Vleuten 2008). The difficulties experienced by medical students and undergraduates in the transference of knowledge acquired in simulated clinical practice to real clinical contexts has been widely documented (Bradley & Bond 2006; Kneebone, Nestel, Vincent & Darzi 2007). The introduction of PBL at the NRMSM was prompted in part by clinicians' impressions that medical students were unable to transfer learning from the classroom to the clinical setting. Prawat (1989: 150) defines transfer of learning as the 'ability to draw on or access one's intellectual resources in situations where those resources may be required'. The clinical context provides an opportunity for students to show how their prior learning or understanding is brought to a new context.

With the traditional, discipline-based curriculum at the NRMSM students were exposed to two distinct educational paradigms: a theoretical paradigm (content-based theory) and a practical paradigm. During the first three years students had lectures and studied from textbooks. It was only during their fourth, fifth and sixth year when they attended clinical modules that they saw real patients whom they had read about earlier in their studies. Many studies reveal that when students are faced with real patients in the clinical setting, they are unable to connect the cold facts of 'knowing that'

with an interpersonal contextual 'knowing how' (Heliker 1994). With the PBL curriculum, students were introduced to clinical skills training in a Skills Laboratory (Skills Lab) from the first day of their student experience, unlike the traditional curriculum which took them to the wards only in the fourth year of the programme and where any prior simulated context they may have encountered in the programme up to that point was either non-existent or limited. The Skills Lab is a simulated educational facility in which a wide variety of medical professional skills are taught on models, mannequins and simulated patients. This was one of the ways in which the PBL curriculum sought to introduce the students early on in their studies to clinical situations that they would later deal with during their clinical modules at the hospitals. During their third, fourth and fifth years the PBL students attended clinical modules in the different disciplines of medicine at various hospitals across KwaZulu-Natal.

There have been numerous studies, both locally and internationally, on the use and advantages of clinical skills training in Skills Labs. A study by Docherty, Hoy, Topp and Trinder (2005) supported PBL in clinical situations and proved that students acquired clinical skills in the safety of the simulated environment that the Skills Lab provided. A study by Lee, Jacobs, Linberg, and Kumin (2005) reported that teaching in a simulated environment increased student confidence for learning clinical skills on newborns. Cohen-Schotanas *et al.* (2008) investigated the effects of traditional and PBL curricula on students' general and clinical competencies. They tested the longitudinal effects of a PBL curriculum and of traditional learning related to students' appreciation of curriculum, self-assessment of general competencies and summative assessment of clinical competence. They concluded that no differences were to be found between the cohorts during their clinical modules. So the question this paper seeks to answer is how did the PBL curriculum pedagogically prepare medical students for the real South African clinical context? Analysis of the experiences of learning from a sample of the first cohort of students who registered for the pilot PBL curriculum will be used to answer this question.

Methodology

The research on which this paper is based is located in a qualitative paradigm and uses critical discourse analysis (CDA) as an analytical lens to understand

the discursive power that was imminent in the participants' reporting of how they had constructed their medical knowledge through the PBL pedagogy. Purposive sampling was used and 21 participants were interviewed. The selected sample matched the race and gender norms of the NRMSM'S admission policy. The interviews were conducted when the participants had completed their undergraduate studies and were working as Community Service Officers at rural health care facilities. While the interviews related to the participants' experiences of the clinical aspects of their learning, inevitably they also referred to the other parts of the curriculum. This was perhaps especially inevitable given PBL's purported integration of theoretical and practical knowledge. The data thus also raised issues about the participants' construction and integration of theoretical content-based medical knowledge and their ability to apply this knowledge to the real clinical setting. All ethical considerations were complied with, including the use of pseudonyms to protect the identities of the participants.

A critical research approach was adopted, since critical researchers and theorists claim that knowledge is socially constructed. The notion of the social construction of knowledge is a fundamental tenet of democratised education, according to which the social world that we live in is understood as being constructed through social interaction and dependent on context, history, culture and custom. This social world is symbolically constructed in the minds of individuals who are to be understood not as standing 'before' it but as living in its 'midst'. McLaren (1986:312) states that 'when critical theorists claim that knowledge is socially constructed[3], they mean that it is the product of agreement/consent between individuals who live out particular social relations (class, race, gender) and who live at particular junctures in time'. Hence the particular research paradigm opted for in this study, given the nature of curriculum changes made in response to democratisation.

It is only when one is in the middle of this socially constructed world that one is able to ask, 'how and why knowledge gets constructed in the way that it does, and how and why some constructions are celebrated by dominant culture while others are not?' (McLaren 1986: 312). Some forms of knowledge in this study were found to have more power than others, and the

[3] This social-constructivist position can be in a weak or strong form. Many social-constructivists acknowledge a realist realm which impacts on the ways in which we socially construct our experiences of reality.

data indicate that in interactions between the participants and the consultants they worked with in the hospital wards the processes of knowledge construction which underpinned the participants' learning experiences in PBL pedagogy were frequently disparaged by the consultants whose knowledge had been framed within a traditional and long-established discipline-based pedagogy.

According to critical theorists, it is also the case that certain types of knowledge favour specific gender, class or race interests. Put in question form (as posed by McLaren 1986: 312): 'What interests does this knowledge serve? Who gets excluded from the knowledge? .... Who is marginalised?' In the context of this study, construction-of-knowledge issues arose in relation

(a) to knowledge constructed at the medical school vis-à-vis knowledge constructed during the various subsequent levels of clinical education modules; and

(b) how to account for some knowledge (knowledge constructed through the traditional medical curriculum) having higher status.

The CDA lens offered a means to interrogate the differential accrual of power through one or another of the two modes of knowledge construction (PBL versus traditional pedagogies). My findings, as stated earlier, point to three conclusions: 1) Teaching and practice of the PBL curriculum requires a deep understanding of underlying pedagogical principles; 2) The preparedness of PBL students to operate in a real-life clinical setting needs to be taken seriously; 3) Sound disciplinary content knowledge of medical skills is crucial to the practical real-life settings in which the students are expected to function.

Pedagogical Underpinnings of the PBL Curriculum

One of the main findings of my research is that, as reported by study participants, the consultants (medical specialists in a discipline who have oversight over the training of medical students in the authentic clinical setting) regarded the PBL students as lacking in basic science knowledge. In this regard, Bernstein's (2000) work on knowledge structures and the dimensions of power and control in pedagogic communication sheds useful

light on the divergent assumptions that come into play where (within a broader context of democratic political change) a traditional discipline-based medical curriculum, in place for almost fifty years, has been replaced by a PBL medical curriculum.

Bernstein (2000) provides a classificatory framework for questioning whether pedagogic communication may be influenced by patterns of domination intrinsic to education and, if so, what has made this possible (Muller 2008; Gamble 2006). Classification in this regard (Bernstein 2000) relates to levels of insulation between categories such as disciplines or bodies of disciplinary knowledge and their capacity to establish and maintain the boundaries that mask their identities. Of particular relevance to the present study is the distinction Bernstein makes between 'weak' classification (represented in his system by the symbol 'C–'), where a weak maintenance of boundaries and insulation between discourses results in a blurring of those boundaries, and 'strong' classification ('C+'), which occurs where the disciplinary discourse has a strong status and there is a high level of insulation between the categories of discourse.

The pivotal issue in the present case is the issue of status. In the traditional discipline-based curriculum, medical disciplines like Anatomy, Physiology and Pathology reflected 'strong' classification. The PBL curriculum, on the other hand, exhibits 'weak' classification of the disciplines in that these basic science disciplines are no longer taught as discrete modules but are instead 'inferred' when the students are presented with paper cases. The participants in the study, never having studied in a traditional curriculum where subjects were organised according to 'strong' classification lines, were consequently baffled by the vehemence of the dismissive comments which were made by some of the consultants in the wards and which reflect the classificatory system of the pre-PBL curricular discourse.

Framing, in Bernstein's terms, refers to the locus of control – who has control – in pedagogic practices over the selection, sequencing, pacing and evaluative criteria that govern knowledge. Framing regulates how the discourse is to be transmitted and acquired in the pedagogic context (Bernstein 2000). 'Strong' framing ('F+' in Bernstein's system) is where the teacher has total control over the selection, sequence, pace and evaluation criteria, and 'weak' framing ('F–') is where the learner has control over such issues of selection, sequence, pace and evaluation criteria of the pedagogic interaction.

The didactic lecture in the traditional curriculum at the NRMSM was an example of strong framing 'F+'. In this format, the lecturer was responsible for determining what was to be covered in the 45-minute lecture and went about delivering the lecture at his/her own pace with relatively little input from the students (usually in a large class of two hundred students). In the PBL curriculum, the student is accorded far more control of his/her own learning. The PBL tutorials are facilitated by non-experts who motivate the students to arrive at their own learning goals and subsequently research them in order to solve problems that are presented to them in the paper cases. This process requires self-directed learning techniques on the part of the students who determine their own pace in researching and mastering the knowledge. The PBL curriculum is thus an instance of weaker (F–) framing.

The study participants, who had experienced the 'weak' PBL framing during the first three years of the curriculum, constructed their knowledge discursively as being their own; they assumed their own power in making meaning of the medical knowledge. The interview data indicated reflection by the respondents on their engagement with particular problems and a development of emergent knowledge about the relevant procedures, but also that this was at odds with the more socially hierarchical expectations of the medical ward staff and that consultants would constantly silence them during the ward rounds and emphasise that they (the consultants) were in control of the teaching and learning process. This created a problem for the participants whose experience during the facilitation tutorials had been with a weaker framing that had given them more power over their own knowledge construction.

Applying Bernstein's distinctions to the empirical evidence emerging from the study sheds useful light on the resistance to the PBL curriculum, showing how the issues of power and control that were manifested in the ward translated into principles of communication that differentially regulated forms of consciousness in their production and in their capacity for change. These distinctions help us to understand what enables, legitimises and maintains the discordant pedagogic discourses that were apparent – in particular the hierarchical assumption ('consultant knows best') mediated through distributive rules, recontextualisation rules and evaluation rules (Bernstein 2000).

According to the participants' reports, the 'owners' of the pedagogy in the wards were the consultants who constructed their power discursively

and established their own representations through the use of the abovementioned rules, and in this way could control what would count as 'legitimate' knowledge. Some of the consultants used distributive rules to determine who had access to clinical knowledge in the wards, using the power accruing to them by virtue of the discipline to 'distribute' their medical knowledge to the different groups of students (traditional and PBL students), frequently controlling the kinds of access to medical knowledge of the study respondents could have. This can be further explained in terms of Bernstein's recontextualisation rules which regulate specific discourse formulation, constructing the classification and framing of the pedagogic discourses that I have described earlier. Respondent data indicated that the consultants who had been trained in a traditional curriculum and who had taught using the traditional methodology for most of their careers operated within strong classification and strong framing of the medical disciplines and were for this reason dismissive of PBL curriculum structures which eroded the teacher-learner hierarchy.

Bernstein's theory of knowledge structures usefully highlights the differences between traditional and PBL curricula structures in the way each emphasises particular knowledge, determines how it was taught and learnt, and who is responsible for driving the process of learning. Bernstein also distinguishes between two types of curriculum: the collection code[4] curriculum and the integrated code curriculum, each made up of constituent units (or disciplines). In the traditional curriculum, for example, one unit was Anatomy, another was Physiology.

In the collection code type of curriculum (traditional curriculum) there are distinct boundaries to the units and each unit has a high degree of autonomy – in the Anatomy unit, for example, only Anatomy is taught – whereas in the integrated code type (PBL curriculum), blurring of boundaries occurs and content from each of the units overlaps. According to Bernstein, this kind of pedagogic practice is likely to be self-regulatory and allows for students' rights and status to be increased – in line with the philosophy of the NRMSM PBL curriculum, and with South Africa's constitutionally enshrined principles of democracy.

[4] Collection code curriculum type: The traditional discipline-based curriculum was a collection code curriculum because there were distinct boundaries between each of the disciplines of medicine.

The power relations that the participants experienced in the wards created, legitimised and reproduced boundaries. From the classification and framing perspective, it was clear that the PBL curriculum favoured a weaker classification (C-) that resulted in the blurring of boundaries in basic science knowledge whereas the traditional curriculum was made up of self-contained disciplines through stronger classification (C+). Likewise, the framing of the PBL curriculum was weak framing (F–), in which the students were in control of the pacing of the curriculum (student-centred), while the traditional curriculum was emphatically lecturer-driven and didactic (F+). This mismatch in knowledge construction may in part account for the experiences of marginalization reported by the participants.

In restructuring and recurriculating the study of medicine at the NRMSM, the curriculum developers weakened the classification between disciplinary boundaries in shifting from a collection-type curriculum model to an integrated-type curriculum model. The framing of curricular content in the new PBL curriculum was modified by rendering disciplinary principles of curricular regulation subordinate to external principles of regulation, which repealed the power and control that had previously accrued to individual disciplines. The move from collection-type to an integrated-type curriculum also had major consequences for organisational forms and power structures within the NRMSM. Individual department/disciplines no longer had total control over individual modules but were required to integrate their discipline content into the PBL format and a new School of Undergraduate Medical Education was created to organise and administer the new PBL curriculum.

Preparing Students for Real-life Clinical Settings through the PBL Curriculum

The main finding in the area of student preparedness is that, as reported by the respondents, the PBL curriculum prepared them adequately for real-life clinical settings. They cited their first encounter with clinical medical knowledge as having been in the Skills Lab where they were trained in clinical and medical skills in a simulated environment on specialised models and mannequins, but, while they saw this as a positive factor, they reported that the consultants did not share their sentiments. In the words of one participant,

> *We were labelled as students who learnt Medicine on dummies [models in the Skills Lab] (Gary: 12).*

As reported by the respondents, consultants in the wards had a perception that students who had undergone the PBL curriculum did not know how to treat or examine real patients because they had spent too much time in the Skills Lab learning medicine on simulated patients and models[5]. This was directly counter to the participants' shared opinion that the Skills Lab had provided them with a safe learning environment in which to master the necessary physical examination techniques, communication skills and clinical/emergency procedures of the profession. The following participant comment spells out this conviction:

> *It's the skills that we learnt in a relaxed environment in the Skills lab that showed us what medicine was all about; it was an excellent introduction to the clinical examination (Sarah: 05).*

The consensus among participants was that the clinical knowledge constructed in the Skills Lab enabled them to make the transition to the real clinical setting (where they then encountered a negative teaching environment).

The transfer of skills and knowledge from the Skills Lab to the real patients in the wards was undertaken without assistance from the medical ward staff. Although the participants were able to attain a level of confidence and competence in their clinical skills, they reported that the consultants nonetheless regarded them as having no sense of what medicine was all about. The following participant account indicates consultants' confusion in this regard when both the traditional and PBL cohorts were in their final year together.

> *The skills that we learnt in second and third year in the Skills Lab like abdominal exam and neurological exam made a huge difference when we did ward rounds with the old curriculum students. During*

[5] The comment that the students spent too much time learning on dummies suggests that the previous curriculum, which contained little to no practical training in the first three years, was preferred by the consultants.

> *the ward rounds the consultant would be teaching all the students at the bedside and would do these skills again. We felt advantaged over the old curriculum students because we had done them and were even examined on them in the OSCE*[6] *so it was just revision for us (Gary: 12).*

It was evident to the participants that the consultants belittling students for learning medicine on 'dummies' did not in fact know what clinical skills had been developed in the PBL curriculum Skills Lab. The comment just cited indicates, on the other hand, that the participants themselves felt positively advantaged clinically because the Skills Lab had already given them experience of physical examination techniques (on simulated patients and on each other), with further reinforcement of confidence and self-perception from successful completion of the OSCE clinical assessments that had also been part of their Skills Lab exposure.

The participants stated that they were not affected by the consultants' negative remarks about their clinical skills abilities and the fact that they had trained on 'dummies' because they could see the benefits of being trained in a simulated clinical environment prior to the clinical education modules where they were exposed to live patients. They indicated that the PBL pedagogy and the training in the Skills Lab enabled them to transfer their clinical medical knowledge to the real clinical setting even during their clinical assessments in the wards.

The efficacy of PBL (which involves training in simulated clinical environments) has been a matter of concern for medical professionals globally, not just in South Africa, and there has been widespread research on whether PBL is an effective methodology for developing active, independent learners, divergent thinkers and good communicators. Bligh (1995: 120) has argued that,

> The product of a PBL curriculum will be a doctor well versed in group problem solving, capable of working well independently, competent at using literature and statistical database to retrieve

[6] OSCE: Objectively Structured Clinical Exam – a practical assessment of clinical skills (procedures and physical examination techniques) in the Skills Lab.

> information and who is confident in his [sic] own professional ability.

Contrary to the scholarly view that the PBL curriculum creates more well-rounded doctors, consultants encountered by the participants had a broadly negative opinion of its outcomes:

> *The consultants said we were not going to make good doctors.*

These differences of critique notwithstanding, one concern did however emerge that was expressed by both participants and consultants. This was the issue of content-based theoretical knowledge, or lack thereof, in the PBL.

Content-based theoretical knowledge

Study respondents reported that the classification and framing of the PBL curriculum was perceived by the consultants as failing to meet the required standards in regard to theoretical knowledge, and on this one point the students agreed with the consultants. The students themselves acknowledged gaps in their content-based theoretical knowledge of basic science, even though they felt confident and competent in performing clinical examinations and procedures on real patients, and they reported that they were constantly subjected to negative comparison with traditional curriculum students in regard to basic science knowledge:

> *The old curriculum students did basic sciences over three years. For example they did an entire year of Anatomy, Physiology, Pathology. We had it all combined in the problems from first to third year. We were looked down upon because of this (Patricia: 04).*

In the traditional curriculum, Anatomy was studied in parallel with Physiology and formed a basis for the subsequent study of Pathology and the other clinical disciplines. With the integrated approach to learning in the PBL curriculum, the problems in the first three years of the programme were designed to be vehicles for the learning of the these basic science disciplines. The Theme Design Group appointed by the Medical School had the task of integrating all requisite basic sciences objectives into the set of clinical cases for each designated theme. The envisaged approach was to create a spiral structure introducing basic science concepts at an early stage which would

subsequently be revisited in greater depth at regular intervals across the entire curriculum (NRMSM Faculty Handbook 2001).

The participants' impressions, as reported, were that many of the consultants in the wards had had little or no involvement in the design and development of the PBL curriculum for the first three years of the programme. It may therefore be the case that the consultants were unaware of what basic sciences had in fact been covered by the participants in their small-group tutorials. According to the participants, the consultants expressed serious concerns about the lack of basic science knowledge and regarded them as having a deficient foundation for medicine. They reported that the consultants regarded the PBL curriculum as inadequate preparation for the clinical setting as against a strong content-based theoretical foundation. Participant Jane commented that she knew exactly why the consultants did not like the new curriculum:

> *It was because we were no longer required to perform complete dissections of the human body and we were not taught Biochemistry, Microbiology, Clinical Pathology, Virology etc. (Jane: 15).*

The issue of inadequate basic science knowledge construction in the PBL curriculum is further exemplified by participant Mary's experience:

> *I remember this time in 4th year when I presented a case on pneumonia and the questions that I got asked (of course, we hadn't done that much Microbiology, we had just touched on it in 2nd year), but the question was 'name all the organisms that can give you a cavitating pneumonia?' Oh, I just stood there and laughed 'cos, I only knew klebsiella. The rest of the discussion, the consultant just blurted, 'I don't know why you don't know this! This is basic 2nd year stuff. How are you going to be doctors?' (Mary: 14).*

The concern about adequate coverage of the basic sciences in the PBL curriculum is also raised in the literature on PBL: two principal issues are (a) its ability to provide adequate coverage of the curriculum content, and (b) the time requirement for both faculty and staff (Barrows 2000; Dolmans & Schmidt 1996). However, Dolmans and Schmidt (1996) also claim that PBL curricula encourage the integration of knowledge from different domains, for

example, biochemical and medical domains, which is reported as an advantage of PBL. They go on to say that PBL students should be more able than others to integrate basic science knowledge when they encounter similar problems in real clinical contexts. I argue that my study revealed that this learning did not occur because the participants themselves acknowledged the limitations in their knowledge of the basic sciences, as in the comment by participant Shaun that,

> *when it came to discussing the theory behind it, I wasn't confident about whether I knew enough about the topic.*

This raises the question of whether all the basic sciences objectives were in fact covered in the PBL cases during years one to three of the curriculum, and a second question is whether the participants were actually able to assimilate all the basic science knowledge via the small-group tutorial process at medical school. The data revealed a degree of uncertainty around these issues on the part of the respondents, who were not in a position to comment on whether the core knowledge of the basic sciences had indeed been covered during the five years of the degree programme.

Two factors that might possibly account for the content-based theoretical inadequacy that was reported by the participants, despite integration of the basic sciences in the various themes that make up the structure of the PBL curriculum at the NRMSM, are (a) that in each of the first three years the basic science concepts were all presented in the context of clinical problems and this may have led students to pay more attention to the clinical and contextual aspects of the problems and neglect the underlying basic science knowledge; and (b) that in years three and four of the curriculum, there were study participants who attended their clinical education modules at other hospitals, external to the PBL sessions (themes and tutorials) running concurrently at the medical school. Participant Niki was one respondent who noted this disjunction:

> *I was in a clinical block that was completely unrelated to the theory we were doing in the themes. I was doing Paediatrics in the Block and doing Body in Motion in the theme ... totally confusing (Niki:11).*

It is possible that course-design factors such as these may have impacted negatively on the participants' construction of the content-based theoretical aspects of their medical knowledge and ability to integrate basic sciences knowledge with the clinical problems they were encountering in the real-life clinical setting.

The traditional curriculum at the NRMSM was a collection-type curriculum where power and authority remained within the discipline department. Selection, sequencing and pacing of the content were governed internally by each disciplines. The PBL curriculum, on the other hand, was an integrated-type curriculum which called for staff from the different disciplines to work together in establishing horizontal and equal curricular relationships instead of the hierarchical relationships maintained in the traditional curriculum with its 'strong' classification of disciplinary integrity. This produced more complex patterns of power and authority, requiring a strong social network with collegial sub-communities in place to question the goals of the programme. Staff consensus was also required on what should count as valid/core knowledge and why and how it should be recognised in the programme – a PBL curriculum is dependent on teaching staff being able to embrace a common epistemology (Moore 2002). Whether any such shared epistemology existed among the consultants in the hospitals is questionable in the light of participant responses, with many reporting that the consultants did not understand the structure of the PBL curriculum and were critical of its intentions.

From the literature it can also be seen however that some of the consultants' concerns about content-based theoretical expertise and the PBL medical curriculum need to be carefully considered. Muller (2008:25) argues that proponents of PBL 'are clearly trying to bend the medical stick towards the contextual side by emphasising the contextual problem to be solved rather than the disciplinary knowledge to be learnt'. He describes PBL curriculum design as having an external contextual coherence instead of an internal conceptual coherence. Table 1 indicates the differences between these two curriculum structures at the NRMSM.

Muller (2008) argues that gaps in student knowledge can arise when sequential requirements are ignored and that there are limits to contextualising the curriculum of a vertical discipline in the Bernsteinian sense because of the greater sequential coherence that is required by such a discipline. *Sequence* should be a foremost concern in order to maintain the

necessary congruence with the vertical spine of the parent discipline. Omission of the basic sciences leads to chunks of core knowledge being missed completely, leaving gaps in content-based theoretical knowledge such as those reported by the participants.

Table 1: Conceptual vs. contextual coherence in traditional/PBL curriculum structures at NRMSM

Internal conceptual coherence (traditional curriculum – 'knowing that')	**External contextual coherence** (PBL curriculum – 'knowing how')
• High codification – presumes a hierarchy of abstraction and conceptual difficulty	• Segmentally connected where each segment is adequate to a context, sufficient to a purpose
• Vertical curriculum ('strong' classification and framing) – requires conceptual coherence, and sequence matters	• Sequence is of less importance ('weak' classification and framing) – coherence to context is important
• Regulated by adequacy to truth (logic)	• Regulated by contextual adequacy to a specialised form of practice

Adapted from Muller (2008).

Muller's critique may help to explain why the participants felt a sense of content-based theoretical inadequacy during the ward rounds of the clinical education modules in years three, four and five of the PBL curriculum[7]. It may also shed light on the reaction of the medical ward staff to the participants' theoretical knowledge, or lack thereof, and it suggests that

[7] An alternative explanation may be that 'participants' feelings of inadequacy may have stemmed from their being repeatedly told that their learning up to that point was inadequate, by consultants who were unwilling or unable to provide the continuing teaching of basic science information in context of clinical problems.

cultivation among staff of a sense of common endeavour underpinning a shared PBL epistemology may not have been given sufficient attention[8].

The participant response data indicate that the structure of the PBL curriculum directly impacted on the participants' experiences of learning the clinical aspects of the medical curriculum with ensuing effect on their construction of medical knowledge of clinical skills.

