Journal of Education

Periodical of the Kenton Education Association

ISSN 0259-479X Number 57 2013

http://joe.ukzn.ac.za

Journal of Education
Periodical of the Kenton Education Association
School of Education
University of KwaZulu-Natal
Private Bag X01
Scottsville
3209

E-mail: JoE@ukzn.ac.za

ISSN 0259-479X

Number 57

A new series started at No.23, equivalent to old series volume 23, No.1

Contents

Editorial

Wayne Hugo

Melanie Walker and Monica McLean are two exceptionally brave academics who attempt to articulate an ethic for professional education. Moses came down the mountain weighed down with 10 commandments; Walker and McLean are far more consultative, open and dialogical about the process, but in the end they arrive at eight professional capabilities we need to consider embedding in educational arrangements to prepare graduates to act rightly in conditions of deep inequality and poverty. If we lived in an Islamic or Christian state this would not be an issue, for an established ethical and moral order would exist across all levels of society. But with the rise of secularism and the separation of religion from the functioning of the economy, the law, the state, and even the education system, we find ourselves in a massive ethical void, left with no god-given set of commandments to guide us. We have no long history of rituals, lore and parables to give us light and guidance. *How do we educate our students to act rightly in the process of specialising them for a profession?* Most of us accept that universities should be involved in the ordering of knowledge, but should higher education also be about how we order our lives? Should professional education be about wisdom as well as knowledge and application? Given how rampant the current use of knowledge is in actively destroying our world, this question of the relationship between the epistemic and the ethical in the professions becomes one of the central defining issues of our generation.

It's not enough to point to the internal dynamics of knowledge pursuit providing its own ethics. There is an internal ethic to the process of specialisation that comes from the need to concentrate and learn for long periods of time in ways that discipline the mind and body of the student. This offers no protection against the malevolent but self-disciplined professional. Is a Capabilities approach any stronger? Can it provide a modern and secular ethic for professional education? Should universities embed in their functioning a set of professional capabilities that produce graduates who have an appreciation of human dignity and evaluate what they do in the light of the larger public good? If so, what would these professional capabilities look like? Walker and McLean's research on the issue really does deserve a wide audience as it deals with these issues all of us face.

I am deeply supportive of such a project but at the same time have strong reservations. My reservations coalesce around two major concerns: whether the Capabilities approach provides the correct level of focus in the context of professional education; and the adequacy of the capabilities approach to carry the weight of development ethics. Walker and McLean emerge with a set of eight capabilities that straddle five different professional groupings: Social Work, Public Health, Law, Engineering, and Theology. The question that immediately jumps out for me is whether the correct level of focus to these questions is not best set at that of the individual professions and their ethical codes. At this level you can focus in on the ethical demands specific to each profession and also provide enough substance and enforcement to carry the demands into the light of day. There is a real danger that focussing on a level of ethical intervention at the level of professional education in general provides too broad a set of principles to be of practical use. For example, Engineering students are not renowned for their emotional reflexivity, as Walker and McLean's data showed up, but unlike Social Work, Public Health, Law and Theology, it is not clear that emotional reflexivity should be a part of their professional capabilities. Lack of cultural reflexivity has probably got more to do with Engineering and the peculiar demands such a profession makes and calls for.

It's not clear that the Capabilities approach can actually work at the level of specific professions. 'Capabilities' are too generic a set, even if you attempt to provide realisable functions, as Walker and McLean do. It's almost like those involved in arguing that our modern economy needs generic skills (or learning how to learn skills) have found an ethical counterpart in the Capabilities approach theory, and this is not surprising, given the intellectual origins of Capability theory in Economics. 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.

But as critical as I personally am about the Capabilities approach, I am deeply supportive of the project Walker and McLean are engaged in, because at least they are attempting to answer the hard question of the relationship of professional education to ethics in a secular world riven with inequality that

combines theory, active engagement and empirical research. I might prefer a different level of focus, but Capabilities certainly does provide the right co-ordinating theory at the level of professions as a whole, rather than individual professions in particular. We need numerous answers at different levels from a diverse range of intelligent and well-informed individuals, for that gives us 'the wisdom of academic crowds' (with apologies to James Surowiecki). It's also why journals such as ours are of such value to all of us.

What happens if instead of working with professional education as a whole, we take a look at one profession in particular – teaching? Francine de Clercq provides both a historical overview of the developments in teacher professionalism in South Africa over the last 20 years and a diagnosis of what can still be done to improve matters. She ranges over struggles between the Department of Education and SADTU, alternative positionings of the various unions, the weakness of SACE, and recent developments such as establishment of NEEDU. My own position – that it is at the level of the individual profession where you need the strongest form of regulative control – makes a reading of her paper painful, for in SADTU and SACE we have the turning of professional teachers into workers and the toothless bite of an underfunded regulating body. SADTU is currently shifting from this position, and has 2030 as the date for its shift from militancy to professionalism, something that needs to be celebrated as a mission and taken seriously in practice, as sixteen years is not a long time. In the meantime. . . NEEDU, we need you.

If level of focus was an issue with the Capabilities approach theory and professional education, then a similar issue arises inside one profession. Here the question is the focus on the profession as a whole or the independent subject-based organisations within the teaching profession. Organisations such as the Association of Mathematics Educators of South Africa (AMESA) and the Southern African Association for Research in Maths, Science and Technology Education (SAARMSTE) are doing sterling work. Is it not possible to expand their role in South Africa by encouraging the development of subject specific associations for all subjects, thus increasing professionalism at the level of the subject rather than that of the teaching as a whole? De Clercq certainly thinks so and argues for the need to strengthen independent, discipline based, professional organisations that work at a subject specific level, given the current struggles in SADTU and the malaise in SACE.

So if we take the profession of teaching as our natural level of focus (LO), then we have a level above (L+1) and a level below (L–1) appearing, based on the discussion so far:

L+1 professional education in general (Capabilities approach)

LO the profession of teaching (SADTU, SACE, NEEDU)

L–1 subject specific teaching associations within the teaching profession (AMESA, SAARMSTE).

We need all three levels, but it's trite to see them as equally important. We have limited time, effort and money, and there are opportunity costs to how we conduct ourselves. Where can we make the most intense of interventions with the most leverage?

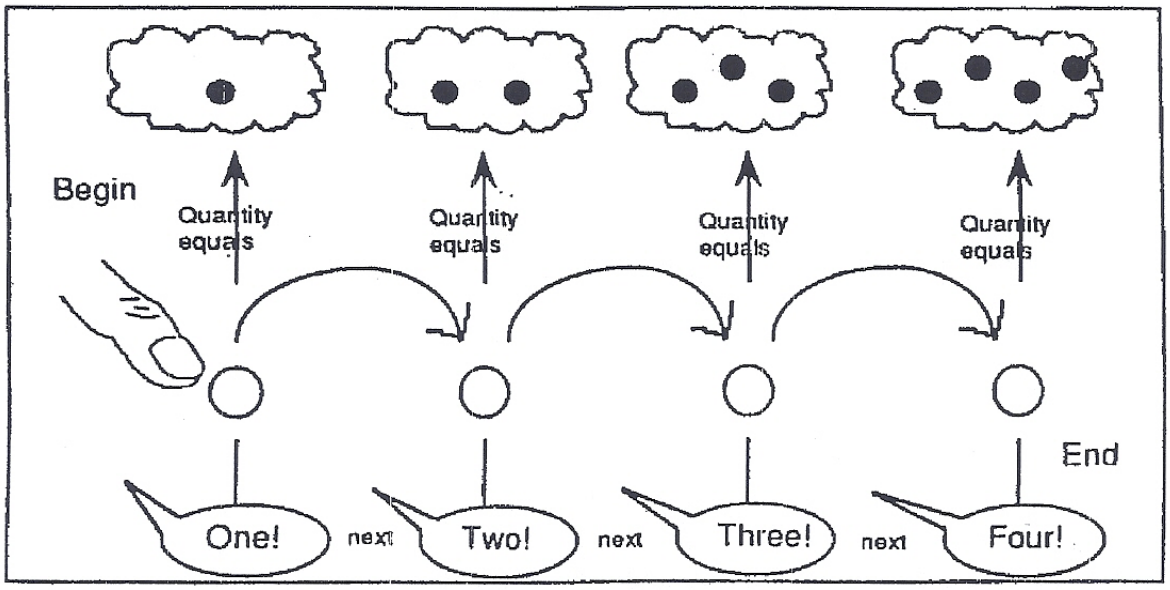
I would argue it's in what has been assumed by all three levels but left unarticulated – the specialisation of those of us teaching teachers. How can it be that we focus on the professionalism of teachers and background teacher education? What qualification and expertise do you need to teach teachers? What are the internal quality controls we have across the country that ensure those of us teaching teachers are actually up to the task? We want teachers to pass knowledge tests in their subjects; what tests do we need to pass to become teacher educators? We want inspectors to come back into the classrooms; what about them coming into our lecture rooms? Surely we need to actively pursue the task of specialising ourselves as well as calling for the professionalism of those we teach. What are the best practices in teacher education, what can we learn from other countries, what are the different models, what is research currently pointing us towards? It could be that we need to start exploring the professionalisation of teacher education as well as the professionalisation of teachers?

We can see an example of what it means to take teacher education as a specialisation seriously in the article by Devika Naidoo and Hamsa Venkat. They plunge into the pedagogic discourses of teachers engaged in teacher number concepts at Grade Two level and do not step away from the

complexity of engaging with the pedagogic act flowing through the lessons. Analysing pedagogy is hard, precisely because it moves with the demands of the concept being taught combined with the contextual conditions it is occurring in, which change in real time. Where do you find an analytical tool that enables a tracking of the flow of meaning? One possibility is Systemic Function Grammar (SFG) and the linguistic resources it offers to intricately describe coherent discourse, and this is what Naidoo and Venkat demonstrate for us. Using concepts that specifically identify what a coherent discourse looks like (synonymy, antinomy, hyponymy, meronomy, repetition, substitution/ellipsis, co-referentiality, structural cohesion) they clearly demonstrate how we can actively analyse levels of coherence in pedagogic sequences. As specialists in teacher education, such attempts to get a detailed handle on the flow of pedagogy should be stimulating debate and emulation across South Africa. Is SFG the right way to go in developing a detailed and systematic analytical language for pedagogy? Maybe it's too linguistic in orientation, maybe it does not get enough of a handle on the structures of knowledge and pedagogy because it's about the structuring of discourse, and discourse is far too distant from the intimate act of teaching? Maybe it should be combined with neo Piagetian developments currently much under-rated in our teacher education curricula? Allow me to run with this a little.

Robbie Case (1993, 1996) was a key neo-Piagetian who both theorised and empirically researched how children develop an understanding of number concepts and the number line. In more developed countries, within middle class families at around the age of four, children have two central numerical structures – one that works with more and less, and another that works with counting.

A



B

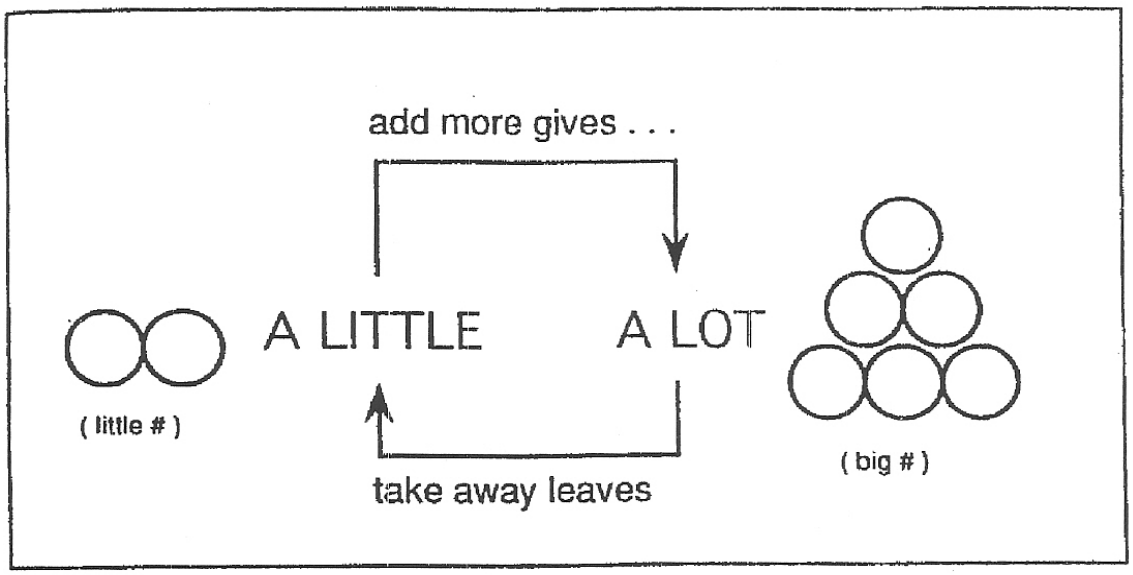


Figure 1(A) and (B): global quantity schema and counting schema (Case 1993, 225)

Around six years of age, these two schemas merge in to something like the following central numercial scheme.

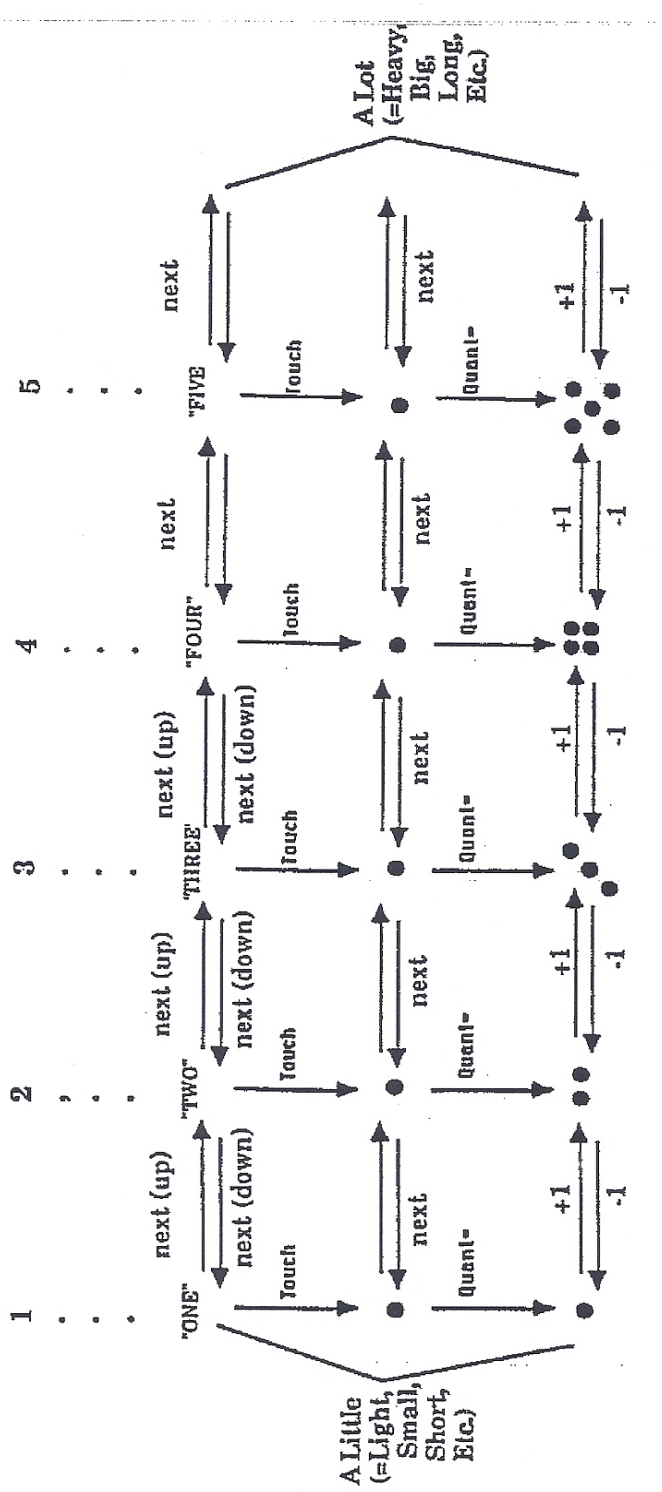


Figure 2: Central numerical structure (Case, 1993, 226)

This synthesis of two elementary numerical schemas is partly due to the child reaching a stage of development (that Case calls the dimensional stage). Explicit teaching of the central numerical structure to elementary school teachers and their learners results in an amazing jump in learner's numeracy abilities (Okamoto, 2010). If we, on the one hand, try to get a handle on what the actual development of a number line sense entails (Robbie Case) and on the other, develop an ability to analyse the flow of pedagogic interactions (reworked SFG), and then combine both with an analysis of how the curriculum on number is structured and sequenced, then we are beginning to live what it means to be a professional in teacher education.

I don't think the above example is too specific, or too specialised, for all of us in teacher education. Grappling with how to analyse the flow of pedagogy, the development of schemas, and the structure and sequence of curriculum should be grist for the mill. Part whole relations, simple to complex relations, specific to general relations, concrete to abstract relations – these are not components of some strange logic or linguistics course, they are the basic operations that define what teachers do, and we should be specialists in them.

Granted, you could feel some despair. Our field continues to move. It's not Piaget vs Vygotsky anymore (which is a misplaced fight anyway); it's the neo-Piagetians and the neo-Vygotskians, and both coming to terms with recent developments in Neuroscience on the one hand and network theories on the other. The issue is we don't have a settled curriculum that we induct our teacher educators into. What do we need to learn in order to become a teacher educator? It surely cannot be enough that we were teachers in the past and now happen to be teaching at a university with some kind of a PhD, important as all of this is. It's us who are responsible for teaching the teachers, who is going to teach us?

Giulietta Harrison and Azwihangwisi Muthivhi keep the focus on young children but use Vygotskian and neo-Vygotskian theories of self-regulation to demonstrate how active teacher mediation at preschool level (4–6 years of age) can improve self-regulation. Numerous examples are given of how the children improve their emotional engagement, problem solving skills and discursive responses. For example, where would you hide if you were Jack (from the beanstalk) and the giant unexpectedly arrived back to his home in the clouds?

A. In the oven thingy
B. In the oven
C. In the bath tub

C, of course. Why? Well in the reasoning of one of the pre-schoolers – Because the giant won't be bathing, he's just dirty. . .He doesn't brush his teeth, he has bad manners.

The teacher responds to this 'O.K. . . . that's a good idea'. And I suppose it is, except . . . if I was the teacher. . . I would wonder aloud about the giant needing to go for a poo, which we all know big giants do, given how much they eat, and the consequences of disturbing a giant on the loo are just too awful to contemplate. Harrison and Muthivhi provide us with an account of how, even at preschool, we should be working on developing characteristics of self-regulation.

Shifting from preschool to PhD, Jane Castle provides us with a well-written account of how many PhD students within a specific school of education tend to characterise their journey in heroic terms. I suspect this is not an unusual trope across our schools, given the difficulty of the journey and how it should transform you. As one student dramatically put the experience:

"It was pure hell. . . I had to stand on my own, fighting for time, fighting for money, for space. . . and the targets were always shifting. . . I was so busy fighting. . . I had no time to bleed. . . In the end I succeeded, but it was pure hell and determination."

A heroic journey goes through three processes – departure, initiation, return – with the whole impact of the journey being one of transformation. Transformation into what? The PhD indicates the shift from the status of student to that of academic peer. It is unclear to me that the current pressures on our institutions to get PhDs is subverting its transformation potential. It used to be true that a PhD was a strong indicator for improved research productivity and informed teaching. But the more pressure that is placed on pushing PhDs through, the less this link holds. There is a difference between a heroic journey and jumping through hoops.

The final article in this issue provides a much needed history and update of the state of school libraries in South Africa. A sad state of decay due to lack of governance is outlined. We have lost an organising centre (the national library

service unit); there is no clarity about which government department is responsible for libraries, and hence not much accountability, except when activist organisations like Equal Education get involved. Not that there is much accountability after they get involved. What Margie Paton-Ash and Di Wilmot don't mention is how rapidly out-dated the idea of a hard copy library is becoming, just as the idea of a 'hard copy' school is fast reaching the end of its production line. The type of schooling we currently are so familiar with is an historical occurrence that arose with industrialisation, and as this mode of production comes to its digital end, so will our factory schools with its factory teachers.

References

Surowiecki, J. 2005. *The wisdom of crowds*. New York: Anchor Books.

Case, R. 1993. Theories of learning and theories of development. *Educational Psychologist*, 28(3): pp.219–233.

Case, R. 1996. Introduction: Reconceptualizing the nature of children's conceptual structures and their development in middle childhood. In Case, R. and Okamoto, Y., *The role of central conceptual structures in the development of children's thought. Monographs of the Society for Research in Child Development*, Serial No. 246, Vol. 6, pp. 1–26.

Okamoto, Y. 2010. Children's developing understanding of number: mind, brain and culture. In Ferrari, M. and Vuletic, L (Eds), *Developmental relations among mind, brain and education.* New York: Springer.

Wayne Hugo
School of Education
University of KwaZulu-Natal

hugow@ukzn.ac.za

Operationalising higher education and human development: a capabilities-based ethic for professional education

Melanie Walker and Monica McLean

Abstract

Drawing on the pioneering human development framework developed by both Amartya Sen and Martha Nussbaum, the article outlines an argument for a new imaginary in the form of a capabilities-based ethic for professional education in universities. It then operationalises such an ethic in the form of a working list of professional capabilities grounded in a research project in South Africa which drew on theory, dialogue and data from three universities and five professional education sites. The capabilities (opportunities and personal powers) on the list are presented as having potentially wide relevance for professional education aims and practices, as well as providing the basis for public scrutiny and deliberation. The functionings (professional education achievements) from the data are understood as contextual and likely to vary from situation to situation. Finally, the paper offers extracts from the case study data to illustrate context-based functionings from which the capabilities are derived, using the example of the capability of 'emotional reflexivity'.

> *When people cannot name alternatives, imagine a better state of things, share with others a project of change, they are likely to remain anchored or submerged even as they proudly assert their autonomy* (Maxine Greene, 1998, p.9).

Introduction

This article applies a development ethics framework to higher education, and more specifically to professional education in universities, drawing on the capabilities approach to development. This was formulated originally by economist Amartya Sen (1999, 2009) and further developed by philosopher Martha Nussbaum (2000, 2011). In this approach to development, progress and social justice is advanced by looking at how or if people's capabilities to be and do in a variety of ways that they have reason to value have been increased, in the case discussed in this article by the contributions of professionals educated in universities. Professional education is seen as significant for the way it sits at the nexus of the university and the society which it serves and hence is important in considering how universities might

contribute to reducing multi-dimensional poverty and to better lives in South Africa, but also in other national contexts. The huge inequalities in South Africa recently reported by the World Bank (see Keeton, 2012) make such attention urgent and important on the part of higher education. Where the poorest 50 per cent of the population earns just 8 per cent of the income there are implications for access to decent public services staffed by university-educated professionals. The paper thus argues for a capabilities-based ethic, and its application to the formation of professional agents in universities.

In order to move beyond ideal theorising, that capabilities formation ought to be the focus of professional education and professional practice, to the what is of practice, we operationalise such an ethics in the form of a working list of professional capabilities for 'public-good professionals' (Walker and McLean, 2013). These capabilities are derived from a South African research project, funded by the UK Economic and Social Research Council (ESCR) and DfiD, and emerge from theory, dialogue and data. The normative (ideal) capabilities can be the subject of dialogue across diverse professional education Schools, and have potentially wide appeal. The empirical functionings are contextual and likely to vary from situation to situation. Extracts from the case study data therefore illustrate the contextual functionings from which a capability is derived, taking the example of 'emotional reflexivity'. The paper concludes that a capabilities ethic and the list enable us to first imagine public-good professionalism as a possibility, and then by using the list, to make it the subject of educational experimentation towards this possibility.

A capabilities-based professional ethic and professional education in universities

In this paper we offer a version of professionalism grounded in the view that university-based professional education of nurses, doctors, lawyers, engineers, teachers, social workers, economists, and so on ought to contribute to what Sen (1999, 2009) and Nussbaum (2000, 2011) call 'capabilities' (freedoms or opportunities) to choose and exercise various and incommensurable beings and doings ('functionings' or achievements or outcomes). The approach was conceptualised by Sen (1999) as an alternative to other ways of thinking about human well-being. In the capabilities approach to human development the focus is not only on a single measure of

well-being, such as income and other resources (computers, libraries, university buildings and infrastructure, for example). Resources are the means but not the ends of development and further, they do not tell us how much of the resource each person has. A resourcist approach, even if it was egalitarian in giving each person an equal amount, would still not tell us about a student's ability to convert her basket of resources into actual achievements. Nor do we only ask how about people's perceived welfare, that is how satisfied people are with their lives (and then aggregate satisfaction for the country). Although we would certainly want to know the answer to this question, it is not the only question we need to ask, and we would want also to know how satisfaction is distributed. Moreover, people adapt to bad as well as good circumstances and an aggregate satisfaction calculus will not reveal this.

To evaluate well-being Sen (1999) rather proposed capabilities as the metric of justice. The approach asks us to consider what a person is able to do and how resources do or do not enable someone to function in a fully human way (Nussbaum, 2000). Capabilities are the potential to achieve functionings – such as being knowledgeable, using one's knowledge in worthwhile ways, being inter-culturally aware and sensitive, and so on. They are actual freedoms people have to do and to be what they value being and doing in order to live in ways they find meaningful, productive and rewarding individually and collectively to the good of society. A functioning may be intercultural competence; the real opportunity for this achievement is the corresponding capability. But we do not look only at this single functioning (e.g. thinking critically) and then say that a person has well-being. Capabilities are the freedoms each person has to choose and exercise a *combination* of ways of beings and doings they have reason to value, and in comparison to others. Thus, if we agree that intercultural competence is important in professional education, then this would require addressing the shortfall if at all possible whereby some students are able to develop this and others are not. In between capabilities and functionings lies the agent, choosing functionings from her capability set; professional education can potentially shape values, knowledge and skills for these choices.

Professional capabilities operationalised in professional education can, then, be rather significant. But Sen (2009) refuses to endorse a fixed list of capabilities, preferring participatory public reasoning, while Nussbaum's (2000, 2011) normative approach insists on a list of ten universal and central human capabilities (see Nussbaum, 2000). For a professional ethic, a middle

way is preferred. A list is proposed but considerable leeway would be allowed in how the professional capabilities are operationalised contextually and for each professional to achieve the functioning "in her own way", to "take control" over how a capability and its corresponding functionings is realised (Wolff and De-Shalit, 2013, p.163). Moreover, such a list is also not the end point of discussion but is open to further development and participatory revision.

Nonetheless the point is endorsed here that capabilities and functionings should point to what it is that professionals ought to be and do; the matter cannot be left entirely open. In other words, there is an ideal of the 'good' professional at stake, to enable us to evaluate good professional practices against the less good. Even though Sen (2009) himself is not in favour of 'ideal' justice, it is hard to see how comparisons alone, for example of forms of professional practice, would enable us to adjudicate or evaluate what is right and good without some professional and social ideal towards which we try to advance (Deneulin, 2010). We cannot avoid moral reasoning and moral judgements about professional practice and we make these judgments in relation to deliberations about the "best way to live" (Sandel, 2009, p.10) because justice is "inescapably judgmental, and the right way to value things" (p.261), including valuing professional accountability and judgements about the right thing to do. To develop through education our personal powers is then also to have a view on which powers are worthwhile developing – and which are not. However, notwithstanding Deneulin's (2010, p.387) critique of Sen's idea of justice for not providing the "ethical equipment" to deal "with hard moral choices" (for professionals, what is the right thing to do), Sen's commitment to public reasoning has something crucial to offer. In South Africa we need urgently to debate in a reasoned way what kind of professionals we need. What kind of professionals will help to create a more just, decent and humane society in which capabilities for all are valued and pursued through public policy measures and practices? This ought to be the focus of widespread discussion and an ideal list offers an entry and can provide helpful direction.

The version of professionalism offered here thus encompasses the idea of equitable, creative and empowering 'human development' (Haq, 1999) in which people are the ends of development, rather than a narrower understanding of people as the human capital means to development and economic growth. Nussbaum's (2011) foundational value of human dignity offers guidance, and substantially informs the professional ethic outlined in

this article. For Nussbaum (2011), fundamental to creating capabilities is the human dignity of each person. Any 'decent' plan "would seek to promote a range of diverse and incommensurable goods, involving the unfolding and development of distinct human abilities" (p.127). Because human beings have dignity, "it is bad to treat them like objects, pushing them around without their consent" (p.130). The question then becomes what kind of education plan is needed to permit human abilities to develop – helping people to develop towards their best selves – and human equality to be respected (Nussbaum, 2011).

The first element then in a capability-based ethics applied to professional education in universities is to foster capabilities and the exercise of functionings which advance human dignity. Professional capabilities and professional functionings would be directed to human development for all, and in the case of South Africa, the poor, the vulnerable and the marginalised that constitute the majority of the population (see Taylor, 2000).

A university education is still a relative privilege in South Africa and many other countries. In South Africa 16 per cent of the age cohort attend university and 84 per cent do not (Singh, 2011). This arguably imposes certain obligations, especially on public universities. Those who do not attend university, and here we have in mind in particular the poor, disadvantaged and vulnerable, are also relevant external stakeholders in what universities ought to do. Here Rawls (1999, p.266) is helpful when he articulates his difference principle that, "Social and economic inequalities are to be arranged so that they are to be of the greatest benefit to the least-advantaged members of society". Thus having the privilege of a professional education from a university imposes a moral obligation to those not so advantaged through no fault of their own. Similarly, Sen (2009) emphasises that as a key feature of justice, we need to understand that capability is a kind of power. If someone has the effective power, he argues, to make a change that they can see will reduce injustice in the world; there is a strong social argument for doing just that.

Applied to professional education this would require the education of agents who understand and respond to the plights of others, and who have acquired through their university education the competencies, knowledge and values to contribute to human development. Following Sen, professional graduates have effective power to contribute to society, and are obligated to do so. Moreover, Sen and Nussbaum are specifically concerned with the poor so that

a capabilities-based professionalism requires professionals to attend to these lives, whatever else they might choose to do and be as professionals.

The second element is thus that professional ethics operationalised in professional education imposes obligations to act as professionals – as other-regarding agents – to advance the well-being of others, paying attention to actual lives and circumstances.

The third element we can extrapolate from (i) professional capability formation to advance human dignity, and (ii) other-regarding professional agents, is that (iii) practitioners should evaluate what they do in the light of a larger public good. As the then Finance Minister, Trevor Manuel, commented publicly some years ago, South Africa's "ability to deliver a deep and durable democracy focused on improving living standards will never be attained without the commitment of our public servants in the key social sciences" (quoted in Joseph, 2008, p.3). Hence in our capabilities-based approach, professionals are conceptualised as "public-good professionals" (Walker and McLean, 2013). 'Public-good' is also not open to any or all interpretations. The trumping rule in justifying and implementing professional capabilities for us is Nussbaum's (2011) fundamental concern with human dignity and action to secure such dignity to all.

To sum up. Professionals can advance the capabilities of others. University graduates are advantaged overall, they have more opportunities and more power; they then owe obligations to others. Professionals ought to be educated in the direction of holding public-good values and of commitments to the poor, vulnerable and disadvantaged in any unequal society. Taken together, this points to a capability-based professional ethic and professional education, which seeks to contribute to public policies and actions which enhance people's valuable functionings.

A professional capabilities list

Our research project in South Africa (Walker and McLean, 2013) therefore set out to operationalise the ideas sketched above by establishing which professional capabilities were theoretically valuable and which were regarded as empirically important by diverse stakeholders in professional education. However, more than a list of professional capabilities was required. A

complex matrix emerged in which capabilities were embedded in educational and social arrangements to capture Sen's concern that individual freedom involves a "two-way relation between (1) social arrangements to expand individual freedoms and (2) the use of individual freedoms not only to improve the respective lives but also to make social arrangements more appropriate and effective" (1999, p.31). Thus the list is especially significant, but not the only element to be taken into account (see Walker and McLean, 2013 for an extended discussion). Nonetheless, here the focus is only the list as the most central element.

The first stage of developing a list of professional capabilities was theoretical and normative. As noted above, the core underlying idea was that of human development and capabilities. The conceptual framing was i) capabilities, ii) aligned with a capabilities-based 'public-good' professional, and iii) professionals working to secure human dignity. Through ii) and iii) the project hoped that professional capabilities developed through professional education processes would align and integrate individual development and commitments to others, rather than promoting selfishness and a turning away from public-good contributions. Without such synthesis, we would not have the kind of professionals who can bring about social change for justice.

We wanted to find out which capabilities and functionings are specific to professionals working for social transformation and which should, therefore, be incorporated as broad goals in professional education and training. To address this, case studies were initiated and conducted by the authors, assisted by the research team, at three South African universities, with different apartheid histories. Five professional education case study departments across the three universities were investigated – Social Work, Public Health, Law, Engineering and Theology. To facilitate on-going dialogue, the project included a research working group (RWG) at each site. Volunteer students were interviewed in focus groups and included black and white, and male and female students. In addition, a dean or deputy dean and head of department and one or two lecturers in each department were interviewed, as well as a university leader, all individually. To capture perspectives among practitioners, alumni were interviewed as well as NGOs, the latter specifically committed to poverty reduction. In total 120 people were interviewed. The data collection aimed to establish which professional capabilities were valued and why, the form and purposes of professional education, educational arrangements and the overall university ethos in relation to poverty reduction, and what might be external constraints or obstacles. What emerged over 18

months was a broad consensus around a list of eight professional capabilities, embedded in educational arrangements to prepare graduates for what it means to 'act rightly' as a professional in conditions of profound inequality and poor quality of life for large numbers of South Africans. Prompts took the form of an initial discussion of Nussbaum's list and capabilities taken from this which might be relevant. While these ideas were initially helpful, the value positions held by participants themselves and the empirical data were both especially significant in the robust dialogue towards developing what one of the participating deans described as 'a framework of interrogation' for professional education.