Conclusion

This paper has explored issues of power and pedagogy in a PBL curriculum intended to develop the necessary clinical preparedness for the study participants to function as medical practitioners within the context of South Africa's severely underresourced healthcare environments. The main argument for a PBL curriculum is that doctors-in-training need to be exposed as early as possible to working in a real-life clinical setting, particularly when that setting is underresourced. Simulated clinical environments and problem-posing education, introduced at the very start of the first year, seems to be able to achieve this, from what was reported by the student participants in the study.

However, this paper has highlighted two areas of concern. The first is pedagogic: not all of the stakeholders subscribe to the pedagogical underpinnings of the PBL curriculum – as was demonstrated by consultants' negative opinion of students emanating from this curriculum. Bernstein's theory suggests that these discordant views have more to do with who has power in the construction of knowledge than with the content of the curriculum.

The second concern is epistemological: it has to do with the way knowledge is constructed in the PBL curriculum, and points to the danger of 'throwing the baby out with the bathwater.' In other words, curriculum developers need to be cautious that in moving towards a more contextual approach they do not

[8] It could be argued that the consultants expected the same layered teaching and learning as they and previous generations of students had experienced, and thus tried to provide clinical teaching only, and could not supply the necessary basic science integration at that level'. I am grateful to the reviewer of this paper who pointed out this valuable insight during the peer review process.

abandon disciplinary integrity – that the learning of basic sciences needs to continue in the clinical context. The study participants concurred with the consultants that some of the content-based theoretical knowledge needed to be specifically re-incorporated into the PBL curriculum rather than being taken for granted. Despite the participants' concerns about the possible gaps in their basic sciences knowledge and their reports of the consultants' dismissive attitudes towards the PBL curriculum, the study indicated that the participants nonetheless felt strongly confident in their ability to cope with the practical clinical realities of working in the underresourced South African healthcare system.

References

Allais, S.M. 2003. The National Qualification Framework in South Africa: A Democratic Project Trapped in a Neoliberal Paradigm. *Journal of Education and Work* 16,3: 305- 324.

Barrows, H.S. 2000. *Problem-Based Learning Applied to Medical Education*. Revised Edition. Springfield, IL: Southern Illinois University School of Medicine.

Bernstein, B. 2000. *Pedagogy, Symbolic Control and Identity: Theory, Research and Critique.* London: Rowman and Littlefield.

Bligh, J. 1995. Problem-based Small Group Learning. *British Medical Journal* 311: 342-343.

Bradley, P. & V. Bond 2006. A Questionnaire Survey of Students' Perceptions of Nurse Tutor Teaching in a Clinical Skills Learning Programme. *Medical Teacher* 28,1: 49-52.

Cohen-Schotanus, J., M. Muijtjens, J. Schonrck-Adema, J. Geertsma & C.P.M. van der Vleuten 2008. Effects of Conventional and Problem-based Learning on Clinical and General Competencies and Career Development. *Medical Education* 42,3: 256-26.

Docherty, C., D. Hoy, H. Topp & K. Trinder 2005. eLearning Techniques Supporting Problem-based Learning in Clinical Simulation. *International Journal of Medical Informatics* 8: 367-378.

Dolmans, D. & H. Schmidt 1996. The Advantages of Problem-based Curricula. *Postgraduate Medical Journal* 72, 535-538.

Dorasamy, A. 2010. Health Care is a Sore Need. *Sunday Tribune* 5 September.

Gamble, J. 2006. Theory and Practice in Vocational Curriculum. In Young, M. & J. Gamble (eds.): *Knowledge, Curriculum and Qualifications for South African Further Education*. Cape Town: HSRC Press.

Heliker, D. 1994. Meeting the Challenge of the Curriculum Revolution: Problem-based Learning in Nursing Education. *Journal of Nursing Education* 33,1: 45-47.

Kneebone, R.L., D. Nestel, C. Vincent, & A. Darzi 2007. Complexity, Risk and Simulation in Learning Procedural Skills. *Medical Education* 41: 808-814.

Lee, M.T., J.L. Jacobs, M. Linberg & C. Kumin 2005. Problem-based Learning, Multimedia, and a Paucity of Behavioral Issue Learning. *Medical Education Online.* Available at: http://www.med.ed.online.org.

McLaren, P. 1986. *Schooling as a Ritual Performance: Towards a Political Economy of Educational Symbols and Gestures.* London: Routledge.

Moore, R. 2002. The Restructuring of Higher Education Curriculum: Contrasting Models of Interpretation. *Journal of Education* 27: 34-57.

Muller, J. 2008. Forms of Knowledge and Curriculum Coherence. Paper presented to the ESRC Seminar Series, Seminar 2: Epistemology and the Curriculum, University of Bath, 26-27 June 2002.

Nelson R Mandela School of Medicine 2001. *Faculty Handbook*. Durban: University of KwaZulu-Natal.

Prawat, R.S. 1989. Promoting Access to Knowledge, Strategy and Disposition in Students: A Research Synthesis. *Review of Educational Research* 59,1: 1-41.

Reddy, S. 2010. *Experiences of Clinical Practice in a Problem-based Learning Medical Curriculum and Subsequent Clinical Environments.* Unpublished PhD Dissertation, University of KwaZulu-Natal.

Pugsley, L. & P. McCrorie 2007. Improving Medical Education: Improving Patient Care. *Teaching and Teacher Education* 23,3: 314-322.

World Health Organization, 2004. *World Report on Road Traffic Injury Prevention: Summary*. Geneva: WHO Library Cataloguing.

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Student Engagement: A Successful Approach to Teaching and Learning in a Third-level Engineering Module at the University of KwaZulu-Natal[1]

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Abstract

The range of outcomes evident in student learning often signals a variety of teaching and learning approaches. In an attempt to address the needs of a large and diverse student body in a high-risk module at the University of KwaZulu-Natal, a teaching and learning approach quite different from the traditional lecture-style approach was introduced. The study reported in this article focused on a third-year civil engineering module where the lecturer used a combination of weekly plenary sessions and interactive group sessions to encourage interaction among students and between students and staff. The research question for the study was, 'What effect do increased student-student and staff-student interaction and engagement have on student confidence, motivation and academic success?' Interviews, observations and final module marks were used to generate the data that were used to answer the research question. Findings from the qualitative study indicate improved student confidence and motivation. Analysis of the final module marks established that this approach supports academic success. The findings have implications for research and practice particularly at UKZN as they show that implementing and researching innovative practices has enabled the establishment of better teaching and learning environments that have the derived benefit of improved pass rates.

[1] Preliminary findings of this study were initially presented at the SEFI conference, Lisbon, September 2011.

Keywords: student engagement, academic success, interactive group sessions

Introduction

An issue of concern nationally is the progression and throughput rates of students in engineering (Nel 2010). In his report to the Engineering Council of South Africa (ECSA), Fisher (2011) reports that fewer than 33% of engineering students graduate within the set curricular time, and fewer than 67% graduate within six years.

This has grave significance in view of the critical shortage of engineers in South Africa (Case 2006; Fisher 2011; Nel 2010), which has repercussions at many levels. It seriously inhibits socioeconomic development (JIPSA 2010; Rasool & Botha 2011), it constrains infrastructural development and it also stifles development within the discipline, which impedes the country's ability to keep abreast with global trends in engineering (Fisher 2011). Fisher suggests in this regard that the issue of higher education teaching,

> should be a matter of serious national concern, not only on the grounds of the human and financial costs of poor throughputs and high student attrition, but from the perspective of social and economic development, and the skills requirements of an economy which needs to grow and which critically needs to create jobs (2011: 85).

One of the ways in which this concern has been addressed is by improving access to engineering courses, and at the University of KwaZulu-Natal (UKZN) this has resulted in greater student numbers than ever before, with a student body characterised by wide diversity in terms of socioeconomic, educational and language backgrounds, and with varying competencies and learning styles. But despite the increased student intake, retention and throughput in engineering are low and the university's response has been to give serious attention to their improvement, and a number of student-centred initiatives have been put in place in an attempt to boost progression and retention rates at the institution.

These initiatives include academic counselling, supplemental instruction[2] (SI) and workshops on topics such as time management and study skills. While these initiatives have been ongoing, very little has changed, however, in the way teaching and learning are approached by academics in engineering. Lectures are still commonly conducted in the traditional style.

The dominant perception this seems to convey is that there is something wrong with the students, perpetuating the notion that they need to be 'fixed' – hence the mélange of student-centred initiatives. It was therefore refreshing to find that in one high-risk[3] third-level module in the discipline of civil engineering at UKZN, the lecturer approached the module from a different teaching and learning perspective. This was achieved by increasing student engagement with both their peers and the academic staff with the object of improving student confidence, motivation and academic success. This article reports on the intervention that was conducted on the third-level civil engineering module as a contribution to the knowledge base in engineering education.

Among the many core modules that students take in the study of engineering, certain modules act as barriers to progression for students (Pocock, Bengesai & Moodley 2011). In recent years, this particular third-level civil engineering module has been identified as one such barrier. After several years of teaching this module, the lecturer decided to adopt a fresh approach based on his own experience of teaching the module together with ideas from the literature. To accommodate the volume of work that needed to be covered, and to improve interaction among students themselves and between students and staff in a large group, the lecturer used a two-pronged approach which combined plenary sessions and interactive group sessions. The four lectures per week allocated to the module were reorganised into two double periods: one plenary session where the lecturer adopted a traditional lecture style in presenting the content to the students, and one interactive group session that focused on problem-solving activities related to the content presented in the plenary each week.

The research question which was posed in relation to an investigation of this innovative teaching module was: What effect does increased student-

[2] Supplemental instruction (SI) is a collaborative, peer-group study session

[3] *High-risk* signifies a module that has a historically high failure rate.

student and staff-student interaction and engagement have on student confidence, motivation and academic success? Answers to this question were sought from data derived from interviews, observations and final module marks.

Literature on Student Engagement

There is extensive theoretical literature on the importance of student engagement for successful learning experiences and personal development (Astin 1984; Chickering & Gamson 1987; Goodsell Maher & Tinto 1992; Kuh, Kinzie, Schuh & Whitt 2005; Pascarella & Terenzini 2005), confirming a strong correlation between student engagement in educational activities that encourage student interaction, and positive outcomes with regard to student success. Additional outcomes indicated in the literature are student development, academic achievement, perseverance and satisfaction (Astin 1984; Chickering & Gamson 1987; Goodsell *et al*. 1992; Kuh *et al.* 2005; Pascarella & Terenzini 2005; Strydom & Mentz 2010; Trowler 2010).

Trowler (2010) characterises student engagement as an investment of effort and time in educational activities by both student and the institution. Harper and Quaye (2009) argue that student engagement includes more than student participation and involvement and suggest that activity, feelings and sense-making are further important components. Kuh, Kinzie, Buckley, Bridges and Hayek (2007) see student engagement as participation in activities that are effective educationally and have results that can be measured. For Krause and Coates (2008), student engagement refers to the educational activities within a class that lead to the achievement of learning outcomes. Strydom and Mentz (2010) describe student engagement as the extent to which students participate in educationally purposive activities. Taking these various perspectives into account, *student engagement* for the purpose of this study applies to the effort made by students to participate (collaborate, question, explain and describe) in educational activities designed by the lecturer. Included in this perspective is the notion that both students and staff are responsible for effective student engagement (Chickering & Gamson 1987).

Noting that the concept of student engagement derives from the educational philosophy historically of John Dewey, Graham, Tripp,

Seawright and Joeckel (2007) indicate confirmation from subsequent research that active participation in lessons does indeed have a positive influence on academic achievement. A large-scale study of first-year university students by Kuh, Cruce, Shoup, Kinzie and Gonyea (2008) found that student engagement in purposefully designed educational activities correlated positively with academic outcomes. Their study focused more specifically on the effect of interaction among students and students and staff and found that, regardless of social and educational background, student engagement seems to increase the probability of achieving academic goals and attaining the skills and competencies required in the present-day world. In a separate study of undergraduate students, Kuh (2008) also found that the competencies of students entering university were not as crucial to their academic success as was their involvement in educational activities as students. This finding is especially relevant in the current context, marked by notable student diversity with regard to language, culture, educational competencies and socioeconomic background.

Tinto (1993) argues that increased interaction between students and staff results in students becoming more comfortable in their academic environment. This, he says, leads to increased feelings of 'belonging' or 'fit' with the institution, that are in turn positively correlated with retention and academic success. Rush and Balamoutsou (cited in Trowler 2010) claim that one of the benefits of student engagement is the resulting ability to work confidently with peers. Pascarella and Terenzini (2005) showed that environments that encouraged close relationships between faculty and students promoted intellectual development. Gibbs (2010: 17) suggests that 'close contact is more easily possible when there are not too many students for each teacher to make close contact with'.

Kuh *et al.* (2008), report that students who interact with peers and staff, and who use their knowledge in practical situations, gain from their studies. More interaction with peers and staff enhances the sense of legitimation and also creates opportunities for richer learning experiences (Bensimon 2009). The South African Survey of Student Engagement (SASSE), a study commissioned by the Council for Higher Education (CHE) and conducted by Strydom and Mentz (2010), used five benchmarks to measure effective educational practice: level of academic challenge, active and collaborative learning, student and staff interaction, enriching educational experiences, and supportive campus environment. This is relevant to the

current South African context, as the engineering student cohort is representative of diverse socioeconomic, educational and language backgrounds, with varying competencies and learning styles.

The theoretical framing of the study (below) draws on the benchmarks of effective educational practice identified by Kuh (2003) and is shaped to capture significant points of issue emerging from the literature review.

Theoretical Framing of the Study

Student engagement is based on the premise that the more time students invest in learning, the better they are able to grasp the content; more practice, coupled with constructive feedback enhances student learning. As part of the National Survey of Student Engagement (NSSE), Kuh (2003) identified five clusters of practices which may be used to benchmark the extent of students' engagement and which will promote effective learning. Similar to those selected by the CHE in the SASSE study (2010), these five clusters are student–faculty interaction, active and collaborative learning, enriching educational experiences, academic level of challenge and supportive campus environment. Of these, the three which I found most pertinent to the study reported on in this article, and which I refined to suit the purpose of the study, were student–lecturer interaction, active and collaborative learning, and enriching educational experiences. Student-lecturer interaction involved the educational opportunities created for communication between lecturer and students during class; these included questioning, clarification and feedback from the lecturer. The active and collaborative learning focus related to students' active engagement in solving problems and how they worked together to solve problems. The third benchmark took into account students' overall experiences in the lessons and focused on enhanced learning (academic success), motivation and confidence. This three-part framework also picks up the theme of *Education at the Crossroads* in as much as the discipline of civil engineering and more especially this third-level module have hitherto adhered to a traditional approach to teaching and learning in which lectures have been strongly teacher-centred activities, and where the challenge now is how best to inculcate new thinking that will foster new educational possibilities, practices and optimisms. Taking note, then, of

avenues that scholarship might suggest for educational reform, this paper reports on a study of one such new venture which shows a paradigmatic change from a traditional teacher-centred approach to a student-centred approach much more closely aligned with student engagement and with active and collaborative learning (see Astin 1984; Chickering & Gamson 1987; Goodsell *et al.* 1992; Kuh, Kinzie, Schuh & Whitt 2005; Pascarella & Terenzini 2005; Strydom & Mentz 2010; Trowler 2010).

Methodology

A mixed methods approach was adopted in generating data for this study, following the position taken by Johnson and Onwuegbuzie (2004) that a combination of qualitative and quantitative paradigms allows the researcher to draw from the strengths of each approach while minimising their separate weaknesses.

Primary data were generated through lesson observations, interviews with students and staff, and secondary data and final module marks were accessed from the Student Management System (SMS). The primary interview and observation data were analysed using interpretive qualitative analysis, and were compared with statistical analyses of the final module marks on SMS including the central measures and the maximum and minimum marks to determine whether the intervention influenced academic success.

Observations of plenary and interactive group sessions and interviews with students and staff were conducted in 2011. With the intervention having been piloted in 2010 data over the period 2009 to 2011 were used in the analysis and the 2009 final module marks were used as a benchmark against which to compare the 2010 and 2011 results. Observation of the interactive group sessions made it possible to measure aspects of student engagement such as interaction among students and between students and staff. Random sampling was used to identify those students who would be interviewed about their experiences in the module, yielding a sample of seven students, the lecturer and a facilitator as interviewees. Written consent was obtained from all the study participants. The student interviews yielded data for analysis directly related to answering the research question, while interviews with the lecturer and facilitator provided insight into the module

and understanding of the context. For example, the lecturer was able to provide insight into attendance. He observed that whereas prior to implementation of the innovative approach the first lesson of the day was generally sparsely attended, after the intervention was instituted attendance during the same time slots improved significantly – although it must be acknowledged that pedagogical strategy is just one of many possible factors to which the increased attendance could be attributed.

The nine respondents were interviewed independently. Academic staff interviews, seeking to ascertain effectiveness of and challenges in implementing the innovative approaches, were conducted between lectures and during the lunch breaks, as this was often the only time available to both researcher and staff. Students were interviewed predominantly in the afternoons once their lectures were completed for the day as this provided sufficient uninterrupted time to probe and clarify their responses. These interviews sought to ascertain the students' experiences of the innovative approach. The responses of the seven students were coded and, as nuances in the data arose, they were recorded. Salient points that emerged were categorised into themes. Supporting evidence from interviews and rich descriptions of lesson observations were documented. The final module marks were analysed to determine overall pass rates, and measures of central tendency were computed to determine the effect on the quality of performance and to compare them with those for the period 2009 to 2011.

Findings

In the restructured module, the plenary session was dedicated to the introduction and explanation of the concepts in a traditional lecture-style teaching approach. In this 90-minute session, the lecturer explained and discussed concepts in a series of (approximately) 15-minute sessions separated by 5-minute breaks, structured on the assumption, drawn from his extended experience of lecturing the module, that 15 minutes was about the maximum attention span of students in his class. In addition, printed handouts of the lecture material were also provided to the students. Prior to the commencement of the research, the lecturer indicated that the purpose of the handouts was to make it easier for students to pay full attention during the lecture and take additional notes as and when necessary. It also gave students

the opportunity to familiarise themselves with the content ahead of the plenary and group sessions and to revise prerequisite knowledge if necessary.
The plenary session was conducted at a fast pace with few opportunities for students to ask questions. The lecturer did not encourage questioning during this session and there seemed to be an unspoken rule that this was not allowed. I noted during observation of the plenary session that some students focused on writing down as much as they could of what the lecturer was saying (despite having the handout), some simply listened to the lecture, and others were preoccupied with their cell phones or chatted with their peers.
The interactive group session was very different from the plenary session in both approach and environment. Students were divided into four groups of 20 (it was explained by the lecturer that no negotiations by students were entertained for placement in any group as it was envisaged that many students would want to be in his group). The venues used were single-level rooms with desks arranged in rows. Although it somewhat restricted movement, this arrangement did allow for more student/instructor interaction than in the regular lecture theatre with tiered seats. The group sessions were conducted concurrently, one by the lecturer and the other three by trained facilitators who acted in place of the lecturer. In an interactive group session conducted by the lecturer, I observed the lecturer introduce a problem on the board, following which, after some prompting, the students were encouraged to make input to a solution with the assistance of step-by-step explanations by the lecturer. Students were given problems that they had to attempt to solve within specified time frames, and communicated with lecturers on issues such as clarification of the problem and the methods that they were using to solve the problem. Some students worked collaboratively with each other and made reference to their handbooks and notes to solve the problem. The lecturer interacted with students independently as well as in groups. Once the lecturer was satisfied that the students had had sufficient time and had made sufficient attempt to solve the problem, students were then asked to explain and discuss their particular solutions. The researcher also noted that activities as they have been set out in the handbook lent themselves to group interaction and discussion.

In summary, students were clearly engaged in active learning and collaborative activities (student-centred activities associated with student engagement) orchestrated by the lecturer in a shift from traditional classroom practice.

Analysis and Discussion

The intervention stands as an instructive instance of *Education at the Crossroads* in its encouragement of student engagement with content and student interaction with peers and staff.

Analysis of the data collected from observation of the interactive sessions and interviews with students is discussed under the following themes: *academic success*, *motivation and confidence*, *feelings of legitimation* and *interaction with peers and staff*. The second of these themes, *feelings of legitimation* was not initially included but subsequently emerged as being strongly indicated in the data. During student interviews, students acknowledged that they understood very little of what was presented in the plenary, expressing the view that they expected it all to become clear during the interactive group sessions. I probed into this further and queried why they did not question the lecturer or ask for clarification during the plenary. Many students responded that they did not feel it was the correct forum to raise questions and that the lecturer did not encourage them to question or to seek clarification during the plenary. They understood that questioning and clarifying were objectives of the interactive group session that would follow on a subsequent day.

Academic Success

Academic success was measured in terms of passing the module. The final module marks were statistically analysed to determine the pass rates, central measures and mark range in the specific module over the period 2009–2011. An analysis of the 2009 final module marks was included as it provided a basis for comparison of academic success pre-intervention and post-intervention. A pilot study of the innovative approach was conducted in 2010 and followed up in 2011 to determine whether the data were indicative only of a particular cohort of students. For the purpose of consistency and validity, statistical analysis results were used of final module marks from 2010 and 2011, the years in which the intervention was implemented. The data in Table 1 (sourced from the Student Management System, UKZN) establishes that academic gains were consistent during the period when the innovative approach was used.

Table 1: Module statistics for the period 2009–2011

Year	No. of students	% Pass	Min %	Max %	Mean %	Median %	Mode	Variance	Std Dev
2009	104	75.00	30	80	54.12	52	50.00	125.56	11.21
2010	80	91.25	45	85	63.53	63	68.00	136.15	11.67
2011	66	92.42	43	92	67.59	68	66.75	131.78	11.48

There is a strong likelihood that the pass rate increase from 75% to 92% between 2009 and 2011 can legitimately be attributed to the new approach to teaching and learning since a rise of 16.25% was already apparent in results from the initial pilot for the new course in 2010, although one additional factor could also be that the smaller enrolment than in previous years[4] may have made it possible for teachers to get to know their students better and for students to be less anonymous than in a large class (see Astin 1984; Kuh 1991; Pascarella & Terenzini 1981; Tinto 1993). The sustained improvement in 2011 suggests however that the innovative teaching and learning approach in the redesigned module had a significantly positive effect. Also noteworthy was the decisive overall rise in the range of marks as reflected in the minimum and maximum marks achieved by module students from year to year (Table 1, columns 4 and 5), and especially by the smaller 2011 cohort. All three of the important central measures (columns 6,7 and 8) reflected improvement over the three years: not only did more students pass, but the quality of pass also improved.

[4] According to the staff member lecturing in the module, the 23% drop in the number of students registered for this module between 2009 and 2010, and the further 20% drop from 2010 to 2011, was ascribed to attrition and high failure rate in the prerequisite module.

Confidence and Motivation

Evidence from the data shows that the innovative teaching and learning approach used in the module provided an enriching educational experience for students, who displayed enhanced motivation and greater confidence in their own ability. Student attendance at the interactive sessions was high despite the fact that it was scheduled for the first period in the day, which, according to the lecturer, generally attracts significantly fewer students. The high attendance could be attributed to students perceiving the interactive session as beneficial. The environment created during the group session stimulated discussion and interaction with peers and staff; communication is often easier in a small, informal group setting. This is indicated in the following response from a student:

> *I don't mind missing the plenary as I am able to understand in the interactive session…. I was also able to show my peers how to work out certain problems ... it made me understand my work better and now I feel confident about what I know. I don't feel afraid to ask questions (Student A, Interview, 2011).*

This confirms the point made by Rush and Balamoutsou (2006) that students who are effectively engaged will have a positive disposition about themselves and their role in the class and will be encouraged to question and to contribute to the group. Additionally, and as evidenced in my observation of the sessions, they are also apt to demonstrate confidence in working with peers.

However, some challenges did arise in that students who were not in the lecturer's group, harboured the concern that they would be disadvantaged. On further probing, it became apparent that the basis of this concern was that students thought that only the lecturer himself was privy to class tests and the final examination. Students in the facilitators' groups felt less confident, 'as we do not know whether we are being adequately prepared for the exams' (Student B, Interview, 2011).

Many of the respondents felt that the interactive group sessions were beneficial while the plenary sessions were unproductive. One of the respondents indicated that 'I don't even attend the plenary, as I understand well from reading my notes and attending the group session' (Student C, Interview, 2011). This statement was further supported by an attempt from a group of students who made a formal request via the class representative to

have all of the lectures converted to interactive group sessions, a request that was denied on the grounds that, according to the module requirements, a certain percentage of the lectures had to be formal. While the data indicated enhanced learning and improved confidence, it did not necessarily speak to the impact on motivation.

Interaction with Peers and Staff

Increased student interaction with peers and academic staff leads to the development of better academic environments linked to improved academic achievement (Tinto 1993; Kuh 2003). The lecturer–student interaction mentioned in the framework was realised during the interactive group sessions. This was indicated by one of the student interviewed, who commented that he had

> *benefited from the interactive sessions by working with other students and the lecturers and [facilitators]. I learnt how what we learn is applicable in practice…and it is informal so you don't feel afraid to ask questions or to say that you don't understand. They [staff] allow us to see how the problem is relevant to us in engineering (Student E, Interview, 2011).*

From my observation it was evident that students were actively participating in the group discussions and communicating with their peers as well as with the staff. The informal environment seemed to lend itself to easy discussion and questioning. Students noticeably wanted their explanations to be heard and they also showed interest in other perspectives; the class format also afforded students the opportunity to observe academic staff engage in problem solving while they explained what they were doing and why. These findings are further confirmation of the link between student engagement and richer learning experiences (Kuh 2009).

Feelings of Legitimation

Interaction with staff and peers seemed to foster a sense of belonging among students giving them further encouragement to participate in the session. In

the words of one of the interviewed student, 'You know you feel like you are a part of the group, that you belong and they ask you to explain as though your answers are important' (Student B, Interview, 2011). Students' responses seemed to indicate feelings of 'belonging' in the sense of being part of the discipline, and whereas continuing student apathy was observed in the plenary sessions, growing participation was apparent in the group sessions. In the group sessions, students made reference to the application of concepts and problems in the 'real world'. This indicated that students were beginning to see this module not just as a means to passing the degree, but also as an opportunity for them to be engineers-in-the-making. During observation, it was noted that students were actively engaged with the tasks that were set by the lecturer and interacted with their peers in discussing the task or asking for explanations. Interaction with the lecturer and facilitators included clarifying the task, asking 'how' and 'why' questions, explaining their solutions and contributing to class discussions. These observations are in line with a range of findings in the literature that report a positive sense of 'belonging' or 'fit' experienced by students in a conducive academic environment which allows for constructive student engagement (Tinto 1993; Trowler 2010; Bensimon 2009).

Challenges of the Innovative Approach

The lecturer reported in conversation that in the more cognitively demanding aspects of the final examination paper for 2011 questions were not answered well, and that despite the higher pass rate and improved quality of pass he regarded the new module initiative as still a work in progress, needing ongoing development and enhancement of its approaches to raise the level of achievement in higher-order thinking skills.

The lecturer also pointed out that the sustainability of this innovative teaching and learning approach is in question because accommodating the group sessions in the engineering timetable requires significantly more suitably qualified staff members to be available, simultaneously, as facilitators, which is not always possible. In the two semesters during which the innovative approach was piloted, the module coordinator used postgraduate students who were trained as facilitators to conduct the group sessions, but because most graduate engineers take up positions in industry

immediately – often because they need to fulfil their commitments to bursary providers – the annual postgraduate intake in civil engineering is normally low and few are available for facilitating the interactive group sessions. In addition, development in the discipline is, in part, reliant on research activity carried out by postgraduate students, which further cuts down on their availability as facilitators. Hence, finding adequate staff to sustain the intervention is problematic because it is time-consuming and requires ongoing training and funding for module personnel.

Conclusion

The innovative third-level civil engineering module investigated in this study sought to promote mutual engagement among student peers and between students and staff with the intention of improving student motivation, confidence and academic success. Data gathered for the study through interviews with students and staff, observations of plenary and group sessions, information gained through informal conversation with staff, and final module marks showed that the increased collaborative interaction brought about in the module enhanced the learning experience, boosted student motivation and confidence and promoted academic success – thereby transcending some of the challenges presented by large classes with high diversity in the student enrolment. While the disciplinary focus was teaching and learning in a specific engineering module, it is anticipated that the benefits of the new approach can be extended to other engineering courses as well which have hitherto centred principally on traditional lecture-style teaching.

Although the innovation had a positive influence on emotive commitment from students, it needs nonetheless to be noted that performance at higher levels of cognitive demand was less responsive to the intervention. Development of higher-order thinking skills was not an issue that the study set out to investigate but the reservations expressed in this regard by the lecturer would clearly support further consideration in any potential extension of this research through closer analysis of students' performance in the various aspects of the tests and examinations. Such an investigation would need to take account of the level of cognitive demand as well as diagnostic

analysis of student performance per question to determine students' level of development in specific aspects of this module.

With the university continuously beset by issues of retention and throughput, it is evident that the innovation is a shift in a positive direction but also that ongoing development and research of the innovation is necessary for further enhancement of teaching and learning. Where this initiative stands at an all too familiar educational 'crossroad' is its inescapable reliance on personnel resources and on intensive, continuing development and monitoring – sustainable only if adequate financial resources are found.

References

Astin, A.W. 1984. Student Involvement: A Developmental Theory for Higher Education. *Journal of College Student Development* 25: 297-308.

Bensimon, E.M. 2009. Foreword. In Harper, S.R. & S.J. Quaye (eds.): *Student Engagement in Higher Education*. New York and London: Routledge.

Case, J. 2006. Issues Facing Engineering Education in South Africa. Published in the *Proceedings of the African Regional Conference on Engineering Education*, Pretoria, 2006. Available at: http://uct.academia.edu/JenniCase/Papers/116327/Issues_facing_engineering_education_ in South_Africa. (Accessed on 1 March 2012.)

Chickering, A.W. & Z.F. Gamson 1987. Seven Principles for Good Practice in Undergraduate Education. *AAHE Bulletin* 39,7: 3-7.

Fisher, G. 2011. *Improving Throughput in the Engineering Bachelor's Degree*. Report to the Engineering Council of South Africa.

Gibbs, G. 2010. *Dimensions of Quality. The Higher Education Academy*. Heslington: The Charlesworth Group.

Goodsell, A., M. Maher & V. Tinto (eds.) 1992. *Collaborative Learning: A Sourcebook for Higher Education.* University Park, PA: National Center on Postsecondary Teaching, Learning and Assessment, Pennsylvania State University.

Graham, C.R., T.R. Tripp, L. Seawright & G.L. Joeckel 2007. Empowering or Compelling Reluctant Participators Using Audience Response Systems. *Active Learning in Higher Education* 8,3: 233-258.

Harper, S.R. & S.J. Quaye (eds.) 2009. *Student Engagement in Higher Education*. New York and London: Routledge.

Johnson, B.R. & A.J. Onwuegbuzie 2004. Mixed Methods Research: A Research Paradigm whose Time has Come. *Educational Researcher* 33,7: 14-36.

Joint Initiative on Priority Skills Acquisition (JIPSA) 2010. *Growing Priority Skills in South Africa*. Final Report on JIPSA.

Krause, K. & H. Coates 2008. Students' Engagement in First-Year University. *Assessment and Evaluation in Higher Education* 33,5 493-505.

Kuh, G.D. 1991. *Involving Colleges: Successful Approaches to Fostering Student Learning and Development Outside the Classroom*. Jossey-Bass Higher and Adult Education Series. San Francisco: Jossey-Bass Publishers.

Kuh, G.D. 2003. What We're Learning about Student Engagement from NSSE: Benchmarks for Effective Educational Practices. *Change* 35,2 24-32.

Kuh, G.D. 2008. *High-Impact Practices: What they Are, Who has Access to Them, and Why They Matter*. Washington DC: Association of American Colleges and Universities.

Kuh, G.D. 2009. What Student Affairs Professionals Need to Know about Student Engagement. *Journal of College Student Development* 50,6: 683-706.

Kuh, G.D., T.M. Cruce, R. Shoup, J. Kinzie & R.M. Gonyea 2008. Unmasking the Effects of Student Engagement on First-Year College Grades and Persistence. *Journal of Higher Education* 79,5: 540-563.

Kuh, G.D., J. Kinzie, J.A. Buckley, B.K. Bridges & J.C. Hayek 2007. Piecing Together the Student Success Puzzle: Research, Propositions, and Recommendations. *ASHE Higher Education Report* 32,5. San Francisco: Jossey-Bass.

Kuh, G.D., J. Kinzie, J.H. Schuh & E.J. Whitt 2005. Never let it Rest: Lessons about Student Success from High-Performing Colleges and Universities. *Change: The Magazine of Higher Learning* 37,4: 44-51.

Nel, H. 2010. *Future of Engineering in South Africa. Tomorrow's Leaders' Conference*. Available at: http://www.saiie.co.za/index.php?option=com_content&view=article&id=222:future-of-engineering-in-south-africa&catid=95:newsletter-items&Itemid=212. (Accessed on 1March 2012.)

Pascarella, E.T. & P.T. Terenzini 1981. Residence Arrangement, Student/Faculty Relationships, and Freshman-Year Educational Outcomes. *Journal of College Student Personnel* 22: 147-156.

Pascarella, E.T. & P.T. Terenzini 2005. *How College Affects Students: A Third Decade of Research.* Volume. 2. San Francisco: Jossey-Bass. Available at: https://edocs.uis.edu/Departments/LIS/Course_Pages/LIS 301/papers/How_college_effects_students_534-545.pdf. (Accessed on 7 April 2012.)

Pocock, J., A.V. Bengesai & M. Moodley 2011. *Barriers to Progression: A Longitudinal Study of an Access Programme for Engineering.* SASEE Conference 2011. University of Stellenbosch, Cape Town.

Rasool, F. & C.J. Botha 2011. The Nature, Extent and Effect of Skills Shortages on Skills Immigration in South Africa. *SA Journal of Human Resource Management/ SA Tydskrif vir Menslike Hulpbron Bestuur* 9,1: 287.

Rush, L. & S. Balamoutsou 2006. *Dominant Voices, Silent Voices and the Use of Action Learning Groups in HE: A Social Constructionist Perspective.* Paper presented at the British Educational Research Association Annual Conference, University of Warwick, 6-9 September.

Strydom, J.F. & M. Mentz 2010. *South African Survey of Student Engagement (SASSE) – Focusing the Student Experience on Success through Student Engagement*. Pretoria: CHE Publication.

Tinto, V. 1993. *Leaving College: Rethinking the Causes and Cures of Student Attrition.* Chicago: University of Chicago Press.

Trowler, P. 2010. Student *Engagement Literature Review*. Lancaster: Department of Educational Research. Lancaster University.

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Cooperative Learning as an Innovative Strategy in the Teaching of Life Orientation Education: Experiences of PGCE Pre-service Students

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Abstract

This article explores cooperative learning as an innovative teaching strategy to prepare Post Graduate Certificate in Education (PGCE) pre-service students in terms of their teaching skills and content knowledge in Life Orientation (LO) Education. The LO Education curriculum is challenging as it focuses on the holistic development (physical, social, personal, intellectual, emotional and spiritual) of a learner. Working within a qualitative approach, this paper presents a case-study design involving ten purposively selected LO final year PGCE pre-service students as respondents. Data was generated using recorded semi-structured focus group discussions and reflective journals. Data analysis using a phenomenological model revealed problems in relation to ineffective promotion of positive interdependence, lack of effective and creative strategies for group activities, lack of knowledge of reflective practice and lack of confidence in teaching sensitive topics in the LO curriculum.

Keywords: cooperative learning, PGCE students, Life Orientation teacher, reflective journals

Introduction and Background

Every country needs teachers with specialised knowledge, skills, values and research capabilities on which they can draw in the task of developing competent and confident individuals empowered to participate as active

responsive citizens. In *Action Plan to 2014: Towards the Realisation of Schooling 2025* (Department of Basic Education 2010), Goal 16 is 'Improve professionalism, teaching skills, subject knowledge and computer literacy of teachers throughout their entire careers'. This complements the responsibility that a teacher has to advance education and develop learners as individuals, as construed in the South African Council for Educators Code of Professional Ethics.

To achieve this objective Life Orientation (LO) was introduced as a compulsory subject for grades R–12 as part of the restructuring of the South African education system after 1994, and also as part of the curriculum package for pre-service students registered for the one-year Post Graduate Certificate in Education (PGCE) qualification in a Higher Education Institution (HEI). The prerequisites for registration in PGCE LO specialisation in the university where the study was conducted are Sociology and Psychology (level 2) as majors in the Bachelor's degree that students have already acquired. Other subjects which provide an added theoretical advantage in understanding the interdisciplinary nature of LO education are Anthropology, Theology, Political Science, Criminal Law and Philosophy.

In the 19 years during which the new curriculum has been now in operation it has been observed that PGCE students registered for LO encounter a number of problems, which include reduced self-esteem and self-confidence, complexity of experiences in study activities, and difficulty in adaptating to new roles and relationships, especially during teaching practice (TP) (Bertram, Mthiyane & Mukeredzi 2013). This runs counter to the aims of the one-year (full-time) PGCE programme which is to equip pre-service teachers as good professionals who take the interest of learners to heart.

A particular challenge presented by the LO curriculum is that its focus goes beyond scholastic and academic achievement to include the holistic development and well-being (physical, social, psychological, emotional, spiritual, political and economic) of the learners (Magano 2011; Donald, Lazarus & Lolwana 2010; Prinsloo 2007; DoE 2000, 2002, 2006, 2011). During teaching practice for pre-service PGCE full-time students, which comprises a ten-week module working in two different schools, students are expected to demonstrate academic and professional abilities and utilisation of a range of teaching strategies relevant to different contexts (Robinson 2003). Pre-service teachers often find it a daunting transition to go

from HE academic programmes to teaching practice with practical application in an actual classroom (Frick, Carl & Beets 2010).

Following the recommendations made by Frick, Carl & Beets (2010), this study explored the experiences of pre-service LO teachers during the TP session and their use of cooperative learning as a teaching strategy. The study was underpinned by the following critical questions:

- What are the experiences of the LO pre-service teachers in relation to cooperative learning as a teaching strategy?

- How do pre-service teachers put cooperative learning into effect during their TP?

Literature

The pivotal task for LO teachers is to address the outcomes specified the LO curriculum. It has been noted by a number of authors (Helleve, Flisher, Onya Mukoma & Klepp 2011; Magano 2011; Theron 2008; Prinsloo 2007; Harden & Crosby 2000) that the LO teacher is expected to serve as role model, mentor, counsellor, pastoral carer, friend, parent, social worker and psychologist, *and* be creative and sensitive towards his or her learners.

Furthermore, good teaching and learning is not just about the curriculum or academic matters, nor is it confined to classroom; it is about stimulating young minds to think, through teacher–learner and learner–learner communication. Various authors (Wilken 2008; Morrow 2007; O'Brien 2004; Robinson 2003; Harden & Crosby 2000) have commented that good teaching should involve reflective experience – where the teacher is more than just expert or knowledgeable in his or her field, but is also capable of assisting learners to interpret knowledge through a range of interactive educational strategies.

The LO curriculum recognises that learning experience and instructional setting go beyond the traditional confines of the classroom. An informal setting has benefits for both teachers and learners since it presents learners with opportunities to solve real-life problems through play, creative art, and interaction with peers and adults, drawing on the resources of language and culture. Similarly, the physical education (PE) aspect of the LO

curriculum helps to promote the social, physical, psychosocial and emotional development of the individual.

Learning through Interactive Practices

The human/personal development aspect of LO reminds us on the one hand that each person is unique and on the other that no one exists in isolation. This makes it all the more appropriate, then, to foreground the value of cooperative and interactive modes of learning in the teaching of this subject and to give them priority in supporting pre-service teachers who are faced with the potentially daunting expectations of the LO curriculum and who are trying to get acquainted with their learners in the short space of time available to them in the TP session.

Cooperative, participatory learning is an active and reflective form of learning, centred on the learner, with the teacher as facilitator: small, heterogeneous groups of students participate in a collective task designed by the teacher in such a way that the students mutually maximise their learning (Vaughan 2002; van Wyk 2012). It is a mode of teaching in which the teacher needs to be well informed about the topic content and has a critical responsibility for lesson planning and for clear explanation to the learners of the requisite group activities, while at the same time catering for individual learning styles among the group to connect with their real-life experiences and prior learning. It is also important for the learners to have a sense of what is to be learnt, what conceptions or ideas may be changed, and why such learning or change of thinking may be desirable. As Kohonen (2003:9) remarks,

> An intentional conceptual change becomes possible when the person understands the reason for it and is facilitated to plan, monitor and evaluate the change processes through motivation, support and encouragement.

Getting learners to become actively engaged and responsible for their own learning in a class community enhances creativity and innovativeness in the culture of learning. Through cooperative learning they experience the benefits

of positive interdependence and acquire a belief in the value of working collaboratively (Haller, Gallagher, Weldon & Felder 2000; Slavin 1995).

In the Teaching Practice Classroom

South African society is extremely diverse, and both teachers and learners will bring to the classroom a wide range of backgrounds and life experiences. During the time of apartheid South African education served to exclude rather than to include, having little or no relevance to the culture and educational needs of the society, but in today's schools respect for diversity is critical for the daily process of learning and relationship between the students and teachers.

In the ten weeks of teaching practice, PGCE students are expected to demonstrate academic and professional abilities and ability to utilise a range of teaching strategies relevant to different contexts and stages of the teacher–learner relationship. In addition to being competent in subject content the trainee teacher has the further responsibility of creating a positive, safe environment where learners are allowed to explore, engage in discussions, construct and share new knowledge (Bertram, Mthiyane & Mukeredzi 2013; Donald, Lazarus & Lolwana 2010).

Literature on traditional classroom practices, where instruction is teacher-centred and teacher-directed, notes that this provides learners with little or no opportunity for active learning and authentic engagement with content (Adeyemi 2008; Hammann & Hendricks 2010; Kohonen 2013). A constructivist perspective, on the other hand, holds that learners can be empowered to construct meaning through interaction with others and can be encouraged to actively participate in dialogue though planned activities, and that this also represents best practice for teacher to demonstrate his or her competency or command of basic knowledge academically, pedagogically, socially and culturally (Arends 2007: 15). Extending this view, Spalding, Garcia and Braun (2010) stress the benefits of collegiality among teachers in allowing them to capitalise on each other's strengths. Similarly, Lunenberg, Korthagen and Swennen (2007: 586-587) point to the 'role model' function of the teacher as being productive of 'new learning outcomes, new kinds of learning processes and new instructional methods wanted by society'.

Embedded in the principles of the South African National Curricu-

lum Statement (NCS) and LO aims (DoE 2011) is the centrality of creative and critical thinking for both teachers and learners, where critical thinking involves development of logical reasoning and application of reflective practice and is self-empowering insofar as one sets standards to assess one's thinking skills.

Critical thinking generates sophisticated decision-making and problem-solving abilities which enable an individual to evaluate and question assumptions in different contexts such as the choices and decisions that confront learners in frequently complex career guidance element of LO (Rosenberg, Raven, Nsubuga, Mosidi, Ramsarup & Burt 2009).

Theoretical Considerations

Teaching practice exposes pre-service teachers, especially those with LO as their subject specialisation, to a complex set of interdependent relationships with the schools where they are placed, with their mentors, and with the learners in classroom. Differing environments will have a differing impact for each individual trainee, and each will in turn respond differently to the environments they encounter (Darling 2007). If the trainee encounters a major disturbance, relationships and interdependencies may become hard to keep in balance; when the relationships and cycles are in balance, the system can be sustained, but troubling psychosocial issues can be barriers to effective teaching and learning.

Research Design and Methodology

This qualitative study utilised a case-study approach with ten purposively selected PGCE student teachers having LO as their subject specialisation. As an HEI tutor/lecturer, I was allocated 12 students to visit in different schools for TP evaluation, of whom 10 consented to participate in the study. Eight of the schools – in which the ten participating students were placed – were in former African, Indian and Coloured townships; in a ninth school, a former white school, the two remaining two students chose not to participate. The participant sample comprised African, Indian and Coloured male and female pre-service teachers. They were all informed about the project and had

workshopped ahead of TP sessions on lesson planning and keeping a reflecting journal. Prior to the teaching practice, all participants had been exposed to a variety of teaching strategies including cooperative learning during LO lectures and tutorial sessions.

Data for the study was generated using two semi-structured, recorded 60-minute focus group discussions (FGDs) which sought to capture the perspectives of all participants. The discussions took place after the students' TP sessions had concluded. Individual reflective journals in which participant pre-service teachers reflected on their experiences prior and after the teaching of LO lessons (see Kohonen 2013) also played an important role as they provided a bridge between practical experience and theoretical conceptualisation. Participation was voluntary and flexible and all ethical issues were taken into account.

Following data collection, I used qualitative analysis in accordance with the phenomenological model proposed by Giorgi, Fischer and Murray (1975). I reviewed FGD transcripts and individual student teacher reflections and I determined categories and coded for key themes and interpretation.

Findings and data analysis

Data from the focus group interviews and reflection journals revealed students' experiences of using cooperative learning as a teaching strategy for LO lessons during TP, with respect to the following thematic/interpretive categories.

(a) Passion for Teaching and Complexity of Curriculum Content

South African learners face many social challenges in their personal lives, in their relationships, in issues concerning their peers, in their families and in their communities (Donald, Lazarus & Lolwana 2010; Clarke 2007; Arends 2007). Where these issues are addressed in the schools is in the LO classroom, which makes the quality of the LO teaching and learning they experience in the classroom crucially important; good teaching and learning happens, as Clarke (2007) reminds us, 'when learners are thinking about their thinking', and it happens in what Taggart and Wilson (2005) refer to as 'reflective thinking/practice'.

An innovative teacher has the potential to bring about change in the lives of all learners, including those confronted by cognitive and psychological obstacles. Student teacher respondents in the study indicated awareness of this potential in comments such as the following:

> *We need to protect them and care for them as if they are our own. / It kept them interested and I used real-life examples. / Grade 6, Grade7, and even Grade 10 couldn't read and write. / Some terms in LO are difficult to understand and explain… language and communication is a barrier as English is my mother tongue and theirs IsiZulu / at schools there are no books….. I had to buy books*

Essentially, they had to try to make sense of the situation and be responsive in their pedagogy – and their responses indicated that they were learning the value of self-reflection.

> *I had thought LO is easy but ayi-khona [not at all] I had to do my homework / I knew my learners needed planning strategies that best suited them. / Deal with emotions of Teaching Practice…. escape frustrations of unruly learners…. I had to show them that I am here for the reason…. wondered if I was boring, current issues?*

The trainees were experiencing at first hand the multiplicity of problems facing South African education 'at a crossroads', and the challenges that face them as future teachers of the LO curriculum in particular.

One specific aspect of LO that some student teachers found initially daunting was the PE element of the curriculum:

> *Physical Education…I had no idea of what is done / I managed to convince students to participate [in LO PE lessons]. They felt proud of themselves….. I also felt so good as a teacher! / The lesson was very interesting. I enjoyed it myself*

This was to be expected as the pre-service teachers had not been exposed to PE methodology in their courses prior to TP. Notable in this context was an instance where teamwork and the teacher's gender had encouraged female learners to participate and made the trainee feel like a 'good teacher'.

(b) Establishing Interconnection of Isolated Social Stations

As Slavin (1995:73) puts it, 'cooperative learning usually supplements the teacher's instruction by giving students an opportunity to discuss information or practice skills', but for some of the student teachers, problems of discipline in a cooperative learning setting produced escalating feelings of helplessness:

> *I questioned myself as to whether I was joining the correct profession and do I want to subject myself to such abuse from learners at this age.*

Faced by lack of respect from learners, the beginner teacher may well struggle to maintain discipline, especially in group work (Clarke 2007), as respondents in the study discovered:

> *My mentor… we both failed to control them / I realised that these kids don't have respect for themselves, so how can they have respect for others?*

This mention of *'others'* highlights the pre-service teachers' prior expectations of collaboration, collegiality and support. Some of the respondents felt isolated and abused – '*not part of the collective*' – and even the presence of the mentor did not ameliorate the feeling of being both disrespected and disregarded. As one respondent put it, expressing doubt as to whether she was making the right career choice,

> *Who am I to deal with these learners? … at this age [and] out of control.*

Cooperative learning hinges on respect, responsibility and accountability, and the requisite interrelationships for effective group culture take time to develop. The process happens in a context that, according to Donald, Lazarus and Lolwana (2010), calls for attention, exploration, manipulation, elaboration, and imagination. For the study respondents, the learner behaviour they encountered was outside of their expectations, with learners manifesting signs of being in trouble and having 'issues' of behaviour where appropriate intervention needed to be established.

Remarks by various respondents suggest some of the ways in which they sought to meet the classroom problems they encountered:

> *I spoke to them like adults, laid down rules of my classroom space together with them / Consider the manner in which you carry yourself out / We did not do LO when we were at school, different generation…you have to groom them; it's your responsibility as a teacher*

The respondent who spoke here of '*my classroom space*' quickly remembered that in a cooperative learning setting each and every member of a group has a responsibility and is accountable, qualifying her comment with the addition, '*together with them'*, thus acknowledging the need to motivate learners and show that they are valued and that their opinions count. Classroom rules apply to all members of the class: as a teacher you should provide a model for behaviour and tolerance and show your expertise and confidence in your class. These novice teachers acknowledged the impact of the generation gap, the challenges in the teaching of LO that require patience, and also their responsibility as LO teachers to *'groom'* appropriately.