The eight professional capabilities on the list are the opportunities that would be provided in and through professional education in universities, for example the opportunity or freedom for informed vision; the functionings would be the valuable outcomes from the formation of these capabilities (see Table 1 for functioning examples and the capabilities extrapolated from these). The capabilities are therefore presented as vague and broad, while the functionings are specified in more detail, based on what was found in qualitative data across the five professions. The process of identifying capabilities was an extrapolation from observable empirical functionings, dialogue and theorising. The capabilities would be interpreted for different contexts and realised as situated functionings, where the latter may differ from context to context.

Table 1: Public-good professional capabilities

Realisable Functionings (examples selected from empirical data)	**Ideal/ Normative Capabilities (from data, dialogue and theory)**
Understanding how the profession is shaped by historical and current socio-economic –political context national and globally; being able to imagine alternative futures and improved social arrangements	1. Informed vision
Care and respect for diverse people; developing relationships and rapport across social groups and status hierarchies; communicating professional knowledge in an accessible way/courtesy and patience	2. Affiliation (solidarity)
Perseverance in difficult circumstances; fostering hope	3. Resilience
Community empowerment approach/promoting human rights; contributing to policy formulation and implementation; leading and managing social change; working in professional and inter-professional teams; participating in public reasoning.	4. Social and collective struggle
Empathy/narrative imagination; compassion	5. Emotional reflexivity
Acting ethically; being responsible & accountable to communities and colleagues; striving to provide high-quality service	6. Integrity
Expressing and asserting own professional priorities; contributing to policy; having confidence in the worthwhileness of one's professional work	7. Assurance and confidence
Having a firm, critical grounding in disciplinary, academic knowledge; having a multidisciplinary / multi-perspectival, stance; integrating theory and practice.	8. Knowledge, imagination and practical skills

The proposal from the research is that professional education at university ought to foster these multi-dimensional capabilities so that graduates in the professions might develop a wide capability set from which to choose

functionings to be and do as public-good professionals who work to enable human development.

A working list

This list is also work in progress; it is revised as new ideas or new angles on the data and context, come to light. For example, after an exchange in July 2012 with one of the participating universities, what began as the capability of 'emotions' has been changed to the more nuanced 'emotional reflexivity'. The change is seemingly slight, but important nonetheless, in that it better captures how emotions in higher education learning can be directed to transformative professional reasoning and critical emotional reflexivity (Zymbalys, 2008).

For her part, Nussbaum (2001) argues that an adequate ethical theory requires an adequate theory of emotions. Human beings are "both dignified and needy" (2001, p.405); we can be both agents and victims in life. We wherefore need to understand what contributions emotions bring to ethical deliberations, personal and public. Emotions cannot be side-lined but must form part of our system of ethical reasoning and we must be prepared to deal with grief, anger, fear, and so on. Moreover, emotions are not divorced from reason or thought as the Stoics argue but can be potential allies and constituents in rational deliberation. She argues that, "if we think of ourselves like self-sufficient gods, we fail to understand the ties that join us to our fellow humans. . . Emotions of compassion, grief, fear, and anger are in that sense essential and valuable reminders of our common humanity" (2004, p7). Emotions constitute part of our inquiries into a complete human life, opening our eyes to suffering in the face of human vulnerability and enabling the imagination of human suffering. Nussbaum is especially concerned with empathy for the disadvantaged and sees compassion "within the limits of reason" (2001, p.414) as essential to a "decent" society (p.350).

But emotional reflexivity requires expanding this framing of emotions as a professional capability to capture something richer and thicker. Boler (1999, p.157) argues that Nussbaum articulates only a 'passive empathy', with Nussbaum (2001) herself admitting that however empathetic we may be we may fail to carry out any change. Boler (1999) indeed argues that Nussbaum does not go beyond passive empathy towards those suffering and that this does

not require that we act for more justice. This form of empathy towards the other, for example, empathy from the privileged professional to the disadvantaged client, can be slippery and paternalistic and may not change anything in the lives of people living in poverty. Boler (1999) explains that it is therefore "not a sufficient educational practice". Rather, what is at issue, is not only the ability to empathise with the distant other, but "to recognize oneself as implicated in the social forces that create the obstacles the other must confront" (p.159).

While the point is well made, it is nonetheless debatable that this applies to Nussbaum (2001) who argues for the importance of compassion as a pathway from private thoughts to public altruism and for the role of empathy in public judgments for justice. Her work on the emotions makes the case for maximally humane personal relations, which one can assume demands action as well as good intentions, given that relationships are lived and not merely imagined. Her view of the imagination as educative further suggests a concern with relationships, with the social, and with changed persons who might act differently in the world. For Nussbaum, compassion and its attendant empathy can therefore be rather crucial to public deliberations about justice and the obligations of justice: "Compassion is not the entirety of justice, but it both contains a powerful, if partial, vision of just distribution and provides imperfect citizens with an essential bridge from self-interest to just conduct" (1996, p.57). The more important issue, however, is that both Boler and Nussbaum are deeply concerned with the interconnections of emotions and beliefs and with making justice in the world, and we needed to better capture this in how we described the capability.

Zymbalys (2008) captures what we think both of them are advocating in the form of 'critical emotional reflexivity' (CER). Such reflexivity, in relation to our emotional responses to situations and people and our communal or cultural loyalties, involves thinking critically against the grain of taken-for-granted world views. We learn to address awkward questions about the way things are and how and why we are situated in relation to advantage or disadvantage. Thus CER "is grounded historically and politically and in power relations: it consists in the ability to question emotionally charged, cherished beliefs, exposing how privileged positions and comfort zones inform the ways in which one recognises what or how we have been taught to see and act (or not see/act) and empowering different ways of being for the other" (Zymbalys, 2008, p.65). Secondly, Zymbalys argues that it is not enough simply to acknowledge the role of emotions but to change, to become

and to be more compassionate, more just, etc. This seems especially relevant to a public-good professional education in the context of unequal societies and unequal access to professional education opportunities in universities.

The lesson for the evolving list is that it must be open to being shaped by new conversations and new theorising, or even old theorising revisited. It is furthermore an ideal list – what the best professional education and professional ethics ought to work towards. The functionings signal what is valued in professional practice pointing both to real world realities but also to where professional education might intervene to encourage development which is closer to the ideal. The list therefore is helpful for situational analysis, for participatory professional education development among stakeholders, and for evaluation, or for all three.

Illustrative data extracts

How then did the professional capabilities emerge from the functionings that people discussed in interviews? Here we focus on one capability of emotional reflexivity to illustrate the process. We found valuable functionings and descriptions in the data and from dialogue – such as trust, care, empathy, concern. We try to capture these responses as forms of emotional reflexivity which are realised more or less imperfectly in actual functionings across the professions. While emotional reflexivity is the ideal to work for, the practice may be more awkward, ambivalent and undeveloped. This is especially among students still in higher education, among students trying to grasp the inequalities in their society of which they may not have been fully aware or even aware at all given the persistence of apartheid patterns of geography and social relations, of students confronted with the lives of people who are poor and needy, and with variation across the five professions studied.

In *Theology* all the informants emphasised the need for capabilities linked to the self, such as self-knowledge, personal growth, self-esteem, and centredness, linked to spiritual and religious identity. The outer work of social transformation is intimately related to the inner task of personal transformation. One of the students, Sara[1], argued that there was a need for deep self-reflection to facilitate individual transformation. She spoke about

[1] All names used as psuednyms

this in the context of the involvement of an individual's family, community and self in South Africa's apartheid history. A visiting black professor, Jonathan Jansen (see Jansen, 2009), had spoken of 'bitter knowledge', a concept that resonated strongly for her. Jansen's work on personal transformation focuses particularly on white Afrikaans students' responses to political change in the country and in their universities. However, the processes that he discusses are relevant for all South Africans, particularly youth, who are making a transition from the apartheid past into the future. Sara said, '[Even though] we are a different generation and we view this stuff a lot different than our parents have. . .' she said, 'we have to realise that. . . we all have that bitter knowledge, whether we were part of apartheid or not. It's something that's passed on and along and I think we have a responsibility to fight actively. . . against the bitter knowledge that's in us'.

Aidan, a black student, thought that religious ministers or community workers needed 'to know themselves or have grown to know themselves [so that there would be] a level of authenticity' when they were engaged with other people. He said 'a lot of the people that I engage with were people with extremely low self-esteem. Now if I cannot accept myself, then there's a sort of barrier that comes across. . . and in accepting myself I give almost permission to other people if you can use that term, to be themselves, whatever situation they come from, whatever brokenness [they experience]'. Jan, one of the lecturers, valued a capability which he referred to as 'emotional intelligence – understanding people and their needs'. He said that the science of theology was oriented towards making a difference in people's lives. Ministers needed to work with people, love them and care about them. In order to do this, they needed to examine their own reasons for being a minister, their commitment, life experience, virtues and integrity. They needed to ask themselves the question, 'Why do you do what you're doing?' While Jan identifies this capability as emotional intelligence, it is linked to reflexivity. His association of love and caring with capability for reflexivity resonates with Nussbaum's integration of the emotion of love with thought. She argues that the emotion of love and patterns of action associated with caring are best understood as involving "quite a lot of thought and interpretation, especially evaluation" (Nussbaum, 2000, p.265).

In the case of *Law*, strongly linked to the capability for affiliation (see Table 1) was the capability to feel emotion and empathy, particularly in cases where the personal distress of the clients was great. One alumnus, Thandi, emphasised the importance of respecting and tolerating others' views, having

empathy and through this finding an emotional 'balance'. In particular, because clients may have been through very difficult experiences, it was important to be able to empathise with them; not to advise them on particular courses of action, but to make them fully aware of their options, valuing people's ability to choose their own options. Thandi described this in terms of treating others as you would like to be treated yourself, 'how would you like to be treated if you find yourself in such a situation. . . what do you expect from the next person?'

A student, Nazia, spoke of how she tries to forge an emotional connection and relate to their clients in this way, 'I try to sit with my client and to first make her feel that she's human again, you know, I try to give her advice and we sometimes laugh together with the client especially when they come to see you and they cry their heart out because they can't believe that they can get out [of an abusive marriage]'. Contrary to stripping the law of emotions, the democratic governance and rights unit at the University of Cape Town has called for judges with empathy, compassion, humility, open-mindedness, courtesy and patience. Roberts (2009) cites the South African deputy chief justice as remarking that, while cowboys don't cry, judges do. This is something of a departure for the more traditional legal education emphasis on distance, and supports the case for emotional reflexivity being on the list.

In *Social Work*, lecturers, students and alumni emphasised the need to be a reflective practitioner and to engage in life-long learning and on-going professional development, which is close to Zimbalys's idea of emotional reflexivity. As one lecturer, Miriam, explained, '[Social Work graduates should be able to] reflect on their capabilities, their strengths, their weaknesses and to try and constantly build on their strengths and work through whatever weaknesses they have. . . .if there's anything that we would want to emphasise in our training and education is that this has to be a lifelong cycle for our graduates that in the professional work setting they need to reflect not just what they're doing but their ability to do it and learn from what has happened and bring those learnings into different practice' . While Anne, an alumnus, commented that the ethos of her organisation was 'relationship before projects and so that I feel very, very strongly about that'; as a social worker one needs to be 'open and teachable, learn from [people in the community], take time to form relationships, even if it takes a year before you actually effectively are in there, even though their needs are tremendous, it takes time to build a relationship and trust'.

In *Engineering* emotional reflexivity was present in a much undeveloped form, but there were signs of its value to students and lecturers, even as there were signs of the limitations of this awareness among mostly white, mostly male students. It took the form of responses to gaining awareness of disadvantage and poverty through a module in which students worked in schools in the local and very poor black township. As one of the few black students on the programme said of white students, it was important for them to 'see how people are actually living, because they never came to these areas firstly, and they don't even, you can't even relate to them because they [white students] have no idea what those people are actually going through. For me it was good that some of them could also go there and see what is really happening, because I'm sure in their lifetime most of the whites wouldn't go' (Fabian). But Fabian also added: 'Even we [coloured students] don't always understand what the whole thing is about, the gap between the rich and the poor. But when you actually go from the University, let's say the nice areas where the streets are so clean. And then you go to an area like that where the houses are built with tin, old motor parts and stuff – you know, how can we be in, not even the same country, just be in the same town and you can have those extremes?'

These students clearly felt discomfort, frustration and non-acceptance that such levels of inequality continue to exist in South Africa today; and at least part of this discomfort seems to have been engendered through their experiences on the course. But some student responses showed that while they have been exposed to a new side of society, this has not really changed their world-view. For some white students, the trips to the township seemed more of an exciting curiosity and foray into an 'other' world, than a reframing of their understanding through realising social reality and a catalyst for change. Mandla, the only African student interviewed, was keener to offer a solution, and to see better housing prioritised, for example. Nonetheless, as the lecturer on the module suggested, perhaps university courses can at least aim for the 'bottom line' achievement of raising awareness or indeed engendering 'discomfort' (Boler, 1999).

Finding evidence of emotional reflexivity was more difficult in the Public *Health* case which was a postgraduate programme focused on health systems and targeted at health managers. Jane Simons, the Programme Coordinator, explained that, 'We want to develop attitudes of inclusiveness, of community orientation, of recognition of why people are under-resourced and poor. . . embedded in the whole notion of equity but also with an understanding of

why that has come about, particularly through the colonial past and. . . history'. There was an overlap between emotions and the broad capability of affiliation. In order to work in an empowering way with poor people they needed to be able to respect people, listen and put themselves in the shoes of others. In order to practise health care in a community-centred way, the capability of respect and treating people with dignity were highly valued by alumni and students. We can however extrapolate from the capabilities of awareness, for example, to argue that emotional reflexivity would have to be a constituent part.

What these extracts have thus attempted to do is to show which functionings emerged from the data as of value, and how a capability was extrapolated from these functionings. The same process of identifying functionings was done across all the interview data for all five professional sites, and scrutinised and discussed with university participants over three iterations of a list of professional capabilities and in the light of capabilities theorising to generate the professional capabilities list in its current form.

In conclusion

The development of a capabilities-based professional ethics and its operationalisation in a list captures, we think, many of the complexities and challenges of professional education. The list is the result of negotiations, arguments and compromises with those dealing with a harsh reality. Yet it expresses the hopes and actions of these people and has the potential to be critical and transformative. It is not fixed or universal and will always require re-negotiation. It could enable an evaluation of goals, policies and practices across different professional groups with different status and interests, testing the capabilities and identifying valuable functionings in and through education.

To argue for a capabilities-based professional ethic in professional education is therefore to propose the concept of a public-good professional as 'experimental'. By this we mean that what it means to be such a professional is not yet settled, but a subject for conversations between and with people in the situation out of which will come thinking and action. Rather like a Stenhousian (1975) curriculum, public-good professionalism is first imagined as a possibility, and then made the subject of experiments grounded in

educational and professional practice, and then reviewed in turn against an ideal (we propose our professional capabilities list).

Rather like democracy, we think that public-good professionalism is never finally settled 'but always a quest that must be renewed and reshaped over time' (Sullivan, 2005, p 220). Yet this openness to renewing and reshaping what it means to be a public-good professional is also not arbitrary. Instead, it is infused with a deep concern for dignity, justice and a world in which every person has a fair chance of fulfilling her human potential. Translated into professional education this requires us to ask what it means to be human and what this in turn means for professional service in a decent society. These are radically open questions animated by social justice and directed towards the future. But these are also questions that should be addressed in the immediate present by actually doing education, rather than as a question that needs to be settled before we can begin. We will make a capabilities-based, public-good professional ethic by actually doing professional education, animated by a vision of dignity and justice.

References

Boler, M. 1999. *Feeling power*. New York: Routledge.

Deneulin, S. 2010. Book review. *Oxford Development Studies*, 38(3): pp.383–388.

Greene, M. 1998. *The dialectic of freedom*. New York: Teachers College Press.

Haq, Ul M. 1999. Reflections on human development. Second Edition. Delhi: Oxford University Press.

Jansen, J. 2009. *Knowledge in the blood. Confronting race and the apartheid past.* Stanford: Stanford University Press.

Joseph, N. 2008. 'As in UDF heyday, we must believe in ourselves – Manuel'. *Cape Times*, 21 August, p.3.

Keeton, G. 2012. No simple solution to SA's inequality problem. *Business Day*, 3 September, p.9.

Nussbaum, M. 1996. Compassion: the basic social emotion. *Social Philosophy and Policy*, 13: pp.27–58.

Nussbaum, M. 2000. *Women and human development*. Cambridge: Cambridge University Press.

Nussbaum, M. 2001. *Upheavals of thought.* Cambridge: Cambridge University Press.

Nussbaum, M. 2011. *Creating capabilities. The human development approach.* Cambridge, MA: The Belknap Press.

Rawls, J. 1999. *A theory of justice*. Second Edition. Harvard: Harvard University Press.

Roberts, R.S. 2009. 'Law and dogma: the illiberal elite', *Mail & Guardian*, 23–29 October, p.28.

Sandel, M. 2009. *Justice. What's the right thing to do?* London: Penguin Books.

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

Sen, A. 2009. *The idea of justice.* London: Allen Lane.

Singh, M. 2011. The place of social justice in higher education and social change discourses, *Compare*, 41(4): pp.481–494.

Stenhouse, L. 1975. *An introduction to curriculum research and development* London: Heinemann.

Sullivan, W. 2005. *Work and integrity: the crisis and promise of professionalism in America.* Third Edition. Stanford: Jossey-Bass.

Taylor, V. 2000. *South Africa: transformation for human development.* Pretoria: United National Development Programme.

Walker, M. and McLean, M. 2013. *Professional education, capabilities and the public good: the role of universities in promoting human development*. London: Routledge.

Wolff, J. and De-Shalit, A. 2013. On fertile functionings: a response to Martha Nussbaum. *Journal of Human Development and Capabilities*, 14(1): pp.161–165.

Zymbalys, M. 2008. Adult learners' emotions in online learning, *Distance Education*, 29(1): pp.71–87.

Melanie Walker
Centre for Higher Education and Capabilities Research (CHECaR)
University of the Free State

walkermj@ufs.ac.za

Monica McLean
School of Education
University of Nottingham
and
Honorary Professor
University of the Free State

monica.mclean@nottingham.ac.uk

Professionalism in South African education: the challenges of developing teacher professional knowledge, practice, identity and voice

Francine de Clercq

Abstract

To change and improve teacher knowledge, practice, behaviour and mindset remains a difficult challenge in South African school education. This article investigates how macro and meso influences beyond the level of the school have shaped teacher professionalisation and professionalism as both are outcomes of complex contradictory forces and factors. The post-1994 period has seen education departments and teacher unions dominate and shape the construction of teacher professionalisation and professionalism. As a result, serious problems continue to exist in the level and quality of teachers' work and attitudes. This article argues that a crucial space exists in which a positive impact can be made by independent professional associations to improve teacher knowledge, practice, identity-formation and mindset. These associations have great potential for working collaboratively with and for teachers to strengthen the voice of the profession and make professional inputs in the teacher-related policy-making process.

Introduction

The aim of this article is to fill a gap in the South African educational literature with regards to the challenges associated with the enhancement of teacher professionalism in post-1994 South African school education. It assesses the factors which contribute to the shaping of teacher professionalisation and professionalism in South Africa today, given the legacy of apartheid and taking into consideration the post-1994 attempts at redressing past inequities and promoting quality.

A qualification is needed at the very start. It is important not to confuse or collapse 'teacher professionalisation' and 'teacher professionalism', as these terms may be related, but are indeed different. This article borrows

Hargreaves' (2000) distinction: professionalisation refers to the nature of teachers' work, working conditions, status and power in society, while professionalism speaks to the profession's internal quality, authority, values and autonomous practices. Teacher professionalisation is a sociological project that centres on the work and status of teaching as a profession; whereas teacher professionalism is a pedagogical project centred on the internal quality of teaching as a profession, with its relative control in making autonomous decisions over teaching practices (SACE, 2005). An understanding of the state of teacher professionalisation therefore assists in framing the way in which teacher professionalism and professional identities develop.

After reviewing debates around teacher professionalism, this article examines how the main factors beyond schools – such as the socio-economic context, state policies and globalisation – impact on teacher professionalisation and professionalism. It then explores the role of teacher unions and how the latter (can) respond to the state's attempt at shaping teacher professionalisation and professionalism.

Thereafter the article proceeds by applying these conceptual lenses to a macro and meso analysis of the pre- and post-1994 South African school education in order to show how the construction and shape of teacher professionalism has been dominated and contested by education departments and unions, with their different agendas. It reviews what the existing South African literature says about teacher professionalism and the relationship between the state and teacher unions (Chisholm, 1999; Swartz, 2004; Govender, 2004; Douglas, 2005; SACE, 2005). It then proposes a new dimension to these analyses by arguing that independent professional associations are crucial forces to assess as they can occupy the space that exists between the two main stakeholders to strengthen teacher professional identity, professionalism and teacher-related policy-making.

Meaning and shaping of teacher professionalism(s)

There is no clear consensus over the meaning of professions and professionalism. Abbott (1988, cited in Gamble, 2010) defines professions as possessing a form of abstract knowledge, which qualifies the occupational grouping to exercise professional jurisdiction. Carr (2000) argues that

professions: provide an important public service; involve a theoretically and practically grounded expertise; have a distinct ethical dimension and code of practice; and require a high degree of individual autonomy and judgement for effective practice.

In the literature, teacher professionalism has either a descriptive/normative or a socially-constructed dynamic definition. The descriptive definition refers to notions of professional expertise, autonomy and responsibility (or self-regulation), as demonstrated in work practices (Hoyle and John, 1995). The three tenets of professionalism according to Gamble (2010) are: abstract professional knowledge to defend professional jurisdiction against competition or subordination; collective autonomy; and accountability. Demirkasimoglu (2010) adds a normative dimension by referring to professional competences, behaviours, attitudes and values that inform teacher performance in achieving the highest standards and improving service quality.

The second socially-constructed definition stands against essentialist definitions of professionalism and recognises competing versions whose meanings and delineations are sources of conflicts and change over time (Whitty, 2008). Stevenson, Carter and Passy (2007, p.2) agree that teacher professionalism is "an ideological concept that is neither static nor universal, but located in a particular socio-historical context and fashioned to represent and mobilise particular interests." This is why Sachs (2001) argues that today there is an ideological struggle between managerial professionalism – or the regulatory discourse of the state intended to control teachers and their practices – and democratic professionalism – or a democratic discourse, initiated from within the profession or teacher unions as an occupational strategy. The latter is about protecting teachers against dilution of their work practices and/or establishing greater collective autonomy to determine conditions of practice (self-regulation) as well as professional and ethical standards (Gamble, 2010).

What is required is an empirical investigation of how and by whom the discourse of professionalism is constructed, shaped, mediated and practiced. Evans (2010) does not subscribe to such normative or discursive definitions of professionalism, which she argues are 'demanded' (by teachers' organisations) or 'required' (by the state) professionalism. She prefers a qualitatively neutral definition of professionalism, as something that is

enacted (and not something that ought to be); in other words, a professional practice that is observed, perceived and interpreted:

> what teachers do, how and why they do it; what they know and understand; where and how they acquire their knowledge and understanding; what attitudes they hold; what codes of behaviour they follow; what their function is; what purposes they perform; what quality of service they provide; and the level of consistency incorporated into the above (Evans, 2010, p.855).

She distinguishes three main components of professionalism: behavioural, attitudinal and intellectual. Other scholars emphasise the importance of subjective components of professionalism, such as teachers' identities, attitudes and engagement with their work, employers, learners, and colleagues. Teachers' subjective positioning and social identification are greatly influenced by teachers' identities or images of themselves. Carrim (2001) argues that teachers have multiple identities which are negotiated through various constitutive identity-formation processes, which have to be investigated empirically in a given context. These processes can be personal (the product of history, capacity, knowledge, beliefs, and values), social (the product of socio-cultural structures and state policies) and/or situated (the result of teacher collective interaction/negotiation).

Sachs (2001) distinguishes two broad teacher identities that are useful for this article, even if insufficient. There are teachers who are compliant, over-dependent on the state's understanding of teaching. This passive compliant identity makes teachers respond to the state as workers or state functionaries, with little authority, power or interest in controlling their work. This leads to a narrow form of self-serving teacher professionalism, which is more concerned about teachers' working conditions than recognising their social agency. The second group engages with the state as independent pro-active professionals, committed to improving their practices and school education as a public good. This activist identity makes teachers engage both within as well as outside their workplace for better education quality and equity. This is the ingredient of a broad form of democratic professionalism which, through a genuine dialogue with other responsible stakeholders, builds a common vision and strategy about school improvement.

For the purpose of this article, the constructed and descriptive definitions are both retained. It is important to recognise teacher professionalism as the complex outcome of contradictory forces or factors – which are both external and internal to the profession; whether this involves discourses or pressures

from international agencies, the state, the public or the unions (Douglas, 2005). However, at the micro-level, it is also necessary to acknowledge what is and, if possible, how practitioners mediate the various constructions of professionalism and enact it with their knowledge, practice, identities and mindsets.

Let us now turn to a discussion of the macro-influences on teachers' work and status – or what Hargreaves calls 'professionalisation' – and how these delimit and shape teacher professionalism.

Macro socio-economic influences, teachers' work and professionalisation

Hargreaves (2000) identifies different ages of teacher professionalism in countries such as the US, Canada and the UK. He constructs these ages by studying the context and evolution of teachers' work and status over the past 50 years as outcomes of changing socio-economic and other factors. In the first age, in the 1950s, most teachers were expected to transmit pre-determined knowledge to learners, through standardised and prescribed teaching procedures and methods. Hargreaves (2000, p.153) calls this the "pre-professional" age, when teachers were regarded as a labour force, for whom it was compulsory to follow departmental rules and regulation in transmitting pre-specified syllabi. Teachers were treated as mere workers, with only basic technical competencies, and required to deliver a teacher-proof curriculum. By the late 1960s, in response to civil rights movements mobilising against social inequities, schools felt pressurised to produce better quality education for learners from under-privileged backgrounds. Teachers were then expected to acquire greater pedagogical competences to enable them to adapt the curriculum and syllabi to their learners' context and constraints. This shift led to the second "autonomous professional" age of Hargreaves, when teachers started to behave as professionals, with the discretion to use their professional knowledge to adapt their teaching content, strategies and activities to reach their different learners. As teachers gained more autonomy over their work, they were expected to improve their work practices by sharing their experience and by acting as reflective practitioners. Hargreaves (2000, p.153) names this the "collegial professional" age.

The fourth 'post-professional' age is associated with the global competitive era of the 1990s and the neo-liberal market-driven policies adopted by many countries at the time to improve the productivity and efficiency of public sector employees. Education departments adopted a form of managerialism to control teachers, with new forms of monitoring of teachers' work, performance management, narrowly-conceived standardised curriculum frameworks and/or prescribed content knowledge. Teacher expertise and autonomy became increasingly circumscribed to fall in line with the centralist agendas of the 1990s. Teacher responsibility was redefined to include new regimes of performance-based accountability, which placed high demands on teachers, often without corresponding support and resources to meet their needs and their changing classrooms. Ozga (1995) argues that such performance-based reforms de-professionalised teachers, by reducing their professional status, discretion and judgment.

However, the impact of globalisation was not one-dimensional. Hargreaves (2000) notes its contradictory dimensions, given its ambiguity and uncertainty as well as the complexity of its educational settings. The changing global conditions required teachers to be professional and proactive in order to function adequately. Globalisation and the ICT revolution also brought about the possibility for teachers to network and share their practices and challenges with other professional groups beyond their schools. Hargreaves (2000, p.153) explains the post-modern age as:

> a struggle between forces and groups intent on de-professionalising the work of teaching, and other forces and groups who are seeking to re-define teacher professionalism and professional learning in more positive and principled modern ways that are flexible, wide-ranging and inclusive in nature.

These four ages characterise the school system of some western countries, but are not a template for the trajectories of others. These ages also co-exist within an education system, especially when the latter is characterised, as in South Africa, by strong inequalities in teacher education, teacher competences and practices, as well as working conditions. Given similarities and differences in various education systems, these changing ages are retained here as conceptual tools for the analysis of how socio-economic and political forces influenced changes in South African teachers' work, status and knowledge in the context of global teacher-related reforms.

Teacher unionism

Teachers' work, status and professionalism are also influenced by teacher unions and the way they mobilise and develop their members to advance their interests. Scholars are divided about the influence of teacher unions. Moe (2002) argues that teacher unions are, by definition, more concerned about their members' immediate interests than about meeting the challenges of improving their performance and the quality of school education. Such scholars perceive unions as a conservative, self-serving force that opposes government reforms which intensify teachers' work, regardless of their potential for better quality teaching and learning. Hess and West (2000) contend that unions use collective bargaining as a basis for political and/or economic power in education to advance their members' narrowly-conceptualised interests. Because of this and due to the growing professional autonomy of teachers in the West during the 1980s, these scholars argue that it was time for the state to monitor and improve teachers' productivity and practices through tighter accountability to the state and the public over what they teach and produce.

An opposite view held by Villegas-Reimers (2003) is that, even though teacher unions and better professional practices are often not good partners, there are unions in the US and Canada committed to improving teachers' status, performance and professionalism. Bascia (2003) notes that pro-active US teacher unions encourage teachers to undertake action research on their own practices and to contribute to the shaping of state reforms on teaching content and standards, as well as on issues of social justice in schools. Such unions understand that greater teacher professionalisation and professionalism has the potential of protecting their members' long-term interests. In analysing unions' influence on teacher professionalism, it is therefore important to examine their discourse and strategies.

Teacher professionalisation and professionalism in South Africa: the legacy of apartheid education

The changing nature of teachers' professionalisation in South African education did not follow the western trajectory, mainly because of the *apartheid* education legacy and the way the post-1994 education

reconstruction was dealt with. A brief review of the pre-1994 education context as well as its dominant forces and conflicts around issues of teacher professionalisation and professionalism may be useful here.

The *apartheid* regime enforced segregated education with racially-fragmented departments that controlled white and black teachers and their work differently. A behaviourist-type of 'fundamental pedagogics' was imposed on all schools, requiring teachers to transmit a prescribed curriculum and syllabus and not allowing teacher autonomous interpretation. This period shared strong resemblances with Hargreaves' pre-professional age, but with repression of black teachers, who were treated as mere workers to control, while white teachers were allowed limited professional discretion. These conditions shaped their respective practices, identities and unionisation in ways that were fundamentally different.

Hyslop (1999) explains that racially-fragmented teachers' organisations responded differently to the *apartheid* education dispensation. Legally-recognised regional white teachers' organisations focused on apolitical professional issues, while non-recognised coloured, Indian and African teachers organised on a regional basis to voice their frustrations about poor working conditions and repressive treatment. Most of the militant non-white teachers' organisations eventually regrouped in the 1990s under the South African Democratic Teachers' Union (SADTU), which affiliated as a workers' union to the Confederation of South African Trade Unions (COSATU), and fought for political and educational democracy as well as improved working conditions (Hyslop, 1999).

All these unions had different views and strategies around teachers' work and needs. Three broad tendencies can be distinguished by their different stance and demands around teacher professionalism (Govender, 2004). A first workerist approach, associated with some non-white teacher unions, objected to their poor differential and discriminatory treatments and flexed their muscles with strikes and protests for better working conditions and collective bargaining rights. Soon, many of these unions changed and adopted a workerist-cum-political approach, using industrial tactics and political demonstrations to demand better working conditions, as well as political and educational freedom. Chisholm (1999) explains how SADTU mobilised the 'worker' and 'political' identity of teachers to fight for the abolition of *apartheid* education and the *apartheid* system, as well as to demand collective bargaining rights and a democratisation of education management and

monitoring. It embraced the rhetoric of 'professionalism' but did not mobilise to translate it into concrete programmes or campaigns for teachers' improved professional identities, responsible behaviour and autonomy. These issues seemed to have been relegated to a later stage, and remain a serious challenge for SADTU up to today.

The third approach came from the white and some Indian, coloured and African teachers' organisations mainly concerned with improving the profession's status, competences, behaviours and attitudes, while discarding the political mobilisation of its members for the abolition of *apartheid* (Govender, 2004). Most of these unions merged in the early 1990s into the National Association of Professional Teachers Organizations of South Africa (NAPTOSA), which continued to downplay the political alignment of its members for a focus on greater professional autonomy, competences, responsibilities and ethical values. Govender (2004) notes that NAPTOSA was also committed to the right of every child to receive quality education within an equitable and non-discriminatory system of education. Finally, a group of white conservative unions from the Suid-Afrikaanse Onderwyserunie (SAOU) organised around professional issues, avoiding any workerist or political issues in or outside the workplace.

Upon the advent of democracy in 1994, it was clear that not much shared history and discourse existed around teacher professionalism. This was because the practices, competences, attitudes, responsibilities and identities of teachers had been shaped and constituted differently by their specific treatments from, and responses to, the segregated education departments.