Arends (2007: 60) notes how diversity in culture, ethnicity and race present difficult instructional challenges for teachers. Although it is necessary to acknowledge diversity in cooperative learning, for solving problems in a collective the emphasis should be on what groups create (their culture) rather than on groups in themselves. Group culture does not reside in students alone but extends to the wealth of strategies that teachers use to avoid what Arends refers to as 'discontinuity and miscommunication' between home and school, based on culture, beliefs and values.

The respondents also expressed strong feelings about what they considered realistic and what they considered unrealistic in LO teaching expectations. The chief complaint in this regard was the gap between what the training institution expected of group work and the reality they encountered in the schools. The barriers were contextual: for example, in nearly all classes, especially LO classes, the respondents encountered threatening contextual factors: 72 learners, or 86, or 93 in a single class. Even so, 'no matter what the circumstances are, the job of the teacher is to teach' (Morrow 2007:4). Overcoming challenges on such a scale meant drawing from a variety of resources to keep learners motivated and interested in an LO lesson:

> *incorporate many resources / recognition of hard work, understanding, [being] motivational / much effort in preparing this lesson…/ But planning is important. Plan ahead guidelines / and read! read!*

One of the respondents commented that LO had given her a platform and foundation to become an excellent, innovative teacher through practice and reflecting on her practice, and mentioned the value of her reflective journal: '*I did not know what reflections were. I just reported what happened on that day'.* This is one of the skills that all teachers need to cultivate in order to improve their practices and widen their range of variety of teaching strategies, and also to inculcate reflectiveness in their learners.

Emotive topics such as death and mourning require sensitivity on the part of LO teacher, especially in cooperative learning settings, and forward planning should make provision for counsellors, educational psychologists and social workers to be on standby for possible referrals should there be a crisis. Magano (2011) comments that HEIs should align the training they offer to produce what she refers to as 'a new kind' of a teacher who will meet the demands of a the 21st century. The respondents largely concurred, in their critique of the disjuncture between what is taught in HEIs and what they are faced with in schools when they go for teaching practice.

(c) Cooperative Learning and Critical Thinking

Thinking critically means asking questions instead of accepting facts at face value; it means working creatively with knowledge and exercising control of the learning material. Respondents felt that although they initially found it difficult to conduct cooperative learning activities, by the end of the TP session things had changed:

> *I know some students who were affected and infected by HIV and AIDS .... Group work, role plays, watching the video, drawings, all made them to open up …. [bringing in] .real life experiences … [they found] their ideas valued and self- esteem enhanced.*

In one instance, testimony from a learner who was a trained caregiver in a

community organisation for people affected by HIV/AIDS proved to be informative for the whole class and consequently changed attitudes.

Although putting cooperative learning into practice in PGCE LO classes showed positive results for the trainee teachers, challenges remained in relation mainly to management of discipline in schools and the status given to LO as a subject.

Despite the many educational and social problems faced by learners, cooperative learning methods are gaining popularity and many studies indicate that they heighten achievement and self-concept for learners, and quality of interpersonal relationship and regard for others for student teachers. Some responses from study participants indicated that support for cooperative learning as a strategy stemmed in some cases from prior experience:

> *abuse was just like normal to some students… so they could understand or relate and identify with some ideas shared / I felt very bad to say goodbyes*

As previously mentioned, established teachers very often lack confidence in teaching critical issues and pass them off to novice teachers to grapple with., But the fact of the matter is that every teacher must commit to being a lifelong learner, and to knowing and understanding the subject content. In particular, accountability and competence define someone as an effective life skills teacher. Collaborative learning requires ongoing renewal of approaches, development of trust and recognition of the uniqueness of each individual. A declaration by one of the respondent was expressive of this kind of commitment:

> *I will use this approach… I had changed, I fell in love again with teaching…where I 'felt alone', 'no support', 'ill-disciplined learners' had to happen for me to be strong and follow my passion.*

Student teachers confirmed that it was not easy to control discipline because some of the topics led to learners becoming '*too excited'* and '*out of hand'*. The emphasis was on getting learners to participate in their roles and activities planned for them.

Conclusions and Suggestions

The study revealed a multitude of challenges facing student teachers of LO in their teaching practice sessions, but also potential steps to meet some of these challenges. Using cooperative learning was an unfamiliar experience for the respondents, and their participation in this project and the sharing of their teaching practice experiences revealed a need for individual and collective support. Among the points that emerged was their realisation that teaching LO is by no means as easy as it may have seemed, and that many of the LO topics needed to be studied in depth because learners '*want to learn and they participate*'; there was also a realisation that this requires thorough planning, good student–teacher and learner–learner relationships, and also more specific attention to the Physical Education aspect of LO. The respondents also found it interesting to notice the change in academic and social behaviour of the learners as the pre-service teachers themselves gained increasing confidence in their practice and began to acquire the classroom management skills that are crucial for good mutual interaction between teacher and learners. They also came to realise that LO benefits from working in small groups.

One of the suggestions made by the respondents was that the HEI should network with the schools to support teachers and PGCE students jointly in the students' first year of practice. The particular suggestion was that the teachers should be encouraged to collaborate by through forums to be held at the HEI, during school holidays, in which HEI lecturers dealing with LO would be briefed on practical realities of LO activities and programmes in the schools that could be taken into account in the development of corresponding HEI programmes and courses. This idea was enthusiastically supported by the respondents as a potential structure to build confidence and to integrate PGCE students in a community of practice. An alternative suggested forum would include participation of learners and LO teachers from neighbouring schools.

Respondents also suggested planned activities, workshops, and community engagement that would enhance critical understanding of the existence and development of the self-in-society. Teachers learn best through interaction with other teachers, and, with experts acting as 'critical friends' in professional learning communities, an environment of mutual trust may be possible.

References

Adeyemi, B.A. 2008. Effects of Cooperative Learning and Problem-solving Strategies on Junior Secondary School Students' Achievement in Social Studies. *Electronic Journal of Research in Educational Psychology* 16/6,3: 691-708.

Arends, R.I. 2007. *Learning to Teach.* 7th Edition. Boston: McGraw-Hill.

Bertram, C., N. Mthiyane & T. Mukeredzi 2013. 'It will make me a real teacher': Learning Experiences of Part-time PGCE Students in South Africa. *Journal of Educational Development* 33:448-456.

Clarke, A. 2007. *The Handbook of School Management.* Cape Town: Kate McCallum.

Darling, N. 2007. Ecological Systems Theory: The Person in the Centre of the Circles. *Research in Human Development* 4,3-4: 303-217.

Department of Basic Education 2010. *Action Plan to 2014: Towards the Realisation of Schooling 2025*. Available at http://www.education.gov.za /Curriculum/ActionPlanto2014/tabid/418/Default.aspx. Department of Education (see DoE).

DoE 2000. Norms and Standards for Educators. *Government Gazette* No. 20844 4 February 2000. Pretoria. Government Printer.

DoE 2002. *Revised National Curriculum Statement Grades R-9 (Schools). Life Orientation*. Pretoria. Government Printer.

DoE 2006. *National Curriculum Statement Grades 10-12 (General) Life Orientation.* Pretoria. Government Printer.

DoE 2011. *Curriculum and Assessment Policy Statement for Life Skills/ Life Orientation. Grades 4-6; 7-9 & 10-12*. Pretoria. Government Printer.

Donald, D.R., S. Lazarus & P. Lolwana 2010. *Educational Psychology in Social Context: Ecosystemic Applications in Southern Africa*. Cape Town: Oxford University Press.

Frick, L., A. Carl & P. Beets 2010. Reflection as Learning about the Self in Context: Mentoring as a Catalyst for Reflective Development in Pre-service Teachers. *South African Journal of Education* 30:421-437.

Giorgi, A., C.T. Fischer & E.L. Murray 1975. *Duquesne Studies in Phenomenological Psychology*. Atlantic Highlands, NJ: Humanities Press.

Haller, C.R., V.J. Gallagher, T.L. Weldon & R.M. Felder 2000. Dynamics of Peer Education in Cooperative Learning Workgroups. *Journal of Engin-*

eering Education 89,3: 285-29.

Hammann, D. & B.C. Hendricks 2005. The Role of the Generations in Identity Formation. *Erikson Speaks to Teachers of Adolescents* 79,2: 72-75.

Harden, R.M. & J. Crosby 2000. The Good Teacher is More than a Lecturer – The Twelve Roles of a Teacher. *Medical Teacher* 22,4: 334-347.

Helleve, A., A.J. Flisher, H. Onya, W. Mukoma & K-I. Klepp 2011. Can *any* Teacher Teach Sexuality and HIV and AIDS? Perspectives of South African Life Orientation Teachers. *Sex Education* 11,1: 13-26.

Kohonen, V. 2013. Learning to Learn through Reflection – An Experiential Learning Perspective. Available at: http://archive.ecml.at/mtp2/Elp_tt/Results/DM_layout/00_10/05/Supplementary%20text%20E.pdf.

Lunenberg, M., F. Korthagen & A. Swennen 2007. The Teacher Educator as a Role Model. *Teaching and Teacher Education* 23,5: 586-601.

Magano, M.D. 2011. The New Kind of a Teacher to Handle the New Subject: Life Orientation in a Township High School in South Africa. *Journal for Social Sciences* 28,2: 119-127.

Morrow, W. 2007. What is a Teacher's Work? *Journal of Education* 41:1-18.

O'Brien, A. 2004. Teacher, Mentor or Role Model? The Role of the Artist in Community Arts Work with Marginalised Young People. *Change: Transformations in Education* 7,2: 74-88.

Prinsloo, E. 2007. Implementation of Life Orientation Programmes in the New Curriculum in South African Schools: Perceptions of Principals and Life Orientation Teachers. *South African Journal of Education* 27,1: 155-170.

Robinson, M. 2003. Teacher Education Policy in South Africa: The Voice of Teacher Educators. *Journal of Education for Teaching* 29,1:19-34.

Rosenberg, E., G. Raven, Y. Nsubuga, S. Mosidi, P. Ramsarup & J. Burt 2009. How About a … Biologist? A Short Report on Environmental Career Guidance for School Leavers. Eco-Schools Conference, Cape Town.

Slavin, R.E. 1995. *Cooperative Learning: Theory, Research and Practice.* Boston: Allyn and Bacon.

Spalding, E., J. Garcia & J. Braun 2010. *An Introduction to Standard-Based Reflective Practice for Middle & High School Teaching*. New York: Teachers College Press, Columbia University.

Taggart, G.L. & A.P Wilson 2005. *Promoting Reflective Thinking in Teach-*

ers: 50 Action Strategies. Thousand Oaks, California: Corwin Press.
Theron, L.C. 2008.The Batsha-Life Orientation Study – An Appraisal by Grade 9 Learners Living in Townships. *Education as Change* 12,1:45-65.
Van Wyk, M. 2012. The Effects of the STAD-Cooperative Learning Method on Student Achievement, Attitude and Motivation in Economic Education. *Journal for Social Sciences* 33,2:261-270.
Vaughan, W. 2002. Effects of Cooperative Learning on Achievement and Attitude among Students of Color. *The Journal of Educational Research* 95,6:359-364.
Wilken, C.S. 2008. *Learning to Live Through Loss: Grief and the Mourning Process*. Florida Cooperative Extension Service: University of Florida. Available at: http://edis.ifas.ufl.edu/pdffiles/FY/FY88100.pdf.

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Conceptions and Misconceptions of Tourism as a Subject in the South African School Curriculum

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Abstract

The post-apartheid government of South Africa has made various attempts to achieve fundamental transformation of the education system. In 1996 the Department of Education (DoE), now the Department of Basic Education, introduced the new subject of tourism as part of the formal school curriculum. Tourism was introduced as a school subject with a view to redressing past imbalances by contributing to social transformation (DoE 2003). The aim of this paper is to explore how tourism as a new subject has been received in schools. It critically investigates conceptions and misconceptions about tourism as a new subject introduced in the school curriculum. The empirical work took the form of a case study of secondary (FET phase) schools that had included tourism in their curricular offering. Data were collected through interviews. The findings indicate that most of the participants view tourism as a subject worth including in the school's curricular offering, believing that it exposes learners to a variety of career opportunities they were not exposed to in the past. At the same time, however, they all see tourism as having a low status within the curriculum as it is not an academic subject leading to university entrance. This places its existence at a crossroads as it is simultaneously regarded as important from the practical standpoint but unimportant from the academic one.

Keywords: tourism education, subject status, school curriculum

Introduction

When South Africa became a democratic country in 1994, various changes

were introduced, including changes in educational policy and curriculum framework. Specifically, to transform the education system, a review focusing on the structure of the curriculum, subject offerings and packages, human resource development and qualifications, became necessary (Department of Education 2003). In 1996, the then Department of Education (DoE) introduced tourism as a new subject in the school curriculum. This step was linked to a recognition of the tourism industry as one of the sectors with the most potential to contribute to economic development, the diversification of the economy, and the generation of foreign earnings (New Partnership for Africa's Development 2004; Inui, Wheeler & Lankford 2006; Thitthongkam & Walsh 2011). Tourism is regarded as South Africa's fastest growing industry and an important contributor to the Gross Domestic Product (Pan-African Investment Research Services 2010). Seen against this background, the introduction of tourism as a subject in schools was aimed at giving a helping hand to economic transformation in post-apartheid South Africa (Department of Education 2003).

The importance of tourism in the economy prompted the development of school curricula relevant to the support of the industry. In South Africa, the development of the tourism industry and, linked to that, tourism as a school subject, has become one of government's priorities for realising the goals of reducing unemployment and alleviating poverty (Bornman, Budlender, Vetten, Van der Westhuizen, Watson & Williams 2012). To sum up, tourism was introduced into the school curriculum in step with the growth of the tourism industry, and with a view to stimulating further growth by satisfying the anticipated demand for an increased workforce in the industry (Strietska-Ilina & Tessaring 2005).

The available literature suggests that tourism education supports an industry that offers increased employment opportunities. For example, Manyathi (2012) argued that tourism education has become popular because of the growth of the sector and the need for a larger workforce if the sector is to realise its potential to make a meaningful contribution to national economic development. Nkumane (2008) highlighted the point that teaching tourism in schools would help learners to get employment and thus contribute to alleviating the problem of unemployment. Hence, Earle (2008) claims that tourism is a sector better placed than most for contributing to government's objectives of job creation, economic growth and poverty relief in South Africa.

Tourism does not have a long history as a school subject (Page & Connel 2006; Walmsley 2009), having only recently received attention as a choice subject offered by a number of schools in the country post-1994. Not surprisingly, there has been an ongoing debate about its status following its introduction as a field of study (Tribe 2001; Leiper 2000). Tribe (2001), for example, maintained that tourism is not a unitary discipline, but consists of two distinct fields, the business aspect of tourism and its non-business aspect. For Tribe, the fact that tourism education originates from industry and initially focused on business aspects weakens its status as a discipline. This view is seconded by Geirsdottir (2008) who suggested that the relation of the discipline to its vocational field motivates teachers to privilege the needs of the industry, thereby weakening its status as a discipline. While some privilege the business aspect of tourism, others favour its more academic aspect. An emerging voice views tourism as a 'threshold' subject (Meyer & Land 2003), suggesting that it needs to integrate vocational and academic aspects the better to ensure career prospects and lifelong learning in the field of tourism. This paper is premised on the notion that the way in which schools view tourism informs their decisions about whether or not to include it in the curriculum. The aim of this paper is to investigate the conceptions (and possible misconceptions) underlying the reception of tourism into the school curriculum. The investigation was conducted by canvassing the views of various stakeholders connected in some or other capacity with tourism as a subject in the school curriculum.

Tourism in the South African School Curriculum

Tourism has been approved as a subject for inclusion in the school curriculum. It is offered as one of the three choice subjects that the learner can take to make up the required seven subjects stipulated by the National Curriculum Statement (NCS) (DoE 2005). Even though tourism is in the approved list of subjects offered, its status is adversely affected by its omission from the designated subjects list. The subjects not on the designated list will not qualify learners for admission to a Bachelor's degree, unless combined with four designated subjects (Department of Basic Education [DBE] 2011). This raises doubts about the viability of tourism in the

curriculum because of the issue of points used by tertiary institutions to determine admission to particular university programmes. The Academic Points System outlined in the Central Application Office document (2010) states that as far as tertiary institutions in KwaZulu-Natal are concerned, points are awarded to all recognised subjects in the NCS, including non-designated ones, with the exception of Life Orientation. So schools appear to be misinterpreting higher education policy, at least as regards the points issue, since universities in KwaZulu-Natal award points for tourism as for other recognised subjects in the NCS. (It needs to be borne in mind, however, that awarding points for a school subject is a matter separate from whether that subject counts for admission to a degree programme; it may only be good for admission to a diploma or certificate programme.) The standing accorded a given school subject by universities' admission policies is important as it strongly influences schools' curriculum decisions. This implies that school subjects require a power base in university curricular offerings in order achieve higher status in the school curriculum (Paechter 2000). It is against this backdrop that Inui *et al.* (2006) argues for a balanced approach between the vocational and academic aspects of tourism, with a view to its gaining recognition as a subject counting towards university admission for degree purposes.

In some higher education institutions in South Africa, tourism is offered as an academic discipline, counting towards qualifications at the certificate, diploma and degree levels. Consequently, the teaching of tourism in secondary schools would then be perceived as an advantage for learners interested in pursuing studies in tourism at the higher education level. Geldenhuys (2000) asserts that the tourism curriculum in the tertiary education setting should be regarded as an extension of the school curriculum, so that the subject as taught at school level gives learners an advantage for further studies. Still, as long as tourism remains a non-designated school subject, learners interested in pursuing degree studies at university level will have little incentive to choose it at school (Earle 2008), since, as noted above, tourism does not qualify learners for Bachelor's degree entrance. Consequently, obtaining a pass in secondary school tourism gives learners interested in studying tourism at degree level in a university no real advantage. This contradicts the claims by O'Mahony and Sillitoe (2001) who argue that one of the great advantages of tourism as a school subject is that it also has an impact on tourism training at the tertiary level.

Theoretical Framework

The analysis in this paper is underpinned by Rogers' (2003) innovation framework. Rogers' theory argues that the attributes and characteristics of the innovation itself are particularly important in determining the manner of its diffusion and the rate of its adoption. According to this framework, the attributes of the innovation include its nature and its advantages and also determine whether those who will implement it understand it. Rogers (2003) proposes four attributes that are necessary for reducing uncertainty about the innovation. According to him, the relative advantage of an innovation in terms of cost implications and general status is the strongest predictor of its success. The innovation (for example, a new subject in the school curriculum such as tourism) may be seen as providing better opportunities and outcomes than existing programmes, and these considerations could outweigh the innovation's perceived low status. Fullan (2001) emphasised the importance of the link between the proposed innovation and people's conceptions/ misconceptions about it. In these terms, the perceived relative advantage of tourism as a school subject would be the determining factor in people's views about it.

The second attribute identified by Rogers (2003) is the compatibility of the innovation (its contextual suitability) with existing programmes in the school. To illustrate, if tourism as a subject is viewed as compatible with existing subjects in the school, uncertainty about its status and value would decrease and attitudes to its introduction could be expected to become more favourable. The third attribute suggested by Rogers is observability. Rogers argues that if members of the school community are able to foresee the results of the innovation, they are more likely to understand it, and to accept and adopt it, if what is foreseen is concluded to be beneficial. In this context, Fullan (2001) cautions against adopting innovations not preceded by a careful examination of whether they effectively address the needs of the community (the intended target). It is therefore important for a school not only to understand the nature of the innovation, but also to anticipate its impact on the community. Working in favour of a community's acceptance of an innovation is its acceptance of the need for change and its willingness to experiment with new ideas (Van Rooy 2005). The fourth attribute suggested by Rogers (2003) is complexity. In this regard, Rogers argues that the complexity of the innovation, together with the manner in which it is

introduced, will determine the level of acceptance by the target community. As a general principle, the more complex the innovation and the process of its introduction, the greater will be the risk of generating misconceptions and resistance. Using Rogers' framework, Chigona and Licker (2008) concluded that the likelihood of an innovation's being adopted depends partly on the attributes identified by Rogers.

Informed by this framework, the study reported in this paper is premised on the notion that the ways in which the stakeholders understand the nature and potential of tourism as an innovation in the school curriculum bear importantly both on its acceptance and effective implementation. The study addressed the question: What are curriculum decision-makers' conceptions and misconceptions regarding tourism as a school subject? In what ways do these influence their decision to include or not include tourism as a subject in the curriculum?

Research Design and Methodology

To address the research questions, data were collected from four high schools in the UThukela district of KwaZulu-Natal which have included tourism as a subject in grades 10-12. As the schools are located in an area declared by UNESCO as a world heritage site (UNESCO 2000), tourism in the vicinity of the selected schools is a thriving industry. To identify the four 'case schools' for the study, purposive sampling as suggested by Merriam (2009) was used. This involved using data obtained from the Uthukela District Examination Office. The schools under study present similar features in their curriculum: in addition to tourism, they all offer science, economic and management sciences and humanities. Busabusa[1], however, offers an additional stream of technical subjects. Two of the schools (Kwasakwasa & Nawe) have tourism in all three grades of the FET phase. The other two schools, Kuzolunga and Busabusa, offer tourism in only two grades: at Kuzolunga in grades 11 and 12, and at Busabusa in grades 10 and 11. The numbers of learners taking tourism varied from school to school: at Kwasakwasa, enrolment ranged from 9 to 35, at Kuzolunga from 10 to 35, at Nawe from 45 to 55 and at Busabusa from 13 to 32.

[1] Pseudonyms are used to protect the identity of the schools involved in the study

The persons interviewed at each of the schools included curriculum decision-makers and those with a vested interest in the subject and in curriculum-innovation matters. Accordingly, data were collected from the principal, the Head of Department for Tourism and the tourism teacher in each of the schools. In-depth interviews were conducted individually with a total of 12 participants from all four schools. This paper reports the findings of those interviews as they bear upon the participants' conceptions (and misconceptions) of tourism as a curricular subject on offer to learners.

Conceptions and Misconceptions of Tourism as a School Subject

As the views of the participants in this study suggest, their perspectives on the role and status of tourism as a school subject point to a paradox: on the one hand, tourism is regarded as an important subject inasmuch as it provides learners with vocational skills, inclusive of practical and occupational skills (Busby 2001), and, more importantly, with skills advantageous for securing employment, thereby alleviating the problems of unemployment and poverty in communities. On the other hand, as will be discussed in the section below, the status of tourism in the curriculum is perceived to be low.

Tourism as an Important Subject in the Curriculum

The available literature (e.g. Marshall 2005) suggests that the tourism industry plays a major role as a lead contributor to the economy of South Africa. In the light of that, Le Grange and Beets (2005) argue that the inclusion of tourism as a curricular subject could be of direct benefit to the economy, as well as of indirect benefit by reducing the high unemployment rate through the creation of new career opportunities. This view is supported by Page (2005) who notes that many governments see tourism as offering new employment opportunities in a growing sector of their economies.

Participants' understanding of tourism as an important school subject could be influenced by the location of their schools around a world heritage site. So, for example, participants viewed as valuable the potential of tourism to create employment opportunities in the area in which the schools are located; nevertheless, a more global understanding of the subject as a gateway to

career opportunities in the tourism industry in general predominated. In this regard, principals, HODs and teachers were of one mind. To illustrate, one participant stated:

> *We have included tourism in our curriculum because it is an engaging subject that exposes learners to employment and also career opportunities if it is taught at school (Princpal: Kwasakwasa).*

The Department of Environmental Affairs and Tourism declared in 1996 that education and training in tourism had become imperative to provide knowledge about and for the tourism industry. This imperative was recognised by participants in this study; as one principal put it:

> *There are also new opportunities to venture into new careers that were not known to us as a black community ... through teaching tourism we believe they will be known to us and our learners can follow those careers in the tourism industry (Principal: Kuzolunga).*

Furthermore, principals strongly argued that teaching tourism in schools would make learners aware of job and career opportunities in the tourism industry, whether local or farther afield. As one teacher explained:

> *There are career prospects for learners in this area since it is surrounded by many hotels and there are many tourists who are visiting the area so learners do have opportunities to follow careers in the tourism industry. Learners can follow many careers in tourism or start their own small businesses (Tourism teacher: Nawe).*

These views tie in with claims by the South African government (Department of Environmental Affairs and Tourism 1996) that the majority of South Africans have never seriously enough considered the tourism industry's potential in terms of employment opportunities, one of which would be learners starting up their own small-tourism related businesses after leaving school. On the basis of this perspective, the teaching of tourism in the schools surveyed is viewed as a priority as the respondents believe that the study of tourism will lead to employment opportunities in the tourism industry as well

as to entrepreneurial opportunities. This outlook tallies with the argument by Lewis (2005) that the aim of tourism as a school subject is to prepare learners for joining the work force or becoming self-employed.