Post-1994 teacher-related reforms, teacher professionalisation and professionalism

The main data sources for this section come from a wider 'political economy' study of socially contested teacher evaluation policies (see De Clercq, 2011). These include teacher-related policy and policy analysis readings of the 1994-2011 period, including their contexts, texts and implementation, as these help locate the views of different key actors involved in these policies. Semi-structured discussions were also conducted with eight senior education officials, three senior unionists, two SACE officials and two educationists. They were asked about their position towards these policies, their enabling

and restricting components, as well as their organisation's responses, mediation and implementation strategies.

Legislative changes and emergent education stakeholders

After 1994, a new socio-political and educational configuration emerged with implications for teacher professionalisation and the social construction and state of professionalism. The new government declared its commitment to working towards a stakeholder democracy by incorporating multiple stakeholders in the negotiation of reform changes. The 1994 White Paper on education and training outlined a vision of a transformed education system dedicated to better quality and to equity. Radical legislative policy changes based on extensive dialogue with all stakeholders followed.

The first wave of aspirational teacher-related policies aimed at improving the quality, status and professionalisation of teachers. The 1997 Higher Education Act incorporated most colleges of education into existing higher education institutions to upgrade teacher education and qualifications; sophisticated and often revised curriculum and assessment frameworks, based on an Outcome-Based Education (OBE) system, encouraged teachers to work collegially as professionals (close to what Hargreaves describe in the third age); the 1998 Employment of Educators Act regulated collective bargaining between employers and teacher unions; the 2000 Norms and Standards for Educators (NSE) specified new professional standards, criteria for the recognition and evaluation of teachers' qualifications, as well as expanded social and professional roles for teachers (Harley, Barasa, Bertram, Mattson and Pillay 2000; Douglas, 2005).

These policies, which aimed at structural changes for the greater professionalisation of teachers' work and status, represented a significant shift in discursive practices, moving from assumptions of teachers as workers or state functionaries to a construction of teachers as self-driven professionals, committed to the improvement of their practices (Barasa and Mattson, 1998).

Education departments and teacher unions agreed on these ambitious policy discourses, but differed on how to translate them into realities and on how to prioritise the necessary policy instruments and processes (cited in De Clercq, 2011). The department urged teachers to behave as accountable professionals

and drive their own development, while the unions, and especially SADTU with its disadvantaged members, insisted that teachers received first adequate teacher development (TD) from the department before being made to account. Indeed, the policy implementation challenges overwhelmed disadvantaged black teachers whose work, knowledge, practices and attitudes had been profoundly undermined by years of professional neglect under *apartheid*. As Morrow (1989) notes, most black teachers suffered from inadequate teacher education, a culture of obedience to authority, and over-dependence on outside assistance for what and how they had to teach. In contrast, white teachers benefitted from quality teacher education, better treatment from education departments, superior school infrastructure and resources, putting them in a better position to implement these policies.

Teacher unions refocused their strategies. SAOU engaged for the first time with the collective bargaining process to make professional demands as long as these did not undermine learners' right to education (Govender, 2004). NAPTOSA, with its racially mixed membership, did the same while also focusing on issues of redress and equity in teacher education and in schools. Both SAOU and NAPTOSA saw better school and TD provisions as a way to promote the professional status and practices of their members within the new state-defined education system (cited in De Clercq, 2011).

The fast-growing militant SADTU (with the largest teachers' membership) adopted a two-pronged strategy of redress and equity which challenged the existing system by demanding 1) participation in macro- educational policy-making with a view to transforming the system and 2) the improvement of its members' status and working conditions (Govender, 2004). SADTU's first success was to widen the scope of the Education Labour Relations Council (ELRC) to include agreements on all issues impacting on teachers' work (Swartz, 1994). It also pushed the department to address the poor professional knowledge and competences of disadvantaged teachers by agreeing to the 1998 Development Appraisal System (DAS), a teacher-driven agreement, which replaced the previous fault-finding evaluation of inspectors and school managers.

A second success was the establishment of the South African Council of Educators (SACE), an independent professional body whose mandate and responsibility was to promote greater professionalism amongst teachers through professional norms, standards, and values. Its discursive practices were about stronger teacher commitment towards professional practice,

responsibility and ethical conduct. SACE's first move was to accredit teachers with a recognised professional qualification for the duration of their whole career, thereby rejecting the idea of a renewable accreditation based on teachers' competences and practices. SACE took this pragmatic and politically safe decision because it did not want to victimise the disadvantaged black teachers who had been subjected to poor quality pre-service and in-service teacher education (cited in De Clercq, 2011). SACE's work focused mainly on the implementation of the professional code of conduct to discipline teachers who acted inappropriately within the profession. It also organised workshops to help teachers diagnose their professional development needs.

It is argued here that SACE's weakness was to neglect the promotion of a dialogue among teachers on how to advance their professionalism and professional identities, whether through provisions of large-scale TD or other campaigns. SACE did not appear to recognise the need to improve teacher mindset, motivation and responsibility, something which the department and the unions did not directly address. The department was interested in implementing ambitious policies, while the unions – and in particular SADTU – were keen to secure promotion for their members and protect those who struggled to enact the curriculum, given their poor subject/pedagogical knowledge and weak department support.

SACE's work was also undermined by its problematic governing board, which became a site of conflicts amongst the majority of its members who were representatives of unions and education departments – with the latter accusing SADTU of capturing SACE for its sectarian interests (cited in De Clercq, 2011). Many professionals, who were at different times on the SACE board, resigned in frustration with the political dynamics of the board and its rather ineffective executive leadership (cited in De Clercq, 2011). As a result, SACE could not forge an independent position and use the professional space provided to strengthen teachers' collective professional identity, responsibility, voice and social agency.

Other professional subject-based associations emerged at the time to focus on improving teachers' practices and engagement with their work and colleagues, and did not compete with SACE in building teacher professional standards, responsibility, conduct and public standing.

By the late 1990s, conceptions and practices of teacher professionalism remained ambiguous and varied. The state wanted teachers to become more competent and responsible professionals, while the unions continued to contest the sequence of steps required for reaching that goal. On the ground, a continuum of professionalism remained, ranging from a narrow conception with teachers pursuing their sectarian interests to a broader conception with teachers determined to improve their professional knowledge and autonomy, while others were also committed to learners and/or participation in policy-making for better school education for all. No strong stakeholder or organisation focused directly on what Evans (2010) sees as two important constituent components of professionalism: the behavioural and attitudinal. This was a serious omission as South African school education demanded a cultural transformation of teachers' passive behaviour, attitude and mindset into something professionally responsible and pro-active.

Polarised strategies around professionalisation and professionalism

The government's initial commitment to stakeholder democracy and participatory decision-making did not last long. With the 1997 GEAR market-driven policies, the economic restructuring and fiscal austerity measures, the balance of forces shifted, causing greater polarisation among stakeholders (Chisholm, Motal and Vally, 2003). In education, concerned about the poor culture of teaching and learning, the department decided to control teachers through greater regulation and accountability. As Jansen (2004, p. 54) explains,

> to the extent that regulation is an intimately political act, the stage was set for making teachers accountable as professional actors within public schools that in large measure still bore the unmistakable marks of instability of the 1970s.

The second teacher-related policy phase was characterised by a departmental managerialist approach to the promotion of efficiency in policy implementation and education delivery. Shifting away from a focus on teacher development, the department looked for greater monitoring and control measures over office staff, schools and teachers (De Clercq, 2011).

The 2001 National Policy on Whole-School Evaluation (WSE) subjected schools and teachers to standardised bureaucratic monitoring, and this without any consultation with unions. SADTU boycotted the WSE for eroding the

autonomy of schools and teachers as well as contradicting the spirit of DAS of empowering teachers to be reflective professionals, able to drive their own development. It also criticised the WSE for being an unfairly judgemental inspection system, which poorly assessed school/teacher performance by not examining the deeper causes of poor performance, linked to both the destructive *apartheid* legacy and inadequate department support (cited in De Clercq, 2011). The 2002 ELRC Performance Management and Development System measured the work performance of public servants against pre-specified performance standards, in the hope of introducing a performance-oriented culture. The 2003 systemic evaluation of grade 3 and 6 learners aimed at benchmarking school performance and tracking schools' progress in the achievement of set goals, producing in the process performance data for greater school accountability.

Most unions reacted to these measures by demanding that departmental TD precedes any school appraisal or accountability. They negotiated with the department the 2003 Integrated Quality Management System (IQMS), which combined DAS, performance management and the WSE as a holistic school and teacher appraisal system, winning the principle that development had to take place before any summative evaluation. The IQMS agreement was far from being a rational outcome but rather the result of ELRC compromises, with stakeholders having different designs and interpretations (De Clercq, 2008). The department hoped the IQMS could become the backbone of a national monitoring system, which would report on the most effective and ineffective schools and teachers (cited in De Clercq, 2011). The unions, and SADTU in particular, remained oppositional and continued to pressurise the department for a large-scale TD plan and attending strategies. The existing poor department support frustrated unions and teachers so much that they decided to manipulate the IQMS scores to qualify for a bonus (cited in De Clercq, 2011).

This second policy phase was managed through a top-down state imposition or at best through strained negotiations between education departments and teacher unions. The state was interested in pushing for a form of managerial professionalism, with its emphasis on auditing, accountability and control measures in the name of efficiency. These measures were not as aggressive as the West's performativity approach, which measured teacher performance in terms of learners' results. Also, contrary to what international agencies recommended in countries they funded, the power of unions was not undermined in post-1999 South Africa. However, unions responded to the

second policy phase in a more defensive than pro-active manner. They confined themselves to criticise the department for jeopardising policy implementation with its lack of meaningful teacher support, while SADTU boycotted some monitoring and accountability policies (De Clercq, 2011).

What was yet again not addressed was the issue of teacher professional and public responsibility, something which Evans (2010) notes is embedded in the behavioural and attitudinal constituents of teacher professionalism.

Teacher development and enhanced professionalism

The INSET realities did not improve for teachers for a long while, partly because of the absence of a TD policy framework, strategy and plan. By 2007, the National Policy Framework for Teacher Education and Development (NPFTED) gave conceptual coherence to the teacher education system; it committed the DoE to support TD activities and made SACE responsible for the coordination and management of the implementation and quality assurance of the Continuous Professional Teacher Development (CPTD) system. Contestations soon arose between the two main stakeholders over what constitutes TD and TD points[2] (De Clercq, 2011), but without much engagement with the kind of TD that could impact positively on Evans' intellectual, behavioural and attitudinal components.

The institutionalisation of TD did not stop the department from looking for a better national monitoring system, given the poor reliability of the IQMS and the inadequate work performance of the monitoring and support units of the PDEs (cited in De Clercq, 2011). The National Education Evaluation and Development Unit (NEEDU), a quasi-independent body, was given the responsibility of evaluating schools and the support they receive from department officials (DoE, 2009). This was the first time that the educational bureaucracy was to be subjected to independent evaluation measures, something schools and unions had always demanded (cited in De Clercq, 2011). It is interesting to note that Taylor (2011, p.6), the new NEEDU CEO, identifies another serious problem prior to TD: the hiring of education officials and school staff:

---

[2] The NPFTED document specifies that teachers have to accumulate a minimum of 150 TD points every 3 years.

> a principle function of unions, political parties, party factions, and other groupings of convenience is to act as patronage networks which distribute [better employment] opportunity to their members.

He proposes that "teachers applying for posts. . . should pass the relevant subject content test before appointment; the same should apply to applicants for heads of subject departments, and curriculum officials in district and provincial offices (Taylor, 2011, p.54). It is difficult to imagine how unions and other educational institutions would envisage such meritocratic proposal to deal with a deeper cause of low staff performance.

Subsequently, the 2011 Minimum Requirements for Teacher Education Qualifications (MRTEQ) made a Bachelor of Education degree or Advanced Diploma in Teaching (both at NQF Level 7) the minimum teacher professional and academic qualification. It specified clear requirements and guidelines for teacher qualifications and learning programmes, which were to address "the poor content and conceptual knowledge found amongst teachers. . ." (DHET, 2011, p.7). It emphasised the integration of theoretical and applied competences to draw reflexively from integrated and applied knowledge in order to work flexibly in a variety of contexts.

The 2011 Integrated Strategic Planning Framework for Teacher Education and Development put aside large funds for the establishment of national and provincial teacher development institutes, district teacher development centres and, interestingly, the establishment of "professional learning communities (PLCs) to strengthen teacher professionalism" (DBE/DHET, 2011, p.14). PLCs promote collaborative teacher reflection on and learning from practices, and set higher standards of practice and ethics, but can only function if supported by outside experts with professional knowledge and understanding of context. Another advance is the unions' intention to set up their TD institutes, while continuing to pressurise the department for delivering on its nationwide TD plan.

But how will the department and unions build the capacity to support teachers with the needed conceptual, reflective and practical knowledge to influence practices and behaviours? Some educationists aware of insufficient departmental and national support capacity proposed a different form of support intervention for disadvantaged teachers (Schreuder, 2008; Fleisch, 2012). They argue that these teachers required more detailed and specified instructional content and practices for each subject and grade, from which

they could learn and build. This led to the primary literacy and numeracy strategies of the Western Cape (2006) and Gauteng (2010). Interestingly, the 2011 Curriculum and Assessment Policy Statement (CAPS) also provides a higher level of specificity on the means by which to achieve learning outcomes, in the hope of assisting teachers struggling to develop and implement their own learning programmes. CAPS specifies the learning content for each Assessment Standard, methods of teaching and examples of good teaching practices. This trend in curriculum changes has been criticised as a state expedient attempt to prescribe what has to be taught and how, thereby underemphasising the need for teachers to acquire greater intellectual and reflexive knowledge.

Thus, 17 years into the democratic dispensation, South African teachers' work, status and professionalism have evolved, even if accompanied by somewhat ambiguous changes, which hold only some similarities with Hargreaves' 4th post-modern age. On the one hand, greater teacher professionalisation and potential active professionalism were made possible by some post-1994 policies and new social and educational structures, such as union participation in policy agreements; SACE; teachers' broadened roles; higher teacher professional qualifications; TD provisions focused on the interconnection of various intellectual, applied and practical knowledge; and curriculum and assessment policy, with some professional autonomy.

On the other hand, there were elements of de-professionalisation, with greater regulation and intensification of teachers' work, and assumptions of a compliant teaching force that had to be tightly monitored. The ambitious OBE-based curriculum overburdened many teachers, and was amended too many times for teachers to engage actively with each new version. The 2011 CAPS, which was advisory and not prescriptive, risks frustrating competent teachers wanting to protect their autonomy, while making less competent teachers more dependent on the state's curriculum and assessment practices, and therefore less able to develop into autonomous reflective professionals. The lack of human capacity and resources to deliver meaningful TD was also against teachers, and so were controlling departmental evaluation measures, which demoralised teachers, many of whom pleaded with their unions for meaningful opportunities to learn and grow professionally.

Thus, in this period the social construction of teacher professionalism continues to be monopolised, albeit also contested, by education departments and unions with their conflicting agendas. Little attention was paid to

changing teacher mindset and behaviour to take responsibility for the quality of their teaching and school education as a whole. The professional space provided to SACE was not exploited with effective forward-looking strategies. However, SACE could contribute to meaningful TD and professionalism, with its recent increased responsibility as coordinator and quality assurer of the CPTD system, but only if it develops a strong independent professional leadership as well as social capital, through effective partnerships with other genuine professional associations and TD providers.

Teacher professionalism and the role of independent professional associations

If professionalism generally refers to the professional knowledge, autonomy, behaviour and ethics of teachers; in South Africa, it requires different professional organisations to generate deep changes in the intellectual knowledge, mindset and values of teachers. Yet, it is a priority for teachers to develop stronger professional identities and responsible commitment to learners and quality school education as a whole.

The 2011 TD plan is welcomed in this regard, even though there are serious obstacles in translating it into appropriate provisions which are tailored to the local and contextual needs of teachers as well as promote teacher professionalism. The problem is that the majority of teachers have deeply ingrained negativity and scepticism towards their jobs and developmental programs aimed at their teaching practices as they have mostly experienced these as seriously inadequate.

The literature on teacher change discusses extensively how to change teachers' beliefs and attitudes. Some scholars argue that changes in beliefs and values occur through TD, which then lead to changes in classroom practices and behaviours. Guskey (2002) reverses this causality, arguing that beliefs and attitudes change *after* an exposure to and experience of changed classroom practices, associated with better learner achievement. Clarke and Peter (1993, cited in Clarke and Hollingsworth, 2002) criticise this linear sequential view of the teacher change process, while Clarke and Hollingsworth (2002) argue that change occurs through the mediations of teacher reflection and enactment in four domains: the personal domain of

knowledge, beliefs and attitudes; the domain of professional practice; the domain of consequence (outcomes) and the external domain (sanctions or stimulus). For them, the TD form with the most potential at nurturing teacher reflection and enactment in these domains is the PLC. However, South African PLCs can only do this with access to strong continuous support and guidance from outside professional facilitators.

Another way to nurture teacher reflection and enactment in the personal, professional and consequential domains is through independent professional associations. These associations, with their focus on better professional practices, mindset and long-term interests among teachers, can play a leading role in making teachers responsible, motivated and committed to quality education for all. Such associations have great potential as an interface between their members and society: they can support teachers in implementing a curriculum, in promoting a professional community to advance professional expertise, knowledge and commitment in the discipline/subject as well as in transforming them into pro-active professionals interacting and learning in a socially situated manner. As Hilferty (2007, p.240) argues, genuine professional organisations constitute a platform or "entry point into the politics of curriculum policy-making [. . .] strategic sites for professional development reform [. . .] and active participants in the social construction of teacher professionalism". By engaging politically and claiming a role in curriculum policymaking, professional associations can give teachers a collective voice by means of which to drive their own professionalism.

At present, there are a few South African discipline-based professional associations that bring teachers together on a voluntary basis from across the profession, to focus on improving professional practices and standards. The Association of Mathematics Educators of South Africa (AMESA) or the Southern African Association for Research in Maths, Science and Technology Education (SAARMSTE) are such independent discipline-based professional associations, which emerged organically, and emphasise the value of teacher collaboration and networks and the improvement of teachers' professionalism and school education for all. For example, AMESA declares its commitment to:

- encouraging its members to strive towards a high standard of professionalism;

- promoting and disseminating research related to Mathematics Education;
- formulating policy statements on matters regarding Mathematics Education and promoting of such perspectives among its members, policy-making bodies and organs in civil society involved in education;
- engaging actively in Mathematics Education projects that will result in the social, economic, political and cultural development of society (www.amesa.org.za).

SAARMSTE has 'chapters' which connect its members to one another and promote a supportive environment for practitioners to undertake research, to reflect and improve on their practice (www.saarmste.org). Unlike SACE, these independent associations are led by university-based professional educators and use experts to assist with their professional developmental activities.

These associations can never become mass teacher organisations, but they could secure enough space and power to develop a critical mass of teachers with strong professional identities and responsible mindsets as well as collective voice and social agency. If they then were to lobby for formal representation on policy-making bodies (with responsibility for curriculum and assessment), they could contribute to teacher-related policy-making and quality school education for all. Finally, SACE could play an indirect role, as coordinator and quality assurer of the CPTD, by promoting the growth and contribution of such professional associations.

Conclusion

Teacher professionalism needs strengthening as a matter of priority. This has to be achieved partly through the development of teacher professional knowledge and competences, but also through subjective constitutive processes which improve teacher professional identity, mindset, behaviour and values. The enhancement of teacher professionalism cannot be done through collective bargaining negotiations between education departments and unions, or through narrowly-conceptualised TD programs. The challenge for SACE is to develop a visionary leadership committed to promote and work with independent professional associations, in order to oversee the

development of teacher professional knowledge, practice, mindset and identity, as well as responsibility for better quality schooling for all.

References

Barasa, F. and Mattson, E. 1998. The roles, regulation and professional development of educators in South Africa: a critical analysis of four policy documents. *Journal of Education,* 23: pp.41–72.

Bascia, N. 2003. *Triage or tapestry? Teacher unions' work toward improving teacher quality in an era of systemic reform: a research report.* University of Washington: Centre for the Study of Teaching and Policy.

Carr, D. 2000. *Professionalism and ethics in teaching*. London: Routledge.

Carrim, N. 2001. From teachers to educators: homogenising tendencies in contemporary South African educational reform. *International Journal of Education Development,* 21: pp.45–52.

Chisholm, L. 1999. The democratization of schools and the politics of teachers' work in South Africa. *Compare,* 29(2): pp.111–126.

Chisholm, L., Motala, S. and Vally, S. (Eds). 2003. *South African education policy review: 1993–2000*. Johannesburg: Heinemann.

Clarke, D. and Hollingsworth, H. 2002. Elaborating a model of teacher professional growth. *Teaching and Teacher Education,* 18: pp.947–967.

De Clercq, F. 2008. Teacher quality, appraisal and development: the flaws of the IQMS. *Perspectives in Education,* 26(1): pp.7–18.

De Clercq, F. 2011. Teacher appraisal reforms in post-1994 South Africa: conflicts, contestations and mediations. Unpublished PhD thesis. Johannesburg: University of the Witwatersrand.

Demirkasimoglu, N. 2010. Defining 'teacher professionalism' from different perspectives *Procedia Social and Behavioral Sciences*, 9: pp.2047–2051.

Department of Education, 2009. The Report of the Ministerial Committee on NEEDU, Government Gazette No. 32133. Pretoria: Government Printer.

Department of Basic Education and Department of Higher Education and Training, 2011. *Integrated strategic planning framework for teacher education and development in South Africa: 2011–2025*. Pretoria.

Department of Higher Education and Training, 2011. *Minimum requirements for teacher education qualifications*. Pretoria.

Douglas, J. 2005. *Teacher professionalism and education transformation.* Johannesburg: CEPD.

Evans, L. 2010. The 'shape' of teacher professionalism in England: professional standards, performance management, professional development and the changes proposed in the 2010 White Paper. *British Educational Research Journal,* 37(5): pp.851–870.

Gamble, J. 2010. *Teacher professionalism: a literature review*. Mimeo. Johannesburg: JET

Govender, L. 2004. Teachers unions, policy struggles and educational change, 1994 to 2004. In Chisholm, L. (Ed.), *Changing class: education and social change in post-apartheid South Africa*. London and New York: Zed Books, pp.267–292.

Guskey, T. 2002. Professional development and teacher change. *Teachers and Teaching*: *Theory and Practice,* 8(3/4): pp.381–391.

Hargreaves, A. 2000. Four ages of professionalism and professional learning. *Teachers and Teaching: History and Practice,* 6(2): pp.151–182.

Harley, K., Barasa, F., Bertram C., Mattson, E. and Pillay, S. 2000. 'The real and the ideal': teacher roles and competences in South Africa policy and practice. *International Journal of Educational Development*, 20: pp.287–304.

Hess, F. and West, M. 2000. *A better bargain: overhauling teacher collective bargaining for the 21st Century*. Harvard University: Program of Policy and Governance.

Hilferty, F. 2007. Contesting the curriculum: an examination of professionalism as defined and enacted by Australian history teachers. *Curriculum Inquiry,* 37(3): pp.239–261.

Hoyle, E. and John, P. 1995. *Professional knowledge and professional practice*. London and New York: Cassel.

Hyslop, J. 1999. *The classroom struggle: policy and resistance in South Africa, 1940–1990*. Pietermaritzburg: University of Natal.

Jansen J. 2004. Autonomy and accountability in the regulation of the teaching profession: a South African case study. *Research Papers in Education*, 19(1): pp.51–66.

Moe, T. 2002. Politics, control and the future of school accountability. Retrieved on 6/2/2008 from http://www.hks.harvard.edu/pepg/PDF/events/TAConfPDF/PEPG02-14%20TA%20Moe.pdf

Morrow, W. 1989. *Chains of thought: philosophical essays in South African education*. Johannesburg: Southern Book Publishers.

Ozga, J., 1995. Deskilling as a profession: professionalism, deprofessonalisaton and the new managerialism. In Busher, H. and Saran, R. (Eds), *Managing teachers as professionals in schools.* London*:* Kogan Page, pp.28–49.

SACE. 2005. The state of teacher professionalism in South Africa. Paper commissioned to the EPU by SACE. Centurion: ELRC.

Sachs, J. 2001. Teacher professional identity: competing discourses, competing outcomes. *Journal of Education Policy,* 16(2), pp.149–161.

Stevenson, H., Carter, B. and Passy, R. 2007. New professionalism, workforce remodeling and the restructuring of teachers' work. *International Electronic Journal for Leadership in Learning*, 11(18): pp.1–11.

Swartz, R. 1994. South African Democratic Teachers Union: collective bargaining and education transformation. Unpublished Master of Education Research Report. Johannesburg: University of the Witwatersrand.

Taylor, N. 2011. *Priorities for addressing South Africa's education and training crisis*. JET.

Villegas-Reimers, E. 2003. *Teacher professional development: an international review of the literature*. Paris: International Institute of Educational Planning.

Whitty, G. 2008. Changing modes of teacher professionalism: traditional, managerial, collaborative and democratic. In Cunningham, B. (Ed.), *Exploring professionalism*. Bedford Way Papers. London: Institute of Education, pp.28–49.

Francine de Clercq
School of Education
University of the Witwatersrand

francine.declercq@wits.ac.za

Coherent discourse and early number teaching

Devika Naidoo and Hamsa Venkat

Abstract

Functional linguists argue that a prerequisite for the mediation of semiotic meaning is coherent discourse. The multisemiotic nature of mathematics adds complexity to the need for coherence. In mathematics classrooms it is language that weaves semiotic modes together as teachers' words and explanations are the means by which the relation within, between and across semiotic modes are explicated. The assumption is that there are greater possibilities for mediating semiotic meaning when there is coherence in the teacher talk and practice that seeks to convey such meaning. The focus of this paper is to illustrate, through comparative analysis of discourse in two Grade 2 number lessons – one, an intervention project number activity and the other a number lesson taught by a Grade 2 teacher - the significance of coherent discourse for enabling sense-making of the number concepts taught.

What teachers and learners say, do, and write are the experiences that form the bases for meaningful learning. Coherence or incoherence across these semiotic modes create or militate against possibilities for meaning making. The concept of coherent discourse, drawn from systemic functional linguistics and operationalised in relation to literature of early number learning, provided the lens to analyse the pedagogic discourse in the two classrooms. The paper firstly identifies functional/qualitative differences in coherent discourse in two lessons and secondly, identifies reasons for lack of coherence. These reasons enable or militate against meaning making resulting in differentiated possibilities for development of learners' number sense. The implications of the differing discourses for the mediation of semiotic meaning and for teacher development are discussed.

Introduction

Functional linguists argue that a prerequisite for the mediation of semiotic meaning is coherent discourse (Halliday and Hasan, 1991). The assumption is that there are greater possibilities for semiotic meaning making by learners when there is coherence in the discourse that seeks to convey such meaning Hasan (2004), drawing on Vygotsky (1978), defines the concept of semiotic mediation as "the cultural mediation of mental development through acts of semiosis" (p.30). Semiotic acts are 'acts of meaning' mediated by sign-

systems such as language. While semiotic mediation of meaning is a prerequisite for the development of higher mental functions, a prerequisite for semiotic mediation is coherent discourse (Hasan, 2004). Discourses are not just linguistic descriptions and thoughts but include the practices that arise from them. Thus, "discourses are practices that systematically form the objects of which they speak" (Foucault, 1977, p.2), and are inclusive of accompanying language, visual representations and practices. From the perspective of numeracy teaching, the focus on discourse therefore includes what teachers say, do and write on the board, and their responses to learners, as the experiences for learners that form the bases for meaningful learning.

The fundamental role that discourse plays in any classroom has been highlighted by Wertsch and Minick (1990). They argue that a fundamental property of discourse in classrooms is that the reality it creates is text-based. The term 'text-based reality' indicates that a discursive reality is created by semiotic means: "A variety of kinds of texts and realities may be involved, but in all cases a reality or 'problem-space' is created, maintained and operated on through semiotic (usually linguistic) means" (Wertsch and Minick, 1990 p.74). Similarly Halliday and Hasan (1991, p.95) note that while other semiotic modalities such as eye-contact, gestures and facial expressions are used to mediate meaning "the meanings relevant to a topic must be created through appropriate, communally interpretable language".

O'Halloran (2000) emphasises the multisemiotic nature of mathematics – with modes ranging across symbolism, visual display and language. Important in the context of early learning, Schleppegrell (2007) distinguishes between oral language and written language, and adds a focus on gestures and actions. Haylock and Cockburn (2008) describe early number learning in terms of making strong connections between actions on objects, the words used to describe these actions, diagrams that represent essential components of these actions, and the mathematical symbols that can concisely and conventionally represent these actions/words. Schlepegerell (2007, p.142) also highlights the need for coherence across semiotic modes:

> the written language, the mathematics symbolic statements, the visual representation and the oral language **work together** to construct meaning as the teacher and students interact in (Schlepegerell, 2007, p.142).

Veel (1999), discussing pedagogy in the context of linking different representations, notes that: "teachers words and explanations are needed to

interpret the meanings that the visual displays and symbolic representations construct," (Veel, 1999, p.189) as the teachers words are the means by which the relation between representations is conveyed. Thus, while the use of concrete aids, visual representations and gesture/movement may be used to illustrate a number concept, the building of progressive sense relations is usually achieved through linguistic extensions and elaborations of meaning.

This analysis of pedagogic discourse draws on the concept of coherent discourse. Systemic functional linguistics (SFL) provides analytical distinctions of coherent discourse that enable its description. Discourses that have the property of coherence are discourses that are strongly connected through the use of structural and textual devices. Whether a discourse is coherent and therefore, creates possibility for meaning making or impedes it, is empirically analysable. The focus of this paper is to illustrate, through analysis of two Grade 2 number lessons, differences in coherence and differentiated possibility for semiotic mediation that can be seen through application and elaboration of the notions of structural and textual coherence.

In the next section, Halliday and Hasan's (1991) SFL concept of coherent discourse has been drawn on together with O'Halloran's emphasis on multisemiotic modes in mathematics. Whilst O'Halloran's focus has been on secondary mathematics ideas, our focus is on early number learning where the need to connect learners' everyday understandings of number with the extensions that become possible and necessary through work with visual and symbolic representations of number, are important. We use the idea of coherence through such connections to compare two sections of pedagogy in order to understand the nature and extent of connections made in the two texts. Given the emphasis on connections as central to conceptual understanding and meaning making in mathematics (Hiebert and Lefevre, 1986), this analysis allows us to understand potential differences in possibilities for learning, and as such, ways of furthering our understandings for teacher development for numeracy.

Conceptualising coherent discourse for number learning

Halliday and Hasan (1991) identify features of coherent discourse that are pertinent for our analysis. For them, a text that is characterised by coherence

hangs together: “At every point after the beginning, what has gone before provides the environment for what is coming next. This sets up internal expectations. . .” (p 48). In this view, prior discourse forms an important context for making sense of subsequent discourse. An important contribution to coherence comes from cohesion: “the set of linguistic resources that every language has for linking one part of the text to another” (Halliday and Hasan 1991, p.48). For a text to achieve internal cohesion it has to have the property of unity. Unity in written and spoken texts is of two types – unity of structure and unity of texture. Halliday and Hasan (1991) argue that a text with unity of structure is made up of separate events or elements that are connected. Three separate events are identified – the beginning or the precipitative event that propels from one stage to another; the consequential event that arises from the precipitative event; and the revelatory event that leads to redefinition of the precipitative event. This Aristotelian definition of structure is therefore based on the three elements: a discernible beginning, middle and end. The pedagogic discourse of teachers across the two focal lessons was firstly analysed for structural continuity.

Textual continuity refers to meaning relations within phrases and utterances and between phrases or sentences so that the meaning of the larger piece of language is achieved by the links between the smaller units. The linguistic concept of cohesive tie (Halliday and Hasan, 1991) focuses attention on meaningful ties within, between, and across text. Coherent explanations are characterised by strong cohesive ties across individual messages of a text that produce continuity in the discourse. Within numeracy teaching, and following O’Halloran (2000), messages can be communicated and linked through what the teacher says, writes (using words and diagrams), does and learner responses. For example the drawing of a number line on the board, accompanied by the words, ‘this is a number line’, and the writing of the term number line on the board indicates strong cohesion across what the teacher says and does and writes that increases coherence across these activities and therefore possibilities for appropriating the meaning of ‘what a number line is’.

Textual continuity is achieved through three types of cohesive ties – co-referentiality, co-classification and co-extension (Halliday and Hasan, 1991). Within each of these types, we link the descriptions provided in Halliday and Hasan’s (1991) work with examples drawn from the terrain of early number learning.

Co-referentiality can refer to the use of pronominals, such as 'he, she, it' and the use of the definite article 'the, this, that' with reference to the subject of the previous sentence. For example, in the sentence 'Right, now,. . . the summary there. . . it says. . .', the use of the pronominal 'it' refers to 'the summary' unambiguously. Co-references enable efficient use of language as the subject of the sentence or the previous sentence need not be repeated. Co-references used ambiguously can introduce incoherence in a text especially if there are two subjects that could be referred to or, if across a few sentences, different subjects could be referred to. Ambiguity refers to the use of a cohesive device such as a co-referential in a way that allows more than one interpretation or meaning to be attached to it. An example of co-reference in the context of early number learning would be: '14 is an even number, so we can share *it* equally between two people'.