Second, linked to the above, the participants in this study also viewed tourism as a subject providing vocational and practical skills yielding immediate benefits for the learners and community. In this perspective, tourism is conceived as a subject that is practical and teaches learners vocational competencies such as occupational and business skills (Braun & Hollick 2006) at an early stage of their schooling. Steynberg, Slabbert and Saayman *(*2002) claim that a number of countries, including South Africa, have included tourism in the curriculum of secondary schools to equip learners with a range of desired skills, both those occupationally specific to the tourism and hospitality industries and others having a wider application. Under the former head one may point to technical skills such as effective communication and competent customer service; under the latter, one would highlight information-processing skills, critical-thinking and problem-solving skills, and creativity. Explaining the reasons for her school's decision to include tourism in the curriculum, one HOD stated:

> *We wanted to give learners some skills and knowledge about the tourism industry ..... then they can educate the community about tourism and treating tourists because we have many tourists coming to the area .... I think we are achieving that by giving learners some skills to work in the tourism industry (HOD: Kwasakwasa).*

A teacher from another school agreed:

> *Tourism is not only a theoretical subject but provides skills at school level. We expected learners to take advantage of this subject and start their own businesses immediately after matric with skills acquired in the subject. This is about tourism developing entrepreneurial skills (Tourism teacher: Kuzolunga).*

The findings of the study suggest that stakeholders share a belief that the tourism curriculum focuses on developing skills relevant to the tourism industry's needs. Backing up this belief is the research of Airey (2005) and Breytenbach (2010) whose conclusion is that most of the content in the

tourism curriculum is geared to developing skills that groom students for employment in the tourism industry. These are practical skills such as tour planning, checking procedures, and bookings. On the more theoretical side, the curriculum surveys the basic concepts of the industry and seeks to impart knowledge about it. Germane here is Busby's contention (2001) that tourism programmes should develop skills and competencies required by different facets of the industry in order to offer graduates a range of employment opportunities.

The generally positive assessment of the curriculum was however accompanied by reservations and doubts. Some of the interviewees seemed unsure whether it really equips learners with the skills necessary for a successful career in the tourism industry. Their uncertainties were evident in such statements as:

> *Tourism content is not clear, to be honest I am not much sure of its content .... in that way I am not really sure if learners who are doing tourism as a subject are armed with necessary skills for the world of work (Principal: Busabusa).*
>
> *Yes, we are told that the subject provides skills but we have not seen any of our learners acquiring those skills or maybe demonstrating them in any way (Principal: Kwasakwasa).*

Again, although participants viewed tourism as a subject that would open up a range of new career opportunities for learners, concern was expressed about the lack of specific information regarding the location of such careers in the industry (see Lui 2006). In this connection, one principal commented:

> *There are career prospects in different sectors of the economy, although I am not sure exactly as to what are specific careers but I know that learners can follow many careers because they are all related to tourism (Principal: Kwasakwasa).*

The principals in particular felt that there is a need to establish more precisely whether learners are actually being taught the skills required by their potential employers. But this may not be easy to do as, in the view of some scholars, the content of tourism as a field of study is a contested terrain (Ernwarti 2003; Cervera-Taulet & Ruiz-Molina 2008). At the same time, one

should bear in mind Chigona and Licker's caution (2008) that not all innovations can be expected to yield immediate results.

While stakeholders interviewed for this enquiry displayed a degree of ambivalence about tourism as a school subject, particularly in relation to its curricular content, they appear to be unanimous in agreeing that its status in the hierarchy of school subjects is low.

The Low Status of Tourism as a Subject in the Curriculum

Although participants believe that tourism is an important curricular subject at school level because of its potential for improving learners' prospects of employment, they also acknowledge its low status in the school curriculum. The main reason for this is the fact that tourism is vocationally aligned and not a pure academic subject. In the minds of teachers, learners, parents and the public, a principal determinant of a subject's perceived value is whether it counts for admission to a degree programme at a university. As most universities do not offer tourism as a major subject, and as it does not count for admission to university degree programmes, its standing as a school subject inevitably suffers. Even though the National Curriculum Statement grants tourism recognition as a school subject, the fact that it is not on the designated list undermines its standing. As a result, schools tend not to prioritise it, parents tend to regard it as unimportant, and so, in their turn, do teachers and learners. So its relegation to a low status is hardly avoidable. A teacher explained the devaluing of tourism in these terms:

> *The management and colleagues in the school always send negative comments about tourism. They also feel that it doesn't help learners who want to be admitted to a bachelors [degree] because in the NCS it doesn't count for points. They think it overloads the curriculum unnecessarily (Tourism teacher: Kwasakwasa).*

The low status of tourism as a school subject is also a concern for the tourism industry which has questioned the exclusion of tourism from the designated list of subjects (NewstalkZB 2010). At the same time stakeholders within the schools mistakenly assume that subjects not on the designated list are not

recognised for admission to any programmes at the tertiary level. Thus an HOD declared:

> *I am now not sure if we need to take this subject seriously …. it gives no points at the university (HOD: Kuzolunga).*

Exacerbating the situation is the reported view of district officials who regard tourism as unimportant and have urged its removal from the school curriculum. The attitude of district officials[2] towards tourism, based, it seems, on a misconception, confronts schools that have included tourism in the curriculum with a dilemma. Certainly, the participants in this study felt discouraged by the district officials' attitude; they reported district officials who visited their schools to review performance as having recommended the dropping of tourism from the curricular offering. As one HOD explained:

> *District officials have proposed the exclusion of tourism…as the school is too small to have more than two streams…take out one less important subject like tourism so that learners can focus on sciences and accounting (HOD: Kuzolunga).*

With tourism as a subject devalued at the university level, the district level and school-management level, can one blame learners and their parents for not taking it seriously. Liu (2006) has noted the constraints on choosing tourism as a school subject and making it a career choice; these constraints affect teachers, learners and parents alike. After all, as Lewis (2005) contends, schools and other stakeholders tend to value those subjects they regard as important, particularly for entry to university degree programmes, and vocational subjects such as tourism fall outside the valued list.

Conclusion and Implications

This study focused on conceptions and misconceptions regarding tourism as an option relatively recently authorised for inclusion in school curricula in

[2] District officials refers to all officials employed at the district level of the department of Basic Education to support and monitor the implementation of the curriculum

South Africa. Aiming to explore school curriculum decision-makers' conceptions and misconceptions regarding tourism and how these influence their decisions whether or not to include it as a subject in the curriculum, the study canvassed the views of the principal stakeholders in four KwaZulu-Natal secondary schools in which tourism forms part of the curricular offering. All four schools are located in an area where the tourism industry is well developed. Participants' views as reported in the study suggest that the status and value of tourism as a subject in the curriculum lay bare a paradox, for tourism is simultaneously viewed as having value and as having low status, and this contradiction poses a threat to its viability and to its continuance in the school curriculum.

The view that tourism is a subject with value is based on the perception that it opens up career opportunities for learners which were not available to all in the past. It is also seen as a subject offering immediate benefits as the skills taught in tourism could enable learners to find employment even while still at school. Breytenbach (2010) contends that the tourism curriculum should focus on providing skills that prepare learners for career prospects and the workplace. As a vocationally oriented subject, tourism should equip learners with the kinds of occupational and business skills that would render them employable in the tourism industry after they leave school (Stumpf & Niebuhr 2012; Braun & Hollick 2006).

A conflicting view about tourism that emerged from the data is that it is a low-status subject in the curriculum. The fact that schools strongly opt for academic subjects, which offer access to degree programmes in universities, at the expense of vocational subjects, which do not, has had the effect of reducing the status of tourism. Making the situation worse is the antagonistic attitude to tourism on the part of district officials who are urging its removal from the curriculum on the grounds that it overloads the curriculum and that it does not count for admission to a degree track at universities. The mistaken conclusion to which this fact has given rise is that tourism therefore offers learners no real future. This misperception has been noted by Mihalič (2005) who states that negative perceptions about tourism have led teachers in secondary schools to resist its inclusion in the curriculum.

Applying Rogers' (2003) innovation theory to the tourism issue, one could say that curriculum planners in the schools surveyed have fallen foul of the attribute of complexity inasmuch as they have given too much weight to tourism's vocational orientation and too little to its academic component.

They also appear to have fallen foul of the attribute of compatibility which stipulates that a proposed innovation should be compatible, that is, contextually appropriate, in relation to the school's existing programmes. Given the high value the four schools surveyed set on academic subjects giving access to Bachelor degree studies at tertiary level, it may be that they did not give as much thought as they ought to have done to the question of how suitable a match tourism would be in relation to the rest of the curricular offerings. Another of the attributes in Rogers' (2003) model is that of observability, which stresses the importance of anticipating the results of a proposed innovation. According to the findings of this study, the inclusion of tourism in the curriculum was not preceded by an 'impact assessment', as it were.

It may be that the schools' past failure to take into account the factors to which Rogers ascribes importance in his innovation theory is the main reason for the reservations and uncertainties now being expressed with regard to the place and the future of tourism in the school curriculum. From remarks passed by some of the interviewees, it appears that tourism as a curricular subject in the schools surveyed has arrived at a crossroads. This should be a matter of concern for various directorates (curriculum advisory, human resources, planning, and assessment among others) in the Department of Basic Education; at the same time it should be a spur to the Department to participate more actively, and over a longer period of time, in the process of introducing new subjects into the school curriculum. Such participation should include advocacy strategies and should seek to provide a fuller understanding of the new subject prior to its introduction into the school curriculum than has been the case hitherto.

References

Airey, D. 2005. Growth and Development. In Airey, D. & J. Tribe (eds.): *An International Handbook of Tourism Education*. Oxford: Elsevier.

Braun, P. & M. Hollick 2006. Tourism Skills Delivery: Sharing Tourism Knowledge Online. *Education & Training* 48,8/9: 693-703.

Bornman, S., D. Budlender, L. Vetten, C. van der Westhuizen, J. Watson & J. Williams 2012. *The State of the Nation, Government Priorities and Women in South Africa.* Cape Town: Women's Legal Centre.

Breytenbach, A. 2010. *An Evaluation of Tourism Industry Perceptions of Tourism Programmes of Selected Further- and Higher-Education Institutions in the Western Cape.* CPUT Theses & Dissertations, Paper 149.

Busby, G. 2001. Vocationalism in Higher Education Tourism Courses: The British Perspective. *Journal of Further and Higher Education* 25,1: 29-43.

Central Applications Office 2010. *CAO Application Handbook*. KwaZulu-Natal, South Africa.

Cervera-Taulet, A. & M. Ruiz-Molina 2008. Tourism Education: A Strategic Analysis Model. *Journal of Hospitality, Leisure, Sports & Tourism Education* 7,2: 59-70.

Chigona, W. & P. Licker 2008. Using Diffusion of Innovations Framework to Explain Communal Computing Facilities Adoption among the Urban Poor. *Information Technologies and International Development* 4,3: 57-73.

Department of Basic Education. 2011. *National Policy Pertaining to the Programme and Promotion Requirements of the National Curriculum Statement, Grades R – 12.* Pretoria: Government Printer.

Department of Education. 2003. *National Curriculum Statement: Tourism.* Pretoria: Government Printer.

Department of Education. 2005. *Minimum Admission Requirements for Higher Certificate, Diploma and Bachelor's Degree Programmes Requiring a National Senior Certificate.* Pretoria: Government Printer.

Department of Environmental Affairs and Tourism. 1996. *White Paper on the Development and Promotion of Tourism in South Africa*. Pretoria: Government Printer.

Earle, N 2008. Research Commissioned by Department of Labour, South Africa, HSRC.

Ernwarti, D.B. 2003. Stakeholders' Views on Higher Tourism Education. *Annals of Tourism* 30,1: 255-258.

Fullan, M. 2001. *The New Meaning of Educational Change*. Third Edition. New York: Teachers College Press.

Geirsdottir, G. 2008. Academics as Creators of Imaginary Subjects: On Academics' Ideas of their Disciplinary Curriculum Decision Making. Paper Presented at the Fifth International Basil Bernstein Symposium. Available at: http://www.caerdydd.ac.uk/socsi/newsandevents/events

/Bernsteinpapers/Bernsterinsymposiumpaper08doc. (Accessed on 15 July 2009.)

Geldenhuys, S. 2000. *Career Profiles for the Travel Sector of the Tourism Industry.* Unpublished Magister Commercii Dissertation, Potchefstroom University, Potchefstroom.

Inui, Y., D. Wheeler & S. Lankfort 2006. Rethinking Tourism Education: What Should Schools Teach? *Journal of Hospitality, Leisure, Sports and Tourism Education* 5,2: 25-35.

Le Grange, L. & P. Beets 2005. Geography Education in South Africa after Democracy. *Geography Journal* 190,3: 267-277.

Leiper, N. 2000. An Emerging Discipline. *Annals of Tourism Research* 27,3: 805-809.

Lewis, A. 2005. Rationalising a Tourism Curriculum for Sustainable Tourism Development in Small Island States: A Stakeholder Perspective. *Journal of Hospitality, Leisure, Sports and Tourism Education* 4,2: 4-15.

Liu, H.J. 2006. A Highlight of Tourism and Hospitality Education Issues in Taiwan. *Journal of Teaching in Travel & Tourism* 6,3: 89-102.

Manyathi, O. 2012. Growing the Tourism Sector. *Public Sector Management*. September: 26-29.

Marshall, L. 2005. Can Tourism Help the Poor? Available at: http://news. nationalgeographic.com.

Merriam, S.B. 2009. *Qualitative Research: A Guide to Design and Implementation.* San Francisco: Jossey-Bass.

Meyer J.H.F. & R. Land 2003. Threshold Concepts and Troublesome Knowledge: Linkages to Ways of Thinking and Practising. In Rust, C. (ed.): *Improving Student Learning: Theory and Practice Ten Years On*. Oxford: Oxford Centre for Staff and Learning Development (OCSLD)

Mihalič, T. 2005. Current Issues in Tourism Education: The Case of Slovenia and the Faculty of Economics. *Association for Tourism in Higher Education Annual Conference Proceedings.*

NEPAD 2004. Tourism Action Plan. *Discussion Document prepared for the 41st Meeting of the World Tourism Organisation Commission for Africa.* Mahe: Seychelles.

Nkumane, B.M. 2008. Tourism Education Policy Applications in the Zululand District, Kwazulu-Natal. Unpublished MEd Dissertation, University of Zululand.

Newstalk, Z.B. 2010. Tourism. Available at: http://Yahoo Xtra News.

O'Mahony, G.B. & J.F. Sillitoe 2001. Identifying the Perceived Barriers to Participation in Tertiary Education among Hospitality Employees. *International Journal of Contemporary Hospitality Management* 13,1: 21-29.

Paechter, C. 2000. *Changing School Subjects: Power, Gender and Curriculum*. Buckingham: Open University Press.

Page, S.J. 2005. *Tourism Management: Managing for Change.* Amsterdam: Butterworth & Heinemann.

Page, S.J. & J. Connel 2006. *Tourism: A Modern Synthesis*. Australia: Thomson.

Pan-African Investment & Research Services 2010. *A Framework/ Model to Benchmark Tourism GDP in South Africa. What is the Role of Tourism in the Economy and What Drives Tourism in South Africa*? PAIRS.

Rogers, E. 2003. *Diffusion of Innovation.* Fifth Edition. New York: The Free Press.

Steynberg, L., E. Slabbert & M. Saayman 2002. *Setting the Stage: A Global Curriculum for Tourism: A Proposed Curriculum. Rethinking Education and Training for Tourism.* Zagreb: University of Zagreb Press.

Strietska-Ilina, O. & M. Tessaring (eds.) 2005. *Trends and Skill Needs in Tourism.* Cedefop Panorama Series 115. Luxembourg: Office for Official Publications of the European Communities.

Stumpf, R. & G. Niebuhr 2012. International Best Practice on the Introduction of Vocationally Oriented Education in the Secondary School Sector. *Report Commissioned by CDE.*

Thitthongkam, T. & J. Walsh 2011. Tourism Education at the Tertiary Level and Competitive Advantage: A Comparison Study between Thailand and Malaysia. *Journal of Education and Vocational Research* 1,1: 26-35.

Tribe, J. 2001. Research Paradigms and Tourism Curriculum. *Journal of Travel Research* 39: 442-448.

Van Rooy, S.W. 2005. Curriculum Reform in the Secondary School: The Voices of Experienced Biology Teachers. Available at: www.mq.au.

UNESCO 2000. *Declaration of World Heritage Sites.* Available at: http://whc.unesco.org/nwhc.

Walmsley, A. 2009. *Tourism Education: Beyond Ideology*. International Centre for Responsible Tourism. Available at: http://www.icrtourism.org /publications/occasional-papers/.

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Accounting Teachers' Understandings and Practices of Teaching and Assessment in a Context of Curriculum Change

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Abstract

One of the significant changes of post-apartheid South African education is recurring shifts in school curriculum policy. In terms of the Accounting curriculum, there is a move away from mastery of formulas and procedures to an understanding of the interpretation of financial information. This has necessitated changes in the way the subject is taught and assessed. This is likely to affect teachers' understandings, particularly those of seasoned teachers who are accustomed to the traditional approaches. This article focuses on the relationship between the changing conceptions of Accounting as a discipline and how these changes influence the school curriculum. The research on which this article reports explored the influence of these curricular changes on Accounting teachers' daily practices. A qualitative research design using semi-structured interviews, lesson observations and document analysis was adopted to explore three seasoned Accounting teachers' understandings and practices at one rural school. The findings indicated that the unique discipline of Accounting and the curriculum specifications determine how teaching, learning and assessment happen in Accounting. What emerged from the findings is that, although teachers were aware of the changes in teaching and assessment in Accounting, their engagement with the Accounting content revealed a lack of deep conceptual understanding of the curriculum.

Keywords: Accounting teachers, Accounting discipline, conceptualisation, curriculum, teaching and assessment approaches.

Introduction

Education policy in post-apartheid South Africa has undergone radical change. Curriculum reform brought about many changes in teaching, learning and assessment. These changes are evident in the Accounting curriculum. Prior to the implementation of the National Curriculum Statement (NCS) in the Further Education and Training (FET) band (Grades 10-12), Accounting was mainly regarded as the art of recording transactions. This heavy focus on financial accounting recording and reporting influenced teachers to use a procedural approach as a point of departure in teaching and learning. As a result, 'many teachers regarded knowledge of the recording or bookkeeping process as a major outcome for subject Accounting' (DoE 2008a:8). This comment implies that the traditional format for the teaching of Accounting was too narrow, too procedural and too mechanical, and forced the learners to rely on memory only (Diller-Hass 2004; Duff & McKinstry 2007). Learners' reasoning abilities and the practice of reflecting on the financial information through solving problems were hardly ever addressed or assessed.

The implementation of the NCS resulted in the reconceptualisation and redesign of the subject of Accounting. In terms of the Subject Assessment Guideline (SAG), Accounting is viewed as a specialised 'language of communicating financial information' (Ballantine & Larres 2007:174). This implies that the subject is regarded as a vehicle for communicating financial information in a way that best serves the purpose of making appropriate financial decisions (DoE 2008a). This reconceptualisation had a direct bearing on teaching, learning and assessment approaches and procedures, for it implied a need to transform teaching and assessment practices: teachers now had to follow new approaches to lesson planning, actual teaching and methods of assessment (Gouws 2008).

The change in the content of the discipline and in the conceptual approach to it is reflected in the restructuring of old and new topics in the syllabus and in new ways of facilitating learners' learning. The challenge facing Accounting teachers therefore is to change their teaching and assessment practices and to align them with the requirements of the new curriculum. This is however more easily said than done as many teachers may lack the conceptual elasticity – not to speak of the knowledge – that would enable them to bring their praxis into line with the new requirements; and such an adjustment would be particularly difficult for teachers trained

according to the traditional bookkeeping model, and of the view that the recording function is an end in itself – a view that clearly is at odds with their learners acquiring the skills that are now regarded as of major importance.
Research in accounting education (Farrell & Farrell 2008; Fortin & Legault 2010; Hassall & Markus 2004) has shown that the adoption of alternative teaching approaches can develop accounting competencies. Furthermore, an extensive body of literature (Black & William 1998; Kanjee 2009; Nakabugo & Sieborger 2001; Taras 2007) reveals that effective use of formative assessment can lead to improvements in learning for children. This is in line with the assessment policy in the NCS (DoE 2003) which emphasises continuous formative assessment, which is integrated into the process of teaching and learning.

How do teachers of accounting understand the new expectations and requirements? Do they grasp what the shifts in teaching and assessment procedures imply for their daily practice in the classroom? These questions are particularly pertinent with respect to teachers whose previous practices may have been different from the new expectations. The assumption is that older teachers, who often were seen simply as 'technicians of the former apartheid state curriculum' (Samuel 2008:5) rather than as critics or agents for expanding the knowledge base of learners about the disciplines they were studying, were expected to implement the new curriculum and change their practices accordingly. The question is whether they have in fact done so or whether they carry their old pedagogic values and practices into the new curriculum and, if so, why. So, what are Accounting teachers' understandings of the changes in the content and character of their subject; and how (if at all) have these changes affected their classroom practice? These are the issues which this study addresses.

Curriculum Change

Literature on curriculum change indicates that successful curriculum implementation depends entirely on teachers who are regarded – and who regard themselves – as active agents in shaping policy as their understanding and interpretation of policy are translated into classroom practices (Fullan 2001; Smylie & Perry 2005; Spillane, Reiser & Gomez 2006). However, teachers' belief systems, experiences and ideologies affect how receptive to

curriculum change they are likely to be. According to Ballet & Kelchtermans (2008), teachers do not simply implement curriculum change; they interpret and modify it according to their different frames of experience. Consequently they respond to curriculum change in a number of different ways. Fullan (2001) argues that experienced teachers tend not to change their current practices easily because these are rooted in their beliefs and in the practical knowledge they have accumulated during their years of teaching. So, while changes in the curriculum theoretically require teachers to make significant shifts with respect to its content and their instructional methods alike, in practice many teachers either resist implementing curriculum change or adapt the curriculum to suit their own practices (Spillane, Reiser & Gomez 2006). This means that they choose to assimilate teaching strategies into their current practices with minimal substantive change. Spillane, Reiser and Gomez (2006) point out, however, that when teachers are first confronted with change, they may be uncertain about what change requires of them, and they may have doubts about their ability to succeed in the implementation of the new curriculum.

Teaching, Assessment and Content Knowledge

Implementation of any curriculum change depends on classroom teachers and usually requires a transformation in their understanding of the subject's content, and their teaching of it (Powell & Anderson 2002). According to Kilpatrick (2001:371), subject-content knowledge includes knowledge of facts, concepts, procedures, and the relationships among them; knowledge of the ways that subject ideas can be represented and knowledge of the subject as a discipline. Research has shown that teachers' content knowledge has a bearing on the quality of their instruction and on their teaching style (Charalambous 2010; Deng 2007; Hill & Ball 2009). Deng (2007) and Ball, Hill and Bass (2005) state that teachers' subject knowledge is important for utilising instructional materials in the most productive way, for reliably assessing students' progress and for determining the most effective sequence for the subject's presentation. This means that subject-content knowledge is a very important aspect of the preparation that a teacher requires in order to deliver in the classroom.

Effective teaching requires an ample understanding of a subject's

leading concepts, as well as an ability to make connections among topics (Even & Tirosh 2008; McCoy 2011). Teachers lacking in subject-content knowledge are ill-equipped to explain and represent topics in ways that make sense to learners. When teachers lack subject knowledge and are unsure of how their discipline is structured they tend to teach it as a scattering of isolated facts. Compartmentalised knowledge of the discipline is often not enough, as it is apt to be fragmentary in nature (Jones & Moreland 2005). By contrast, teachers with an ample overview of a subject and a mastery of interrelated subject ideas will be able to make important connections among topics, sometimes with revelatory force as far as the learners are concerned.

Teachers' Understandings and Practices

Teachers develop their practices from their formal training, teaching experience, school experience, knowledge, attitudes, and individual beliefs. The literature shows that there is a direct relationship between teachers' understandings of teaching, learning and assessment and their classroom practices (Cassim 2010; Harris & Brown 2009; Naicker 1999; Raboijane 2005; Van Laren & James 2008). Naicker (1999) maintains that prior understanding forms the basis for the implementation of any policy: without a sufficient understanding of a policy, teachers cannot be expected to implement it effectively. This position is supported by Cassim (2010) and Raboijane (2005) who argue that an unclear, uncertain understanding of policy adversely affects teachers' practices.

Teaching and Assessment in Accounting

The accounting knowledge that the subject of Accounting covers encompasses the skills and values that pertain to the fields of financial accounting, managerial accounting and auditing (DoE 2011). Although the subject is divided into three fields, the curriculum emphasises the importance of teaching it holistically as the fields are interrelated and should be integrated to strengthen the development of conceptual understanding (DoE 2008b). The integration of knowledge takes place through learning and assessment activities which enable learners to connect knowledge from different parts of the same subject (DoE 2008b). Knowledge integration,

taking the broad view, is also expected to take place across subjects (Hoadley 2008) and, indeed, between school knowledge and experiential knowledge in general, through learning and assessment activities that enable learners to apply school knowledge to real-life-contexts (Sieborger & Macintosh 2002). According to the Accounting Learning Programme, the subject of accounting has been developed with a view to learners acquiring critical-thinking, communicating, mathematical, collecting, analysing, interpreting and organising skills (DoE 2008b). In order to teach and assess the practical application of such skills, Pickford and Brown (2006) note that it is important to give learners opportunities to practise them. This requires teaching methods that promote active student learning (Fortin & Legault 2010). They add that active learning can be achieved through case-study analysis, individual and group projects, problem-based presentations, problem-solving and real-life scenarios, role play, discussions and simulations. These approaches require students to be actively involved in the learning process through group discussion and self-expression (Ballantine & Larres 2007; Farrell & Farrell 2008).

Methodology

The study was undertaken within the interpretive paradigm, which is concerned with meaning-making, in an attempt to understand the subjective world of human experience (Cohen, Manion & Morrison 2011; Merriam 2009). It adopted a qualitative approach as it was concerned with understanding the experiences of the participants and the meaning they make of them. One school was selected from a rural cluster of five. Through purposive sampling, three Accounting teachers (Thoko, Bonga and Zola – pseudonyms used to ensure confidentiality and anonymity) were selected in one rural school on the basis of their background and teaching experience. All three teachers were experienced and were teaching Accounting in the Further Education and Training (FET) phase. Thoko had 19 years of experience as a Commerce teacher of all three commercial subjects in the FET phase. Bonga was head of Commerce Department and had been teaching for 12 years. He had taught all commercial subjects and was currently teaching Business Studies and Accounting in Grade 10. Zola was a post-level 1 teacher, with six years of teaching experience. When interviewed she was

teaching Business Studies and Accounting in Grade 11.

Semi-structured interviews of approximately 45 minutes each were used to probe the teachers' understandings of teaching and assessment in Accounting. The interviews were conducted at the participants' workplace during their free periods. In addition, lesson observations were conducted to verify some aspects and to observe practices. Five lessons per teacher were observed, each lesson being of 50 minutes' duration. Video recordings were used to collect data on the lessons. The interviews and lesson observations were later transcribed verbatim. Each transcript was then read a number of times to extract and identify codes. A process of open coding was used, and categories were established, reviewed and clustered into specific themes.

Findings

In the discussion that follows, key issues raised by the teachers are presented and analysed under two themes.

Practice in Accounting Teaching

Teachers acknowledged the crucial role that practice plays in enhancing learners' mastery of skills and knowledge in accounting. They indicated that the practical nature of accounting requires frequent practice in different skills to give learners an opportunity to apply their knowledge of analysing and interpreting financial information within a given context. These teachers also saw practice as involving repeated written exercises. Consequently, they used many repeated procedural assessment strategies to cover the complex nature of the subject and to expand conceptions of the discipline.

Thoko believed that learning in accounting occurred largely by practice. She felt that learners have to be given exercises to practise what they were learning so as to monitor their understanding of new knowledge. She therefore created space for learners to practise what they were learning while the lesson was going on. This is what Thoko said:

> *They have to do activities while I am teaching. I want to see whether they understand what I am explaining. I always stop and give them work to do in class.*

Apart from doing class activities, the participating teachers reported using independent practice to review what learners did in the classroom by providing additional opportunities for learners to do their work independently at their own pace. This is what Bonga said:

> *They have to work in class, at home and every day. I also want them to do their work individually for them to see whether they understand what I was teaching.*

Independent practice offers learners opportunities to improve by allowing them to review the topic on their own. Bonga believed that giving learners additional work to do on their own at home allowed him to ascertain whether learners had mastered the current knowledge before the introduction of further knowledge.

Zola and Thoko agreed with Bonga:

> *I want them to do more work at home to practise what we were doing in class to check understanding.*
>
> *When they do homework they are learning, they have more time to work individually at home.*

Zola assigned written work to ascertain learners' understanding of what had been done in class. Thoko believed that when learners did independent work at home they reinforced the learning that took place in the classroom. As a normal school day and the normal classroom timetable in Accounting do not offer space enough for extended practice in the discipline at school, such practice, the participating teachers concurred, had to take place at home. But for some learners this solution only creates new difficulties: poor socioeconomic conditions at home, limited work space there, little or no assistance from parents owing to illiteracy and/or ignorance of the Accounting discipline conspire often to deprive learners of the opportunity to get the needed practice.

Bonga and Zola further believed that for learners to understand the practical implications and value of scenarios and problem solving in Accounting, they have to be given activities to enhance the development of analytical skills, and the only way of doing this, they said, is by creating spaces for learners to practise different skills collaboratively.

> *They have to discuss in groups, especially in questions like ethics and control and auditing where they have to solve problems. We give them more practice.*
>
> *I give them case studies and problem-solving questions. They have to do analysis together and give their opinions and solutions to the problems.*

The teachers felt that it was crucial to create opportunities for learners to solve financial problems together in order to develop critical thinking in accounting. They felt that it was valuable and useful for learners to grapple with financial problems in groups where a variety of opinions naturally arises. The teachers believed that the more practice of this kind they give learners, the more likely learners are to master the relevant skills.

Bonga added that as Accounting is also a practical subject like Mathematics, learners make progress by doing regular application exercises:

> *Accounting is more practical like Maths, it needs more practice. Therefore they have to work in class, at home and every day for them to see whether they understand.*

In addition to the acquisition of basic accounting skills, teachers mentioned the importance of developing efficiency and accuracy in mathematical calculations. This is what Bonga and Thoko said:

> *There are different formulas that are used to do calculations. I give them class work or homework every day to practice different methods to do calculations in Accounting.*
>
> *They cannot do difficult calculations in Accounting. They need Maths background. I also give them more work on calculations.*

Bonga indicated that in Accounting, learners use different methods to get to the answer when doing mathematical calculations which, in his view, they do not find easy; part of the problem being that learners do not master mathematical knowledge at the same pace. Thoko indicated that learners have difficulty in doing accounting calculations. She felt that they are deficient in the basic mathematical skills needed for manipulating financial calculations. Because such skills are fundamental to the discipline of

accounting, the best way for learners to achieve a passable degree of competence is to give them as many practice examples as possible.
Projects, written reports, presentations and assignments are set with the aim of affording learners an opportunity to engage with real-life problems and to do research. The teachers noted that, although such tasks are for reporting purposes, they are also intended to create opportunities for further learning and to expand learners' accounting knowledge. This view is advanced by Thoko and Zola:

> *I also give them projects and assignments to teach them how to do research … and to add to their knowledge in Accounting by giving more practice.*
>
> *I give them written reports and presentations. I want them to present and discuss their work in groups.*

Teachers viewed projects, presentations and written reports as forms of assessment of learners' ability to apply the relevant skills, apart from offering them the opportunity to research, discover new information by themselves and explore the given topic at a deeper level. These objectives reflect the new curriculum's shift from the earlier emphasis on purely procedural skills (DoE 2008b). The current outlook is that one form of assessment cannot adequately assess the complex nature of the skills that learners need to develop in accounting; a variety of assessment approaches is required in order to provide a fuller picture of learners' progress in complex tasks such as problem solving and the analysis and interpretation of financial information. The need for a variety of assessment strategies provides learners with multiple opportunities for developing and mastering the higher-level skills that are crucial in accounting.

The Nature of Accounting Content Taught

The participating teachers observed that the type of assessment task assigned to learners and the level of classroom interaction depended on the content that they taught. This is revealed in what Bonga said:

> *The content of the topic will tell what and how to ask the question. In*

> *Grade 10, I am teaching journals and posting. I cannot ask them to analyse and interpret the journals or ledger before they understand recording and posting. They are still learning the ledger and posting.*

Bonga also linked the types of questions he asked, and the level at which they were pitched, to the nature of the content and/or to the particular grade being taught:

> *If I am teaching recording or ledger it is not easy to engage my learners into a dialogue. … most of the questions are low level.*
>
> *Like in Grade 10 you will find that most of the questions are usually in lower- and middle-order because all topics we do in Grades 11 and 12 start in Grade 10.*

So Bonga insists that learners master basic concepts before attempting more challenging ones. To make sure the basic knowledge was in place, he underlined the importance of asking recall questions.

In the higher grades, Thoko reported asking complex and challenging questions because the topics covered tended to be more challenging compared to lower-grade topics:

> *It depends on the content that I am teaching that will allow me to ask a question that creates opportunities for dialogue. In Grade 12, I normally ask questions where I want them to debate issues and problem solving.*

By Grade 12, then, learners are expected to use knowledge previously acquired to analyse financial information and to exercise problem-solving skills. Thoko pointed out that in the higher grades it was both easier to engage learners in discussion and more necessary to do so as they had to acquire critical skills. She assigned assessment tasks which afforded learners opportunities to develop analytical skills necessary for interpreting financial information and solving financial problems; and this required them to apply knowledge they had acquired in lower grades, as is evident from the transcript of a lesson in which learners were asked to defend their answers:

Thoko:	*We are on number 6. You are given the figures below. Explain what you would say to Duzi who is the owner of a business about each of the following items at the end of October. Comment by quoting the figures and give advice. Let us start with telephone. Budgeted amount is R1 100 and the actual amount is R2 800. What can you say about telephone?*
Learner 1*:*	*Actual is more than budgeted.*
Thoko:	*Why? What can you say about that?*
Learner 1:	*They are overspending. Telephone was used more than in other months.*
Learner 2:	*No. They are not overspending.*
Thoko:	*Why do you say that because budgeted are more than actual figures?*
Learner 2:	*The business is selling furniture and during October, more people want to buy because they know that they are going to get bonuses. They are making calls to their old customers informing them about special offers for the end of the year.*

Learners gave different answers, which they justified with reasons based on their analysis of the financial information in the Cash Budget. They engaged in a reasoned argument where they had to explain their opinions and extend their thinking.

The participating teachers were agreed that the level of challenge of the questions they asked depended on the level of complexity of the topic being taught. Moreover, the level of complexity of the content determined the strategies deployed by teachers during interaction in class. In Thoko's words:

> *In Grade 12, all questions were higher-order because we were analysing the statements. There were problem-solving questions in every exercise.*

Thoko added that she asked cognitively demanding questions towards the end of the topic:

> *But ethics is always at the end of topics. It means that I always ask open-ended questions if I am about to finish the topic.*

A further point made by Thoko concerned the sequencing of topics in the curriculum, as a result of which she taught some topics in isolation from others.

Discussion

The research findings revealed that teachers viewed Accounting as a discipline which requires a particular kind of practice and instruction. In Accounting, learners are frequently faced with challenging problems which they have to solve together in order to develop higher-order reasoning and problem- solving skills. The three teachers therefore saw Accounting as a subject requiring learners to work as a group to formulate and share different solutions to financial problems (Fortin & Legault 2010). The teachers acknowledged the importance of consistent practice using a variety of teaching and assessment strategies to assist learners in mastering different accounting skills. They believed that learning in the discipline of Accounting occurs largely through regular operational practice due to the mainly practical nature of the subject (Farrell & Farrell 2008; Pickford & Brown 2006). This implies that repeated exposure to accounting scenarios and problems is important for learners to develop competence in different skills.

Notwithstanding the teachers' reported views, observation of the actual lessons and, later, of the video recordings, failed to show evidence of their effectively operationalising the strategies to which they said they were committed. The three participants seemed to struggle to impart the required skills to learners in a way that gave effect to the expectations of the new curriculum, and this pointed to their limited understanding of the nature of the discipline which, as conceived by the new curriculum, foregrounds propositional-content knowledge.

In regarding the accounting content taught in Grade 10 as merely preparatory to what will be encountered later, the participating teachers were assuming that learners in that grade should confront only lower-order questions as the content does not lend itself to higher-level questioning. This is in fact a fallacy in as much as any content is amenable to higher levels of

thinking. So if teachers take their cue solely from the way the Accounting curriculum sequences topics in the FET band, they are likely to deprive lower-grade learners of the opportunity to develop higher-level thinking skills (Adler 2005). Such an attitude displays a limited understanding of how to teach and assess in Accounting.

The participating teachers' persuasion of an almost impermeable hierarchy of knowledge and skills caused them to plan and structure their lessons and activities in a too-compartmentalised way (Ball, Thames & Phelp 2008; Jones & Moreland 2005), such that learners in the lower grades were not really prepared for the more complex content awaiting them in the higher ones. The teachers seemed to be rigid about the structure of the curriculum and believed that teaching should be organised in a fixed sequence. As a result, topics that were in fact related to one another across the three grades in the FET band ended up being taught in isolation from each other, with the teachers confining their instruction to the content set for the particular grade, or lower ones, and neglecting to make connections with what would be encountered later. This reveals a lack of understanding of the interconnectedness of the various topics distributed among the three accounting fields (Even & Tirosh 2008; McCoy 2011).

The teachers saw a need for learners to master mathematical skills to be able to perform complex calculations in accounting. Although they were concerned about learners' difficulties in performing mathematical calculations, they were possibly seeing the teaching of these skills as Mathematics teachers' responsibility. If so, it would suggest an inadequate appreciation of knowledge integration across subjects (Hoadley 2008), and would point to a lack of confidence in their own mathematical competence.

The findings revealed that teachers seem to know about the changes in the Accounting curriculum and that they are aware of the new curriculum's expectations. But their understanding appears to be framed in purely procedural terms whereby they perceive the curriculum as just another set of 'new prescriptions' requiring to be implemented without necessitating an understanding of the rationale behind the shifts in the macro-systemic identity of the discipline. In these terms, the gap between their verbal understanding ('talking') and their actual practice ('doing') should come as no surprise (Ballet & Kelchtermans 2008; Spillane, Reiser & Gomez 2006; Van Laren 2008; Raboijane 2005).

The over-prescriptive character of the curriculum in its latest incar-

nation simply entrenches, and perhaps exacerbates, teachers' low level of understanding of the discipline's guiding principles and expectations. Over-prescription produces compliance without much in-depth development of conceptual understanding. From a pedagogical curriculum-development point of view, what has happened is that the curriculum's refinement from C2005 to RNCS and then to CAPS was accompanied by increasing levels of specification. This is paradoxical since the new curriculum formulations are resorting to greater prescriptiveness (DoE 2003, 2011) at the same time that they claim to be offering more opportunities for intellectual exploration and critical free-play. The greater levels of prescription may be driven by a perceived need to develop a 'teacher-proof' curriculum to compensate for the incompetence of under-performing teachers (Samuel 2008). But if every time the Accounting curriculum is tweaked, increased levels of prescription result, there is a danger over the long-term of turning teachers into mere rubber-stamps and, to that extent, deprofessionalising them.

Conclusion

The article has sought to report on Accounting teachers' understandings and practices in the teaching and assessment of Accounting. The main aim of the enquiry on which this article is based, was to determine teachers' understandings of the shifts in the Accounting curriculum and the implications these have for the teaching, learning and assessment of the subject in a rural school.

The findings revealed a superficial level of engagement with the subject's scope and content on the part of the teachers interviewed, which in turn pointed to an under-developed understanding of the evolving nature of the discipline of Accounting, as embodied in the curriculum. This was evident in the kind of teaching that was happening in their classes. Their praxis revealed that they were not engaging deeply with the shifts in the discipline as enshrined in the new curriculum policy. Although the three teachers were aware of the changes and the policy expectations, there was a failure to transform awareness into actual practice on the levels of teaching and assessment. This could be the result of the teachers' compartmentalised view of the sequence of topics making up the curriculum, at the expense of an understanding of their interconnectedness as parts of a coherent whole.

When teachers view their disciplines merely as sets of facts and procedures without keeping abreast of the broader visioning of the discipline, they run the risk of basing their own pedagogical praxis simply on what they were taught when they trained to be teachers (Fullan 2001), or on the directives contained in the latest curriculum policy requirements. So when we say teachers lack content knowledge, we mean not just knowledge of the content to be covered in the classroom but also knowledge relating to the evolving nature of the discipline in question, and to the issue of how shifts in perspective and policy are to be enacted in practice. The question then is how to get teachers to take ownership of a broader professional exploration of the discipline; how to get them to understand the changing nature of a discipline's orientation and knowledge base. This calls for professional development strategies that will unfreeze teachers' current thinking about their disciplines. Such strategies would need to emphasise the relevance of the new knowledge resulting from a shift in the epistemological base of the discipline, and also the relevance of the altered context within which the new knowledge is to be imparted.

It could be argued, on the other hand, that there have been too many shifts in too short a time in the Accounting curriculum, with the result that teachers have become either too 'policy-resistant' or too 'policy compliant' (Samuel 2008), and that is perhaps reflected in their willingness to give the changes their verbal support without any serious intention, however, of carrying it over into actual practice. This might be an argument for calling a halt to any 'new curriculum policy' until the system is able to stabilise through the professional development (that is, the retraining) of teachers.

References

Adler, J. 2005. Mathematics for Teaching: What it is and Why it is Important that We Talk about it. *Pythagoras* 62:2-11.

Ball, D., H. Hill & H. Bass 2005. Knowing Mathematics for Teaching: Who Knows Mathematics Well Enough to Teach Third Grade, and How can we Decide? *American Educator* 29:14-46.

Ball, D.L., M.H. Thames & G. Phelps 2008. Content Knowledge for Teaching: What Makes it Special? *Journal of Teacher Education* 59,5: 389-407.

Ballantine, J. & P.M. Larres 2007. Final Year Accounting: Undergraduates' Attitudes to Group Assessment and the Role of Learning Logs. *Accounting Education* 16,2: 163-183.

Ballet, K. & G. Kelchtermans 2008. Workload and Willingness to Change: Disentangling the Experience of Intensification. *Journal of Curriculum Studies* 40,1: 47-67.

Black, P. & D. William 1998. Inside the Black Box: Raising Standards through Classroom Assessment. *Phi Delta Kappan* 80,2: 139-147.

Cassim, T. 2010. *An Exploration of Grade 9 Teachers' Understanding and Practices of Assessment as it Relates to the Economic Management Sciences Learning Area.* Unpublished Master's Thesis, University of KwaZulu-Natal.

Charalambous, C. 2010. Mathematical Knowledge for Teaching and Task Unfolding: An Exploratory Study. *The Elementary School Journal* 110,3: 247-276.

Cohen, L., L. Manion & K. Morrison 2011. *Research Method in Education.* Seventh Edition. London: Routledge.

Deng, Z. 2007. Transforming the Subject Matter: Examining the Intellectual Roots of Pedagogical Content Knowledge. *Curriculum Inquiry* 37,3: 279-295.

Diller-Haas, A. 2004. Time to Change Introductory Accounting. *CPA Journal* 74,4: 60-62.

Department of Education (DoE) 2003. *National Curriculum Statement Grades 10-12 (General).* Pretoria: Government Printer.

Department of Education (DoE) 2008a. *Subject Assessment Guidelines*: *Accounting Grades 10-12 (General).* Pretoria: Government Printer.

Department of Education (DoE) 2008b. *Learning Programme Guidelines: Accounting Grades 10-12 (General).* Pretoria: Government Printer.

Department of Education (DoE) 2011. *Curriculum and Assessment Policy Statement: Accounting.* Pretoria: Government Printer.

Duff, A. & S. McKinstry 2007. Students' Approaches to Learning. *Issues in Accounting Education* 22,2: 83-214.

Even, R. & D. Tirosh 2008. Teacher Knowledge and Understanding of Students' Mathematical Learning and Thinking. In English, L (ed.): *Handbook of International Research in Mathematics Education.* Second Edition. New York: Routledge.

Farrell, B. & H. Farrell 2008. Student Satisfaction with Cooperative Learning in an Accounting Curriculum. *Journal of University Teaching and Learning Practice* 5,2: 39-54.

Fortin, A. & M. Legault 2010. Development of Generic Competencies: Impact of a Mixed Teaching Approach on Students' Perceptions. *Accounting Education: An International Journal* 19,1: 93- 122.

Fullan, M.G. 2001. *Leading in a Culture of Change*. San Francisco: Jossey-Bass.

Gouws, F.E. 2008. Assessment in the Intermediate and Senior Phase. In Dreyer, J. (ed.): *The Educator as Assessor*. Pretoria: Van Schaik.

Harris, L. & G. Brown 2009. The Complexity of Teachers' Conceptions of Assessment: Tensions between the Needs of Schools and Students. *Assessment in Education: Principles, Policy and Practice* 16,3: 365-381.

Hassall, T. & M. Markus 2004. Using Case Studies in Accounting Education. *Accounting Education* 13,2: 135-138.

Hill, H. & D. Ball 2009. The Curious and Crucial Case of Mathematical Knowledge for Teaching. *Phi Delta Kappan* 91,2: 68-71.

Hoadley, U. 2008. Social Class and Pedagogy: A Model for the Investigation of Pedagogic Variation. *British Journal of Sociology of Education* 29,1: 63-78.

Jones, A. & J. Moreland 2005. Considering Pedagogical Content Knowledge in the Context of Research on Teaching: An Example from Technology. *Waikito Journal of Education* 9:77-89.

Kanjee, A. 2009. Enhancing Teachers' Assessment Practices in South African Schools: Evaluation of the Assessment Resource Banks. *Education as Change* 13,1: 67-83.

Kilpatrick, J. 2001. Understanding Mathematical Literacy: The Contribution of Research. *Educational Studies in Mathematics* 47:101-116.

McCoy, A. 2011. *Specialized Mathematical Content Knowledge of Pre-service Elementary Teachers: The Effect of Mathematics Teacher Efficacy*. Unpublished Doctoral Thesis, University of Missouri, Kansas City.

Merriam, S. 2009. *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass.

Naicker, S.M. 1999. *Curriculum 2005. A Space for All: An Introduction to Inclusive Education.* Cape Town: Renaissance.

Nakabugo, M. & R. Sieborger 2001. Curriculum Reform and Teaching in South Africa: Making a 'Paradigm Shift'? *International Journal of Educational Development* 21,1: 53-60.

Pickford, R. & S. Brown 2006. *Assessing Skills and Practice*. London: Routledge.

Powell, J. & R.D. Anderson 2002. Changing Teachers Practice: Curriculum Materials and Science Education Reform in the U.S.A. *Studies in Science Education* 37:107-135.

Raboijane, B. 2005. *Mathematics Teachers' Understanding of Alternative Assessment as Applied in Junior Secondary Schools in Gabarone (Botswana).* Unpublished Master's Thesis, University of the Witwatersrand.

Samuel, M. 2008. Accountability to Whom? For What? Teacher Identity and the Force Field Model of Teacher Development. *Perspectives in Education* 26,2: 3-16.

Sieborger, R. & H. Macintosh 2004. *Transforming Assessment: A Guide for South African Teachers*. Cape Town: Juta.

Smylie, M.A. & G.S. Perry 2005. Restructuring Schools for Improved Teaching. In Hargreaves, A., A. Lieberman, M. Fullan & D. Hopkins (eds.): *The International Handbook of Education Change*. Dordrecht: Springer.

Spillane, J.P., B.J. Reiser & L.M. Gomez 2006. Policy Implementation and Cognition: The Role of Human, Social, and Distributed Cognition in Framing Policy Implementation. In Honig, M.I. (ed.): *New Directions in Education Policy Implementation: Confronting Policy*. Albany: State University of New York.

Taras, M. 2007. Do Unto Others or Not: Equity in Feedback for Undergraduates. *Assessment and Evaluation in Higher Education* 31,3: 365-377.

Van Laren, L. & A. James 2008. Selected Teachers' Understanding of Assessment Four Years after the Implementation of the New Assessment Policy. *African Education Review* 5,2: 288-303.

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Health and Liberation Crossroads: Cigarette Smoking among Students at a South African University

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Abstract

University students find themselves in an exceptional space where new freedoms are experienced and promoted. Generally subjected to stringent control mechanisms in schools and homes, young women are likely to experience these freedoms more profoundly than young men. In the context of greater freedom, risk taking through largely prohibited activities such as smoking may be viewed as an enactment of new-found women power and as a performance of personal autonomy.

This paper draws on a qualitative study carried out with a selected group of female smokers on the Edgewood campus of the University of KwaZulu-Natal. It explores the crossroads of health and liberation by interrogating the meanings that female student smokers attach to cigarette smoking within the university space. The meanings attached to this practice and the significance of a non-incriminating space in the production and appropriation of youthful femininities are viewed against the negative health implications.

Data presented here are based on focus group discussions and individual interviews with an initial sample of 12 female smokers between the ages of 18 and 22 years. Findings are discussed in relation to three themes: *university as a transitional space*, *university as an enabling space* and *university as a free space*. The data show the university to be a space where conventional femininity can be challenged and new forms of subjectivity enacted. This paper argues that while some young women claim to be expressing their freedom and independence by exercising free choice, they are ironically entrapping themselves within their notions of freedom and, more detrimentally, within a poorly understood addiction to nicotine in cigarettes.