Co-classification can refer to the use of substitution or ellipsis in a text. In substitution the second message further classifies the first without repeating it. For example, in the two sentences 'Right, now, the test on Wednesday. . . You **need to know** everything up to and including what we have done today' indicates the use of substitution. The second sentence refers to 'the test' that was stated only in the first sentence. In ellipsis the second sentence is meaningful only in relation to the first and a distinct case of it. Co-classifications used ambiguously will also introduce incoherence in a text. Within early number learning, and in mathematics more generally, an alternative representation of an idea can be thought of in co-classification terms – e.g. 'I am going to draw a number line' introduces a diagrammatic representation that unambiguously connects to the words 'number line'. In mathematics, equivalent representations across multisemiotic modes provide alternate ways of seeing an idea that stress particular features of the idea whilst backgrounding others (Mason and Johnston-Wilder, 2004).

Co-extensions are content words or lexical items in a field of meaning. Co-extensions are produced by three types of meaning relations – the use of synonyms, the use of antonyms and the use of hyponyms. Synonymy is the use of words that are similar in meaning to the key term that evoke identical experiential meaning, e.g. the use of 'take away, minus, less than' to convey the concept of 'subtract' and the use of the word 'middle number' to enable learning of the concept of half. Antonymy refers to the use of words that mean the opposite that also evoke experiential meaning by saying what it is opposite of. For example the teacher might use the words 'not before' to convey the meaning of 'after'.

Hyponymy refers to explaining a concept by classifying it in terms of its general class and its sub-classes: the focus is on general-specific relations. For example, the concept of half is general and decontextualised, whilst '5 bricks is half of 10 bricks' is a specific instantiation of it. Generality moves in stages in early number learning – Hughes (1986) notes the more abstract nature of 'What is 2 + 2' in abstract number terms in comparison to 'What is 2 bricks and 2 bricks in all'? Mason and Johnston-Wilder (2004) also note the central role of 'specialisation' and 'generalisation' of examples, and the classes they are exemplars of in mathematical learning more broadly. General or abstract sense-relations are difficult for children to grasp but are powerful precisely because their sense is not dependent on specific contexts. A key aim of numeracy in the Foundation Phase is to support the development of the gradually more general and abstract sense-relations of number that are needed for progress in Intermediate Phase mathematics (Department of Basic Education (DBE), 2011a, 2011b).

An additional sense relation, i.e. meronymy (Halliday and Hasan, 1991), refers to compositional relations (or part of) where the focus is on part-whole relations, for e.g. a tree and its parts such as roots and branches. In relation to developing understandings of the meaning of 16, explanation of number bonds, e.g. 9 + 7 = 16, would represent a meronymic co-extensional sense relation. In mathematics, 'elaboration of a concept' can be considered in terms of co-extensions of meaning. For example, 'decomposing 16 into two constituent parts' is a general concept, which has several specific instantiations, 9 + 7, 10 + 6, etc. In mathematics, movement between general-specific or part-whole relations can work in both directions with an emphasis on deducing specific instantiations, using the known whole or part to work out the unknown, and focusing on working systematically to generate all cases that fit a given constraint.

Hasan (1991) further notes the role of repetition in achieving coherence in texts because 'the repetition of the same lexical unit creates a relation simply because a largely similar experiential meaning is encoded in each' repetition.

In order to employ the above concepts to analyse the data we needed to operationalise them into indicators of more and less coherent discourse. This operationalisation, which brings the concepts in conversation with aspects of early number learning that were pertinent to our dataset, is reflected in Table 1 below:

Table 1: Operationalisation of the key concepts

Coherence	More coherent discourse	Less coherent discourse
Unity of structure	A text that has a clear and connected beginning, middle and end. A text in which the separate parts are connected. ● Within a part in the text there is connection across problem space, consequential event and redefinition	A text that has unmarked or vague beginning, middle and end. A text that has separate events that are unconnected. Parts in the text lack connection between problem space, consequential event and redefinition.
Unity of texture	Unambiguous use of co-references – e.g. it. The co-referents can only be interpreted in one way.	Ambiguous use of co-references. The co-referents could be interpreted in more than one way.
	Unambiguous use of co-classification. The substitution/ellipsis is clearly indicated across the sentences.	Ambiguous use of co-classification – substitution and ellipsis. The learner could substitute different meaning than intended.
	Synonyms used to mediate meaning. Synonyms used for key terms such as increasing/more, decreasing/ less, doubling/ halving/middle in our data.	Lack of use of synonyms to convey similar experiential meaning. The word to be mediated is repeated, rather than elaborated through other words that have similar meaning.
	Antonyms used to mediate meaning of key terms – left/ right, first/last, before/after, plus/minus, more/less, addition/subtraction,	Lack of use of antonyms to convey meaning of word. The word to be mediated is repeated and not elaborated through its opposite meaning, e.g. the number after, not before 6 is 7.
	Orders super-ordinate/hyponymic or general-specific relations that shows hierarchy and connectivity of concepts.	Lack of ordering of super-ordinate/ hyponymic relations or general-specific relations. Meanings are either contextualised and specific or general and abstract.
	Part-whole relations are clear. Partitioning of numbers that make the part/whole clear.	Lack of part-whole relations. The part is disconnected from the whole or the whole is not understood in terms of its parts.
Repetition	Effective repetition of key phrases, combined with textual coherence devices that create the same experiential meaning in different parts of the text.	Ineffective repetition. Repetitions of phrases such as ‘repeated addition’ that fail to create experiential meaning for learners.

Research design

Within the context of poor numeracy performance in primary schools (Department of Education (DoE), 2008) work began on a longitudinal research and development project – the Wits Maths Connect – Primary project (WMC–P) – focused on developing and investigating the implementation of interventions focused on improving the teaching and learning of primary mathematics in ten government primary schools. As part of the baseline data collected for this project, the project team observed and videotaped a single numeracy lesson across the Grade 2 classes in the ten project schools, with a view to gaining insights about the nature of teaching and learning, and the classroom contexts of these activities.

Initial post-observation discussions in the project team involved comments about a lack of purpose and connection between ideas in lessons. Disconnections between a range of aspects of classroom talk and activity were noted – the object of learning/teacher explanations and teacher explanations/materials being used to support the activity. Later in the year, as part of the project's intervention work, short activities based on building early number sense were taught by project team members. In this paper, the significance of coherence for early number teaching is exemplified through comparing the nature and extent of coherence between one of these number sense activities and a Grade 2 number lesson observed early in the year. The first lesson is a number sense activity taught by the project leader and the other is a number lesson taught by a Grade 2 teacher in a suburban school. Data for the number sense activity was collected through non-participant observation and writing detailed field notes as the activity progressed. The field notes were later reconstructed, filled in and typed. The Grade 2 teacher's lesson was observed and video recorded. The video records were then transcribed into text that included what the teacher said, wrote on the board, her actions and her learners' responses. The transcripts were then divided into episodes – with new episodes signalled by the introduction of a new task.

The number sense activity was made up of 11 episodes: (1) introduction to number line; (2) positioning18 on a 1-20 number line; (3) positioning 7 on the number line; (4) identifying middle of line; (5) identifying what number is in the middle; (6) positioning number 18 in relation to middle number; (7) positioning 7 in relation to middle number and connecting this to associating 'less than' and 'before'; (8) repeating above with 12 on the number line; (9)

finding middle of 10 and 20 on number line; (10) using 10-20 mid-value to re-look at position of 12; and (11) an individual assessment activity looking at number recognition, positioning and ordering on a 1-12 number line.

The Grade 2 teacher's lesson was made up of 12 episodes: (1) forward counting from 1–100, then backwards from 100-1; (2) an addition word problem with answer 16; (3) writing 16 in numerals; (4) drawing 16 objects; (5) counting 16 objects/counters; (6) representing 16 as a number word; (7) representing 16 in pictures; (8) recognition of 16 as a number and a word; (9) number pairs that add to 16; (10) subtracting two numbers to make 16; (11) repeated addition of a number to make 16; and (12) a written exercise with addition and subtraction sums to make 16. The teacher's stated aim for the lesson was: 'There are many ways to make 16 – different kinds of methods can be used to make the number 16. The important thing here is for you to know how to write 16 in number, 16 in words – the number name – and how many pictures are we talking about when we talk about the number 16'.

The data transcripts were analysed according to the analytical framework developed reflexively from both the SFL concepts described in Table 1, with attention to coherence between multisemiotic modes. The units of analysis were the teachers' utterances – their words, sentences and explanation sequences, incorporating what they wrote on the board and how they responded to learner inputs. The first step was to analyse the overall structural unity of the lesson and then structural unity across the various parts of the text. The second step was analysing textual unity in terms of sense relations within and across the utterances. Lastly, the use of repetition in the lesson was analysed. (See Appendix A for annotated sections of our analysis using this approach for both lessons). For coherence to be established, structural and textual coherence are simultaneously necessary – they have been separated here to facilitate analysis.

The presence of multisemiotic modes in both lessons

Both lessons evidenced mutlitsemiotic modes: oral language, written language, visual displays and gestures or actions (manipulation of) using mathematical aids such as abacus in varying degrees. Key differences were the extent to which written and oral language accompanied and connected the visual displays, symbolic and concrete representations using counters and

abacus. Variations also arose from varying structural and textual continuity/connection within and across the semiotic modes. Variations were also noted in the use of repetition.

Structural unity of the lessons

In the number sense activity, the beginning consisted of drawing a number line on the board and indicating 0 and 20 on it followed by assessing learners' ability to recognise 0, 20 and 18. The middle was a sustained focus on positioning various numbers on the 0–20 number line using a range of concepts to justify the position: half-way numbers, less than, more than, before and after. Co-extensions such as halfway, middle, same number on either side, bigger than and smaller than – were introduced and linked to the number line. Several examples were worked through with the whole class on estimating where numbers could be placed on the number line by halving numbers through equalising the two parts created. The lesson ended with an application exercise where learners were asked to draw a number line and indicate the position of numbers given to them on it.

Analysis of the Grade 2 lesson transcript indicated that the early episodes consisted predominantly of counting and matching activities – all involving number recognition and matching activities across word, numeral and pictorial representations. The middle section (parts 9–11) was constituted by 3 exercises involving addition, subtraction and repeated addition operations to produce 16. In each of these parts several examples were completed by the teacher with the whole class. The shift to a new operation was signalled by the teacher but not connected to the previous operation. The lesson ended with an application exercise where learners were given a set of problems (addition and subtraction) that equaled 16.

While both lessons showed a clear beginning, middle and end they differed in terms of unity across parts of the lesson. In the number sense activity each part after the beginning was linked to the previous part and formed the context for the next part. The Grade 2 lesson illustrated weaker structural unity due to the lack of explicit connection across the 12 elements. Connections were not made across sums within episodes, and between the addition, subtraction and repeated addition episodes. Consequential steps therefore tended in almost all instances, to de-link, rather than connect with prior solutions.

Textual unity of the lessons

In this part of the analysis the coherence in meaning relations within phrases and sentences and across phrases and utterances and with accompanying activities in both lessons are analysed.

Number sense activity

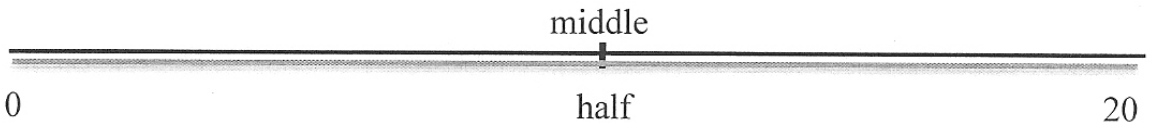
In the number sense activity, co-referentials were used unambiguously throughout. For example 'this' was used four times in episode 1. The first 'this' referred to the number line, the second 'this' referred to the number 0, the third referred to the number 20 and the fourth to the number 18 – with each denoted by pointing to the referent. When the co-referential 'it' was used, its meaning was unambiguous: 'If I wanted to put 18 on the number line, where would I put it?' – 'it' referred unambiguously to the number 18 which was held up on a card and written on the board. The practice of writing each aspect on the board provided linkages across spoken language, symbols and diagrammatic representations in the public classroom space – a feature that was absent in several episodes of the Grade 2 teacher's lesson. Part 2 of the activity focused on where 7 should be on the number line, justifying its positioning, and connecting 7 being smaller than 18 to its positioning before 18.

Co-classificational elaboration of meanings related to the position and relative size of number could be linked to the numbers selected being represented on the number line. This representation links quantity to position –and thus, the co-classification opens space for co-extensions that push towards more abstract representations of number – a feature that has been noted as important if children are to get to grips with number in the concept terms needed for subsequent mathematical learning (Gray, 2008). The number line drawn on the board provided a co-classificational equivalent elaboration – a representation of the numbers that incorporated relative position as a feature (Haylock, 2006). Pointing out 0 and 20 and then holding up 18 and asking 'what number is this?' and getting the answers from learners provided a check of co-classificatory ability between number name and symbol recognition of 0, 20 and 18. Decisions on positioning were also linked to co-extensional elaboration based on synonyms – middle, half way, equal lengths on both sides, as well as 'smaller' to 'before' within the number line representation. Whilst there are mathematical features of the number line model that are not dealt with in the teacher talk – the continuous nature of number needed to

make sense of the measurement notion contrasted with the discrete nature of the integers being dealt with here, the selection of the number line model allows for the measurement idea implicit in the idea of 'halving' to come into view, and linked to the positioning of the counting numbers that learners are already familiar with. The visual mediator thus lays the ground for potential expansions of number concepts that are likely to be useful further down the line.

There was also cohesion between the task: 'Who can tell me where 7 is on the number line?' and the response from the learner who pointed out the correct position of 7. Further, the opportunity for all learners to see the response and hear the feedback given to the learner enabled possibilities for making individual meaning making more visible to the whole class.

Part 3 illustrated the use of synonyms to mediate meaning in the provision of justifications for the particular placing of 7 on the number line. To do this, the middle of the number line was established and 'middle' was written above the mark and 'half' was written below the mark, as below:



Part 3 moved learners into thinking more precisely about the middle of this number line. The mid point was agreed with learners and a mark was made on the line to show the mid point. In part 3 co-extensions for 'middle' such as 'same distance' and 'same gap' were used to lead to the concept of half. In addition the same distance on either side of the middle point was shown by gesturing the same width from 0 to the middle point as from the middle to the 20. Again the use of the co-referential 'this' three times was unambiguous as it was accompanied by pointing out what was being referred to on the number line.

Part 4 went back to the key question 'so what number is the middle'. The incorrect response of '8' from a learner was probed further, and shown to be incorrect with the correct response of 10 checked and written on the number line.

Part 5 illustrated a hyponymic relation. Following an elaborated co-extension of 18 in terms of both symbolic representation and order, the notion of 'less

than' was linked to the positional relation 'before' on the number line. The number 18 provided the specific example, but the rule was stated as a general principle: 'When a number is less than – it comes before.' Then, since it was just 2 away, it was placed at the end of the line, closer to 20. The co-extensional technique of hyponymy was evident in that the general principle – each number on the number line is bigger than – more than the ones before it and smaller than – less than the ones after it – was mediated through a number of examples to illustrate the principle.

Antonymy was used often as well – 'bigger than' and 'smaller than', 'less than' and 'more than', 'before' and 'after' to enable meaning mediation. The excerpt below illustrates the use of 'more' or 'less than' and 'less or more than'.

H: Is 18 *more or less than* 20?

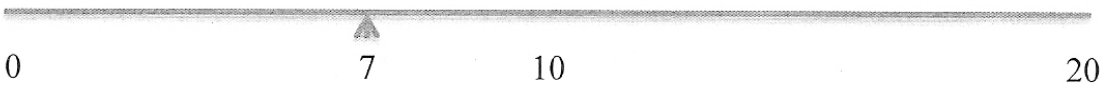
L: Less than 20

H: Writes on the board – 18 is less than 20

H: The other number is 7, where should 7 be?

H: Is 7 *less or more* than 10, asks L to point out where 7 should be. . . [Lr comes up to indicate position]

H: Writes 7 and arrow to point to 7 on the number line.



Analysis of the number sense activity indicated that repetition was linked to the incorporation of synonyms: the key synonym 'middle' was repeated 15 times in different examples and the term 'halfway' was repeated 16 times in different examples to enable understanding of the concept of half on a number line. Linked also with gestural actions of 'travelling' the same distance on either side, there were therefore, multiple processes supporting possibility of learning the general meaning of 'half' of a given number.

In sum, multiple connections, ranging across the different types of cohesive types detailed in Halliday and Hasan's theory, and ranging across the multiple

representational modes that O'Halloran (2000) suggests are a feature of mathematical working, are seen within this activity. These connections in turn, point to strong textual continuity.

The Grade 2 'baseline' lesson

This lesson has been analysed in detail in a previous paper (Venkat and Naidoo, 2012). This previous analysis is drawn on and elaborated further here to enable comprehension of the specific variations in coherence. Within the shorter earlier episodes (1–8), there were relatively strong cohesive ties across what the teacher said, wrote on the board and what learners were asked to do. Of interest is the fact that some learner errors were missed, and that co-reference and co-classification, whilst used coherently, tended to be used for teaching equivalence across numeral, word, diagram and counting activities – which for the number 16 would fall within Grade 1 rather than Grade 2 curriculum content (DoE, 2008). Also of interest in relation to the counting activities, was the fact that concrete unit counting was promoted across all episodes with no scaffolding into what Ensor, Hoadley, Jacklin, Kühne, Schmitt and Lombard *et al*. (2009) refer to as a more abstract calculating orientation. Given that particular problems were evident in learner responses in Episodes 9, 10 and 11, finding two numbers that add to 16, subtraction of numbers to give 16 and repeated addition to give 16 respectively, we focus on these three episodes, whilst making reference to features drawn from the other episodes.

A key general feature of the lesson was the lack of sharing of a representation in the private space of the learner – e.g the child who counted out 16 counters on the floor in Episode 5, and teacher talk on the learner's representation in the public space of the class. Here, learners could hear the teacher but could not see the representation being referred to – and this recurred in other instances as well. Halliday andHasan (1991) notes the importance of connection across oral and graphic discourse, and also the distinctions – in particular the relative permanence of graphic representations in relation to the ephemerality of talk. Leaving out a key step of showing the individual learner's representation to the whole class, either on an abacus or through drawing on the board excluded the majority of learners from accessing explanations given by the teacher that were scaffolded with co-classificatory representations.

The teacher introduced part 6 with 'now boys and girls I want you to give me 2 numbers, when we add them together they give us number 16'. This instruction was repeated four times until a learner gave the answer of 8 + 8, and followed by asking a learner to check whether 8 + 8 made 16 by counting out 8 and 8 and adding. She then asked for another two numbers…another learner offered '9 + 9', which learners were asked to check on their abacus. Some learners appeared unable to count out 9 and 9. In this part there is a break in communication as many learners were unable to make an accurate representation and were not given instructions that helped with this. In terms of pedagogy the fact that 16 is the 'given' here, and that the task requires the generation of various partitions of 16 was not communicated.

Analysis indicated repetition here without explicit focus on the task constraints, and limited co-extensional elaboration of meaning. When learners called out pairs of numbers, each was checked by counting on the abacus and then the correct sums were written on the board. In part 10 the teacher shifted to subtraction to make 16. A similar procedure was followed with learners being asked to give two numbers that when subtracted gave 16. The lack of co-classificational or co-extensional elaboration here keeps the activity of generating two numbers that add to 16 in the realms of concrete trial and error, followed by empirical verification, rather than more cohesively supporting the move to a deductive strategy through which appropriate partitions can be derived, rather than guessed.

Synonyms such as add and plus and take away, minus and subtract were used in parts 6 and 7. We note that in both instances, the terms offered are relatively 'formal' mathematical terms, and that the actions on concrete objects remained in the terrain of individual learners working on their abaci. Thus, co-classificational connections tended to remain once again, in private, rather than the public classroom space.

Mediation between representations in public and private spaces was also problematic in the repeated addition episode. After repeated instructions a learner offered eight 2s (which she had made on her abacus). The teacher acknowledged her answer and re-explained to the whole class that this learner had got '2 eight times' and this had given her 16, referring to the girl's abacus, but did not show the whole class the arrangement. The teacher then wrote 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 16 on the board – a shift to a symbolic form of co-classification. Learners were then asked to make the 8 groups of 2s on their abacus, but several learners were not able to do the task – one learner

pulled down ten 2s on her abacus; another has 10, 7 and 1 pulled down; another five 3s and a single bead pulled down. What was evident was their inability to translate the instruction into appropriate concrete representations on their abacuses. Here, co-classification was presented, but not in ways that connected with learner competences. The lack of visibility of the concrete representation seemed to contribute to learners' inability to link the co-classificational form with its concrete equivalent. Thus, the two semiotic modes were not integrated into a single semiotic system.

Instances of ambiguous use of co-references have been noted in Venkat and Naidoo (2012) and are drawn on here for purposes of comparison. For example, in the introduction to part 8, the teacher introduces the focus on repeated addition with the following words:

> 'Now, who can tell me, you look for one number, you look for one number, you add it many times, it gives us 16. Only one number, you add it many times, repeated addition, to give us the number 16. You must work it out on your abacus, stop colouring. Work it out on your abacus. Only one number.'

The ambiguity arises in the frequent use of 'it'. In this excerpt, the repeated use of the pronominal 'it' has been underlined. The first 'it' refers unambiguously back to the 'one number' that is being looked for which can be added many times to give 16. The second 'it' seems to refer to the output of the process of repeated addition rather than the 'one number' that is being added. The lack of explicitness of the shift of reference from the number that is being added repeatedly to the output of the process of repeated addition creates ambiguity, and particularly so for a learner still grappling with this process. This ambiguity is compounded by the fact that the third 'it' refers again to the starting number that is being added repetitively. The fourth and fifth uses of the word 'it' seem to refer to the arrangements that have to be produced to make 16 to repeated addition – essentially 'it' here refers to the abacus arrangements that the teacher wishes learners to produce. Overall therefore, the number of shifts of reference within this short introduction is likely to contribute to ambiguity for a learner trying to comprehend the meaning of the 'it' in consecutive sentences.

Repetition of procedural instructions in the teacher's lesson was not linked to elaboration of the meaning of the instruction, e.g. see the italicised phrases in the excerpt below from episode 9:

> Now boys and girls, *I want you to give me – two numbers, when we add them together, they give us number 16. Two numbers, when we add them together, they give us number 16.* [Some hands go up immediately.] Have you done it first? How do you know it is 16? You have to work it out first. *The two numbers, when we add them together, they give us 16. And – don't – make – noise.* When you are counting, make sure that you don't make noise. *Two numbers, when we add them together, they give us number 16.* Right? What?

In the above excerpt the instruction 'I want you to give me two numbers, when we add them together, they give us number 16' is repeated four times and in the entire episode on addition the same instruction was repeated 7 times.

In part 11 also, repetition was again present without co-classificational or co-extensional elaboration, and here, occurred with the ambiguity in co-reference presented earlier. In the activity seen in this episode, several learners appeared unable to generate an appropriate representation of repeated addition to make 16 on their abacuses. Weak cohesion therefore appears to relate to lack of use of co-extensions flexibly to mediate the meaning of repeated addition. This weak cohesion was in some instances compounded by lack of appropriate boundary setting in relation to the concept being taught:

> T: 16? I said – 16 – how many times did you add 16 to get 16? Sorry? You put 1 to 16? And it gives you 16? Ok, but that's not what I want. I said, one number, you add it several times. One number, you add it several times, and you tell me how many times did you add that number to give you the number 16. That is repeated addition.

Here, one group of 16 is not viewed as part of the set of appropriate responses for repeated addition to make 16. But repeated addition as a process in mathematics is an important part of the trajectory that leads to multiplication and factor pairs, and (1,16) can be viewed as an important example to include and discuss given this 'horizon' (Ball and Bass, 2009). In Halliday and Hasan's (1991) terms, problematic 'internal expectations' are established.

There were many more instances in this lesson of ambiguity within co-reference, and repetition without co-extensional elaboration. We therefore suggest that repetitions of key terms and phrases appear to contribute to coherence when linked with the other textual coherence categories that allow for elaboration and connection of meanings. A further point to note is the lack of connectivity across parts 9, 10 and 11 to mediate the concept of repeated addition. While the teacher repeatedly told learners what repeated addition was she did not direct the attention of learners to the relationships between examples within episodes or between addition and repeated addition. In the

addition sums the pairs of numbers varied, whereas for 2+2+2+2+2+2+2+2 =16 the number 2 is repeated 8 times, for 4+4+4+4 =16 the number 4 is repeated. This lack of cohesion across parts 9, 10 and 11 militated against semiotic mediation of the concept of repeated addition.

Discussion

The analysis of discourse of the lessons show marked differences in coherence. The number sense activity illustrated greater structural continuity – it had a highly interlinked problem space that was connected across episodes and concluded with an exercise based on the goal of the lesson. The activity made use of mutisemiotic modes and maintained coherence across them. With reference to textual coherence there was greater connectivity across sentences – from one sentence to the next, across consecutive sentences, between what was said and written on the board so that it could be seen by all, from what was a correct response and announced to the whole class and written to be seen by all; between verbal and symbolic/ diagrammatic representation and between what learners were asked to do and what they did. The request for justification of answers across correct and incorrect responses further cemented the expectation that learners were to use the language and ideas seen in the problem space to elaborate their contributions. Secondly co-references were used less and were used unambiguously. Thirdly antonyms and synonyms were used to enable semiotic meaning making. Repetitions of key concepts were repeated with elaboration.

Whilst Halliday and Hasan (1991) holds that conversational texts can often withstand some incoherence and still maintain overall coherence due to the frequent presence of broader shared contextual understandings, pedagogic texts have much greater need for coherence. In the pedagogic arena of the Grade 2 baseline lesson, the lack of systematic recording on the board appeared to limit openings for the learners to see structural relationships between specific cases – which in turn blocked openings for concept building. The lack of structural continuity across the substantive parts of addition, subtraction and repeated addition negated openings for the preceding operation to provide opportunity to understand the relationships across the operations. Whilst learners were able to respond with examples, verification of their ‘correctness’ always occurred empirically, by making and counting. In

this approach, the unit counting seen in Ensor *et al.*'s (2009) analysis of Foundation Phase teaching and in Schollar's (2008) learners' work is evident. A consequence of this approach is the complete de-linking of subsequent and prior examples, and a lack of 'building' unknown knowledge from known information – a feature that is viewed as central to building number sense (Anghileri, 2006) and mathematical learning more generally (Askew and Wiliam, 1995).

The lack of structural cohesion across addition, subtraction and repeated addition has implications for learning number sense. In instances where examples of sums making 16 were offered, these were generated from first principles, rather than 'derived' from the previous part of the lesson. It is this boundedness of parts 9, 10 and 11 – the localisation of working that in essence produced the sense of disconnection between and within episodes in the lesson. Given that literature in the field of early number learning within mathematics education has noted the centrality of developing the ability to generalise patterns and processes and link new problems with the knowledge they already have (Anghileri, 2006), this localisation of working to each immediate task within an episode is problematic. In particular, the ways in which teacher talk structures tasks within this lesson promotes a message of 'extreme localisation' (Venkat and Naidoo, 2012), which stands diametrically opposed to the need to encourage connections and cumulative learning.

Furthermore the lack of semiotic flexibility was evident in firstly, co-references used ambiguously, secondly, key terms/concepts not being co-extended sufficiently using sense relations of antonymy, synonymy and hyponymy and thirdly, repetition of instructions in the same words, rather than with appropriate co-classifications and co-extensions. The result is a repetitive reliance on trial-based guessing and checking sums concretely using the abacus, rather than being able to use deductive thinking (which in mathematics, would rely by definition, on connection with prior results). Thus, the means by which the 'holding back' in concrete methods that has been identified in prior findings (Ensor *et al*., 2009) – is seen here through a cohesion lens.

Implications for teacher development

Our analysis suggests the need for two linked avenues within our teacher development work. Firstly, at the technical pedagogic level, the need for

systematic writing on the board and of showing the formations of individual learners to the whole class in ways that provide co-classificatory supporting representations of talk – would seem to be important. The use of strong cohesive ties across what is said, what is written or represented symbolically – in numbers and diagrams - on the board, and what is done. The need to balance individual and group instruction with whole class teacher led instruction to establish an 'appropriate, communally interpretable' discursive practice.

At the conceptual pedagogical level, the need to build elaborations of key mathematical ideas through language, also comes through, as a way of moving past the repetition that fails to provide learners with alternative routes to understanding the idea in focus. Within this focus on language, we note too, the need to understand the progression of early number ideas from concrete counting to more abstract number concepts that can only be promoted through coherence across multiple semiotic modes including co-classificatory and co-extensional elaborations. Overall, this suggests the development of metalinguistic awareness amongst teachers of the use of co-references, co-extensions and the use of effective repetition for the mediation of meaning within and across sections of texts and multisemiotic representations in progressive ways. The conceptual level may well be more complex to address, but without this, what we see in our analysis is the risk of condemning learners to repetition that fails to take understanding forward, and disconnected episodes that rely on processes that are based on memory and/or trial and error.

References

Anghileri, J. 2006. *Teaching number sense* (2nd ed.). London: Continuum.

Askew, M. and Wiliam, D. 1995. *Recent research in mathematics education 5–16*. London: HMSO.

Ball, D.L. and Bass, H. 2009. *With an eye on the mathematical horizon: knowing mathematics for teaching to learners' mathematical futures*. Paper presented at the 43rd Jahrestagung für Didaktik der Mathematik.

Department of Basic Education. 2011a. *Curriculum and Assessment Policy Statement (CAPS): Foundation Phase Mathematics, Grade R–3*.
Department of Basic Education. 2011b. *Curriculum and Assessment Policy Statement (CAPS): Intermediate Phase Mathematics, Grade 4–6*.

Department of Education. 2002. *Revised National Curriculum Statement Grades R-9 (Schools) – Mathematics*.

Department of Education. 2008. *Foundations for Learning Campaign. Government Gazette. Letter to Foundation Phase and Intermediate Phase teachers*.

Ensor, P., Hoadley, U., Jacklin, H., Kuhne, C., Schmitt, E., Lombard, A. *et al*. 2009. Specialising pedagogic text and time in Foundation Phase numeracy classrooms. *Journal of Education,* 47: pp.5–30.

Foucault, M. 1977. *Discipline and punish*. London: Penguin Books.

Gray, E.M. 2008. Compressing the counting process: strength from the flexible interpretation of symbols. In Thompson, I. (Ed.), *Teaching and learning early number*. Second edition. Maidenhead: Open University Press, pp.82–94.

Halliday, M.A.K. and Hasan, R. 1991. *Language, context and text: aspects of language in a social-semiotic perspective*. Oxford: Oxford University Press.

Hasan, R. 2004. The concept of semiotic mediation: perspectives from Bernstein's sociology. In Muller, J., Davies, B. and Morais, A. (Eds), *Reading Bernstein, researching Bernstein*. London: Routledge Falmer, pp.30–43.

Haylock, D. 2006. *Mathematics explained for primary teachers*. London: Sage Publications.

Haylock, D. and Cockburn, A. 2008. *Understanding mathematics for young children: a guide for Foundation Stage and lower primary teachers*. London: Sage Publications.

Hiebert, J. and Lefevre, P. 1986. Conceptual and procedural knowledge in mathematics: an introductory analysis. In Hiebert, J. (Ed.), *Conceptual and procedural knowledge: the case of mathematics*. Hillsdale, NJ: Lawrence Erlbaum Associates, pp.1–27.

Hughes, M. 1986. *Children and number: difficulties in learning mathematics.* London: Blackwell Publishing.

Mason, J. and Johnston-Wilder, S. 2004. *Designing and using mathematical tasks*. Milton Keynes: The Open University.

O'Halloran, K. 2000. Classroom discourse in mathematics: a multisemiotic analysis. *Linguistics in Education,* 10(3): pp. 359–388.

Schleppegrell, M.J. 2007. The linguistic challenges of mathematics teaching and learning: a research review. *Reading and Writing Quarterly*. 23: pp.39–159.

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.

Veel, R. 1999. Language, knowledge and authority in school mathematics. In Christie, F. (Ed.), *Pedagogy and the shaping of consciousness: linguistic and social processes*. London: Continuum.

Venkat, H. and Naidoo, D.R. 2012. Analysing coherence for conceptual learning in Grade 2 numeracy lessons. *Education As Change,* 16(1): pp.21–33.

Vygotsky, L.S. 1978. *Mind in society: the development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wertsch, J. V. and Minick, N. 1990. Negotiating sense in the zone of proximal development. In Schwebel, M., Maher. C. and Fagley, N. (Eds), *Promoting cognitive growth over the lifespan*. Hillsdale, NJ: Lawrence Erlbaum, pp.71–88.

Devika Naidoo
Faculty of Education
University of the Johannesburg

devikan@uj.ac.za

Hamsa Venkat
Marang Centre for Mathematics and Science Education
School of Education
University of the Witwatersrand

hamsa.venkatakrishnan@wits.ac.za

Mediating self-regulation in kindergarten classrooms: an exploratory case study of early childhood education in South Africa

Giulietta Harrison and
Azwihangwisi Muthivhi

Abstract

This article examines the role preschool teachers could play in mediating self-regulation among preschoolers. It is based on a case study which probed how a teacher's mediation promoted cognitive and emotional development of preschoolers between the ages of 4-6, and facilitated the acquisition of self-regulation.