Keywords: smoking, health, female students, university space

Introduction

The transition from high school to university is a time of personal growth and expressions of freedom and independence for male and female students. It is a time when they are no longer under direct parental supervision, are faced with new social and academic pressures and opportunities, and are entering an environment where the use of intoxicating substances is normative (Prendergast 1994). Away from the watchful gaze of schools and family, the university campus provides a kind of 'blank-cheque' space were moral imperatives appear to be more relaxed. Furthermore, universities are also adult spaces and by their very nature, as institutions of higher education, are spaces where freedom of thought and expression is not just tolerated, but actively promoted.

For young women who continue to be subjected to stricter regulation and policing mechanisms by schools and families, the transition from school to university may be more profoundly experienced as entry into a liberating space than it would be for men. According to Fletcher and Camblin (2008), leaving home to attend university provides women with the opportunity to make many of their own decisions, particularly with respect to their health behaviours.

I use the word 'liberation' in this paper to refer to female university students' notions of freedom to choose and to act, with particular emphasis on their attempts to challenge perceived gender inequalities. Gender equality is high on the transformation agenda in South Africa and, as Bhana and Pillay (2011) note, the legal framework in the country supporting gender equality has produced new possibilities for the expansion of girls' freedoms. This is undoubtedly an important goal, the outcomes of which are anticipated to be empowering and emancipatory.

This paper arises from a concern about the visible increase in female student smokers on the Edgewood campus of the University of KwaZulu-Natal (UKZN) over the past few years. This could be due either to a straightforward increase in the number of female student smokers, or to more female students being willing to smoke in public/visible spaces on the university campus, or to a combination of the two. Either way, given the

context of widely disseminated public awareness regarding the health risks associated with cigarette smoking, the phenomenon of a visible increase in female student smoking appeared to be worthy of attention. This paper explores the gendered meanings attached to the practice of cigarette smoking among female students, while focusing on the university as a space within which their notions of liberation intersect with the known health risks of cigarette smoking.

This paper proceeds with a brief review of the literature on university space and on women and smoking. The context of the study and the methodology are then outlined and this is followed by an analysis and discussion of the findings under three organising themes: *University as a transitional space*, *University as an enabling space*, and *University as a free space.*

University Space

Although metaphors of space are very powerful in educational discourse, research and theorising on the relationship between space and learning have only recently gained momentum (Cox 2011). The growing interest in virtual universities has prompted increased research into virtual learning environments (Guasch, Alvarez & Espasa 2010; Shahtalebi, Shahtalebi & Shahtalebi 2011). Alongside this, there has been a revival of interest in the physical space and built environment of universities (Cox 2011).

Since space is understood as being more than the three dimensional physical realm, studies focusing on university space have been varied, giving attention to social space (Straus 2009), personal space (Khan & Kamal 2010), and to ways in which constructed space recursively moulds social practice (Cox 2011).

Lefebvre (1991) and Massey (2005), in theorising about space, have challenged the idea of space in education as bounded and simply a backdrop for action, and propose space as an outcome of continuous contested productive processes. Along similar lines, Wilson and Cervero (2003) assert that knowledge, power, space/place closely intertwine to frame our social practices. This paper explores the significance of the university as a space for the production and appropriation of student femininities through the gendered

meanings that female students attach to the practice of cigarette smoking at university.

Women and Smoking

Globally the number of male smokers exceeds that of female smokers (Koura *et al.* 2011), and this difference varies dramatically across different countries. The relatively lower rates of smoking among women compared to men have been attributed to social disapproval of women smokers and to women's lower social and economic status (Waldron 1991). But increasing tolerance towards women smokers together with increasing economic independence among women have contributed to changing patterns in the gender profiles of smokers.

Studies on women and cigarette smoking have emphasised that smoking has dire health consequences that are unique to women, such as reduced fertility rates, increased spontaneous abortion rates and complications in pregnancy (Koura, Al-Dossary & Bahnassy 2011). According to Mackay (2001), smoking has come to be regarded as an important gender and health issue and therefore has to be seen as a women's issue. The studies under discussion may be criticised for positioning women primarily as reproducers with their reproductive health being the chief concern. Still, it is rarely contested that smoking is a serious health concern and the most significant avoidable cause of premature morbidity and mortality in the world.

In South Africa, as in most societies, smoking is by and large regarded as a masculine activity, and has traditionally been seen as a socially unacceptable one for females and at odds with conventional views of femininity. Studies have shown that in most societies women outlive men, and this has in part been attributed to health-promoting behaviours. The impression that men engage in health-risking behaviours, while women incline to health-promoting ones is aligned with cultural notions of masculinity and femininity (Soffer 2010). Soffer (2010) further argues that femininity, culturally speaking, is equated with health; consequently, women are encouraged and socialised to avoid risk by embracing health-promoting behaviours.

In investigating gender empowerment and male-to-female smoking ratios, Hitchman and Fong (2011) found that in countries with higher female empowerment (measured by economic participation and decision making, political participation and decision making, and access to economic resources), female and male smoking rates are closer to being equal. Their findings further suggest that while women's smoking-prevalence rates are currently lower than men's, they may be expected to rise in many low- and middle-income countries. Arguably, these shifts are reflected on the Edgewood campus of UKZN, where an increasing number of female student smokers have become visible in public spaces. It is evident that many female students are challenging traditional notions of femininity associated with health-preserving desiderata and are constructing new grammars of female behaviour with potentially hazardous outcomes. The focus of this paper is not on health risks specific to women but on the meanings that female students attach to the risky practice of cigarette smoking, in this case within a university setting.

The Context

The study was carried out at the Edgewood campus of UKZN whose specific focus is Education. The campus has a diverse student population in terms of race, gender, social, cultural and economic backgrounds. There is a large population of full-time undergraduate students studying towards a teaching qualification, and a growing number of full- and part-time postgraduate students. Since teaching continues to be a largely feminised profession, there are more female than male students enrolled at the Edgewood campus. With anti-smoking legislation having been in force in South Africa for a number of years, smoking in buildings, enclosed spaces and public spaces is prohibited. Certain open spaces are however unrestricted, and female student smokers, often congregating in groups, have become increasingly visible in these areas of the university campus.

Methodology

This study was undertaken within a qualitative framework, which provides useful opportunities for exploring how social experiences are given meaning.

Participants were a selected group of undergraduate female students enrolled for an Education degree. The findings discussed in this paper draws on the opinions of an initial sample of 12 female smokers aged between 18 and 22 years who were purposely selected on the basis of being observed smoking in the open spaces on the university campus. These were full-time undergraduate students, the category that accounts for most of the students on the campus.

The research was approved by the appropriate university ethics committee and gatekeeper permission was granted by the Dean of the Faculty. The participants were fully informed about the nature of the research and were made aware that they were free to withdraw from participation at any time. They were guaranteed confidentiality, and in order to ensure anonymity all names have been replaced by pseudonyms. Data were generated by means of focus group discussions (FGDs) combined with in-depth individual interviews, methods that provided opportunities for listening to the participants' views and seeing the world from their perspective. As a full-time staff member at the university, I am aware of the spaces within which students smoke and I am sure that I am a familiar sight to many of them. Gaining access to the participants was easy and they participated enthusiastically in the group discussions. I conducted three FGDs (two groups of three and one group of four participants) in the open spaces within which they were observed smoking. The FGDs provided a safe and comfortable way for the participants to talk about the phenomenon of female student smoking in ways that both included and excluded their personal views and practices. It allowed the participants to talk about themselves, if they chose to, and also to offer explanations relating to their peers.

Some pre-planned questions were asked to 'kick-start' the interviews whose shape was, however, chiefly determined by the direction(s) in which the participants steered discussion. Some of the questions used to get the FGDs going were: 'When and why do you think females begin smoking?'; 'Within which spaces do female students mainly smoke?'; 'What meanings do female students attach to cigarette smoking?'; 'How does knowledge of the health risks associated with smoking affect the decision to begin and continue smoking?'

A further two participants volunteered to be interviewed individually in my office. The questions asked were similar to those in the FGDs except that they now focused on the participants' personal views and experiences.

The discussions and interviews were tape-recorded with the consent of the participants and later transcribed verbatim.

The data from the FGDs and the individual interviews are discussed in terms of the three main themes that emerged from the participants' opinions and observations. The first is 'University as a transitional space'. This theme examines the crossroads of liberation and health within a construction of the University's offering a space perceived as temporary, transitional and experimental. The second theme, 'University as an enabling space', discusses the ways in which the university setting enables a challenge to gender norms, and highlights the potential health risks associated with particular expressions of liberation. The final theme, 'University as a free space', puts to the question the participants' understandings of freedom at the university, as that freedom intersects with their health choices.

Findings

Overall, an array of interpersonal and psychosocial factors was offered by the young women as influences on their decision to begin and to continue smoking. These explanations included curiosity, using smoking as a stress reliever, for image construction, for weight control, and just because it is allowed. The presentation below is based on a selection of the data collected. The three heads under which they are distributed are manifestly interconnected, so the division arrived at is an uneasy one and is adhered to chiefly in the interests of clarity.

University as a Transitional Space

A number of the young women in the study perceived the period in their lives spent as university students as unique and transitory. They foresaw a transition to a relatively stable adulthood upon completion of their studies. From the discussions it was clear that the young women were aware of the harmful effects of cigarette smoking, and many seemingly had a clear intention to quit once they transitioned into 'adulthood'. For example, Priyanka said: *'Maybe it's a phase that I'll get out of and I'll stop completely because I know that I'll want to start a family and I won't want to do that [smoke] for the sake of my children and myself'.* Similarly, positioning this

period in her life as a transitory phase preceding a more stable, responsible one, Justine stated: *'I have decided that if I am married and have a child, I'm going to stop. If I become pregnant I will stop but for now while I still can do it, I'm gonna do it'.*

There was only one participant who stated that she intended neither to have babies nor to quit smoking. In an exchange with Justine, Celine declared: '*Not me. I don't plan to get married or have children so I don't have to quit'.* The rest signalled an intention to stop smoking once they planned to have babies. All of the participants, in their intention either to quit or continue smoking, perpetuate a biological essentialisation of women as reproducers, in terms of which their health is assessed not from an inclusive point of view but solely in relation to their reproductive function and capacity.

Constructing the university as a transitional space also fosters understandings that promote experimentation with self-expression through forms of behaviour that prior to arrival at the university would have been regarded as transgressive. What some of the young women who spoke about image enhancement through engaging in practices that were forbidden at school actually meant, even if they did not say it, was the construction of identity as a commodity that can be purchased from a marketplace of ideas and images (Finklestein 1991). This is reflected in Gugu's explanation of why she smokes at university: *'I think it looks cool and sophisticated and shows that I am my own person.'* Her words point to the projection of an identity that is perceived as both stylish and liberated.

University as an Enabling Space

Viewing the university as an arena in which critical, independent thought is promoted, a number of the participants in consequence viewed it as encouraging challenges to established practices and orthodoxies. Asserting themselves as empowered, independent thinkers, they portrayed smoking as one of the ways in which they enacted their liberation. Pinky, for example, claimed that her choices were independent, without any peer influence: *'Well, we are encouraged to be individuals and make our own decisions – I don't do it because of my friends'.*

Some participants traced their decision to smoke to a wish to chall-

enge the gender norm; for example, in commenting on the kind of image she wanted to portray, Lorraine said: *'It's not that we want to be seen, it's like if boys don't have to hide it why do we have to hide it? It's not like 'Oh I'm smoking', it's more like if it's allowed on campus, we gonna do it on campus.'*

Others boldly interpret risk taking through smoking as a flaunting of new-found power and an enactment of personal autonomy: *'To me it does make me feel powerful and independent because when I have that cig and just like '"Yeh!"'* (Zama) and *'just because I can!'* (Priyanka). The data suggest that inasmuch as smoking defies traditional versions of femininity, it served for some of the participants as a means of enacting their liberation from the fetters of tradition.

While at one level smoking for some of the participants represented an active challenge to traditional gender norms, at another it contradictorily betrayed complicity with them. For instance, there was general agreement in the FGDs around the notion that smoking causes weight loss (To quote Zama: '*it's fine, 'cos I want to and they also say that it keeps the weight down'.*), indicating that the majority of the young women in the study viewed body size as being closely connected to female attractiveness, a view in conformity with the stereotypical notion that women are more preoccupied with their weight, their body image and their appearance than men are. The focus on body shape and size becomes salient in the context where young women's physical appearance is pivotal to the enactment of femininity (Bhana & Pillay 2011). In claiming independence and liberation on the one hand while on the other hand conforming to conventional norms of femininity relating to body size (Bordo 1993), the positions presented here clearly pose a paradox. Furthermore, it is a paradox with serious implications since young women who use cigarette smoking means to lose weight show that they value body image and appearance above good health.

University as a Free Space

While a few of the participants mentioned that they had begun smoking while at school, the majority indicated that they had started at university. This accords with evidence from the United States of America showing that although the majority of smokers experiment with tobacco use during their

teenage years, many only begin smoking seriously in college (Everette & Husten 1999; Wechsler, Rigotti, Gledhill-Hoyt & Lee 1998).

In response to the question about the reasons for taking up smoking, a typical remark was *'it's allowed'* or '*freedom away from home'*. Many of the participants indicated, moreover, that the only place where they smoked freely was the university campus, a stance reflected in Simmi's statement: *'No one worries about what you do at the university, I only smoke on campus'*. But the emancipatory freedom bestowed by the university campus has proved insufficient to overcome Janet's cultural conditioning which tethers her to traditional notions of femininity; and so when she smokes on the campus, she does so secretly: '*I tend to become very shy and conscious about who sees me smoking because I think it's a very unfeminine thing. Because I don't think it's very attractive to be a young female smoking so I try to hide it as much as possible, even on campus they'll know that I really only smoke if passages are quieter and people have gone to lectures'*.

Reena suggested that she smokes to relieve stress, but admitted that that is just an excuse: '*I'm not addicted- it's basically like a stress reliever but it's not really a stress reliever- but when you get agitated then we go smoke, especially when we in our social group then we like "lets smoke" and we go'*. For her part, Pinky insists upon her ability to resist group pressure and to assert independent agency: *I think I started smoking because all my friends were smoking on campus, and I said 'let me try it'. But I would give it up just like that! I won't worry that I have to fit in, and stuff.*

While many of the participants portrayed smoking as an expression of personal liberation, some brushed it off with the comment that it was insignificant and had not cost them much thought. Simmi said: 'I *don't think about it, I don't know why I smoke, I just do it*'; and when asked about her awareness of the health risks, she was equally dismissive: *'Yes, I know, but so what? If I have to die, I'll die'.* It is important to explore further why people continue to engage in behaviours that they know to be risky instead of rejecting them in favour of those that protect and promote health

The opinions and reflections grouped under this theme, like those mustered under the preceding two, convey the impression that many of the participants took to smoking (and continue to smoke) of their own free will. But should this portrayal be accepted at face value? Perhaps not. For in suggesting that they took up smoking voluntarily, are not the young ladies in question deluding themselves? Despite believing themselves to have acted as

free agents when they took up smoking, were they not in fact captives – captives in thrall to the seductive but contestable notion that smoking symbolised freedom, empowerment, independent agency, autonomy?

Discussion and Conclusion

This paper has explored some of the meanings that female student smokers attach to cigarette smoking in a university setting. A university campus, by its very nature, offers young people opportunities for cultivating new tastes, fashioning new forms of subjectivity, exploring new modes of behaviour, all seemingly exempt from from the control of family and the environing society. The data from this study suggest that the presiding discourse at university underwrites direct and indirect messages about independence, liberation and decision making upon one's own responsibility, and that these beliefs encourage active challenges to existing traditional frameworks. And so, despite well-documented research proving the detrimental effects of smoking, because the university is viewed as a space where freedom of choice is valued, a blind eye is turned to smokers while they cause harm to themselves as well as others. This suggests that the ways in which freedoms are understood and expressed at university have to be interrogated, and their valuable outcomes weighed against undesirable ones.

The meanings that the participants in this study attach to the practice of cigarette smoking within the university space are not without contradictions. For example, it is well known that what keeps smokers hooked is a nicotine addiction. Hence, the free-will discourse in the participants' pronouncements, asserting an ability to start and stop smoking at will is clearly at odds with the facts relating to addiction. Another contradiction concerns participants' claims to have taken up smoking through choice, not coercion; however, their willingness to be swayed by the voguish belief prevalent on many university campuses that smoking symbolises freedom, empowerment and independent agency bespeaks a subtle form of coercion after all.

While young females at university may be equating smoking with the pursuit of personal emancipation and independence, the associated health risks have drawn attention to the question of feminine agency. The issue becomes particularly significant when the striving for greater agency tempts

young females into adopting risky forms of behaviour whose association with freedom and empowerment is as illusory as it is seductive. This paper has argued that while the university is a space where freedom of thought and self-expression are, and should be, esteemed, and that while it is critical for women's empowerment to continue, the ways in which young women understand and express their freedoms have to be weighed against possible harmful consequences both for themselves and others.

References

Bhana, D. & N. Pillay 2011. Beyond Passivity: Constructions of Femininities in a Single-sex South African School. *Educational Review* 63,1: 65-78.

Bordo, S. 1993. *Unbearable Weight: Feminism, Western Culture and the Body*. Berkeley: University of California Press.

Cox, A.M. 2011. Students' Experience of University Space: An Exploratory Study. *International Journal of Teaching and Learning in Higher Education* 23,2: 197-207.

Everette, S.A. & C.G. Husten 1999. Smoking Initiation and Smoking Patterns among US College Students. *Journal of American College Health* 48:55-61.

Finklestein, J. 1991. *The Fashioned Self*. Philadelphia: Temple University Press.

Fletcher, C. & A. Camblin 2008. Preliminary Examination of First-year Female University Students: Smoking Practices and Beliefs in a City with No-smoking Legislation. *College Student Journal* 42,4: 120-127.

Guasch, T., I. Alvarez & A. Espara 2010. University Teacher Competencies in a Virtual Teaching/ Learning Environment: An Analysis of Teacher Training Experiences. *Teaching and Teacher Education* 26,2: 199-206.

Hitchman, S.C. & G.T. Fong 2011. Gender Empowerment and Female-to-male Smoking Prevalence Measures. *Bulletin, World Health Organization* 89:195-202.

Khan, A.Y. & A. Kamal 2010. Exploring Reactions to Invasion of Personal Space in University Students. *Journal of Behavioural Sciences* 20,2: 80-99.

Koura, M.R., A.R. Al-Dossary & A.A. Bahnassy 2011. Smoking Patterns among Female College Students in Dammam, Saudi Arabia. *Journal of*

Family and Community Medicine 18,2: 63-68.
Lefebvre, H. 1991. *The Production of Space*. London: Blackwell.
Mackay, J. 2001. Preface. In Samet J.M. & S.Y. Yoon (eds): *Women and the Tobacco Epidemic: Challenges for the 21st Century*. Geneva: World Health Organization.
Massey, D. 2005. *For Space*. London: Sage.
Prendergast, M.L. 1994. Substance Use and Abuse among College Students: A Review of Recent Literature. *Journal of American College Health* 43:99-113.
Shahtalebi, S., B. Shahtalebi & F. Shahtalebi 2011. A Strategic Model of Virtual University. *Procedia-Social and Behavioral Sciences* 28:909-913.
Soffer, M. 2010. The Role of Stress in the Relationships between Gender and Health-promoting Behaviours. *Scandinavian Journal of Caring Science* 24:572-580.
Straus, D.F.M. 2009. Social Space: Philosophical Reflections. *South African Journal of Higher Education* 23,4: 762-794.
Waldron, I. 1991. Patterns and Causes of Gender Differences in Smoking. *Social Science and Medicine* 32:989-1005.
Wechsler, H., N. Rigotti, J. Gledhill-Hoyt & H. Lee 1998. Increased Levels of Cigarette Use among College Students: A Cause for National Concern. *Journal of the American Medical Association* 280:1673-1678.
Wilson, A. & R.M. Cervero 2003. A Geography of Power, Identity and Difference in Adult Education Curriculum Practice. In Edwards, R. & U. Usher (eds): *Space, Curriculum and Learning*. Greenwich (CT): Information Age Publishing.

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Disciplining the Boys: Construction of Violent Masculinities in a South African High School

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Abstract

This article sets out to determine how the processes of school discipline and the meanings and practices found within the school's gender regime contribute to help form school boys' masculinities in a co-educational secondary school in Durban, South Africa. A qualitative research design was used to engage intersubjectively and dialogically with the boys in ways that generated insights that were central to the configurations of masculinities in relation to school discipline. The two main research instruments used to generate data were classroom observation and semi-structured interviews. Accordingly, the data generated took the form of field notes and verbal evidence. This study utilised inductive analysis to analyse and synthesise data. Ten boys and seven teachers were purposefully selected to be the main research participants in this study. Three interviews were conducted with each of the main participants. However other boys and teachers were also interviewed, particularly boys that were involved in violent incidents or confrontations; these interviews were informal and unstructured. The results indicate that rigid disciplinary measures and harsh strategies of control create a school climate that normalises and thereby legitimises enactments of violent masculinities. These violent masculinities serve to break down school order which is an opposing objective of the school's discipline policies and practices. The school discipline practices in this particular school seem to be at a crossroad, resulting in outcomes contradictory to what were expected. The handling of discipline was at the core of a school gender regime that bolstered and perpetuated a particular brand of masculinity in its assertive, intolerant, blustering and violent form. This study recommends that schools should develop new caring discourses and practices which counter the hegemony of violent discourses.

Keywords: control, discipline, high school, masculinity, South Africa, violence

Introduction

Concern has been expressed in South Africa and elsewhere about the broad problem of violence; in particular, violence in schools has lately become a focal point of policy and media attention. Schools have no immunity from problems associated with discipline and violence. In South Africa one discipline policy instituted in an attempt to improve the behavioural climate in schools is set out in the Department of Education's 'Alternatives to Corporal Punishment' (1996). At Sunville Secondary School (research site) there has been resistance to this policy, resulting in teachers increasingly adopting an authoritarian approach to handling discipline – engaging learners in power struggles that serve only to escalate the violence (Khoja-Moolji 2012). This violence is often bound up with particular constructions of masculinity, and subscription to violent configurations of masculinity in school settings has become a crisis situation for education in general.

This study examines the connectedness between punitive discipline measures and configurations of violent masculinity at school level. Drawing from its findings, the study also makes recommendations for intervention that can reduce violence in schools, highlighting critical decisions that need to be made regarding school discipline, especially in relation to violent school masculinities.

Generally, literature that interrogates complex phenomenon such as school violence tends to focus on context variables such as the individual, the family, media or community risk. Some researchers have focused, for example, on individual characteristics that were found to increase violent behaviour in schools. These include aggressive reaction patterns, physical strength, weak self-control, impulsiveness, and irritability (Bjorkqvist 1994; Agnew 2005; Henry 2009). Other studies have shown that factors such as family conditions, neighbourhood and community, poverty, racial composition and residential stability may reinforce aggression and violence among school-going youth (Barker 2005; Kreager 2008; Harding 2009).

Studies that have attempted to understand violence among school boys by focusing on the construction of masculinities include (Oransky &

Marecek 2009; Langa 2010; Morojele 2010; Clare 2012; Mncube & Harber 2012). However, only a few have considered how school discipline and control measures may relate to the construction of masculinity and violence; these include Morrell (2001), Hamlall and Morrell (2009) and Khoja-Moolji (2012). This article picks up on the third of these by focusing on aggressive disciplinary measures and masculinities, analysing how these measures are contributing factors in school violence.

Violence and disruptive behaviour in South African schools has escalated to a level of severity that has become difficult to manage. There has also been a growing concern to understand the root cause of violence in schools and to find constructive ways to reduce it, and if possible prevent it entirely (Morrell 2002; Aitken & Seedat 2007; Johnson *et al.* 2011). There are a number of troubling issues in education that relate to boys, men and their place in gender relations. Discipline problems and violence in schools most often concern boys, for it is boys who are mainly associated with them and enact them (Martino 1999; Lindeggar & Maxwell 2007; Hamlall & Morrell 2012). While no study will ever have a simple way of measuring the relative influence of different institutions, there seems to be a good case for considering schools as one of the major sites of masculinity formation. To understand this we must explore the structures and practices by which the school influences the construction of masculinities among its pupils (Connell 2000). After all, gender is embedded in the institutional arrangements through which a school system functions.