This case study, informed by Vygotsky's socio-cultural theory of learning and development, involved the teacher mediating self-regulatory processes through facilitating role-play (or what could be termed 'fantasy play') by providing models of appropriate dialogue structure to preschoolers, as well as strategies for organisational and problem-solving skills.

The teacher, researching her own teaching-intervention, using theory-informed teaching strategies, found that preschoolers achieved significant cognitive shifts towards mastering self-regulative forms of thinking. This was manifested through children's greater awareness of own thoughts, talking systematically about their thinking as to what processes were involved during solving specific problems or in planning for how a solution could be achieved. Preschoolers who had initially – during pre-mediation activities – revealed impulsive and egocentric modes demonstrated, during post-mediation activities, greater awareness and mastery of their own thinking.

This case study has crucial importance for how preschoolers could be prepared in early learning and preschool classes for productive, developmentally-oriented forms of learning that foster more reflective and analytic forms of thinking.

Introduction

Early childhood education and specifically; school readiness, is a subject that has not received much attention in South African research and little is known about the modes of activities and thought processes that dominate children at preschool level and how these could effectively articulate with formal

learning processes as children begin formal schooling in Grade One. Preschool[3] education; that is, the education of children before they enter formal schooling as a way of preparing them for the demands of formal learning tasks, is critical for laying a firm foundation for successful learning at foundation phase level of children's schooling.

This article is an attempt at bringing the issues of early childhood development and the appropriate, theoretically informed methodologies of relating to these children in ways that mediate effective modes of learning and problem-solving skills; grounded on the ability to control own thinking and reflect on own actions during interactions. Using the neo-Vygotskian, cultural-historical activity theory framework, this article examines the mediation of self-regulation to preschoolers through a variety of play activities, as well as appropriate modes of dialogue to help them transcend their egocentric and impulsive responses to situations that normally arise in the course of their relationships with each other and with their teachers.

Theoretical framework

Self-regulation

The child's ability to regulate himself or herself is essentially linked to social activity, particularly at preschool level, allowing for profound developmental activity because it provides opportunities to safely 'test'; new learning and establish appropriate dialogue.

In this article self-regulation refers to:

> . . . a deep internal mechanism that underlies mindful, intentional and thoughtful behaviours of children. It is the capacity to control one's impulses, both to stop doing something (even if one wants to continue doing it) and to start doing something (even if one doesn't want to do it). Self-regulated children can delay gratification and suppress their

---

[3] We use the concept *preschool* or *pre-schooler,* in line with its general usage in Vygotsky's socio-cultural theory (e.g. Vygotsky, 1997; 1998), reflecting the "social situation of development" of children – a stage which, in South Africa, would comprise the $_{\text{years}}$ prior to the beginning of formal schooling; with lower boundaries around the age of 3 and upper boundaries around the age of 6 (see Bodrova and Leong, 2003). Children in South Africa begin formal school at Grade One by the age of six years, turning seven in their next birthday.

> impulses long enough to think ahead to the possible consequences of their action, or to consider alternative actions that would be more appropriate (Bodrova and Leong, 2005, p.55).

Self-regulation for Vygotsky (1978) is achieved through social interaction and begins with the child exploring their inner potential to imitate adult actions through, for example: 'adult watching' (Bruner, 1977). The child's developmental potential is evidenced by the degree to which they benefit from external intervention (Hall, Glick and Rieber, 1997). Learning would lead development if it occurs within the child's zone of proximal development (ZPD) where skills and concepts can come to fruition with the appropriate guidance of the teacher, peers or significant others (Bodrova and Leong, 2001). The concept of ZPD would therefore suggest that learning can lead developmental change and the use of mediation will influence the child's capacity to develop.

Furthermore Vygotsky sees development as occurring on two plains; namely, the interpersonal level that is between people and subsequently at intrapersonal level, inside the child (Glick, 1997). At preschool level, this guidance could take the form of mediation within fantasy play which provides the opportunity for the preschoolers to learn how to delay gratification; listen to instructions and plan a task (Karpov, 2005). In so doing children are developing self-regulation (Elkonin, 1974).

Karpov (2003, 2005) discusses how children acquire self-regulation through conscious mediation by the teacher within a 'fantasy corner' and in general classroom environment. He suggests that it is only when the teacher actively provides the necessary dialogue to resolve conflicts, provides tools for problem solving, unpacks tasks into manageable steps and sets up fantasy corners that motivate preschoolers to explore the adult world, that self-regulation will be optimised by the mediator.

The work done by the prominent Soviet Psychologist, Lev Vygotsky and his students: Luria, Leont'ev, Galperin and Elkonin has demonstrated that the dominant activity at preschool level is play. Play is important at this level of development because it allows for imitation of adult behavior; the development of language and meaning and opportunities to internalise generalisations which facilitate regulation of the child's actions within socially accepted norms (Elkonin, 1974). According to Elkonin (1974) the work of Vygotsky has helped to shape our thinking around the significance of

play and the importance of mediation. Vygotsky (1967) believed that meaning is constructed through a combination of language and its cultural context and that when children indulge in play they are extending already existing skills to new limits (Bruner, 1977).

Mediation

Karpov (2005) puts forward the notion that the adult plays a key role in the child's ability to develop self-regulation because it is the adult who presents an attitude towards learning, provides stimulating objects, models situational language and helps the child to develop their motivation to learn. This role could be performed by the teacher within the preschool classroom when she provides tools for learning. For example material that can be draped as a cape or used as a tent; when she gives the child the dialogue to resolve conflict, for instance, 'Please may I have a turn with the princess crown'; when she sets up creative activities that stimulate new learning and provide discussion, for example, planting beans and making a giant beanstalk.

For Vygotsky, humans are different from animal species because they bring to the learning environment an evolutionary capacity to adapt and manipulate their environment and, consequently, built up cultural and historical tools (Van der Veer and Valsiner, 1991). This collective social history is brought to the classroom and transferred from preschooler to preschooler and from teacher to preschooler through the process of mediation. Van der Veer and Valsiner (1991) state that the mediational process, according to Vygotsky, is a goal directed and conscious activity in which the teacher creates an environment that is conducive to learning. Further, Vygotsky views mediation as happening with the assistance of signs; which gives it its generative quality; which in turn encompasses the social and cultural qualities of the relationship between the teacher or mediator and the child (Moll, 2004). Language occurs at the same time as the child begins to use symbols and it is language that opens the door to understanding things that are not necessarily present (Piaget, 2001). It is therefore conscious mediation on the part of the teacher that facilitates self-regulation for the preschooler because:

> Cognition is distributed across mind and society, in the activities of preschoolers and other people, in the artifacts and sign systems they use, and in the institutions in which they participate (Moll, 2004, p.107).

Karpov and Haywood (1998) posit that self-regulation occurs in children in the course of mediation, when they acquire and master new psychological tools; which results in the development of new mental processes because ". . .the learning of specific abilities in one domain transforms the intellectual functioning in other areas" (Van der Veer and Valsiner, 1991, p.334). As existing mental processes outgrow the child's current activity, it creates the basis for shifting into new activity (Rowe and Wertsch, 2007). Vygotsky argues that the child does not develop in a straight line but rather develops through "discontinuity, a replacement of one function by another, a displacement and conflict of two systems" (Vygotsky, 1997, p.225).

Higher mental processes are mediated by psychological tools such as language, signs and symbol which; in turn, are taught by adults and internalised by the child (Karpov and Haywood, 1998). From the Neo-Vygotskian point of view, mediation not only creates ZPDs of new mental processes, but also creates ZPDs of new activities of children through the conversion of their goals into motives and actions into activities (Karpov, 2005).

Mediation of language

Language is intimately tied to actions and this enables the child to internalise their new learning and to develop levels of self-regulation (Karpov, 2005). Language is internalised into private speech, which helps the child to learn to regulate his or her actions and to internalise new learning (Wertsch, 1979). Much of the self-talk by the preschooler occurs during fantasy play, which traditionally is an area where preschoolers in South African preschool level, kindergarten classrooms, are given the freedom to play without explicit structure or deliberate intervention.

The problem-solving through external dialogues frequently requires intervention on the part of the preschool teacher (Karpov, 2005). It is here that the teacher must help provide the language to the preschool child, necessary to lead him or her to self-regulation (Zeidner, Matthews, Roberts and MacCann, 2003). Meanwhile, discussion of emotions is important in building emotional competence and therefore self-regulation. In this study, preschoolers were given appropriate language to resolve conflict and to solve problems. They were given plenty of opportunities to practice using the given sentences and to discuss their own emotions or the emotions of the characters

in the story: *'Jack and the beanstalk'*.[2] The choice of the story of *'Jack and the beanstalk*,' was largely arbitrary but it did provide some interesting contexts for problem solving, language acquisition and emotional development. A number of versions of the story were explored in order to provide a variety of morals and values for discussion. The preschoolers were motivated to behave appropriately and use the correct language by means of a 'sharing tree' upon which they received 'leaves' if they were found to be regulating their actions. That is, when they became aware of their actions or consciously controlled their impulses. Across the class the preschoolers quickly began to regulate one another's actions by correcting their friends when they used wrong phrases in a sentence or could not remember how to ask for something.

Mediational tools and play

Adult mediation guides the child and gives them the tools to plan and direct their thinking thereby becoming more logical, less impulsive and better able to regulate their behaviour (Elkonin, 1974). As an infant, the child is initially interested in manipulating objects or tools presented to them by the adult or primary caregiver on whom the child is largely focused (Bruner, 1977). The child changes from simply exploring their environment to observing the links between the objects they are manipulating and their purpose. The focus changes to one of ". . .object-orientated actions whereby the adult draws the child's attention to the context of the object. For example, a spoon is used for eating" (Karpov, 2005, p.86).

At preschool level objects can be manipulated to represent any manner of things. For example, a wooden block could be a cellphone and a piece of netting, a veil. In the present study, preschoolers used salt dough coins as cookies once they had tired of counting them and using them as illustrated in the story of *'Jack and the beanstalk'*. Whilst indulging in this type of fantasy play, preschoolers are continuously describing how the game will be played

---

[2] The choice of this story was largely arbitrary as any traditional fairy tale – including those from non-English literary traditions (we suppose) – could be used as cultural tools for mediating self-regulation. *Jack and the beanstalk* has different versions and the teacher in this study used the different versions of the story; also employing the values and morals each version portrayed, to foster children's critical engagement with contradictory solutions and issues of 'right' and 'wrong'. The class discussions therefore, also provided children with opportunities to explore the universal relevance morals and values portrayed in the various versions of the story.

out. In this way, children are organising their thinking and regulating their actions (Van der Veer and Valsiner, 1991). By engaging in play, children learn to regulate their actions because they experience the need to regulate their actions within their imagined roles (Bruner, 1997). In the present study, preschoolers regulated one another by sticking to the roles they had been assigned which were determined by the costumes they were wearing or the object they were using. For example, if a preschooler was holding the drum, then they were 'the giant' whilst a preschooler wearing an apron was 'the giant's wife'.

Further, children learn to regulate their actions when exposed to mediation through external dialogue. For example, when a preschooler asked if they may be 'the giant', they were told that they had to have the drum and to beat it whilst reciting the verse from the story of *'Jack and the beanstalk'*. If they did not have the drum and had to wait their turn to use it, then they could not play the part of the giant. In this way they are being mediated by the dialogue between them and their peers – as well as their teacher – and the mediational tools in the form of the objects used in the game, as well as the language employed.

Bodrova and Leong (2007) argue that teachers should allocate more time to play in the preschool programme because it is through play that the child moves forward and develops.

> . . . play contains all developmental tendencies in a condensed form; in play it is as though the child were trying to jump above the level of his normal behaviour' (Vygotsky, 1967, p.16).

This would suggest that play has a potential to help the preschooler to regulate their behaviour. Rubtsov and Yudina (2010) argue that current studies show a tendency to spend the preschool years cramming knowledge of numbers, letters and phonics into the daily programme and that the reason for this is the natural desire to learn that is exhibited by most preschool students and consequently exploited by policy makers. As a result, ". . .the child's development is artificially accelerated and the preschool education is made more 'adult' " (Rubtsov and Yudin, 2010, p.8). These authors consider this a grave error on the part of teachers and support the view that play should be encouraged.

Bodrova and Leong (2007) advocate that the teacher mediates play activities in order to improve the development of literacy and cognitive skills, but they do not see the teacher playing alongside the preschooler as a direct member of the group. The reason they give is that the preschooler would then be inhibited within their natural level of play because they would be aware of the teacher's presence. They do however see the benefit of guidance and that the teacher should encourage more competent and socially mature children to mentor those less able. Mediation would therefore be given by the teacher and by peers; who are considered by the teacher to be more mature and therefore able to guide their friends. In the present study, the teacher provided appropriate dialogue in conflict situations, set up a rich fantasy play area and established a stimulating theme as a foundation for new learning. The researcher did not play alongside preschoolers but did intervene when required, observed preschoolers from a peripheral vantage point and also encouraged more competent preschoolers to assist less capable preschoolers when necessary.

Methodology

This case study involved a demographic of twenty-five preschoolers in a multi-cultural South African girls' school. The age of the preschoolers and their language ability was of significance as children at preschool age demonstrate potentially different ZPDs which would affect their ability to be mediated. Furthermore the multi-cultural demographic of this case study presented differential backgrounds which could inhibit the effects of mediation.

The school in which the study took place had an existing emotional competency programme which involved helping preschoolers to recognise their emotions through labeling them; using 'Care Circles'[3] in which preschoolers rated their feelings on a scale of one to four; designing art activities which enabled preschoolers to focus on their feelings and using literature and puppet shows to explore feelings in different contexts. This case study built on this foundation of emotional competency by providing additional tools that would

[3] A care circle is a morning-ring in which preschoolers state how they are feeling using a rating of 1–4 on their fingers.

enhance the preschooler's awareness of their behavior and consequently help them to manage their inappropriate impulses.

The use of a 'sharing tree', to validate the preschoolers who made the effort to share without being prompted to do so, was a successful tool. Providing icons on a 'dress-up chart' with the names of preschoolers next to popular items meant that preschoolers were able to plan their play time and share in an organised manner. Class discussion on the emotions of the characters in the *'Jack and the beanstalk'* theme provided preschoolers with the opportunity to examine a variety of ways to manage emotions and problem solve.

Filmed observations and interviews were the main means of gathering data for this qualitative research project because preschoolers were too young to 'write' tests but were considered old enough to verbalise their emotions effectively.

A baseline study was performed before mediation took place, first by taking film footage of the preschoolers in fantasy play, class activities and outside classroom play. The preschoolers were interviewed individually and scored on an observation grid. The interview questions were drawn from their knowledge of the story of *'Jack and the beanstalk'* and included questions that covered some of their everyday activities. The questions were designed to cover the preschooler's understanding of problem solving, organisational skills and emotional competency. They were briefly introduced to the story of *'Jack and the beanstalk'* in order that they may have a basic understanding of the theme. Observation and filming in the baseline study took three weeks and were then followed by a three-week period of conscious mediation which was also filmed and scored on an observation grid. The final phase of the research; namely, the post-mediation stage was filmed over a three-week period and scored as before.

Observation of self-regulation around problem solving, organisational skills and emotional skills were rated on a five-point scale. Preschoolers were observed during role play and general class activities. The observations were filmed during the pre-mediation and post-mediation stages of the research. The ratings were applied in the pre-mediation and post-mediation stages. The same scale was applied to the interview data gathered on film in the pre-mediation and post-mediation stages of research.

The participants were informed of the purpose of the teachers filming and interviewing and were given the first term to habituate to the presence of a camera in the classroom. The preschoolers were interviewed in a separate room in order to minimise distraction from their peers and some questions had to be rephrased because of the limitations of the age group being studied.

The period of conscious mediation drew from Karpov's (2005) theories of extending a theme from the fantasy corner into the main classroom activities and included Bodrova and Leong's (2007) practical suggestions pertaining to how the teacher could consciously mediate. These included providing adequate time for play, planning play time and monitoring how the preschoolers interact, together with the teacher modelling appropriate dialogue and encouraging preschoolers to mentor one another.

In the post-mediation phase of research each preschooler was interviewed again and filmed during fantasy play and class activities. This data was scored again using the observation grid and viewing of film data.

At the end of the research period the data was analysed by viewing all the film footage and scores which were then statistically analysed to obtain graphs which may show any shift between the pre- and post-mediation conditions.

Findings

The question of self-regulation being facilitated by mediation by preschool teachers was the basis for the case study under discussion in this article. The term 'mediation' is defined by Bodrova and Leong (2007) as a means by which the teacher contributes to the restructuring of the child's mind by promoting the transformation of lower mental functions into higher mental functions. The teacher, as mediator, provides the scaffolding which allows the child to make the transition from a position of maximum assisted performance to one of independent performance, thereby achieving self-regulation (Bodrova and Leong, 2007). The findings in this study demonstrated significant shifts between the pre-mediation and post-mediation stages of research.

Table 1: Scores for observation grid

	Problem solving score (1–5)	Impulse control score (1–5)	Task management score (1–5)	Significance
Pre-mediation	• 10 scored 2 • 10 scored 3 • 2 scored 1 • 3 scored 4	• 8 scored 2 • 10 scored 3 • 7 scored 4 • none scored 1	• 7 scored 2 • 9 scored 3 • 8 scored 4 • 1 scored 1	Some evidence of task management and impulse con trol prior to mediation.
Post-mediation	• 2 scored 2 • 13 scored 3 • 10 scored 4 • none scored 1	• 1 scored 2 • 10 scored 3 • 14 scored 4 • none scored 1	• 1 scored 2 • 8 scored 3 • 16 scored 4 • none scored 1	Marked improve-ment after medi-ation suggesting mediation helps self-regulation.

The table below shows a marked improvement in all three areas of self-regulation between the pre-mediation and post-mediation conditions. This suggested that conscious mediation helped the preschoolers to internalise self-regulatory skills.

Table 2: Scores for interviews

	Problem solving average score	Understanding emotions average score	Task management average score	Significance
Pre-mediation	• 6 scored <50% • 14 scored 50–70% • 5 scored 70–85%	• 7 scored <50% • 10 scored 50–70% • 8 scored 70–80%	• 11 scored <50% • 9 scored 50–70% • 5 scored 70–88% • 3 scored <50% • 7 scored 50–70%	Some evidence of task management, impulse control and problem solving prior to mediation. Could be result of E.Q. programme.
Post-mediation	• 3 scored <50% • 4 scored 50–70% • 18 scored 70–99%	• 2 scored <50% • 6 scored 50–70% • 17 scored 70–99%	• 15 scored 70–99%	Marked improvement in self-regulation suggesting mediation helps self-regulation.

Table 3: Evaluative episode examples

	Nature of episode	Person mediating	Sample of dialogue	Significance
Pre-mediation	Preschooler refuses to share a dress and moves away to avoid sharing.	Teacher consciously does not mediate but preschoolers attempt to resolve problem.	'You've had the dress a long time. Can I have a turn?'	This shows some evidence of problem solving skills but preschoolers were not successful without mediation from teacher.
During mediation	Preschooler refuses to share a drum but is encouraged to do so and obliges.	Teacher consciously mediates and gives appropriate dialogue and reward.	'What must you say if you want a turn?' 'When you have finished your turn, please may I have a turn.'	When given the appropriate dialogue and problem solving skills, preschoolers can regulate behaviour.
Post-mediation	Preschooler prepared to share and does so without being asked.	Preschoolers solving the problem by themselves.	'I gave her a turn with the pink dress without being asked.'	This shows that the regulatory tools given have been internalised and preschoolers are able to regulate their actions.

The high number of preschoolers struggling with emotional skills, organisational skills and problem solving was considerable in the pre-mediation stage. The preschooler in the problem-solving evaluative episode during the pre-mediation stage uses avoidance tactics to escape sharing the dress with their peer. It should be noted that without mediation from the researcher, the preschoolers did attempt to mediate one another. They were however, not successful in their attempt. The marked improvement after the period of mediation is significant. The pride attached to succeeding in problem solving was evident. Preschoolers demonstrated a keen desire to 'get it right' and for this to be noted by the researcher. Having the appropriate dialogue to solve a problem appeared to facilitate an ease of self-regulation. Preschoolers quickly grasped the language that was given and implemented it appropriately.

The dialogue extracts below revealed the contrast in a preschooler who struggled with organisational skills in the pre-mediation condition but appeared to benefit from mediation and the extension of the theme of *'Jack and the Beanstalk'* into general class activities. The preschooler appeared to have difficulty grasping what was being asked and consequently the teacher had to rephrase the question.

Extract 1: Example showing a shift in organisational skills

Pre-mediation Interview

Teacher:	Can you tell me how would you go about making yourself a sandwich for your snack box?
Preschooler:	Um, What do I put on my sandwich?
Teacher:	Yes, how would you make yourself a sandwich?
Preschooler:	I would put syrup. . .and then I'd put. . .actually I'd put melted cheese.
Teacher:	On what? What are you putting it on?
Preschooler:	Do you know that flat thing that goes up and then you press it down and then you leave it alone?
Teacher:	Are you talking about a snackwich maker?
Preschooler:	Yes.
Teacher:	O.K. So how would you make yourself a snackwich?
Preschooler:	Hmmm. . ., that's how I'd do it.
Teacher:	You'd just put syrup on something?
Preschooler:	Yes.
Teacher:	O.K.

Post-mediation Interview

Teacher:	Tell me, pretend teacher is very stupid and I don't know how to make a sandwich, explain to me how would I make myself a sandwich?
Preschooler:	You first, you first get the bread. Then you put butter. Then you put what you want. Then you put it on. Then you get another slice of bread. Then you put it on and then if you want to cut it then you can.

The contrast in length of dialogue between the two interviews, together with the confusion in understanding the question in the pre-mediation interview, suggests a shift in understanding on the part of the preschooler during the post-mediation interview. The post-mediation text showed a more logical sequence of thought and understanding of the question being asked. At no

stage were preschoolers instructed on how to make a sandwich nor did they actually perform this task in class time. The purpose of this question was to determine if organisational skills that had been put in place with general school tasks, were being carried over into domestic activities. It was also seen as an opportunity to determine if preschoolers could organise their thinking around a simple task.

During the mediation period of research, the preschoolers had plenty of opportunity to practice breaking a task down into simple steps which helped them to organise their thinking before performing the given task. Discussing a task with their peers or teacher provided additional clarity and confirmation that they understood the designated activity. Furthermore preschoolers were taught to pause and notice each stage of a task as a means of checking if they were performing appropriately.

When activities were extended into the classroom, in the pre-mediation condition preschoolers were struggling to organise their thinking, appeared to have difficulty understanding the instructions and remembering all the steps of the given task. This may have been age related as the younger preschoolers have a shorter concentration span and therefore have difficulty retaining more than a couple of instructions. Language capabilities could have been a contributing factor as some of the preschoolers were being instructed in English, which was often their second language and; developmentally, some preschoolers tend to be slower to grasp language and, therefore, struggle to understand instructions. Preschoolers were always reminded on a daily basis to place their names on their work and should therefore have been familiar with this basic step in any creative activity. This is one of many examples that were taken during the study. At the time of observation, preschoolers had been in preschool classes for six months and many had attended some form of preschool classes since the age of two.

Table 4: Pre-mediation organisational skills

Example of task/incident	**Preschooler response**
Preschoolers participated in a Pritt competition and had to place their names at the back of the work before constructing their collage. They were shown how to put together their picture and which pieces to put on the page first. The collage consisted of many elements but an example was provided and the elements were discussed in detail.	Eight preschoolers forgot to place their name on their work at the beginning of the exercise and had to be reminded to do so. Three preschoolers wrote their names on the front despite being asked not to do so. Four preschoolers used too much glue and too many of a particular resource whilst others did not use enough of the glue or the materials provided. Preschoolers struggled to complete the task in the time given and some chose to pick glue off their fingers instead of doing the set task.

Table 5: Post-mediation organisational skills

Example of task/incident	**Preschooler response**
Preschoolers were instructed on how to make a cow mask out of cardboard and water colour paints. The colours were discussed and the steps of the task described. For example preschoolers were reminded to put names on their work first, paint using one colour at a time and cleaning the brush each time to keep colours pure. They were also reminded to place wet art on the drying rack. The steps were revisited and carefully unpacked before the task was begun. Preschoolers had to verbally state what the necessary steps involved.	All Preschoolers were happy to work independently and appeared to enjoy discussing the colours they were using and why they were appropriate for the animal concerned. All preschoolers remembered to place their names at the back of the mask before painting and to place their completed work on the drying rack separate from a peer's art. They also remembered all the steps of the task.

The above examples show how preschoolers followed instructions, remembered all the components and worked independently. They shifted from a somewhat disorganised state to one of confident learning.

Extract 3: Example showing shift in problem-solving skills

Pre-mediation Interview	
Teacher:	Where do you think Jack could hide to get away from the giant?
Preschooler:	When the giants coming to get him. . . In the oven thingy.

Extract 4: Example showing shift in problem-solving skills

Post-mediation Interview	
Teacher:	Where do you think Jack could hide to get away from the giant?
Preschooler:	I think it would be in the oven and the bath tub.
Teacher:	In the bath tub! Why the bath tub?
Preschooler:	So then, so then because, you know the giant . . .the giant won't be bathing.
Teacher:	Oh is he just dirty? Does he never bath?
Preschooler:	Yes he's just dirty. He doesn't brush his teeth, he has bad manners.
Teacher:	O.K. . . .that's a good idea

The pre-mediation response (extract 3) is taken from the preschooler's knowledge of the basic story of *'Jack and the Beanstalk'* in which the character of Jack is placed in the oven when the giant arrives home. The preschooler's response is brief and taken directly from the example of the story she heard. This suggests that little thought went into her answer and consequently no effort was made to solve the problem. The originality of thought should be noted in the post-mediation answer (extract 4) together with the length of the response. The preschooler has sourced their answer from a combination of the role play ideas that took place in the classroom and her own adaptation of the concept of the giant as being ill-mannered, to her understanding of a good place to hide. This suggests that she has thought carefully about her answer and is working to solve the problem posed. Furthermore she is providing a creative and appropriate solution to the question.

Table 6: Pre-mediation problem-solving skills

Examples of tasks/incidents	**Preschooler response**
During outside play a preschooler complained that another preschooler had pulled her uniform and laughed at her.	The preschooler who complained to the teacher was able to say that she felt 'sad' when her friend was unkind but she was unable to decide how to solve the problem.

Table 7: Post-mediation problem-solving skills

Examples of tasks/incidents	**Preschooler response**
Preschoolers were inspired by the story of 'Rapunzel' who had to 'let down her long hair' for the witch to climb up into the tower. During outside play one of the preschoolers used an old duvet cover to represent her hair and was hanging this item over a high wall. Another preschooler was attempting to climb up the fabric. Both preschoolers were informed that this was potentially dangerous and were asked to re-evaluate the game.	The preschoolers responded by moving to a flight of stairs which facilitated safe climbing and allowed the game to continue. This solution was devised without intervention from the teacher.

The contrast between the pre and post conditions show how the preschoolers are moving from a state in which they were unable to find a solution to a problem to one in which they creatively solved their problem and did so independently. The preschooler leading the game had shown difficulties resolving conflict independently during the pre-mediation phase of research and was in fact repeating Grade R[4] because of her emotional immaturity. She was particularly responsive during the activities in the mediation phase and was often seen to be mediating her peers. She appeared to enjoy taking on a leadership role and it seemed to build her confidence. Furthermore, this child was able to verbalise her feelings and paused to notice how her behaviour was impacting her peers, which was evidenced in a post-mediation incident in which she apologised for saying something unkind to her friend. In the pre-

[4] In South Africa, Grade R is a reception year within the early childhood education subsystem which comprises a class immediately before the formal school's year one or Grade One class.

mediation period of research she would probably have sulked, denied fault and been unable to discuss the incident appropriately.

The text extracts below illustrate a shift in emotional skills as demonstrated by one preschooler's understanding of 'Jack'. The existing emotional competency program meant that preschoolers were already able to label emotions and the aim was to build on this existing knowledge.

Extract 5: Example showing a shift in emotional skills

Pre-mediation Interview	
Teacher:	How do you think Jack felt when his mommy sent him to bed with no supper?
Preschooler:	Ummm. . .ummmm. . .he gets into bed.
Teacher:	He gets into bed. . .how did he feel though?
Preschooler:	Sad.
Teacher:	Why would he feel sad do you think?
Preschooler:	Because he will be hungry (said quickly and somewhat flippantly).

Extract 6: Example showing a shift in emotional skills

Post-mediation Interview	
Teacher:	How do you think Jack felt when mommy sent him to bed with no supper?
Preschooler:	Umm. . .Sad.
Teacher:	Would he feel anything else do you think?
Preschooler:	Cross.
Teacher:	Why would he be cross do you think?
Preschooler:	Because his mommy never gave him tea and, and food and such. (preschooler took a moment to consider before answering and seemed confident in her response)

The misunderstanding of the question in the pre-mediation interview should be noted. The researcher needed to redirect before getting an answer linked to emotions. Film footage shows the preschooler being somewhat dismissive in her response and appearing to give an answer gleaned from the familiar version of *'Jack and the Beanstalk'*. The more complex description of emotions in the post-mediation interview is relevant. The preschooler has returned to their original answer of 'sad' but has also described another appropriate emotion for this context. The explanation is a little more detailed

than in the pre-mediation stage. The film footage also demonstrates that the preschooler took more time to consider the question when answering during the post-mediation interview. This suggests a greater depth of understanding of emotions.

Table 8: Pre-mediation emotional skills

Examples of tasks/incidents	**Preschooler response**
One preschooler wishes to play a princess game and is told that she must ask another preschooler as it is not their game. The preschooler leaves the play area and comes back a few minutes later complaining that she is 'sad'.	The preschooler describes her friends as being 'rude' to her because they would not play with her. She is sulking and struggling to resolve the problem but does understand that she is upset and why.

Table 9: Post-mediation emotional skills

Examples of tasks/incidents	**Preschooler response**
One preschooler picked up a drum and began to beat it whilst reciting the verse from 'Jack and the beanstalk'. Her peers immediately accepted she was the 'giant' and took on other roles such as 'Jack', 'the giant's wife' and 'Jack's mother'. Props were used to define the roles and the rules were strictly adhered to.	Preschoolers responded by running and hiding from the giant whilst screaming in 'fear'. Some preschoolers joined in with other percussion instruments and recited the verse with vigor. This was repeated several times throughout the period of research. Everyone worked co-operatively without adult intervention and accepted their designated roles without conflict.

The general classroom emotions were happy with the occasional altercation. Most preschoolers were already able to express their feelings but did not always know how to manage a conflict situation as seen in Table 8 above. Those preschoolers resorted to whining. Most preschoolers were happy to tell the teacher about their problem and this was often sufficient for them to feel better and shift to another game. In the post mediation condition preschoolers displayed a level of independence when exploring their emotions but were also able to regulate their actions and to participate in a potentially chaotic game (as seen in Table 9) in a regulated manner. The example described in Table 9 shows preschoolers playing co-operatively and using tools to define their role in the game. Here, they were exploring the concept of 'fear', but in a safe manner and the repetition of this game suggests that they were enjoying the experience.

Conclusion

This case study reveals that children could be assisted to acquire conscious control of their own thinking or achieve self-regulation, especially during the critical period in their development when such cognitive skills are fundamentally important for learning success when they enter formal schooling, as well as for relating effectively to the world around them.

However, for the mediation of self-regulation to be successful – as Vygotsky (1978; 1981) argued, it has to happen at the appropriate level of children's socio-cultural engagement. That is; when children can make sense of and relate meaningfully to the cognitive tools or conceptual skills that would eventually become part of the repertoire of their thinking processes and problem-solving strategies. This is the level appropriately termed the zone of proximal development; which for these preschoolers was constituted within their play activity.

Play is a crucial part in preschool children's development – a 'leading activity' that defines this critical, stage in the course of children's development. Therefore, systematic intervention in children's play activities; aimed at deliberately mediating cultural tools that foster the development of self-regulation, may assist children transcend their egocentric and impulsive modes of thinking and relating to the world and generate reflective and self-regulative forms of thinking – necessary for successful learning and development during formal schooling.

Self-regulation in this case study was mediated through the use of appropriate discourse modes that facilitated children's acquisition of a sense of awareness of alternative perspectives and feelings, views and interests of other persons. For example, preschoolers were encouraged to change their limited egocentric modes towards others and be considerate and collaborative. For example, they became aware of the need to ask when they needed to use something that did not belong to them and to express gratitude when receiving something from a friend, etc. Meanwhile, the use of appropriate discourse modes by the teacher assisted preschoolers to use language towards themselves as a means to regulate their own thinking and thereby begin, gradually, to make more deliberate use of their newly acquired cognitive strategies.

Therefore, the mediation of self-regulation fostered the development of planning skills on the part of preschoolers; which required that they think about and reflect on their actions, and approached the tasks in a more organised manner. Given the opportunities to practice these skills, the preschoolers were able to master new learning over a relatively short period of time and had also begun the process of internalisation of new cultural tools which had hitherto been at their primitive stage of development. They could, for example, also share their knowledge and mediate to one another, thus gaining greater awareness of their own thoughts and actions and consequently becoming less impulsive and more self-regulated. Through storytelling, preschoolers acquired the crucial skill of logical sequencing of events as well as organisation of their own thoughts, etc.

References

Bodrova, E. and Leong, D.J. 2001. Lev Vygotsky playing to learn. *Scholastic Early Childhood Today,*15(4): pp.48–49.

Bodrova, E. and Leong, D.J. 2005. Promoting student self-regulation in learning. *National Association of Elementary School Principals,* 85: pp.54–58.

Bodrova, E. and Leong, D.J. 2007. *Tools of the mind: the Vygotskian approach to early childhood education.* New Jersey: Pearson Prentice Hall.

Bodrova, E. and Leong, D.J. 2003. The first years of school. *Educational Leadership,* 60(7): pp.50–55.

Bodrova, E. and Leong, D.J. 2003. Learning and development of preschool children form the Vygotskian perspective. In Kozulin, A., Gindis, B., Ageyev, A.V. and Miller, S. (Eds), *Vygotsky's educational theory in cultural context.* Cape Town: Cambridge University Press, pp: 156–176.

Bruner, J. 1977. The organization of early skilled action. In Richards, Martin P.M. *The integration of a child into a social world.* London: University Press, pp.167–184.

Bruner, J. 1997. Celebrating divergence: Piaget and Vygotsky. *Human Development,* 40(2): pp.63–73.

Elkonin, D. 1974. *The psychology of preschool children*. Cambridge: MIT Press.

Hall, M.J., Glick, J. and Rieber, R.W. 1997. *The collected works of L.S. Vygotsky: the history of the development of higher mental functions.* New York: Plenum Press.

Karpov, Y. and Haywood, C.H. 1998. Two ways to elaborate Vygotsky's concept of mediation: implications for instruction. *American Psychologist,* 53(1): pp.27–36.

Karpov, Y. 2003. Internalization of children's problem solving and individual differences in learning. *Cognitive Development,* 18: pp.377–398.

Karpov, Y. 2005. *The Neo-Vygotskian approach to child development.* New York: Cambridge University Press.

Moll, I. 2004. Why Piaget and Vygotsky? Chapter 2 in 'Internalization' in Piaget and Vygotsky: the question of the synthesis of the two theoretical traditions and its implications for the analysis of school learning. Unpublished doctoral thesis. University of Geneva. Geneva, Switzerland.

Piaget, J. 2001. *Readings on the development of children: the stages of intellectual development of the child –Jean Piaget*. Gauvain, M. and Cole, M. (Eds). New York: W. H. Freeman & Co.

Richards, M. P.M. 1977.The integration of a child into a social world. In Jerome S. Bruner, *The organization of early skilled action.* Cambridge: Cambridge University Press, pp.167–184.

Rowe, S. and Wertsch, J.V. 2007. Vygotsky's model of cognitive development. Goswami, U.(Ed.), *Blackwell handbook of childhood cognitive development.* M.A.: Blackwell.

Rubtsov, V.V. and Yudina, E.G. 2010. Current problems of preschool education. *Psyjournals*, 3: pp.5–15.

Van der Veer, R. and Valsiner, J. 1991. *Understanding Vygotsky: a quest for Synthesis.* Oxford: Blackwell.

Vygotsky, L.S. 1967. Play and its role in the mental development of the child. *Soviet Psychology*, 5: pp.6–18.

Vygotsky, L.S. 1978. *Mind in society – the development of higher psychological processes.* Cambridge, MA: Harvard University Press.
Vygotsky, L.S. 1967. Play and its role in the mental development of the child. *Soviet Psychology,* 5: pp.6–18.

Vygotsky, L.S. 1981. The instrumental method in pyschology. In Wertsch, J.V. (Ed.), *The concept of activity in Soviet pyschology.* Armonk, NY: M.E. Sharpe, pp. 134–143.

Vygotsky, L.S. 1997. *The history of the development of higher mental functions.* New York: Plenum Press.

Vygotsky, L.S. 1998. *The collected works of L.S. Vygotsky. Volume 5 Child Psychology.* (Trans. J. Hall). London: Plenum Publishers.

Wertsch, J. 1979. From social interaction to higher psychological processes. *Human Development,* 22: pp.1–22.

Zeidner, M., Matthews, G., Roberts, R.D. and MacCann, C. 2003. Development of emotional intelligence: towards a multi-level investment model. *Human Development,* 46: pp.69–96.

Giulietta Harrison
Azwihangwisi Muthivhi
School of Education
University of Cape Town

harrisonguiulietta@gmail.com
azwihangwisi.muthivhi@uct.ac.za

“I had no time to bleed”: Heroic journeys of PhD students in a South African School of Education

Jane Castle

Abstract

Why do students in a South African School of Education describe their experience of doing a PhD as a journey of epic proportions? Why do they portray themselves as superheroes in this journey? These were questions I asked myself as I collected students’ narratives during a ‘PhD weekend’ in August 2011 and reflected on the problems, pleasures and risks students associate with doing a doctoral degree. The research draws attention to the dominant narrative of a heroic journey so that supervisors and academic coordinators can better understand and respond to the challenges embedded in students’ experience of doing a doctorate.

> *“It was pure hell. . . I had to stand on my own, fighting for time, fighting for money, for space. . . and the targets were always shifting. . . I was so busy fighting. . . I had no time to bleed. . . In the end I succeeded, but it was pure hell and determination.”*

So began one student‘s dramatic account of doing a PhD in a School of Education several years after the event. It is a story of difficulty, delays, hardship, and determination. It is also a story of heroism and, ultimately, of triumph.

Thirty-five postgraduate students and supervisors had gathered in the School of Education staffroom at the end of a ‘PhD weekend’ in August 2011. As chair of a roundtable discussion designated ‘reflection on the weekend’, I invited them to think of a metaphor for their experience of doing a PhD and to write or sketch it using the coloured paper and pens I provided. After a few minutes, participants were invited to tell their stories and show their drawings. The vast majority of them used the metaphor of a heroic journey undertaken alone over exceedingly rough terrain. Their drawings showed landscapes bisected by powerful rivers to cross, mountains to scale, pitfalls to circumvent. This was nothing like my own experience of doing a PhD in the same institution fifteen years previously. Why, I wondered, do so many students describe their experience in this way? What are the conditions and events which lead them to depict themselves as superheroes facing – and defeating – terrifying odds?

Research purpose

In this paper I explore narratives told by students and supervisors about their experiences of doing a research degree in a South African School of Education. My interest lies in finding out how this group interprets their experience, how individuals negotiate and overcome problems, and how they succeed in completing their degree.

Exploring students' narratives in this way has the potential to sensitise both students and supervisors to aspects of their roles, possibly enhancing the quality of supervision and the postgraduate experience (McCormack, 2009). Students' stories can open a door for students and supervisors to reflect on and negotiate what Grant (2003) has called the 'chaotic pedagogy' of supervision.

Assumptions

The research proceeds from a humanist assumption that postgraduate students are in essence creative, resourceful and whole. Creating stories, or narratives, about their experiences is one way in which students can express their creativity and resourcefulness. Playing with concepts and ideas by constructing a narrative can enhance the experience of learning, teaching and supervision. Furthermore, a relationship between creativity and reflective practice can be nurtured and enhanced through the process of reflection at different levels.

A key assumption underlying this research is that significant events, remembered and reconstructed in stories, play an important part in the construction of identity. Throughout adulthood, people construct their identities, change themselves, reinterpret themselves and see what benefits (and losses) they derive from doing this.

In the next section I introduce narrative enquiry, followed by four narratives which show how students' identities are shaped and (re)constructed as they complete a research degree. I then turn to a particular type of narrative, the mythic journey, before reviewing research on the challenges posed by doctoral study. I review contextual and other factors leading to student attrition. Next, I give a detailed account of the methods I employed in the

research and the participants in it. A three-act narrative, the heroic journey, represents the research results, and the paper closes with concluding remarks.

Narrative enquiry

Narrative, in its simplest form, has to do with stories. Narratives are first person accounts of experiences in a story format, having a beginning, middle and end. All forms of narrative share an interest in making sense of experience, of constructing and communicating meaning to others (Merriam, 2002; Rossiter, 1999; Richardson, 1994). Stories provide an opportunity for reflection on emotions, contexts, influences and significant events that contribute to a particular experience.

Through stories, people construct and reconstruct their sense of self as they find their way in the world. They move beyond a simple recounting of events to "create spaces for understanding [themselves] as multiple and diverse, as a work-in-progress, constantly evolving, growing, shifting and changing" (McCormack, 2009, p.142). Stories help us to structure our sense of self and shore up our position in the world. Furthermore, stories have the potential to reveal not only the personal but also the collective nature of experience. "A story. . . carries the shared culture, beliefs and history of a group. . . It is a way of experiencing our lives" (Durance, 1997, p.26). Because stories provide an opportunity for thinking through the emotion, context, influences and significant events that contribute to an experience, they are a form of research and representation that is inherently educational (Evelyn, 2004; Merriam, 2002).

Ylijoki's narratives of thesis writers

In interviews with 72 students completing a research degree in Finland, Ylijoki (2001) found that postgraduate students constructed four core narratives about their experience, which she termed the heroic, tragic, businesslike and penal narratives.

Students who relate the *heroic* narrative believe that their dissertation is a quest for scholarship and intellectual wisdom, and believe that their dissertation will make a significant contribution to knowledge. Their

'heroism' involves living up to a high standard of scholarship, toiling against the deficiencies and criticism of supervisors and peers, and undergoing emotional swings as they complete trials and tests (Ylijoki, 2001). According to Badenhorst (2008, p.12) "Students on this path are often stuck for long periods, sometimes paralysed by the task they have set themselves". Ultimately, however, they succeed.

Ylijoki's *tragic* narrative is one in which students live in fear that they will be exposed as inferior and unworthy. Students who construct a tragic narrative often fail to complete the degree because they are convinced that they are not good enough to undertake research at a high level. They despair, they avoid their supervisor, they feel guilty, and ultimately either withdraw or rationalise their failure to complete the degree (Ylijoki, 2001).

In the *businesslike* narrative, the student simply gets on with the job. The dissertation holds no mythical qualities for these students – it is something to be understood and constructed. It is hard work, but these students have no fear of failure (Ylijoki, 2001). Perseverance is the key to success, and the student has a close working relationship with the supervisor. These students focus on a goal and are not usually side-tracked by emotional or self-esteem issues (Badenhorst, 2008, p.13).

Finally, the *penal* narrative has punishment and suffering at its core. These students are motivated only by the need to complete a degree to meet job or employment requirements. The thesis is interpreted as a nuisance and the supervisor as a prison guard. The student does the minimum amount of work, suffering all the while. The university rules are seen as petty and obstructive, the supervisor doesn't understand the student, and the effort seems pointless. Completing the thesis, even at minimal standards, means release from prison (Ylijoki, 2001; Badenhorst, 2008).

Ylijoki points out that the four narratives are collective stories that do not correspond precisely to the accounts given by individuals. However, they begin to provide explanations for why certain students complete a research degree, or abandon it, or become 'eternal students'. The narratives also suggest that people's beliefs in their abilities have a profound effect on those abilities (Bandura, in Durance, 1997, p.3). One has to have the will *and* the way (the resources) to accomplish goals. In Ylijoki's heroic and businesslike narratives, students have the will and the way to complete the degree. In the tragic and penal narratives these are lacking.

Ylijoki suggests three possible levels of reflection on the narratives. At the individual level, a narrative perspective can help students to problematise their tacit assumptions and beliefs about writing a thesis and consider alternative ones. At the interactional level (the level of student-supervisor), the narratives can contribute to improved supervision practices. The four core narratives signal different views of the role which students and supervisors take up in thesis writing. It is important that supervisors and students recognise their own narratives, or at least be 'on the same page'. Finally, at a cultural level, the narrative approach could help make visible the unexamined norms and values prevailing in different disciplinary cultures or academic departments, into which students may have been socialised in their undergraduate degree. For example, are alternative narratives to the heroic journey available in the School of Education?

Mythic journeys

My interest in this research is in the power of story-telling for its mythic, as well as explanatory qualities. Why *was* the dominant narrative of doctoral students in the School of Education the mythic or heroic journey?

Rule and John (2011) suggest that all narratives have an element of the performance about them as the story goes beyond representing mere content to include the way that participants understand their story in social context. A shift in identity often occurs at a turning point in a story, and events and experiences both past and present take on different significances in the light of the new identity of the characters or narrator (Riessman, 2003). The story and its narrator are part of a social world in which characters, plot and action all play a part.

The characters in the School of Education narratives will be described in a later section of this article, but the plot and action of heroic journeys were studied by Campbell (1968, 1988) who explored myths from many different cultures and found that they all followed the pattern of a three-act drama: Departure (Act One) – Initiation (Act Two) – Return (Act Three).

In Act One, the hero is living in the ordinary world when he hears the 'call to adventure'. He may initially refuse to heed the call, but the call becomes insistent and eventually the hero embarks on his journey. A mentor may be

consulted to help the hero prepare for the journey and therefore to heed the call. A group of supporters may join the hero in his quest. Yet the hero faces the first threshold, or challenge, of his journey alone.

In Act Two, the hero has his first triumph behind him. He attracts allies and makes enemies. After several struggles and trials, he reaches the 'innermost cave' where he knows he must face an ordeal. He hesitates at the threshold of the cave, to gather strength and renew his vows, before proceeding. The hero then faces the ordeal and overcomes it, showing immense courage and fortitude. He takes a reward away with him, but his journey is not over yet.

In Act Three, the hero is on the road back to the ordinary world, accompanied by allies, and harassed by enemies trying to take the reward back. Although weary and perhaps physically injured, the hero knows that there will be one final skirmish before his journey ends. In this final battle, the hero succeeds and makes his way home. However, he is not the same person who began the journey. He has undergone a transformation, or 'tasted the 'elixir'', and cannot any longer be an ordinary person in the ordinary world (Badenhorst, 2008; Vogler, 1988; Campbell, 1968).

South Africans of different cultural backgrounds and all ages enjoy popular myths and epics such as the Star Wars trilogy and the Harry Potter books and films. They also have their own cultural variants of Campbell's 'monomyth' (for example, 'a promising young man is trusted with an important mission by his chief, but first has to cross a river infested with crocodiles. . .'). One of the best-known stories in South Africa is Nelson Mandela's heroic journey: from birth and youth in a remote village in the Eastern Cape, to lawyer and leader of the ANC Youth League, to initiator of the armed struggle against apartheid, capture and the Rivonia treason trial, long imprisonment on Robben Island, and finally release in 1992 to become president of the ANC and South Africa, – all captured in his autobiography '*Long Walk to Freedom*' (1994). With such a stirring narrative widely available and celebrated in their country, perhaps it is not surprising that students in the School of Education adopt the metaphor of the heroic journey to describe their own initiation and transformation.

The PhD: quest or ordeal?

Why do people undertake a PhD? Backhouse (2009) suggests that there is no single understanding of what a PhD is, and why people undertake one. Instead, there are at least three competing, strongly held, views. The 'scholarly' view entails completing a substantial scholarly project, firmly located in a discipline, in order to contribute original knowledge to the field. People who hold this view see the PhD as a 'rite of passage' for entry into the research and academic community (Bitzer, 2007). A licensed scholar, a 'doctor', is qualified to pursue research "unsupervised, independently and autonomously" (Johnson, Lee and Green, 2000, p.135). The scholarly view is also known as the traditional, or autonomous, view of the PhD (Badenhorst, 2008). It is widely held in the School of Education, where the 'apprenticeship model' of the doctorate prevails. In this model the student toils, often alone, to complete a thesis under the guidance of a supervisor. Adherents of the scholarly view may display resistance to alternative models of the PhD on the grounds of compromising standards of excellence or preserving the culture of the disciplines (Backhouse, 2009, p.5).

The 'labour market' view, on the other hand, is about developing high level skills for the economy, and is rooted in the discourse of the knowledge economy and the market. Research may be designed and carried out in groups or teams to develop particular skills or to solve particular problems, for which there is a recognised demand. This view of the PhD, like the 'scholarly view' is present in the School of Education, as in other professional schools and disciplines, where students may have, or aspire to enter, careers in the public service or as researchers and consultants.

The 'ongoing development' view of the PhD sees the doctorate as a process of ongoing personal and professional development, of both student and supervisor (Backhouse, 2009; Fataar, 2005). The aim of undertaking a PhD, in this view, is to increase personal satisfaction and growth by developing critical intellectuals able to engage with knowledge in an academic way. This view of the PhD may be driven by a social justice agenda.

Backhouse notes that personal motives for undertaking a PhD are seldom simple, but may be related to influences accumulated in students' lives and the circumstances and opportunities they encounter (2009, pp.287). So, for example, academics and professionals may undertake a PhD to enhance their

careers *and* to establish themselves as researchers with knowledge and skills to be applied outside the academy.

The liberal education for English gentlemen of the last century, known as the 'Oxbridge' tradition, and described by Backhouse as the 'scholarly view' of the PhD, still holds appeal for academics in many universities. The concept of supervision embedded in this tradition sees higher degrees as an intellectual apprenticeship, offering students opportunities to become rational, self-directed, autonomous scholars. The stakes of this kind of supervision are often high (Grant, 2005) as the student may work for long periods of time in isolation from his/her supervisor. The student may be intentionally or unintentionally abandoned to 'get on with writing the thesis'. As Grant (2005) and Lee and Williams (1999) point out, this traditional model of the supervisor-student relationship is implicitly male, highly personalised and yet not interpersonal. It has been characterised as a 'trial by fire' and 'a bit like a military training academy' from which only the strongest survive (Lee and Williams, 1999). The authors deem the process of doing a PhD as 'fraught and contradictory' for everyone, but particularly for women who cannot easily be accommodated in the rational model of the 'autonomous independent scholar'. Supervisors and students who adopt this model perceive the PhD to be both a quest and an ordeal. The ordeal is what makes the quest worthwhile.

Problems which contribute to student attrition (incomplete degrees, or 'dropout') are well documented in the local and international literature. Mouton (2007) attributes attrition in South African institutions variously to the relationship between the student and supervisor; untrained and inexperienced supervisors; insufficient financial support for students; and insufficient resources devoted to postgraduate support, including an acute shortage of equipment and office space for students. There are thus personal, physical, psychological and organisational factors which contribute to attrition.

Drawing on data from two large national studies, Herman (2011) studied the causes of attrition cited by PhD students and postgraduate programme leaders and grouped them in six categories in descending order of frequency:
1) conflicts over time and energy as mature students in full-time employment attempt to balance work pressures and family commitments; 2) academic challenges, such as a gap of up to ten years since the previous degree, lack of research training, and lack of team work; 3) problems with access to facilities and resources, including faulty equipment and the unavailability of library

materials, internet time and working space; 4) financial problems, exacerbated by officially legitimated discrimination against mature part-time students, white students and international students; 5) Supervision issues (supervisors are overloaded, fail to give timely feedback, their expertise and personalities are mismatched with those of students); and finally 6) the South African context, a category which takes in the trauma resulting from high rates of crime, negatively affecting time on task, concentration and motivation. International students noted xenophobic experiences, difficulties with visas and permits; and feelings of permanent fear. Herman (2011) observes that a better understanding of doctoral attrition is needed, and that research should be conducted in different departments and institutions to inform students and those working with them of the obstacles to completion.

This section of the paper has reviewed three views of the PhD offered by Backhouse (2009), and research undertaken to understand the high rates of attrition in doctoral study. Taken together, these perspectives suggest that the PhD may be understood as both a quest and an ordeal. Students who live by Yliyoki's heroic and businesslike narratives take up the quest and circumvent (the businesslike narrative) or overcome (the heroic narrative) the ordeals. Students who live by the penal and tragic narratives are overwhelmed or crushed by the ordeals.

The next section and the following one deal with the context of the research.

The School of Education: challenging terrain

Swanepoel (2010) and Divala and Waghid (2008) draw attention to important challenges facing higher education institutions in South Africa in the first decade of the century. They charge that institutional autonomy and academic freedom have been eroded by increasing government oversight of higher education. University leaders and research managers no longer lead academic institutions, but instead are engaged in responding to changing policy and satisfying external audits. Both government and university managers have lost touch with what is going on at ground level. Therefore, academics have to find their way through an uncertain and confusing higher education landscape.

Like staff in other institutions, lecturers in the School of Education encounter escalating corporatisation and managerialism in the university. They feel the weight of decreasing autonomy and academic freedom, and pressures to grow *and* excel while also to economise – pressures which are both oppressive and contrary to the academic endeavour (Waghid and Divala, 2008; Jansen, 2010). For example, a government directive, the National Plan for Higher Education in South Africa (2001), aims to improve retention and throughput rates at all levels of study in tertiary education, yet effectively increases the burden on academics who are already under pressure to conduct and publish research, obtain NRF ratings, and teach and supervise increasing numbers of differently prepared students. This burden leads to increasing resignations and 'circulation' of academic staff as lecturers seek better conditions of work at other institutions.

Deteriorating work conditions for most university academics (Habib and Morrow, 2007; Nundulall and Reddy, 2011) are evident in increasing teaching workloads under disheartening conditions, including large class sizes and inadequate lecture halls. This means that supervisors have less and less time to devote to their students and to research in their own disciplines, reducing their capacity to mentor novice supervisors.

A relatively small number of academic staff in the present School of Education hold PhDs, a legacy of the merger between the former College of Education and the Faculty of Education in 2002, and their subsequent incorporation into the Faculty of Humanities. The role of College lecturers was to teach teachers, not to conduct research, so a higher degree was considered unnecessary (Jansen, 2010). In addition, there are few rated researchers in the School of Education to provide role models, inspiration and financial support for postgraduate students.

The profile of ageing and shrinking (due to retirement and migration to other institutions) senior academics also poses challenges for postgraduate supervision and research. Pressures to transform the institution racially have meant that young, entry-level black staff are under huge pressure to develop a research profile and complete a higher degree while simultaneously undertaking teaching, leadership and management roles in the School.

Meanwhile, the drive from national and provincial government departments to focus on educating a corps of teachers qualified to boost the failing public education system is at odds with the university's strategic goal of being a

research intensive university in the top 100 of world rankings (University of the Witwatersrand, 2012). There are too few postgraduate students in relation to undergraduates in the School of Education. To make matters worse, within the university, academic colleagues have low regard for teacher education, resulting in a constant battle for resources and recognition from senior administrators (Jansen, 2010).

Given the distressing conditions sketched above, it is perhaps not surprising that doctoral students in the School of Education, many of whom are staff members, describe their efforts to complete a higher degree in heroic terms. The increasing turnover of staff in recent years, and the high incidence of burnout, depression and cancer, especially among female academics, suggests that many students might have related a tragic or penal narrative rather than a heroic one, had they been present at the PhD weekend.

Levelling the terrain

In response to the challenging conditions sketched above, efforts have been made to improve the environment for postgraduate study in the School of Education. The first efforts took the form of practical, administrative measures such as revising admissions requirements and procedures; aligning School and Faculty standing orders on higher degrees and attempting to communicate them better to staff and students.

A 'PhD boot camp' designed to support academics to complete a doctorate and establish a publication record (Geber, 2010), was held in the School in 2010. Over a nine-month period, eleven mid-career academics participated in six courses and received twelve hours of personal coaching. Most academics found that participating in the bootcamp increased their productivity, commitment and accountability. The coaching component of it helped with exploring ambitions, building confidence, developing life skills and directing energies (personal communication with the Coordinator, March, 2012).

An existing postgraduate course on research design and methodology was given new vigour and status by expanding the involvement of senior academics within and outside the school and changing the venue from an awkward corner classroom to a well-equipped boardroom.

In addition, 'PhD weekends' which had existed only in disciplines such as Applied English Language Studies and Mathematics Education, were introduced to supplement traditional supervisor-student consultations with student-led seminar presentations. The weekends give students opportunities to chair sessions, organise and present their ideas to an audience of peers, debate, discuss and give feedback to one another in a structured environment. The cohort model (Govender and Dhunpath, 2011) which provides a conceptual base for the PhD weekends, attempts to foster communities of practice within and among students and supervisors. It is still too early to confirm whether this is the case in the School of Education. However, a significant advantage of the PhD weekends is that they present opportunities for supervisors and students to reflect on and honour their achievements, as in the roundtable discussion which gave rise to this research.

Finally, the School developed a strategy to enable legacy College of Education staff working on doctorates to take sabbatical leave. Financial support was sourced for 'time out [from teaching] sabbaticals'. The School introduced collaborative research projects with colleagues from overseas and local universities, supported and led by the institution. The result has been an expansion of research activity and output in 2005–2009, as reported in the quinquennial review (Wits School of Education, 2011).

So the challenges inherent in completing a doctorate remain but the resources and support are being increased. Increasing the financial resources and administrative and academic support may ameliorate some of the hardship for staff and students, but fundamentally the School remains subject to a policy framework, institutional culture and general conditions which are both contradictory and resistant to change. In such a situation it is easy to see why many students conceive of their PhD journeys as long, arduous journeys over uneven terrain. It is necessary to summon up courage to embark on the journey, to stay on it, and complete it.

Method

Qualitative researchers working with narrative draw a distinction between analysis applied to narratives and narrative analysis (or enquiry) (De Wet, 2011; Clough, 2002, Cresswell, 2007). To use Kouritzin's words, "you can research the story or story the research" (2009, p.80). In analysis of narratives,

narratives are the source material for knowledge and study. Researchers analyse them using methods such as discourse analysis, thematic analysis or content analysis, then interpret them, and sometimes create taxonomies of themes which hold across stories (Cresswell, 2007). In narrative analysis/enquiry, however, the researcher approaches the text not only as a representation of people's lives and worlds, but as a performance of it (Rule and John, 2011). Narrative analysis/enquiry begins with a written or spoken text giving an account of an event or action. The researcher collects texts, then reconfigures them into a narrative with characters, a timeline, plot, and setting or context. Thus the narrative in narrative analysis/enquiry is the outcome or result of the research, not the method of analysis. It is a data set in itself, reflecting the voices of the participants and the interpretive voice of the researcher (De Wet, 2011). The four narratives (heroic, businesslike, tragic and penal) which Ylijoki developed from interviews with students are examples of narrative analysis/enquiry. In this study I used narrative analysis/enquiry to better understand students' experience of doing a PhD. Both the story (the content) and the method (narrative analysis/enquiry) are powerful in their own right.

Using techniques associated with narrative analysis/enquiry I constructed the 'heroic journeys' of doctoral students by taking the following steps:

1. Students and supervisors who attended the PhD weekend were asked to reflect on their experience as postgraduate students. They were asked to think of a metaphor for their experience, and to write or sketch it on paper.

2. Students volunteered to tell their stories and/or show and explain their drawings. I took notes, attempting to capture words, feelings, events and explanations. Students showed courage and a degree of trust in me as facilitator as well as among themselves. No one was forced to tell their story.

3. I did not determine the scope or focus of the research in advance of the reflection session. The students told their stories and I marvelled at their bravery and persistence. I gathered students' stories with their full agreement, taking ethical considerations into account. No names are used in this article, and students' drawings and stories are kept confidentially.

4. After the PhD weekend I assembled the data and reconstructed my notes of students' texts so that they made a point.

5. I 'restoried' students' stories (I put them in the three-act mythical journey format, with a chronological structure (a beginning, middle and end) a place or situation, a predicament, conflict or struggle, and a resolution or conclusion of sorts).

6. I organised the stories to expose the understandings and interpretations held by *most* students. I reflected on how the understandings differed from or were similar to one another; what other conceptions were possible; and what students' constructions meant, if anything, for postgraduate study and supervision in the School of Education.

7. I undertook reflective dialogue and member checks with others (with members of a writing group, and by presenting an earlier version of this paper in the School) to explore problematic experiences and consider alternative interpretations of the data. This was a way of managing the ethical and validity issues which arise when stories of others' experience are interpreted when they are not present to clarify or expand meanings (McCormack, 2009). It was also a way of repositioning myself from 'researcher' to 'acknowledged participant' in the PhD weekend.

8. I explored links to experiences and stories in the published literature on student experiences of research degrees. I also sought to understand in greater depth the events and conditions in the School of Education which affected students' PhD experience.

9. I examined my own willingness to question my own and others' assumptions, challenge entrenched ways of thinking, and to consider alternatives.

10. I reflected on the entire research experience and attempted to extract principles or draw conclusions from the stories.

The characters (participants)

PhD students in the School of Education are usually mature adults, diverse in terms of nationality, ethnicity, age, gender, previous education, experience and motivation to do a PhD. Most study part-time as they are in full-time employment either in the School or elsewhere, for example in national or provincial education departments, or in the private sector. The traditional model of PhD students as young, full-time scholars supported by research grants applies to only a minority of students in the 'stem' (Science, Technology, Engineering and Mathematics) education disciplines (ASSAf, 2010). Some are lecturers in other Schools and Faculties of the institution pursuing an abiding interest in education. An increasing number are international students from other countries in Africa, whose previous education was conducted in a different language, and in circumstances more or less challenging than those found in the School. Most students are in their forties or fifties, many of them women with responsibilities for child care and sometimes parent care. Some black South Africans, especially from rural areas, contribute financially to the education of younger siblings and family members, and provide a role model for other members of their community. Many are the first in their family to go to university, or to complete a higher degree. Parental, collegial and partner expectations of their success may add to the stress these students experience in doing a higher degree. Most students have experienced a gap of five years or more since completing their previous degree. Thus doctoral students have varied backgrounds, preparation, expectations, motivations, resources and responsibilities. These characteristics may be seen as a resource *and* an obstacle to completing a doctorate.

I turn now to the heroic narrative which students related in the PhD weekend. Statements made by students in the reflection session at the end of the PhD weekend appear in *italic* font, in double quotation marks. I have used the word 'hero' to refer to both women and men, for the sake of simplicity.

The heroic journey

Act one, departure

The journey begins in the ordinary world, in the everyday life of the hero. The hero heeds a call to adventure (to embark on a research degree). Sometimes the hero refuses to heed the call until something or someone makes it difficult for him to stay in the ordinary world, in his everyday life ("*It was part of my life, my career, then it became an obsession*"). There are milestones along the way (identifying a research topic; developing conceptual, theoretical and methodological frameworks; designing the research). A mentor, or supervisor, may help the hero to heed and respond to the call. The hero begins to understand that the quest is both a journey and a destination. The hero embarks on the journey. ("*It was like driving on an untarred, rocky surface, with potholes". "It was a massive learning journey*"). Not far along, he faces the first threshold (submitting draft work for comment or presenting work in progress at a PhD weekend; receiving feedback; revising and reworking; and ultimately submission of the proposal for examination). The hero becomes aware of the demands of scholarship. He is "*pulled in different directions*" and experiences "*shifting targets*". He persists and "*feels pride*" that he has crossed the first threshold. But he also admits to fear and doubt ("*Do I have anything new to say*?" "*Do I have anything to say at all*?"; "*At first I knew how much I know, then I learned how little I know.*")

Act two, the call to adventure

Once past the threshold, the hero meets *allies* and *enemies*, ("*I stood on my own but I got help from others, my supervisor, the PhDs*"). The hero must now face trials and tests as he develops his disciplinary knowledge and begins his fieldwork. He grapples with the amount and complexity of the work ahead. ("*It was like a giant puzzle*"; "*I was working in a structure, then I had to abandon the structure"*). He may have help, but he has to face the tests himself. He toils against the shortcomings of peers and the criticism of supervisors, ("*First we were close knit, then we got disconnected*"). As the hero passes through these tests, acquiring knowledge of ethical conduct and professional responsibility, reading widely, he reaches the innermost cave (writing the thesis), a dangerous place where he has to face a ferocious enemy – anxiety and self-doubt ("*Do I have control? Have I lost control?*"). He

undergoes emotional swings, and his confidence seesaws. The hero pauses at the entrance to the cave to prepare and summon strength ("*I had a sore arm, sore neck, sore back*"). In the cave, the hero faces The Ordeal *("I felt fear, insecurity"*; "*The intimidation was overwhelming"*). He faces his greatest fear – the possibility of death (feeling 'stuck', doubtful and paralysed for periods of time, contemplating defeat and dropout) – but he persists and is tested in a battle with his enemy ("*It was pure hell*"; *"It was a massive learning experience"*). This is where the hero's chances of succeeding in the quest appear bleak ("*Stretch me, bend me, don't break me"*). We experience the brink-of-death moment with the hero *("I had no time to bleed. . . It was pure hell and determination*"). But the hero returns from near-death. Having survived near-defeat and overcome obstacles, the hero takes possession of the treasure (the ability to conduct original research, to add to the understanding of a discipline or field, to write a thesis and submit it for examination).

Act three, transformation, tasting the elixir

The hero's journey is not yet over. On the road back, he has to deal with the consequences of confronting the enemy and taking the treasure. The enemy (examiners, supervisors, colleagues, even family members) comes after him to take the treasure back. The hero must face one last trial. He receives examiners' reports: revisions and corrections may be required. He must now communicate his knowledge to others through teaching and research. His supervisor wants him to publish his research. His colleagues want him to ease their load. His family calls him back to the life he left behind when he started his travails. The enemy tries one last time to defeat the hero. For the hero, it is the final test of whether he has learned the lessons of the ordeal. The hero wins and is resurrected *("Wow, I can write!"; "I achieve things I could never do before"; "I enjoyed the ride")*. He is transformed by this final lesson and is able to return to the ordinary world with new insights *("Joining a community of academics requires perspective, production, vision"*). The hero returns with an elixir (a lesson or medicine) from the special world (*"It opens the world of critical thinking"; "You have to be strategic").*

Discussion and conclusion

I began this paper by stating an assumption that creating narratives, or stories, about their experiences is a way for PhD students to express their creativity and resourcefulness. The process of interpreting and reinterpreting events and

experiences is a form of identity construction, an affirmation of the gains and losses students have made on their PhD journey. It is a way of restructuring a sense of self, a sense which is constantly shifting and changing.