There is extensive literature on school violence that seeks to 'explain' the connection between masculinity and violence (Connell 1989; 1996; 2000; Morrell 1998; 2001; Skelton 2001; Gibson & Lindegaard 2007). While contexts where violence in school is studied vary, masculinity is connected with all of them and understanding these connections is necessary and important in the context of school discipline. In many cases when schools are faced with disruptive and aggressive behaviour, a standard response has been punishment, suspensions, sanctions, and numerous other punitive measures to get learners to conform to school rules and regulations. Granted, disciplinary procedures and attention to school security are important in maintaining order and ensuring school safety, but harsh and punitive disciplinary strategies do not always serve to reduce or discourage aggressive and disruptive behaviour among and between learners (Khoja-Moolji 2012). It is against this background that my study sought to address the following research question:

What is the relationship between heavy-handed approaches to discipline, constructions of masculinity, and heightened violence and aggression in the behaviour of boys?

The present paper is based on a three-year ethnographic study conducted in Sunville Secondary School which is situated in Chatsworth, a suburb of Durban, and is presented here as part of this broader project which examined how conflict and violence feature in the construction of masculinities.

Schooling the Boys: Violence and Masculinities

Connell (1989) argues that schools have unwittingly become masculinity-making devices. This is because 'gender is embedded in the institutional arrangements by which a school functions' (Connell 1996: 213). This manifests itself in each individual school's particular hierarchy, rules, and criteria of evaluation and judgement, and many of the parameters are set by a formal regime which has a whole life and meaning all of its own. It includes not only relations and interactions between pupils, but also the informal relations between pupils and teachers. It is in this context that schools can actively promote violence (e.g. through inflicting corporal punishment), even though they are supposed to be peaceful, stable and supportive environments (Harber 2002; Maphosa & Shumba 2010).

The literature which examines the intricacies of the methods boys use to construct their gender identities (Mac an Ghaill 1994; Sewell 1997; Martino 1999; Skelton 2001; Reay 2002; Smith 2007; Watson 2007) also points out that the relationship between teachers and pupils can be seen as an area of strategic importance in the production of masculinities. Other writers – Connell (1989) and Walker (1998) – argue that a violent discipline system invites competition in 'machismo' among boys, and sometimes between boys and male teachers. More recent work has suggested that rigid educational systems, particularly systems that focus more on maintaining order than on engaging students in meaningful ways, reinforce behaviour that chafes at authority (Barker 2005; Hamlall & Morrell 2009; Khoja-Moolji 2012). All these studies point to the link between a rigid system of discipline and violent male competition and aggression.

Boys' investments in and subscription to aggressive, violent, compe-

titive, masculinities are often associated with them challenging authority and disputing policies of control (Skelton 2001; Walker 1998; Gibson & Lindegaard 2007). The enactment of this particular type of masculinity has become a crossroads issue for education seeking to promote peaceful, democratic and respectful learning environments.

Theoretical Framework

As a means of explaining/exploring configurations of masculinity that are constructed in a school setting in the maintenance of discipline, this study adopts a social practice approach, particularly that offered by Connell (1989; 1995; 1996; 2000). Connell maintains that although there are many different modes of masculinity it is nonetheless possible to identify certain configurations of masculinity on the basis of general social, cultural and institutional patterns of power and meaning, and to discern how they are constructed in relation to each other. Following Connell, these masculinities are identified as hegemonic, complicit, subordinate and marginal, although it would be naïve to assume that boys' behaviour will fit neatly into these conceptualisations.

In any institution such as a school there will be a hierarchy of masculinities, and generally one form of masculinity gains ascendancy over the others and becomes dominant (Frosh, Phoenix & Pattman 2002). As Connell puts it (1995), the hegemonic form becomes 'culturally exalted' or 'idealised'. Hegemonic masculinity makes its claims and asserts its authority through a variety of cultural and institutional practices, and although it does not necessarily involve physical violence, it is often underwritten by the threat of such violence (Kenway & Fitzclarence 1997; Stoudt 2006). Hegemonic definitions of masculinity create boundaries, furthermore, which serve to delineate what appropriate maleness should be within the social arena.

These theoretical explanations offer a useful way of understanding the manner in which boy's behaviour is shaped by their constructions of masculine identity. From a social constructionist perspective, men and boys are active agents in constructing and re-constructing dominant norms of masculinity. This concept of agency, the role boys play in exerting power and producing effects in their behaviour, is central to this study.

Method

A qualitative research design was used to engage intersubjectively and dialogically with the boys in ways that generated insights that were central to the configurations of masculinities in relation to school discipline. The two main research instruments used to produce data for this study were classroom observation and face-to-face interviews. The data generated took the form of field notes and verbal evidence.

I observed classroom and school practices of keeping discipline, interactions between teachers and learners, and the nature of, and manner in which, school policies were implemented, especially to control learner behaviour. Much of this involved observation in an ethnographic format.

To obtain insights into how the school's policies and practices influenced the gender regime, especially violent practices on the part of boys, I interviewed teachers and learners (boys) using semi-structured and informal interviews. The interviews and in-depth observations were conducted between 2006 and 2008.

I identified 10 boys who became the main research participants in this study. All the boys were in Grade 10, aged between 15 and 17 years. Four were African[1], four were Indian and two were coloured. All the boys came from a working-class background and lived in and around Chatsworth.

These boys were identified, from classroom observations of conflict situations with teachers and learners in the classroom and the playground, as frequently found to be involved in violence and to be breaching school rules. Such identification was confirmed by referring to the disciplinary records of the school. I conducted three semi-structured interviews with each of the boys in the study. Each of these interviews lasted for approximately 45 minutes. Informal and unstructured interviews were also conducted with other boys, particularly boys who had been involved in violent incidents or confrontations.

In the selection of teachers as study participants, I used purposive sampling. The criteria used were experience and seniority. I interviewed

[1] I use the racial classification created by colonialism and apartheid but still in use in post-apartheid legislation as a means of effecting redress of injustice and inequality. The categories, which remain controversial and contested but still have social reality, are: white, Indian, coloured (people of mixed descent or birth) and (black) African.

seven teachers: four female and three male. Other teachers who had been involved in confrontations with boys were also interviewed informally. I conducted interviews with teachers in order to examine their agency in shaping the school's gender regime and their role in shaping the construction of masculinities among boys.

This study utilised inductive analysis in which 'patterns, themes and categories emerge from the data rather than being developed prior to collection' (Marlow 1993: 324). In my analysis of observations and interviews, I focused on recurring regularities in the data which represented patterns of meaning in describing and understanding constructions of masculinity.

In what follows I describe the rigid school practices and structures that were used to maintain discipline among the boys. These practices contributed to a gender regime which mobilised around a hegemonic form of masculinity associated or implicated with violence.

School Disciplinary Practices in the Construction of Masculinity

Sunville had many mechanisms in place to control behaviour and maintain discipline. The school is enclosed by a solid wall and is patrolled by two guards armed with whips. There are surveillance cameras monitoring the 'hot spots' and learners are constantly being hauled to the office by the guards for infringing school rules or entering 'no-go' areas. Sanctions, suspensions and expulsions are common. Sometimes the police were called in when more serious incidents occurred (e.g. stabbings, drug peddling and extortion of money), which either the teachers or the security guards (or both) believed they were unable to deal with effectively, and boys were sometimes arrested. The guards have also been known to handcuff boys when taking them to the office. They run their whips along the rails to intimidate learners and force them to comply.

These control mechanisms are examples of direct violence that draws on the culture of hegemonic masculinity at Sunville. Through these control mechanisms the school normalises violence that is embedded in regulations and policies. This type of culture and climate promote education for control rather than education for critical consciousness. Morrell (2001) argues that this zero tolerance approach fosters discourses of violence that promote violence to the extent that they prevent other discourses from emerging, or at

least force them into the margins where their ability to offer people a different language or behaviour is limited. Research into authoritarian, harsh disciplinary systems and the construction of masculinity – for example Swain (2005) and Khoja-Moolji (2012) – contends that stringent disciplinary structures at school reflect an association of masculinity with violence.

At Sunville the zero tolerance approach to handling discipline was highlighted in the morning assemblies where learners were constantly cautioned about the consequences of infringing school rules. The principal often spelled out disciplinary action that would be taken if certain school rules were infringed. In one of the assemblies the principal made an announcement that the guards would now carry a 'sjambok' (whip). Boys who jumped over the school fences to enter the school and who were not in full school uniform would run the risk of being 'sjambokked' (whipped) by the guards. Many boys subsequently did jump over the school fences, were caught, and suffered the consequence of being whipped by the guards. The boys often retaliated, resulting in violent confrontations.

It was apparent that the school's heavy official emphasis on conformity and respect for authority did not always have the desired effect. In response to threats of draconian action, many boys made comments in the interviews such as 'They must first catch us' and 'I will show them what I can do'. Many boys saw the school's threats as a challenge to which they responded with anti-authority actions which in turn reinforced their attitude of toughness and elevated their status among other learners in the school.

A considerable number of boys took the discipline system as a challenge and made a heavy investment in ideas of toughness and confrontation. The reaction of the boys to the principal's threats and to actions of teachers and security guards in the maintenance of discipline, as indicated above, reflects Connell's (2000) contention that a heavy-handed approach to discipline serves to stimulate the display of exemplary, hegemonic masculinity and in many cases promotes recourse to violence.

The harsh and punitive discipline strategies disciplinary structures at Sunville legitimise a particular kind of masculine subjectivity, in the end simply creating a school climate that approves violent configurations of masculinity rather than seeking to foster positive pro-social behaviour, and in this sense placing these masculine configurations 'at a crossroads'. The performance and preservation of this masculinity often (but not in all cases) involves boys engaging in anti-authoritative behaviour which promotes

recourse to violence (Harber 2002; Maphosa & Shumba 2010). The current school practice in handling discipline does not appear to be effective. Sunville's educational discipline policies and practices thus raise issues about effective behavioural strategies in that they promote violent masculinities which compromise the maintenance of school order.

While many of the teachers subscribed to the view that in order to maintain discipline and control of the boys it was necessary to use physical force and aggression there were also teachers, male and female, who did not subscribe to the methods of control that I describe below. There were teachers who did promote peaceful and non-violent behaviour among learners and who themselves acted in non-violent ways as an example to learners. Further, not all boys reacted to teacher aggression in a similar fashion or subscribed to the particular versions of hegemonic masculinity at Sunville.

I found that the hard line approach to disciplining learners was especially overt when I observed teachers and learners during the breaks. When boys got into a fight or scuffle, the fight usually stopped when a teacher intervened. Female teachers never intervened when boys were fighting, while the male teachers that intervened always used physical aggression when separating or stopping a fight. They often slapped and pushed the culprits around. These flawed teacher-pupil interactions have been noted as frequently contributing factors in provoking violence in schools (Mills 2001).

I interviewed a male teacher ('Mr Roy'[2]) immediately after he had intervened to stop a fight on the school grounds. His response was, 'This is the only language they understand – in these situations you have to clobber one or two'. He said this with great pride and his body language and facial expression showed satisfaction that he had handled the problem adequately and 'sorted out these fighters'.

Teacher–learner relations of the kind described above produce a masculinising practice that endorses violence. Morrell's (2002) suggests that when men see violence as a choice which demonstrates their masculinity this leads boys to regard violence as a key area in masculinity making. It is in these interactions with teachers that boys get the information that tells them how they are supposed to be and act as a boys and future men. This was confirmed by many boys at Sunville who admired teachers who were hard and aggressive in handling difficult situations. Boys commented in interviews

[2] Fictitious names are used in all cases for persons at the school.

that 'Mr Desmond' was a tough '*ou*' (man, guy) and that they must not mess with him. Boys also said that they '*smaaked*' (liked, admired) 'Mr Chats', a male teacher who was physically well-built and often used physical force to get boys to conform or to deal with volatile situations among boys. The teachers who adopted aggressive, intimidatory management strategies did not, however, seem to be aware that they were helping to create a particular type of masculine ideal that encouraged violence, aggression and force. Many of the teachers would in fact often celebrate the use of intimidation and aggression in handling discipline problems with boys. Where counselling and pastoral care of learners is limited issues of discipline are likely to be handled insensitively or mechanistically, and Devine (1996) suggests that distancing of teachers from pastoral care in the discipline process is a factor that creates and fosters a culture of violence in school.

Male teachers at Sunville (though not all) often used violence to stop violence among the boys. Violence was regularised under the guise of intervention. Male teachers in particular seldom used non-violent means to deal with schoolboy fights, thereby entrenching the cultural context where violence was regarded as the most appropriate means to end conflict in the school. The consequence was that boys emulated this mentality and readily resorted to force and aggression among themselves.

An example from my field notes records an instance of boys emulating a male teacher's aggressive response to a boy who was experiencing difficulty handling a machine in a welding workshop.

> *Teacher: 'You must put on an apron and go and work in the kitchen. We do not want sissies in this workshop'. The teacher aggressively shoved the boy away. The other boys joined in the pushing and shoving and sang in chorus, 'kitchen boy, kitchen boy'. The teacher made no attempt to stop them.*

According to Humphrey (2008), when boys are consistently exposed to the presence of violence in their interactions with teachers and peers, violence becomes an element of the boy's transition to adulthood. As was the case in Humphreys's study, many of the boys at Sunville wanted to be seen as men and regarded violence as a legitimate means of achieving this aspiration. Different cultures, different societies and different communities have different mandates of what it is to be a man, but common to all of them is a

cultural mandate to prove yourself, and define what kind of man you are, and to do so in a public way. At Sunville this imposed specific obligations in relation to defence of one's identity and dignity. Teachers' handling of discipline played a significant role in charting the ways recognition of manhood was earned in the context of the school.

It is important to understand that in the enactment of a particular masculinity, while individuals do the acting, they do so within institutional settings and thus their actions cannot be understood in purely voluntarist terms, or (in other words) out of context. The setting of this study was a high school in which tough, aggressive forms of masculinity were celebrated by teachers and learners alike, and the school was an agent in shaping the way boys handled conflict and violence *vis à vis* shaping masculinities. A major problem in many schools is that the schools not only neglect to educate learners about masculinity in a way that would curb violent interpretations of it, but all too often actively encourage such violent interpretations (Mncube & Harber 2012).

However it is important to recognise that violence in schools is far more complex than simply what male teachers do to 'innocent' boys. A host of variables, such as individual, family, media and community risk contexts, aggressive reaction patterns, physical strength, weak self-control, impulsiveness, irritability family conditions, neighbourhood and community, poverty, racial composition and residential stability, have potential to reinforce aggression and violence among school-going youth (Agnew 2005; Barker 2005; Kreager 2008).

In the school context of this study I was not able to map particular kinds of disciplinary measures with particular types of violence, but it is important to note that variables such as ridicule, embarrassment and criticism by teachers, insensitivity, rigid monitoring, sanctions, suspensions, expulsions and physical force and aggression in trying to control and discipline boys certainly influenced the way in which boys handled conflict within the school arena. These harsh measures were more likely to steer boys' handling of conflict towards violent resolutions and they implied masculinities aligned with negative values of confrontation, hostility and belligerence instead of positive values of non-violence, democracy and peace. Within the cultural milieu of this school a good case can be made that the harsh disciplinary measures played a major role in shaping this violent mentality.

Conclusion

This study centred on the way in which the Sunville school gender regime, in relation particularly to order and discipline, influenced boys' behaviour in the construction of their masculinity. Its findings indicate that frequent use of aggressive discipline measures by teachers, combined with the boys' own investment in this culture of violence, produced a climate of hostility at the school. Attributes such as hardness, readiness to confront antagonists and fighting prowess were key elements in the construction of hegemonic masculinity, and use of force and aggression to settle disputes was a key feature of the boys' micro-culture. This was often built around the masculinities of some of the school's teachers who had investment in using violence to generate respect and maintain control.

In a climate where teachers were not automatically accorded respect by virtue of their position, physical force was often used to command respect and confirm authority. For the boys, use of violence was a way to assert their masculine identities in a complex and hostile school environment. Rigid disciplinary measures often led to frustration on the part of the boys leading them to challenge school authority and dispute policies of control, often in violent ways.

At Sunville, masculine investments in violence on the part of both teachers' and pupils lent high status to 'tough' forms of masculinity and contributed to a broad school culture of hostility. There being a number of causal factors for violence in schools, this paper argues that the school context (in this case, of rigid rules and policies combined with displays of teacher aggression against learners in imposing discipline) has a major influence on the prevalence of violent masculinities.

The key issue emerging from this study is that the teachers' disciplinary approach suggested to learners that it was legitimate for them to aspirate to 'hard man masculinity', which led in turn to violent confrontations between learners, and in some instances even between learners and their teachers. The dilemma here is that stringent, hard line approaches to maintaining discipline accelerate anti-school behaviour, and this raises serious doubt about the wisdom of approaches to school discipline that are likely to increase and fuel violent mentalities and behaviour, especially among boys, rather than a creating a more positive and peaceful climate. These violent conceptions of masculinity set at naught any violence

prevention programmes seeking to promote peaceful learning environments. This presents us with a crossroads issue for education in general. In an era of educational accountability there is a strong argument for questioning the efficacy and the effect of this school's discipline regime.

Intervention programmes to address school violence need to begin with identification of the school's dominant masculinity and of other masculinities operative at the school. Appropriate strategies can then be developed to tackle violent behaviour by offering boys alternative non-violent versions of masculinity. Programmes need to be offered with activities that help teachers to perceive the effects that aggressive discipline strategies have on shaping violent masculine identity. On this point, Mills (2001) recommends that teachers adopt a respectful approach towards boys rather than the arrogant, severe demeanour which they are commonly associated with. Male teachers in particular should abstain from aggressive displays of dominant masculinity in their handling of discipline problems. It is important that school violent intervention programmes be developed in which learners and teachers confront the linkage between violence and dominant forms of masculinity. My intention in this study has been to build on and add to existing understanding that schools in their discipline policies and practices are in danger of endorsing and legitimising the cultural violence of hegemonic masculinity. Although a dominant form of masculinity exercises immense power, it remains a social construct and is therefore subject to interrogation and change. Schools need to implement a progressive education policy to convert a human rights discourse into emancipated reality. In other words we need to develop new caring discourses and practices which counter the hegemony of violent discourses.

References

Aitken, L. & S. Seedat 2007. The Relevance of Violence-prevention Interventions in South African Schools. *Journal of Child and Adolescent Mental Health* 19,2: 7-19.

Agnew, R. 2005. *Juvenile Delinquency: Causes and Control.* Second Edition. Los Angeles: Roxbury.

Barker, G.T. 2005. *Dying to be Men: Youth Masculinity and Social Exclusion.* Abingdon: Routledge.

Bjorkqvist, K. 1994. Sex Differences in Physical, Verbal and Indirect Aggression: A Review of Recent Research. *Sex Roles: A Journal of Research* 30,3: 177-183.

Clare, B. 2012. 'I'm not allowed to wrestle and stuff': Hegemonic Masculinity and Primary School Boys. *Journal of Sociology* 48,3: 227-247.

Connell, R.W. 1989. Cool Guys, Swots and Wimps: The Interplay of Masculinity and Education. *Oxford Review of Education* 15,3: 291-303.

Connell, R.W. 1995. *Masculinities*. Cambridge, Polity Press.

Connell, R.W. 1996. Teaching the Boys: New Research on Masculinity and Gender Strategies for Schools. *Teachers College Record* 98,2: 206-234.

Connell, R.W. 2000. *The Men and the Boys*. St Leonards NSW: Allen and Unwin.

Department of Education 1996. *National Education Policy Act.* Pretoria: Government Printers.

Devine, J. 1996. *Maximum Security: The Culture of Violence in Inner-City Schools.* Chicago: University of Chicago Press.

Frosh, S., A. Phoenix & R. Pattman 2002. *Young Masculinities*. New York: Palgrave.

Gibson, D. & R. Lindegaard 2007. South African Boys with Plans for the Future: Why a Focus on Dominant Discourses Tells us Only a Part of the Story. In Shefer, T., K. Ratele, A. Strebel, N. Shabalala & R. Buikema (eds.): *From Boys to Men: Social Constructions of Masculinity in Contemporary Society*. Lansdowne: UCT Press.

Hamlall, V. & R. Morrell 2009. I Know that I could have Walked Away but There were People Around There: Masculinities and Fights between Boys at a Durban High School. *Agenda* 80: 68-79.

Hamlall, V. & R. Morrell 2012. Conflict, Provocation and Fights among Boys in a South African High School. *Gender and Education* 24,5: 483-498.

Harber, C. 2002. Schooling as Violence: An Exploratory Overview. *Educational Review* 54,1: 7-16.

Harding, D.J. 2009. Collateral Consequences of Violence in Disadvantaged Neighborhoods. *Social Forces* 88,2: 757-784.

Henry S. 2009. School Violence beyond Columbine: A Complex Problem in Need of an Interdisciplinary Analysis. *American Behavioral Scientist* 52,9: 1246-1265.

Humphrey S. 2008 Gendering Corporal Punishment: Beyond the Discourse of Human Rights. *Gender and Education* 20, 5: 527-540.

Johnson S.L., J.G. Burke & A.C. Gielen 2011. Prioritizing the School Environment in School Violence Prevention Efforts. *Journal of School Health* 81,6: 331-340.

Kenway J. & L. Fitzclarence 1997. Masculinity, Violence and Schooling: Challenging 'Poisonous Pedagogies. *Gender and Education* 9,1: 117-133.

Khoja-Moolji S. 2012. The Making of Violent Masculinities: Exploring the Intersections of Cultural, Structural and Direct Violence in Schools. *UCLA Journal of Education and Information Studies* 8,1: 1-18.

Kreager, D.A. 2008. Too Cool for School? Violence, Peer Status and High School Dropout. *Social Forces* 87, 1: 445-471.

Langa, M. 2010. Contested Multiple Voices of Young Masculinities amongst Adolescent Boys in Alexandra Township, South Africa. *Journal of Child and Adolescent Mental Health* 22,1: 1-13.

Lindeggar, G. & J. Maxwell 2007. Teenage Masculinity: The Double Find of Conformity to Hegemonic Standards. In Shefer, T., K. Ratele, A. Strebel, N. Shabalala & R. Buikema (eds.): *From Boys to Men: Social Constructions of Masculinity in Contemporary Society*. Lansdowne: UCT Press.

Mac an Ghaill, M. 1994. *The Making of Men – Masculinities, Sexualities and Schooling.* Milton Keynes: Open University Press.

Maphosa, C. & A. Shumba 2010. Educators' Disciplinary Capabilities after the Banning of Corporal Punishment in South African Schools. *South African Journal of Education* 30,3: 387-399.

Marlow, C. 1993. *Research Methods for Generalist Social Work*. California: Brooks/ Cole Publishing Company.

Martino, W. 1999. 'Cool Boys', 'Party Animals', 'Squids' and 'Poofters': Interrogating the Dynamics and Politics of Adolescent Masculinities in School. *British Journal of Sociology of Education* 20,2: 239-263.

Mills, M. 2001. *Challenging Violence in Schools: An Issue of Masculinities.* Buckingham: Open University Press.

Mncube, V. & C. Harber 2012. *The Dynamics of Violence in South African Schools: Report. UNISA College of Education.* Pretoria: University of South Africa.

Morrell, R. 1998. Gender and Education: The Place of Masculinity in South

African Schools. *South African Journal of Education* 18, 4: 218-225.
Morrell, R. 2001. Corporal Punishment and Masculinity in South African Schools. *Men and Masculinities* 4,2: 140-157.
Morrell, R. 2002. A Calm after the Storm? Beyond Schooling as Violence. *Education Review* 541: 37-46.
Morojele, P. 2010. What does it Mean to be a Boy? Implications for Girls' and Boys' Schooling Experiences in Lesotho Rural Schools. *Gender and Education* 23,6: 677-693.
Oransky, M. & J. Maracek 2009. I'm not Going to be a Girl: Masculinity and Emotions in Boys' Friendships and Peer Groups. *Journal of Adolescent Research* 24,2: 218-241.
Reay, D. 2002. Shaun's Story: Troubling Discourses of White Working-class Masculinities. *Gender and Education* 14,3: 221-234.
Sewell, T. 1997. *Black Masculinities and Schooling: How Black Boys Survive Modern Schooling*. Stoke on Trent: Trentham Books.
Skelton, C. 2001. *Schooling the Boys: Masculinities and Primary Education*. Philadelphia: Open University Press.
Smith, J. 2007. 'You've got to have balls to play this game sir!': Boys, Peers and Fears: The Negative Influence of School-based 'Cultural Accomplices' in Construction Hegemonic Masculinities. *Gender and Education* 19,2: 179-198.
Stoudt, B.G. 2006. 'You're either in or you're out': School Violence, Peer Discipline, and the (Re)production of Hegemonic Masculinity. *Men and Masculinities* 8,3: 273-287.
Swain, J. 2005. Masculinities in Education. In Kimmel, M.S., J. Hearn & R.W. Connell (eds): *Handbook of Studies of Men and Masculinities*. London: Sage Publications.
Watson, S.W. 2007. Boys, Masculinity and School Violence: Reaping what we Sow. *Gender and Education* 19,6: 729-737.
Walker, J. 1998. *Louts and Legends*: *Male Youth Culture in an Inner City School*. Sydney: Allen and Unwin.

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