I then reviewed literature on the disputed nature and purpose of the PhD, the role of the supervisor, and factors leading students in South Africa to experience hardship and to abandon their studies. The literature showed that the PhD may be seen as both a quest and an ordeal – key features of the heroic journey. I showed that despite recent efforts to increase support for PhD students, many of whom are mature, female students steeped in teaching, conditions in the School of Education are not favourable for study. It is essential for students to be both courageous and tenacious to undertake a PhD and succeed in it.

I return now to the questions I posed at the beginning of this paper, 'Why do students in a South African School of Education describe their experience of doing a PhD as a journey of epic proportions?' 'Why do they portray themselves as superheroes in this journey?'

Badenhorst (2008, p.17) observes that

> The extra-ordinary world, the call, the trials along the way, the mentors and enemies, the ordeals and rewards can all be related to the dissertation process. People who take on a large process like a PhD often go through severe personal tests. Some of them find it too much to bear and withdraw. Others face their worst fears and continue. Most undergo an identity transformation.

The PhD journey involves vision, strength and courage. It is an experience marked by trials and persistence on the part of the student. Doctoral students in the School of Education constructed a mythical narrative – the heroic journey – to make meaning of their experience of completing a higher degree in the daunting context of the School of Education. The fact that the heroic journey is a mythical story does not challenge its reality. Myths are not mystifications (Geertz in Britten, 2012).

The narrative of the heroic journey reflects the voices of participants and the interpretive voice of the researcher. It is an idealised version of the stories shared by the students in the reflection session at the end of a PhD weekend. It was the dominant narrative related by students, not the only one. It does not correspond to personal narratives of individual students, each of which has its own features (Ylijoki, 2001). The heroic journey makes visible students'

assumptions and beliefs about what it takes to complete a PhD in the School of Education. It is worth noting that students do not identify themselves as victims, or even survivors, of an institution whose vision and strategic plans far exceed its capacity to carry them out. Students see themselves as conquerors, as superheroes with exceptional gifts and powers. This should not surprise us, as students in South Africa engage in a testing academic journey while also overcoming contextual obstacles, as described in the literature.

The aim of using narrative enquiry was to gain a new perspective on the context and prevailing practices of PhD production in the School of Education, to enable students and supervisors to reflect on them, and change them where useful. Supervisors, programme managers and academic support staff would do well to recognise and encourage students' sense of agency, ingenuity, persistence and bravery, while pressing senior managers to increase resources and improve conditions for doctoral study and research. Students may then be able to finish their theses in a more business-like way, without so much drama and suffering. Perhaps, too, alternatives to Ylijoki's heroic journey (2001) will come to the fore in the School of Education, and students will create new narratives of their PhD journey.

Acknowledgements

Cecile Badenhorst's books, workshops and enthusiasm for narrative research inspired me to write this paper. I also thank my colleagues Moyra Keane and Hilary Geber who read and commented on draft versions of the paper. Most of all, I salute the PhD students in the School of Education who entrusted me with stories of their heroic journeys.

References

ASSAf, 2010. *The PhD study: an evidence based study on how to meet the demands of high-level skills in an emerging economy*. Pretoria: Academy of Science of South Africa (ASSAf).

Backhouse, J. 2009. Doctoral education in South Africa: models, pedagogies and student experiences. PhD thesis. Johannesburg: University of the Witwatersrand.

Badenhorst, C. 2008. *Dissertation writing: a research journey*. Pretoria: Van Schaik.

Bitzer, E.M. 2007. Supervising higher degrees as a scholarly practice. *South African Journal of Higher Education*, 21(8): pp.1010–1019.

Britten, S. 2012. Britten on South Africa. In Thoughtleader, *Mail and Guardian* online, March 30–April 4. www.mg.co.za

Campbell, J. 1968. *The hero with a thousand faces*. Princeton: Princeton University.

Campbell, J. 1988. *The power of myth*. New York: Doubleday.

Clough, P. 2002. *Narratives and fictions in qualitative research*. Buckingham: Open University Press.

Cresswell, J. 2007. *Qualitative inquiry and research design*. 2nd edition. Thousand Oaks, London and New Delhi: Sage Publications.

De Wet, C. 2011. The professional lives of teacher victims of workplace bullying: a narrative analysis. *Perspectives in Education*, 29(4): pp.66–77.

Divala, J. and Waghid, Y. 2008. Challenges facing higher education governance practices on the African continent. *South African Journal of Higher Education*, 22(1): pp.1–16.

Durance, B. 1997. Stories at work. *Training and Development*, 51(2): pp.25–30.

Evelyn, D. 2004. Telling stories of research. *Studies in the Education of Adults*, 36(1): pp.86–110.

Fataar, A. 2005. Negotiating student identity in the doctoral proposal development process: a personal reflective account. *Journal of Education*, 36: pp.37–58.

Geber, H. 2010. Research success and structured support: developing early-career academics in higher education. *South African Journal of Higher Education*, 24(4): pp.674–689.

Govender, K. and Dhunpath, R. 2011. Student experiences of the PhD cohort model: working within or outside communities of practice. *Perspectives in Education*, 29(4): pp.88–99.

Grant, B. 2003. Mapping the pleasures and risks of supervision. *Discourse,* 24(2): pp.175–190.

Grant, B. 2005. Fighting for space in supervision: fantasies, fairytales, fictions and fallacies. *International Journal of Qualitative Studies in Education*, 18(3): pp.337–354.

Grant, B.M. 2010. Challenging matters: doctoral supervision in post-colonial sites. *Acta Academia Supplementum*, pp.1–18.

Habib, A. and Morrow, S. 2007. Research, research productivity and the state in South Africa. *Journal of Higher Education in South Africa,* 5(1): pp.113–130.

Heathcott, J. 2005. Trained for nothing. *Academe*, 9(1): pp:14–18.

Herman, C. 2011. Obstacles to success- doctoral student attrition in South Africa. *Perspectives in Education*, 29(3): pp.40–52.

Jansen, J. 2010. *Knowledge in the blood*. Cape Town: University of Cape Town Press.

Johnson, L., Lee, A. and Green, B. 2000. The PhD and the autonomous self: gender, rationality and postgraduate pedagogy. *Studies in Higher Education*, 25(2): pp.135–147.

Kouritzin, S.G. 2009. The Chaucerian dissertation model that "got away". In Kouritzin, S.G., Piquemal, N.A. and Norman, R. (Eds), *Qualitative research: challenging the orthodoxies in standard academic discourse(s)*. New York and London: Routledge, pp.67–82.

Lee, A. and Williams, C. 1999. "Forged in Fire:" narratives of trauma in PhD supervision pedagogy. *Southern Review*, 32(1): pp.6–26.

Mandela, N. 1994. *Long walk to freedom*. Randburg: Macdonald Purnell.

McCormack, C. 2009. Stories return personal narrative ways of knowing to the professional development of doctoral supervisors. *Studies in Continuing Education*, 31(2): pp.141–156.

Merriam, S.B. and Associates. 2002. *Qualitative research in practice: examples for discussion and analysis*. San Francisco: Jossey-Bass.

Mouton , J. 2007. Postgraduate studies in South Africa: myths, misconceptions and challenges. *South African Journal of Higher Education,* 21(8): pp.1078–1091.

Nundulall, R. and Reddy, K. 2011. Mentorship as a strategy to improve research output at tertiary institutions: a case study of the University of Johannesburg. *South African Journal of Higher Education*, 25(6): pp.1155–1177.

Richardson, L. 1994. Writing: a method of inquiry. In Denzin, N.K. and Lincoln, Y.S. (Eds), *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage, pp.345-371.

Riessman, C.K. 2003. Analysis of personal narratives. In Holstein, J. and Gubrium, J.F. (Eds), *Inside interviewing: new lenses, new concerns*. Sage Online.

Rossiter, M. 1999. Understanding adult development as narrative. In Clark, M.C. and Caffarella, R.S. (Eds), An update on adult development theory: new ways of thinking about the lifecourse. *New Directions for Adult and Continuing Education*, 84. San Francisco: Jossey Bass, pp.77–85.

Rule, P. and John, V. 2011. Your guide to case study research. Pretoria: Van Schaik.

Swanepoel, C.S. 2010. Masters degree studies: expectations versus reality. *South African Journal of Higher Education*, 24(1): pp.132–144.

University of the Witwatersrand. 2012. *Vision 2022 Strategic Framework*. Johannesburg: University of the Witwatersrand.

Van Biljon, J.A. and De Kock, E. 2011. Multiplicity in supervisory relationships: a factor in improving throughput success? *South African Journal of Higher Education*, 25(2): pp.987–1002.

Vickers, M.H. 2002. Researchers as storytellers: writing on the edge – and without a safety net. *Qualitative Enquiry*, 8(5): pp.608–621.

Vogler, C. 1998. *The writer's journey.* Studio City, CA: Michael Wiese Productions.

Wisker, G. and Claesson, S. 2013. The impact of cross-disciplinary culture on student-supervisor perceptions. *International Journal of Doctoral Studies*, 8: pp.21–37.

Wits School of Education. 2011. *Quinquennial review 2005–2009.* Johannesburg: University of the Witwatersrand.

Ylijoki, O. 2001. Master's thesis writing from a narrative approach. *Studies in Higher Education*, 26(1): pp.21–34.

Jane Castle
Centre for Learning, Teaching and Development
University of the Witwatersrand

jane.castle@wits.ac.za

The state of school libraries in South Africa

Margie Paton-Ash and Di Wilmot

Abstract

Fewer than 8% of South African public schools have functional libraries (Equal Education, 2010, p.21). This is despite links made by research to student achievement and school libraries in South Africa and elsewhere. Our main contention is that if school libraries are to play a significant role in promoting and supporting a quality education, then we need to understand the issues and challenges that schools face. This article reports on a component of a broader qualitative study that investigated the issues and challenges facing school libraries in ten primary schools in Gauteng Province, South Africa. In this article we analyse and discuss the findings of the document analysis we undertook to understand key events and developments in public school libraries before and after the transition to democracy in 1994. By drawing on an array of different sources we were able to identify and discuss emergent issues and challenges within the broader context of South Africa in general, but more specifically with reference to the goal of the Department of Basic Education to provide quality education for all. We conclude that the critical issue that needs to be addressed is that of governance.

Introduction

Since 1994 the Department of Education (DoE), now the Department of Basic Education (DBE), and the Department of Arts and Culture (DAC) have been mandated to address the inequalities of the past. The right to education has been achieved by making basic education compulsory, and the introduction of no-fee schools has gone a long way in achieving the goal of access to education for all. The DBE notes that "currently, the schooling system is characterised by high enrolment rates in compulsory basic education that comprises Grades 1 to 9 by children aged 7 to 15" (South Africa DBE, 2011b, p.1). In spite of the high enrolment figures the DBE recognises that this "does not necessarily translate into quality education" (South Africa, DBE, 2010d, p.72). More recently, the DBE acknowledged that quality of education was an urgent issue needing to be addressed. This is borne out by South African pupils' "persistently low performance in academic achievement" compared to national curriculum standards and international assessment (South Africa, DBE, 2011b, p.3). The DBE's Action Plan to 2014: Towards Realisation of

the Schooling 2025 prioritises "improving the quality of education and reducing the financial burden of education costs for parents, to improve access to quality education and to give effect to the right to education" (South Africa, DBE, 2011b, p.1).

Parallel to the development of the DBE's strategic plan to address the issue of quality education, the Department of Arts and Culture (DAC) was mandated to address the inequalities of the past. These include the uneven distribution and quality of library and information services and access to library and information services for all South African citizens. Drawing on the findings of international research, the DAC observes that there is "convincing evidence of the vital contribution of school LIS (Library and Information Services) to quality education and student achievement" (South Africa, DAC, 2009, p.38). This view is supported by the literature which reveals that links have been made to student achievement and the presence of libraries in South Africa and elsewhere (Lonsdale, 2003; Pretorius, 2005; Lance, Rodney and Russell, 2007; Bhorat and Oosthuizen, 2008; Scholastic Library Publishing, 2008).

This raises questions about the current status of school libraries in South Africa: What are the issues and challenges schools face and how are these being addressed?

Events and developments in school libraries

There has been a great deal of publicity and discussion about the state of school libraries in South African public schools. An analysis of newspaper and magazine articles (print and internet sources), blogs, research reports, marches for school libraries, debates, questions in parliament, as well as government responses, illuminates the contestations and problems facing public school libraries in South Africa at present.

Table 1 is a chronological summary of significant events and developments in school libraries in South Africa for the period 1994 to the present.

Table 1: Events and developments in public school libraries

Date	Development	Issue
Pre 1994	Lack of library facilities in public schools in black schools in particular (Dick, 2002).	Impact of Apartheid
1996	The *South African Schools Act* marks the start of our new education system but makes no reference to school libraries (Hart and Zinn, 2007, p.92).	Governance
1997	The first of 5 draft policies on school libraries was circulated by the Department of Education (DoE). (Equal Education (EE, 2010a, p.7). The government's *School Register of Needs* estimated that eight million out of twelve million learners did not have access to libraries (EE, 2010a, p.18).	Governance State of public school libraries
1998	The *National Norms and Standards for School Funding* Act is passed which would not interfere unreasonably with parents'discretion as to how to spend their own resources on their children's education (South Africa, DAC, 2009, p.42).	Governance
1999	The *Human Sciences Research Council* (HSRC) audit found that many school libraries were often used as classrooms or were shut for most of the day as the person in charge was a full time teacher. (South Africa, DAC, 2009, p.43). The *School Library and Youth Services Interest Group* (SLYSIG) of the Library and Information Association of South Africa (LIASA) is established recognising the "common ground between public and school libraries" (Hart and Zinn, 2007, p.96)	Governance Broadening awareness of the role of public school libraries
2002	The DoE's School Libraries Unit was closed (EE. 2010a, p.18).	Governance
2002	The *Review of Curriculum 2005* found that the new curriculum was doing well in former white schools because they were better resourced (Hart and Zinn, 2007, p.100). The Directorate of *Education Library and Information Technology Services* (ELITS) drew up its own school library policy in KwaZulu-Natal (Hart and Zinn, 2007, p.93).	Broadening awareness of public school Governance
2004	*White Paper on e-Education: transforming learning and teaching through information and communication technologies* commented that school libraries were collections of books that were inadequate to support resource based learning (South Africa. DoE, 2004).	Governance

2005	SLYSIG drew up information literacy guidelines rooted in the *Revised National Curriculum Statement* (RNCS) for Grades R to 12 in order to influence educational policy (Hart and Zinn, 2007, p.96).	Broadening awareness of public school libraries.
2007	The *Education Laws Amendment Act 31* of 2007 listed the availability of a library as a minimum uniform norm and standard for school infrastructure (South Africa, DAC, 2009). The *National Education Infrastructure Management System report* (NEIMS) indicated that only 7.23% of public schools have a functioning library and 13.47% have a library room that is not stocked. (South Africa, DAC, 2009, p.41; EE, 2010a, p.7).	Governance State of public school libraries
2007	The *National Survey into Reading and Book Reading Behaviour* of adult South Africans showed that half of South African households had no books and that there was "little articulation between homes, schools, and communities as sites of reading" (South Africa, DAC, 2009, p.79).	Literacy and school libraries
2008	The *Review of National Policies for Education: South Africa* by the *Organisation for Economic Co-operation and Development* (OECD) linked the poor reading achievement results of our primary school pupils in the 2006 *Progress in International Reading Literacy Study* (PIRLS) to the lack of school libraries along with restricted access to books in the home and good quality preschools.	Literacy and school libraries
2008	The *National Norms and Standards for School Infrastructure* assumed that a school library is part of a learning space that every school must have (South Africa, DAC, 2009, p.43).	Governance
Dec. 5 2008	The Library and Information Services (LIS) *Transformation Charter* national summit was held in Pretoria.	Governance
July 2009	The 6th draft of the LIS Transformation Charter was published by the DAC and the National Council for Library and Information Services (NCLIS).	Governance
July 2009	Equal Education (EE) initiated *The Campaign for School Libraries*.	Popular support for school libraries
Sept. 2009	The *CREATE Education Roadmap* facilitated by the Development Bank of South Africa and adopted by the Minister of Education highlighted key issues in education and this included the lack of resources such as libraries, science laboratories and computers (Bloch, 2009).	Broadening awareness of school libraries
Sept. 22 2009	3,000 students marched to the Cape Town City Hall and 65,000 people signed a petition calling for a national policy on school libraries.	Popular support for school libraries

Sept. 25 2009	Member of Parliament, Dr. J.C. Kloppers-Lourens (DA) asked the Minister of Basic Education about the current state of affairs of school libraries and what steps were been taken to address the problem (South Africa, National Assembly, 2009).	Broadening awareness of the state of public school libraries
October 2009	The *Report of the Task Team for the Review of the Implementation of the National Curriculum Statement* of October 2009 presented to Minister Motshekga of the DBE makes reference to the importance of books but does not make any recommendations to this other than the provision of textbooks (South Africa, DBE, 2009). The Minister of Basic Education stated that the department had recently finalised the sixth draft policy on school libraries, *National Guidelines for school library services* (South Africa, National Assembly. 2009).	Governance Governance
January 2010	EE published *We Can't Afford Not To* outlining the situation with regard to school libraries and costing the provision of libraries in South African public schools. The Bookery is established by EE in Cape Town to address the shortage of libraries in the short term.	Popular support for school libraries
April 2010	The Development Bank of South Africa hosted a discussion between representatives of corporate South Africa, Dept of Basic Education's national and provincial representatives and Equal Education.	Broadening awareness of the state of public school libraries
April 19 2010	Member of Parliament, Mr J.R.B. Lorimer (DA) asked if all existing libraries in primary and secondary provincial schools were "functional; and if not, (a) why not and (b) when will they become functional: if so what constitutes a functional library?" (South Africa, National Assembly, 2010, April 19).	Broadening awareness of the state of public school libraries
June 11, 2010	DBE adopted a policy on school infrastructure, *National Policy for an Equitable Provision of and Enabling School Physical Teaching and Learning Environment* (NPEP), which includes school libraries.	Governance
July 30, 2010	5,000 people fasted to highlight the seriousness of the school library situation as well as highlighting the need to lower the price of books.	Popular support for school libraries
August 2010	10,000 learners wrote postcards to government leaders as part of the EE campaign and were supported by100 global education leaders who wrote to President Zuma.	Popular support for school libraries
August 17 2010	Minister Motshekga of DBE wrote to EE and assured them that there is 'approval for library posts.' In its *Action Plan 2014* the DBE commits itself to a 'library in every school.' (EE, 2011a, June).	Governance

Sept. 3, 2010	Member of Parliament, Dr J.C. Kloppers-Lourens (DA) asked whether steps had been taken to resource school libraries fully; if not, why not; if so, what are the plans and proposed timelines for her department to provide every school in the country with a properly equipped library and a trained school librarian? (South Africa, National Assembly. 2010, September) 03).	Broadening awareness of the state of public school libraries
Feb. 16, 2011	Presentation of the *LIS Transformation Charter* by Prof. M. Nkondo on behalf of the NCLIS to the select committee on Education and Recreation after public consultations had been completed by the DAC (South Africa, DAC, 2011).	Governance
Mar. 21, 2011	20,000 learners, teachers, parents, community members and activists marched on Parliament to demand the delivery of *National Norms and Standards for School Infrastructure* by April 1, 2011, the implementation date promised by the NPEP.	Popular support for school libraries
Mar. 31, 2011	A large march to the Union Buildings in Pretoria in support of EE's campaign.	Popular support for school libraries
April, 2011	EE sent hundreds of follow-up letters to the DBE venting their frustration (EE, 2011a, June).	Popular support for school libraries
April 14 and 15, 2011	Council of Education Ministers voted against the adoption of the *National Norms and Standards for School Infrastructure*.	Governance
April 18, 2011	EE met with the *Accelerated School Infrastructure Delivery Initiative* (ASISI) which is part of the DBE who presented their plan for dealing with mud schools and infrastructure backlogs, including libraries.	Popular support for school libraries
May 12, 2011	1,300 mothers of EE members sent an open letter to Minister Motshekga in her capacity as president of the ANC Women's League.	Popular support for school libraries
June, 2011	Countrywide assessment tests administered to over 9 million pupils in public schools in February 2011 found that literacy and numeracy rates of Grade 3s and Grade 6s was between 43% (Western Cape) and 19% (Mpumalanga) with Gauteng at 30% (Mtshali and Smillie, 2011, p. 1).	Literacy rates amongst primary school pupils
June 20, 2011	Debate at Wits School of Education on *School Libraries in South Africa: International Debate* where local academics, government officials and international speakers outlined the issues faced by school libraries in South Africa.	Broadening awareness of the state of public school libraries

June 21, 2011	The Gauteng Education Department's *Showcasing School Libraries* highlighted schools with functional libraries.	Broadening awareness of the state of public school libraries
March, 2012	The *National Guidelines for school library and information services* are adopted (South Africa, DBE, 2012a).	Governance

Table 1 shows the different issues associated with school libraries evident in the documents. These include: the status of school libraries in South Africa; the impact of apartheid on school libraries; the link between literacy and school libraries; governance; the broadening awareness of the state of public school libraries, and advocacy (evident through growing grassroots/popular support for public school libraries). We acknowledge that this is not an exhaustive list of issues. There may be others that are relevant. However, for the purposes of our research, the issues listed in Table 1 were the most prominent.

The state of school libraries in South Africa

Equal Education [EE] (2010a, p.18) referred to the School Register of Needs which in 1997 sounded a warning about the state of public school libraries when it estimated that eight out of twelve million learners did not have access to libraries. The DAC (South Africa, DAC, 2009, p.43) cited a survey done by the Human Research Council in 1999 called, The South African School Library Survey, which reported that only 32% of schools in South Africa had an on-site library. Many of these libraries were shut as there was no dedicated librarian and the teacher in charge was busy teaching. The survey noted that 50% of Independent Schools had well-equipped libraries staffed by professionals (Hart and Zinn, 2007, p.93). In 2004 a provincial survey in KwaZulu-Natal confirmed the scale of the problem when it was found that 19% of the responding 5 156 schools had a central library while 31% had a storeroom or box library (Hart and Zinn, 2007, p.93). The rest of the schools either had no library or did not respond to the question.

Zinn's study of trained school librarians (2006, p.29) showed that in schools ranging in size from 750–1 500 learners, no school library held more than 2 000 books. The school or classroom library however, was "cited most often as the source for reading material" for the reading programme, yet the school library was "quite inadequate for a successful school reading programme".

This finding needs to be viewed in light of the link between school libraries and literacy.

By 2007 the situation had deteriorated further nationwide (see Table 1) as the National Education Infrastructure Management System (NEIMS) reported that only 7.23% of South African public schools had functional libraries (EE, 2010a, p.21). These libraries were mainly in former Model C schools. To put this into perspective, of the 24,979 public schools in South Africa an "estimated 79.3% did not have any form of library infrastructure, meaning that only 20.7% had a room available for library purposes. Broken down further, 13.47% had a library space without resources, while only 7.23% had a functioning library" (EE, 2010a, p.22).

In May 2011 the NEIMS report did not show any significant improvements in the state of school libraries. While 21% of 24,793 schools had libraries, only 7% (5,252 schools) had stocked libraries and 79% (19,541 schools) had no library at all (South Africa, DBE. 2011a, p.23). These numbers are not evenly spread amongst the provinces as can be seen from Table 2. The two provinces, Gauteng and Western Cape, with the most school libraries were also the two provinces with the "higher number of fee-charging former Model C schools" (EE, 2010a, p. 22).

Table 2: Percentage of public schools with stocked libraries in each province

Province	2007 (EE, 2010a:22	2011 (South Africa, DBE, 2011a:23)
Eastern Cape	2.9	3
Free State	8.9	9
Gauteng	18.4	19
KwaZulu-Natal	6.1	6
Limpopo	2.4	2
Mpumalanga	6.2	7
Northern Cape	11.8	12
North West	6.4	6
Western Cape	25.3	26

In her written answer to a question in parliament, Question 1188, concerning what constitutes a 'functional library' the Minister of Basic Education (South Africa, National Assembly, 2010, p.:2) listed elements such as enriching reading experiences and the development of learners' skills as independent learners; provision of resources for teachers and learners; support of teaching and learning; extending the curriculum; skilled staff with dedicated time in the library; up-to-date, attractive and suitable resources in a range of media; adequate funding to ensure ongoing maintenance and development; pleasant and stimulating environments; regularly monitored to assess their use as well as being guided by a whole school library and information development plan.

The IFLA/UNESCO School Library Manifesto (2006) states that school libraries must have sufficient funding for qualified staff, resources, technologies and facilities. Furthermore, the school library should offer resources and learning experiences for children to become critical thinkers as well as "effective users of information in all formats and media" (IFLA/UNESCO, 2006). The DAC acknowledges that in reality South African public school libraries cannot be deemed functional, considering the many challenges they face (South Africa, DAC, 2009, p.40). These include the virtual non-existence of space, funding for reading, learning resources and staff. The absence of a national policy was a problem as well as the lack of capacity of the provincial school library support services. A further problem related to the misconceptions about the links between resource-based learning and the role of the library and the fact that the internet was seen as an alternative to the library which was perceived to house outdated collections of books. In reality however, the White Paper on e-Education reported that many schools lacked basic ICT infrastructure (South Africa, DoE, 2004) and a study done by Stilwell (2009, p.3) showed that if schools had computers they were not used "to generate knowledge or to integrate ICT across the curriculum," but were used mainly for administrative purposes.

Other challenges (South Africa, DAC, 2009, pp.14-16) faced by library and information services generally were the low status of the library profession and the fact that too few librarians are being developed at a tertiary level to meet present and future needs. There also appeared to be a lack of recognition of the role of the library and librarians as agents of change and development. Bot (2005, p.6) noted as a "consequence of historical backlogs and inequalities, exacerbated by the rapid expansion in schooling, there are considerable shortages in infrastructure and a large number of schools are poorly equipped to provide an adequate standard of education".

It is clear from the state of public school libraries, where only a small percentage of schools have functioning libraries, that books and information are not available and accessible to all South African children. As a result school libraries cannot be referred to as transformation spaces in our educational landscape as there are simply not enough functioning libraries to make an impact.

The impact of apartheid on school libraries

The Department of Arts and Culture and the Department of Education (since 2009 the Department of Basic Education) have been trying to redress the inequalities of the past, when the white child was favoured in terms of educational resources. Dick (2002, p.19) observes that in 1953 the Bantu Education Act "entrenched an inferior education for black South Africans under the apartheid Native Affairs Department," which led to the "purge or closure of many existing black school libraries". Stadler (1991) notes that this is attributable to the apartheid ethos, in terms of which "…black people were destined to be 'un-thinking cogs' in the labour machine, in no need of libraries" (Hart and Zinn, 2007, p.91). According to the Vice- Chancellor of the University of the Western Cape, five times the amount of money was spent on a white child compared to a black child during the apartheid era (O'Connell as cited by Pressly, 2011, p.19). This translated into serious inequalities in school infrastructure.

It must be acknowledged that much has been done in recent years to improve school infrastructure: e.g. in the period from 1996 - 2010 the number of schools without water decreased from 9,000 to 1,700 and the number of schools without electricity decreased from15,000 to 2,800 (South Africa, DBE, 2010a, p.32). But despite efforts by the government to improve conditions, the legacy of apartheid has not been easy to erase, particularly in poor rural areas (Lotz-Sisitka and Janse van Rensberg, 2000, p.30). They cite Gordon (1999) who found that 57% of learners in South Africa attended rural schools which were "characterised by gross inequalities and affected by numerous issues associated with the previous government's apartheid policies".

Bloch contends that conditions and outcomes were worse for the mostly black learners attending rural and township schools, where 80% of schools were

dysfunctional. It was in these schools that the majority of learners failed to achieve the outcomes and levels of achievement that were considered standard for each grade (2009). A similar view is evident in Van der Berg's research into poverty and education, which showed that historically white and Indian schools still outperformed the black and coloured schools at the primary school level, showing that "the school system was not yet systematically able to overcome inherited socio-economic disadvantage, and poor schools least so" (2006, p.2). Table 3, showing literacy rates amongst Grade 6 pupils in the Western Cape (EE, 2010b, p.3; EE, 2010c, p.2), illustrates this point:

Table 3: Percentage (%) of Grade 6 learners literate at the standard level of Grade 6

	2003	2005	2007	2009
CED (former 'White' schools	82.9	86.9	No disaggregated results	Disaggregated results withheld from the public
HOR (former 'Coloured' schools)	26.6	35.5		
DET (former 'Black' schools)	3.7	4.7		
Aggregated result for all	35	42.1	44.8	48.6

It is a concern that after 15 years of transition to democracy in South Africa, the Minister of Education (South Africa, National Assembly, 2009) still referred to the "historical neglect of such services particularly for schools serving the poorest communities". In 2010, in answer to Question 1188 tabled in parliament concerning the status of primary and secondary school libraries, the Minister of Education once again linked the absence of functional libraries in schools to the "past inequitable resource provisioning" (South Africa, National Assembly, 2010).

It must be noted that education receives an increasingly large portion of the state's budget each year:

- In the 2005/2006 to the 2008/2009 budget year the average amount of money spent on education was 17.7% representing the largest

item of government expenditure (South Africa, DBE, 2010d, p.12; Appel, 2009, p.1).

- In the 2010/2011 budget education was awarded 20% of budgeted expenditure (Vollgraaff, 2011, p.7).

The fact that the amount of money allocated to education by the national government as a percentage of budget has been growing demonstrates the will on the part of government to provide a quality education for all. Despite this increased expenditure the inequalities due to past policy have not been redressed (Hart and Zinn, 2007). O'Connell notes that spending across all age groups is now equal but represented 30% of the previous spending on a white child; it was not possible to grow the economy to the extent that "the spending previously spent on a white child could be applied across the board" (Pressly, 2011). The authors of the Library and Information Services (LIS) Transformation Charter (South Africa, DAC, 2009) commenting on Mpumalanga's budget for 2009/2010, noted that the spending of R34 per learner was not enough to meet international standards of ten library items per scholar as set by the IFLA/UNESCO School Library Manifesto of 2006. It would require R100 per learner to meet these targets (South Africa, DAC, 2009, p.47), and EE has acknowledged that given the situation in South Africa three books per learner is more realistic (2010a).

The present government and provincial education departments need to take responsibility for their inability to redress the inequalities in school libraries in the system. Towards the late1990s the government attempted to cut costs, and books and stationery were "amongst the first to go" (Lotz-Sisitka and Janse van Rensberg, 2000, p.30). School libraries in South Africa have suffered a "serious decline since 1994" when library expenditure fell under Media Collections (Lotz-Sisitka and Janse van Rensberg, 2000, p. 42). These authors give examples of this:

- In the 1997/98 budget the Mpumalanga Education Department spent nothing and Gauteng spent R906.00 of their Media Collections budget.

- In Mpumalanga many good school libraries were closed due to "rationalisation and redeployment".

This is supported by the findings of the Transformation Charter (South Africa, DAC, 2009, p. 42) where a member of staff in the Eastern Cape Education department's school library support services reported that between 1994 and 2004 "no attention was paid" to school libraries; there were no school library posts and only the ex-model C schools had libraries.

The authors of the Transformation Charter pointed out the irony of the National Norms and Standards for School Funding Act of 1998 which would not interfere unreasonably with parents' discretion as to how to spend their own resources on their children's education (South Africa, DAC, 2009, p. 42). It had not helped government's redress strategy as the funding provisions in the Act favoured the libraries or library spaces in those schools "…patronised by middle-class and wealthy parents". In Gauteng the 200 functioning school libraries were all found to be in 'wealthy' areas with the school librarians being paid by the schools' governing bodies (South Africa, DAC, 2009, p.42). In reality, as Hart and Zinn stated (2007, p.90), school libraries "continue to be an indicator of class advantage".

In 2008 the Organisation for Economic Co-operation and Development [OCED] (p.87) reported that our school libraries are in "poor shape", despite a lucrative (R9.6 million) commercial market in supplementary non-book materials such as wall charts mostly in the cities. The Transformation Charter (South Africa, DAC, 2009, p.55) highlighted another problem area with regard to expenditure: the differing approaches of the provincial governments, independent schools and ex-Model C schools (the last two being the only schools with budgets for school libraries). The trend was seen by the authors as *ad hoc* and unsustainable, with serious implications for public school libraries as there were no dedicated school librarian posts as well as "no strategic interventions for the uptake of ICT in school libraries and unwieldy tendering processes that delay provision".

Zinn (2006, p.21) observes that "by 2000, as specialist posts were abolished at schools, the training of school librarians trickled to zero". The fact that there is no budget for school librarian posts (Thomson, 2010, p.1) has implications for the service provided by the school library, as the responsibility tends to fall on members of staff who are full time teachers in the poorer no fee or low fee schools. This problem is highlighted in a recent COSATU research paper that states: "without dedicated librarians books are not enough. Even though there might be books in a school these are locked up in store rooms or are not used because educators do not know how to use them" (EE, 2010a, p.14). The

Transformation Charter (South Africa, DAC, 2009, p.47) also recorded anecdotal evidence of unopened boxes of books in schools and claimed that "there has to be someone in the school to manage the resources and to champion their productive use".

The written reply to a question raised in parliament (South Africa, National Assembly, 2010, April 19), from the Minster of Basic Education about the steps the government is taking to provide for trained school librarians was vague and disappointing; "the provision of teacher librarians will have to be made within the context of broad post provisioning according to priority needs in the system" (South Africa, National Assembly, 2010 September). Even more disappointing is the fact that there appear to be no long-term plans for school library posts: the Action Plan 2014: Towards the realisation of schooling 2025 makes no provision for school librarian posts and librarian training, which is "crucial to providing functioning libraries" (EE, 2010d, p.14).

Several provincial library support services had provided schools with library materials as a result of public schools having no budget to spend on school library services (South Africa, DAC, 2009, p. 46). This was done on an *ad hoc* basis with amounts varying from nothing in several provinces to R5 million in the Eastern Cape for 2007, and R40 million in KZN between 2005 and 2007 (South Africa, DAC, 2009, p. 46).

Stilwell (2009, p.2) citing Zinn (2006), pointed out yet another problem in equipping school libraries. This relates to changes to the funding formulae for school library materials, which meant that the funds were "no longer ring-fenced". The term used by government, 'learning and teaching support materials' (LTSM) includes "textbooks, books, charts, models, computer hardware and software, televisions, video recorders, videotapes, home economics equipment, science laboratory equipment and musical instruments"(South Africa, DBE, 2010c, p.4). The wording is too vague and the actual percentage of money that should be allocated to library materials is not specified (South Africa, DBE, 2012a, p.25). Gauteng for example ensured that 10% of the budget was reserved for this purpose (South Africa, DAC, 2009, p.47).

As stated in the Education for All report on South Africa, "while significant progress has been made towards the realisation of the right to basic education, a greater effort is required to make further education more accessible.

Moreover, much more is required to improve the quality of education provided" (South Africa, DBE, 2010d, p.10). The result is that by 2012 the issue of access to a school library for all children has still not been adequately addressed.

The link between literacy and school libraries

The concept of literacy has changed and developed over the past 50 years and now includes competencies in the basics (reading, writing and calculation) as well as in information and technology (United Nations Educational, Scientific and Cultural Organisation [UNESCO], 2006). Although the definition of literacy has changed it is significant to note that literacy has always included reading. An information literate person according to the American Library Association (1989) is able to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information."

South Africa kept up with international trends with regard to information literacy with Curriculum 2005 (1996) and later, the Revised National Curriculum Statement (RNCS), (South Africa, DoE, 2002), which placed information skills very firmly as a critical outcome of learning. The 2002 RNCS describes the 'desired learner' as one who has these skills amongst others and lists seven critical outcomes and five developmental outcomes in the South Africa Qualifications Act (1995), some of these emphasising literacy and information literacy skills in particular.

This outcome was "library friendly" in "both its ethos and its pedagogies" (Hart, 2006, p.77) as the need for information literacy education was "widely accepted to be a specific mission of school librarianship" (Hart and Zinn, 2007, p.89). But the Transformation Charter (South Africa, DAC, 2009, p.40) observes that there is a "lack of appreciation of the links" between what is acknowledged as a 'resource-based curriculum' and school libraries.

Hart (2006, p.77) notes the impact of the increase in project work as a result of these outcomes on public libraries. Due to a lack of resources in their own schools learners have had to use public libraries in the afternoons, and Hart's quantitative study in 2002 (2006, p.78) documented "the unmanageably large numbers and long queues of children at the photocopiers".

Literacy is seen as both a right in itself and a means of achieving other rights: as "literacy is a key outcome of education, it is difficult to separate the right to literacy from the right to education or the benefits of literacy from those of education" (UNESCO, 2006, p.135). In 2002, UNESCO declared 2003-2012 the United Nations Literacy Decade and passed Resolution 56/116 placing literacy at the heart of lifelong learning , in terms of which literacy was seen as "crucial to the acquisition, by every child, youth and adult, of essential life skills that enable them to address the challenges they can face in life, and represents an essential step in basic education, which is an indispensable means for effective participation in the societies and economies of the twenty-first century" (UNESCO, 2006, p.155). Their report on Sub-Saharan Africa (p. 1) notes that literacy is still a right denied to many in the region, which, at less than 60%, has one of the lowest adult literacy rates in the world. South Africa's adult literacy rates stand at 78% (South Africa, DBE, 2010d, p.74).

Pretorius (2005, p. 790) showed that quantitative studies by the University of South Africa, between 1998 and 2001, of the reading abilities of undergraduate students demonstrated a relationship between reading ability and academic performance. The students who failed had "problems constructing meaning during reading. This limits their understanding of print-based material, and hence their difficulty in constructing new knowledge in the learning context" (Pretorius, 2005, p.807). This was supported by a study of South African teachers' reading competences by Bertram (2006), which found that a third of teachers enrolled in a distance education programme in a SA university were reading ordinary academic text at frustration level, and that there was a strong correlation between reading competences and academic achievement.

In 2000 the review of Curriculum 2005 found that the new curriculum was faring well in formerly white schools because they were better resourced (Hart and Zinn, 2007, p.100). Hart concurred and stated that there were good examples of information literacy programmes centred in good school libraries and resource centres where learners created knowledge using various sources of print material. These examples are to be found almost always in independent schools or those schools that have been historically advantaged, such as the former Model C schools (2007, p. 3). This means that schools that serve poor communities in South Africa cannot afford a library or a qualified librarian and as a result find themselves at a disadvantage when it comes to implementing the very curriculum that was designed to redress past inequalities in education.

By 2009, Outcomes Based Education, which was introduced to support Curriculum 2005, was perceived as problematic, and another review of the curriculum was undertaken (South Africa, DBE, 2011b, p.4). One of the recommendations by a Ministerial Committee related to the quality of textbooks and the need for other learning and teaching material (LTSM) to be centralised at national level.

Systemic evaluations by the DoE of Grade 3 and 6 learners in the fields of literacy and numeracy painted a bleak picture of learner achievement in reading and mathematics. In 2001, Grade 3 learners achieved an average score of 39% for reading comprehension and 30% for numeracy, whilst Grade 6 learners in 2004 achieved 38% in language and 27% in mathematics (South Africa, DBE, 2008). The situation has not improved as the literacy and numeracy results in 2007 "were worse, with highs of 48% and 49% in Western Cape and lows of 29% and 24% in Limpopo" (South Africa, DBE, 2010d, p.35). The downward trend continued, as reflected in the large scale February 2011 assessment tests, Annual National Assessments (ANA), which found that literacy and numeracy rates of Grade 3s and Grade 6s were between 43% in the Western Cape and 19% in Mpumalanga (Mtshali and Smillie, 2011, p.1), with the best provincial figure being 46% for Grade 3 literacy in the Western Cape (South Africa, DBE, 2011c, p.6). These results were "well below what can be considered acceptable" (South Africa, DBE, 2011c, p.6) and reflected the continuing failure of the vast majority of South African primary schools to provide their learners with the fundamental literacy skills in the earliest grades.

The DBE also acknowledged that the poor performance of the schooling system as a whole was "brought to the fore each year in unsatisfactory Grade 12 examination results which reflect a serious under-representation of, in particular, African and Coloured learners, especially in subjects such as mathematics and physical science which are linked to critical career opportunities" (South Africa, DBE, 2010a, Part B, p.4). South Africa has participated in four comparative studies which measure school quality:

- In the second study, done by the Southern and Eastern Africa Consortium for Monitoring Education Quality (SACMEQ II) between 1994-2004, of the achievements of mathematics and literacy amongst Grade 6 learners in east and southern Africa, South Africa came 9th out of 14 countries. 49.9% of our learners

were not able to understand the meaning of basic written information (EE, 2010a, p.5).

- South Africa's Grade 8 learners achieved the lowest average test scores in 1999 (out of 41 countries) and 2003 (out of 50 countries) in the Trends in International Mathematics and Science Study (TIMSS), (South Africa, DBE, 2008).

- In 2006 in the Progress in International Reading Literacy Study (PIRLS) our Grade 4 and 5 learners achieved the lowest scores out of 45 countries tested by the International Association for the Evaluation of Educational Achievement (South Africa, DBE, 2008).

- The third study by the Southern and Eastern Africa Consortium for Monitoring Education Quality (SACMEQ III) was not particularly encouraging as it showed that although by 2007 our Grade 6 learners had shown some improvement in reading and mathematics, the change was minimal (Makuwa, 2010, p.4; South Africa, DBE, 2010d, p.47). Less affluent countries such as Botswana, Swaziland, Kenya and Tanzania performed better than South Africa (South Africa, DBE, 2010d, p.47).

These studies showed that South Africa did not compare favourably to the rest of the world as well as other neighbouring African countries poorer and less developed than us. Taylor summed this up when he concluded from these studies that "South Africa is not getting value for money from its public school system" (2007, p.2).

There is a relationship between the lack of public school libraries and the poor results in reading that have been recorded in three of the studies above. As McKenzie (2010, p.1) insists, a thriving library programme was "central to the success of a school's reading and learning programmes". Schools where learner outcomes were poor were nearly all schools that were to be found in deprived areas, and it must be noted that these are the very schools that lack "the most basic resources to teach literacy and numeracy, or... have very few resources to make any difference in the quality of teaching and learning in the classroom" (South Africa, DBE, 2010d, p.64). This was evident in Pretorius's study (2010, p. 73) which showed that making books accessible to learners

was a "basic requirement for reading development yet one that is typically absent in poor schools".

OECD (2008, p.187) makes the link between poor literacy rates amongst our underprivileged children in primary schools, mostly in the rural areas, and the lack of school or local libraries in these areas "despite 40% of teaching time being allocated to literacy during the Foundation Phase (grades R-3), and 25% to Language Learning Areas (including literacy) during the Intermediate Phase (grades 4-6)".

EE (2010a, p.45) states that the majority of our learners are not learning to read because of the "simple inaccessibility of books". This view is supported by Taylor (2002, p.14), who makes a strong case for reading and books. He argues that "progression in school learning is essentially about learning to read and write at successively higher levels of cognitive complexity while the different school subjects represent distinct areas of specialised knowledge and language. It follows that the quality of learning at each level crucially depends on the presence and productive use of good textbooks and other reading and writing materials". Pretorius (2005, p.793) noted in her qualitative study of the first-year psychology students at Unisa who struggled to read, that they all came from township primary and secondary schools in Gauteng. She explained that "none of the students had much exposure to book reading outside of their school textbooks, none had been taught any reading or comprehension strategies at school, none of them went to libraries or read books for leisure, and none of them came from families in which the reading of books magazines or newspapers played any significant role on a daily basis". A later study (Pretorius, 2010, p.73) suggested that when poor schools are helped by making books available together with the constant motivation of learners to read, reading levels improve.

The DBE is aware of the link between reading and books, as can be seen by this statement in the Report of the Task Team for the Review of the Implementation of the National Curriculum Statement: "providing a print rich environment, especially for children who come from homes that lack books and reading material, is critical to the development of the ability to read well" (South Africa, DBE, 2009, p.52). The latest version of the national curriculum (the Curriculum and Assessment Policy Statement [CAPS]) which is being phased at present places an emphasis on independent reading in English Home Language in the Intermediate Phase (South Africa, DBE, 2012b, p.15), and in Social Sciences children need "access to a variety of reading books and

visual material suitable for the grade" (South Africa, DBE, 2012c, p.8). It is evident that the role of a school library is as important as ever.

Governance of school libraries

Many aspects of governance have an impact on public school libraries. These include lack of policy, closing of the School Libraries Unit, unclear mandates between different government agencies with influence over school libraries, the lack of will by policy makers, as well as the *ad hoc* nature of interventions by government to provide solutions to the crisis in public school libraries.

Lack of a national school policy

Several draft school library policies have been circulated since 1997 by the DoE but none has been adopted. Hart (2006, p.76) cites Karlsson, who in 2003 referred to the process as "a slow and discontinuous process". The Transformation Charter (South Africa, DAC, 2009, p. 43) saw the lack of national policy with unambiguous guidelines as stalling the progress of school libraries and reported that although some provinces (KZN, Free State and Mpumalanga) have developed their own policies there are limitations with these initiatives, especially with regard to the "provision of school librarian posts".

In 2009, the Department of Education (South Africa, National Assembly, 2009) finalised guidelines called National Guidelines for School Library Services, as part of a broader strategy to provide practical guidance to provinces, districts and schools on how to ensure access to library services for all schools. In reply to Question 1188 by a member of parliament (See Table 1 April 19, 2010) the Minister of Basic Education wrote that this would be achieved by:

1. Roles and responsibilities on the four levels of government – national, provincial, district and school.

2. Development model options included – mobile libraries, cluster libraries, classroom libraries, centralised school libraries and school community libraries.

3. Also "physical infrastructure, staffing and training, administration and management, resource collection, programmes and activities, e.g. an information literacy and reading promotion programme, marketing and advocacy strategies and finally monitoring and evaluation plans to assist schools in ensuring that their goals regarding library and information services are achieved" (South Africa, National Assembly, 2010).

This was a disappointing response to the issue of a national school library policy. At the debate held in Johannesburg, School libraries in South Africa: international debate (2011), Zinn contended that these guidelines represented a downgraded or slimmed down version of a national policy document and suggested that guidelines would not pressurise schools into creating libraries.

Closure of the School Libraries Unit in the National Department of Education

The School Libraries Unit was closed in 2002 (EE, 2010, p.18). Stakeholders are calling for the re-establishment of the national school library unit within the Department of Basic Education and for this unit to draw up implementation plans for policy (South Africa, DAC, 2009, p.44). The implications for policy development and enforcement are worrying, as Hart and Zinn (2007, p.98) argue, because "without a national coordinating office, there is little or no direction and provinces cannot insist that schools 'ring-fence' their budget".

Differing mandates between government agencies responsible for school libraries

The Transformation Charter (South Africa, DAC, 2009, p.48) makes reference to the problem that collaboration between departments was being hindered by the fact that school libraries and public libraries fell under different national and provincial government departments (DBE and DAC respectively), but at the same time both departments shared a role in education. Hart and Zinn (2007, p.94) note that a few school library support services have had to relocate from different departments such as the DAC and were often "hamstrung" by being placed in "inappropriate departments within education, for example sport".

It took 19 months for the Transformation Charter (Table 1 - February 16, 2011) to be presented to the Select Committee on Education (South Africa, DAC, 2011), as public consultations, interviews with scholars and practitioners and the consultation of available academic literature were only completed in February 2011. This was a long time considering the urgency of the issues that the DAC's Transformation Charter and the DBE sought to address. Significantly, at the presentation there was a call for reform and changes to the way libraries and educational institutions conduct their business. The lack of a national school library policy on norms and standards as discussed earlier was identified as the core challenge (South Africa, DAC, 2011). Other challenges were the overlapping mandates across government sectors of the DBE, and the DAC as well as the different tiers of government concerned with libraries (South Africa, DAC, 2011; South Africa, DAC, 2009).

Yet the development of standards and policy for school libraries falls under the Department of Basic Education. Stilwell (2009, p.1) maintains that the actual provision of school library facilities is "a competence shared by the National Education Department, the provincial authorities and the school governing body". The 1996 Constitution determined the responsibilities of our different tiers of government, with national departments being responsible for laying down policy and the provinces mandated to implement policy and administer schooling (Hart and Zinn, 2007, p.93). All the provinces had a school library service in their education departments, whose influence in reality was "constrained by their rather low status within their parent education departments and the small size of their staffs" (South Africa, DAC, 2009, p.45). The exception was KwaZulu-Natal, the only province whose department had directorate status. Hart and Zinn (2007, p.93) have identified a further problem, the situation of school library advisors who were "placed in decentralised district offices, [and] report on a day-to-day basis to the district office's manager, who might have little understanding of the educational role of school libraries". All the provinces were battling to cope with the large number of schools "under their wings" (South Africa, DAC, 2009, p.45).

Lack of will by policy makers

Stilwell (2009) notes that until recently there were no champions for the library and information sector's role in education. According to Zinn (2006, p. 23), since 2001 there has been a "void at national education level, with

nobody taking the lead for the school library fraternity. Zinn (2006) cites Karlsson, who referred to this oversight as the department's "blind spot". The point was illustrated in the Western Cape, when the provincial education department offered solutions to the poor literacy levels amongst Grade 3 learners which did not include a school library (Zinn, 2006, p.23). Hoskins (2006, p.63) cites Boekhorst and Britz's study (2004), which looked at information literacy at school level. The authors concluded that the role that school libraries have to play in enhancing information literacy was "currently undervalued".

In stark contrast to the two examples above, the KwaZulu-Natal Department of Education acknowledged the importance of the school library when affirming in 2003 that the school library was the "heart of the school and can play a vital role in helping the education system to achieve its goals" (Hoskins 2006, p.61).

Hart and Zinn (2007, p.101) argue that the DoE's lack of response to the librarians' submissions by the School Library and Youth Services Interest Group (SLYSIG) in 2005 (Hart and Zinn, 2007, p.96) on the RNCS and the failure to institute a national school library policy represents a 'lack of will' to "recognise the role of school libraries in the curriculum". Hart and Zinn (2007, p.94) point to another "stumbling block", the reluctance of school governing bodies in charge of schools at a local level to "recognise the need for school libraries". Hart and Zinn (2007, p.101) contend that there appears to be a "fundamental lack of understanding among educators and policy-makers of the role of a school library", and that this is true of educators across the board. Teachers, curriculum advisors and educational managers are "not convinced that libraries are beneficial and spend entire 'learning support materials' budgets on textbooks and photocopy paper" (Hart and Zinn, 2007, p.101).

A review of the relevant literature revealed that research shows that libraries have an impact on student achievement. In the light of this, and given the "evidence of the success of the new curriculum in well resourced schools", the lack of will is "puzzling" (Chisholm, cited by Hart and Zinn, 2007, p.98). It would appear that our policy makers in the education department were either not convinced or did not have the will to implement a national school library policy until Minister Pandor publicly made "the connection between the development of school libraries and improved literacy levels" in 2005 (Zinn, 2006, p.23). But Pandor is no longer the Minister of Basic Education.

Ad hoc nature of government interventions

Taylor (2002) makes reference to the systemic reform of education systems based on the need to align and mediate accountability. He points to large scale systemic reform in the United States and the United Kingdom in particular, where the largest and most successful initiative was launched by the British government in 1997. Known as the National Literacy and Numeracy Strategy (NLNS), targets were set by the Minister of improving the average numeracy scores from 54% to 75% and literacy scores from 57% to 80% for all 11 year olds by 2002. By 2000 literacy had improved to 75% and numeracy to 72%. The success of the programme was attributed to the fact that there was a national plan setting targets, actions, responsibilities and deadlines; a great deal of money was spent especially on poorer schools and on books; the expectation that every child would be exposed to maths daily and a literacy hour daily; teacher training and ongoing professional training of administrators, principals and teachers to enable "every primary school teacher to understand and be able to use best practice in teaching literacy and numeracy", as well as regular external monitoring and evaluation (Taylor, 2002, p.7).

The DBE has played a role in trying to improve literacy by developing a culture of reading through several initiatives which do not include providing a school library. In comparison to the NLNS, the department's literacy policy seems to be piecemeal and without real accountability. These initiatives include: developing and finalising a National Reading Strategy which was sent to all schools; developing a Teacher's Toolkit in all 11 languages; sending packs of books to a number of poor schools, suitable for Grades 1- 3, in a campaign known as 100 Storybooks Project, and deploying mobile library buses in all provinces (South Africa, DAC, 2009). Bloch (2010, p.6) refers to other initiatives by the DBE to expand library resources to schools and learners. These included the Drop All and Read campaign which has provided 30 000 learners and parents with books in all languages. In 2006 the Quids-Up programme provided 4402 poor schools with classroom library collections. The Foundations for Learning Programme recommended that schools set aside time to read every day, and the partnership with the Sunday Times aimed to put 500 000 books in 2600 schools through a storybook campaign. The DBE produced the mass literacy programme, Kha ri Gude, which was recognised internationally as one of its achievements to date (South Africa, DBE, 2011b). In 2011 standardised national workbooks for

Grades 1 to 6 were introduced to "improve classroom practices" (South Africa, DBE, 2011c, p.5).

The draft school library policies proposed several school library models, the implication being that providing every school with a library was not possible (South Africa, DAC, 2009). Options included classroom collections, mobile libraries, container libraries or clustering schools around one library facility or dual use school /public libraries. The DBE saw that the strengthening of partnerships with organisations that provide library and information services was key to their library and information services strategy, with its role being the provision of guiding principles for these partnerships. Bloch (2010, p. 9) reported that among the partnerships already in place were the Vodacom Foundation, which provided 50 mobile library units to primary schools in Northern Cape, Free State, Limpopo, Mpumalanga and KwaZulu-Natal. In 2009, ten mobile library units were provided to the Quids-Up schools of the Eastern Cape. The South African Primary Education Support Initiative provided 21 mobile libraries and 12 more were expected by mid 2010; TSB Publishers undertook to plan, build and equip ten libraries per year over the next ten years starting in 2011; A Book for Every Child Foundation agreed to establish 15 libraries in each province, using available space in the schools.

The provision of material resources to schools is an encouraging start to solving the problems of literacy in South Africa, but is a long way from addressing the need for a systemic approach of the sort evidenced in the United Kingdom. The issue of who teaches reading and information literacy skills is not addressed and one questions whether these resources will be optimally used without the use of a trained professional.

Of concern is the fact that school libraries are not seen as the first solution, as was demonstrated by the response to the Equal Education's campaign to provide functioning libraries to all schools. Ms Hope Mokgatlhe, DoE spokesperson, stated in The Teacher supplement of the Mail and Guardian that: "A stand-alone library for every school would be unattainable, given the historical neglect of this… the department has focused on trying to ensure access to resources in a practical and implementable way. This involves creating and improving classroom library collections, mobile libraries, resources for schools in community libraries and stand-alone libraries that serve a cluster of schools" (EE, 2009, December).

In answer to a question in parliament about the state of school libraries and what government was doing about it, the Minister of Basic Education (South Africa, National Assembly, 2009) reported that 2000 stand-alone libraries had been built since 2000, and library services to schools included the provision of: classroom library collections, 21 mobile libraries serving just fewer than 500 schools with no access to libraries, the provision of library books to schools with inappropriate or inadequate library collections and the supplementing of school collections in community libraries.

As far as infrastructure is concerned, the DBE appears to be in a state of perpetual planning, as evidenced by the manner in which the issue of school libraries is being dealt with. The policy National Norms and Standards for School Infrastructure of 2008 stated that a school library was part of a learning space every school must have (South Africa, DAC, 2009, p.43). In June 2010 the DBE adopted a policy on school infrastructure which included school libraries, the National Policy for an Equitable Provision of and Enabling School Physical Teaching and Learning Environment (NPEP).

Meanwhile Goal 20 of the Action Plan to 2014: Towards the realisation of schooling 2025 as published on 2 August 2010 provided for libraries or media centres to be built in schools with the commitment by government "to promote mini-libraries within classrooms which can assist in giving learners access to materials until the school has a fully-equipped library" (South Africa, DBE, 2010a, p.28). Goal 20 (p.28) also indicated that new standards indicated "what kind of library or media centre a school should have, depending on whether it is a primary or secondary school, and depending on the total enrolment of the school". On 14 April 2011 the Council of Education Ministers voted against the adoption of the National Norms and Standards for School Infrastructure. A few days later, 18 April 2011, a new plan, The Accelerated School Infrastructure Delivery Initiative (ASISI) was presented as the DBE's plan to deal with mud schools and infrastructure backlogs.

Again the DBE's approach to infrastructure planning seems makeshift and there has been no systemic approach to tackling the infrastructure issues. It must be acknowledged however that Part B of Action Plan to 2014: Towards the realisation of schooling 2025 represented an admission by the DBE (South Africa, DBE, 2010a) of the need for long-term planning to "discourage *ad hoc* and fragmented planning, to encourage everyone to think of the long-term implications of decisions taken, or not taken, now, and to provide inspiration in our current work by means of a clear picture of where we want to take

South Africa's schools". An encouraging sign was that the Delivery Agreement (South Africa, DBE, 2010b, p. 4) represented a "major overhaul of government's planning systems," and was linked to Action Plan to 2014 which focused on 12 outcomes to achieve quality education, with each outcome having a limited number of measurable outputs linked to a set of activities aimed at achieving targets and contributing to the outcomes. The Delivery Agreement has introduced a measure of accountability by clarifying the roles and responsibilities of various delivery partners (South Africa, DBE, 2010b).

In its comment on Action Plan 2014: Towards the realisation of schooling 2025, EE supported this new initiative and welcomed the plan as a "progressive attempt to coordinate efforts at addressing the crises that affect our education system" (EE, 2010d, p. 17). EE also welcomed the emphasis on proper monitoring and evaluation but added a condition that should be heeded by government, namely the setting of clear targets with regard to the provision of learning materials and school infrastructure. At issue is the fact that although clear targets have been set for the improvement of average language and mathematics scores of learners between now and 2025, there are no "clear targets for improving access to the learning materials" such as libraries, computers and better school infrastructure (EE, 2010d, p. 8-9).

Broadening awareness of school libraries

The Review of Curriculum 2005 in 2002 made a connection between student achievement and resources, and this was highlighted in the CREATE Education Roadmap in 2009. Among other initiatives depicted in Table 1 is the discussion hosted by the Development Bank of South Africa (2010), School Libraries – where do we go? The various representatives of the DBE, EE and corporate South Africa have highlighted the state of public school libraries and brought the issue to the attention of the wider audience in South Africa. Questions in parliament in 2009 and 2010 (Table 1) have also spotlighted the issue as have the two international debates on school libraries in South Africa held in Johannesburg and Cape Town in 2011. As the DBE (2010b, p.14) acknowledged; "access by learners to materials beyond their core set of textbooks and workbooks, in particular access to a school library and information through the internet" is much more in the open as a result of the "considerable attention recently in the public debates".

Advocacy

Two groups have represented the interests of school libraries in South Africa in particular. The School Library and Youth Services Interest Group in the Library and Information Association of South Africa (LIASA) is one group. This is a voluntary organisation whose members "have engaged in national and regional advocacy for library services wherever the opportunity arises" (Walker, 2007, p.15).

The other organisation, Equal Education (EE), is a movement described by Dugger of the New York Times (2009, p.1) as a "quintessentially South African answer to transform schools into engines of opportunity". Founded in 2008, EE involves learners, parents, teachers and community members working towards "quality and equality in South African education through analysis and activism" (EE, 2010a, p.7). EE has successfully campaigned for the repair of broken windows in a school, and against late coming in Khayelitsha schools in the Western Cape (Toffoli, 2011, p.1). EE has also championed the cause of school libraries by launching a Campaign for School Libraries (1 School, 1 Library, 1 Librarian) in 2009. The struggle for school libraries represents the group's "first attempt to tackle a national issue"(Dugger, 2009, p.2).

From the timeline (Table 1) it can be seen that the efforts by EE to heighten awareness of the plight of school libraries has led to a peaceful and active campaign over the past three years, working towards "ensuring that the government provides every school with a library; a trained, full-time librarian or library administrator; adequate shelving; computer facilities; 3 books per learner; as well as annual funding to service each library by ring-fencing 10% of the Learning Teaching Support Materials (LTSM) allocation" (EE, 2010a, p.8). This research shows that school libraries have a social advantage, as 50% of learners identified school libraries as quiet and stable environments in which to do homework and study for exams. They also offered access to books in communities where homes did not have books.

For EE the key demand was the need for the DBE to provide a national policy on school libraries and then to develop an implementation plan stating that the legal framework already exists in Section 5A of the South African School Act which "empowers the Minister of Basic Education to prescribe minimum

norms and standards for school infrastructure, including that there 'must' be 'a library'" along with full-time librarians (EE, 2010a, p.9).

Conclusion

We have explained how an analysis of newspaper and magazine articles (print and internet sources), blogs, research reports, marches for school libraries, debates, questions in parliament, as well as government responses, helped us to illuminate the contestations and problems facing public school libraries in South Africa at present. We contend that the most fundamental issue that needs urgent attention is that of governance. As a matter of urgency we need to re-establish the national library service unit, finalise and implement a national school policy on libraries, resolve which government department has the mandate for school libraries, and implement government initiated and driven strategic actions that address systemic issues. Without effective governance, school libraries will not play the meaningful role that they should in achieving quality education. It is unacceptable that schools serving poor communities that cannot afford a library will continue to be at a disadvantage when implementing a resource-rich national curriculum that was designed to redress past inequalities in education. On a more positive note, it is encouraging to note the increasingly strong advocacy and activist roles being played by organisations such as Equal Education and The School Library and Youth Services Interest Group in the Library and Information Association of South Africa.

References

American Library Association. 1989. *Information Literacy Competency Standards for Higher Education*.
<http://www.ala.org/acrl/standards/informationliteracycompetency>
Accessed 14 January 2013.

Appel, M. 2009. Education: SA's biggest investment.
http://www.southafrica.info/about/education/budget2009e.htm#.UdGFcPkwcsw
Accessed 8 April 2009.

Bertram, C. 2006. Exploring teachers' reading competencies: a South African case study. *Open Learning*, 21(1): pp.5–18. <Ebscohost database> 22 May 2009.

Bhorat, H. and Oosthuizen, M. 2008. Determinants of Grade 12 pass rates in the Post-Apartheid South African schooling system. Personal communication.

Bloch, G. 2009. *The education roadmap in South Africa: policy brief number 9*. Consortium for Research on Educational Access, Transitions and Equity (CREATE). <http://www.create-rpc.org> Accessed 8 May 2009.

Bloch, G. 2010. DBSA dialogue: school libraries – where do we go? School Libraries Conference, Development Bank of South Africa, Midrand, 8 April.

Bot, M. 2005. School education in South Africa: tracking change over ten years. *Edusource*, 48: pp.1–15.

Dick, A.L. 2002. *The development of South African libraries in the 19th and 20th centuries: cultural and political influences*.
<www.dissanet.com/ifla/pdf/LIASA%2002%20Dick.pdf>
Accessed 8 April 2009.

Dugger, C.W. 2009. *South African children push for better schools.*
The New York Times.com.
<http://www.nytimes.fom/2009/09/25/world/africa/25safrica.html>
Accessed 28 September.

Equal Education. 2009. *Response to DoE's comment on school libraries.*
<www.equaleducation.org.za> Accessed 4 July 2013.

Equal Education. 2010a. *We can't afford not to: costing the provision of functional school libraries in South African public schools*. Khayelistsha: Equal Education.

Equal Education. 2010b. *Submission to Portfolio Committee on Basic Education – comments on how to improve basic education.*
<www.equaleducation.org.za> Accessed 12 February 2011.

Equal Education. 2010c. *Memorandum: we demand a national policy on school libraries: 1 school 1 library 1 librarian!* <www.equaleducation.org.za>
Accessed 12 March 2011.

Equal Education. 2010d. *Comment on Action Plan 2014: towards the realisation of 'schooling 2025.'* <www.equaleducation.org.za>
Accessed 15 June 2011.

Equal Education. 2011a. *The campaign for school libraries*. Pamphlet handed out at the debate School Libraries in South Africa: International Debate held at the Wits School of Education, Johannesburg, June 2011.

Equal Education. 2011b. Debate on school libraries in South Africa, 21 June.
<http://www.equaleducation.org.za/node/560>
Accessed 15 July 2011.

Hart, G. 2006, March. The information literacy education readiness of public libraries in Mpumalanga Province (South Africa). *Libri*, 56(1): pp.48–62.
http://www.librijournal.org/pdf/2006-1pp48-62.pdf>
Accessed 11 April 2011.

Hart, G. and Zinn, S. 2007. The conundrum of school libraries in South Africa. In Bothma, T., Underwood, P. and Ngulube, P. (Eds). *Libraries for the future: progress and development of South African libraries*. Proceedings of the 73rd IFLA General Conference and Council.
Accessed 8 April 2009.

Hoskins, R. 2006. Libraries and teacher-librarians in KwaZulu-Natal. *Innovation*, 33: pp.59–75.
<www.ajol.info/index.php/innovation/article/view/26523
Accessed 12 May 2011.

IFIO/Unesco school library guidelines, 2006.
http://archive.ifla.org/VII/s11/pubs/manifest.htm
Accessed 28 September 2009.

Lance, K.C., Rodney, M.J. and Russell, B. 2007. *How students, teachers and principals benefit from strong school libraries: the Indiana Study –2007.*
<http://www.ilfonline.org/clientuploads/AIME/2007MSArticle.pdf>
Accessed 3 November 2009.

Lonsdale, M. 2003. *Impact of school libraries on student achievement: a review of the research.* Report for the Australian School Library Association. http://www.asla.org.au/site/defaultsite/filesystem/documents/research.pdf Accessed 5 May 2010.

Lotz-Sisitka, H. and Janse van Rensberg, E. 2000. *Learning for sustainability contextual profile*. Johannesburg: Learning for Sustainability Project.

Makuwa, D. 2010, September. What are the levels and trends in reading and mathematical achievement? *Southern and Eastern African Consortium for Monitoring Educational Quality(SACMEQ)*. <http://www.sacqmeq.org.sacmeq3.htm> Accessed 4 April 2011.

McKenzie, J. 2010. Why we still need libraries and librarians. *From Now On*, 19(4). Retrieved 13 April 2010 from http://fno.org/mar2010/still.html

Mtshali, N. and Smillie, S. 2011. Many of our kids can't read or write. *The Star,* 2 June: p.1.

Organisation for Economic Co-operation and Development (OECD). 2008. *Reviews of National Policies for Education: South Africa*. http://www.oecd.org/southafrica/reviewsofnationalpoliciesforeducation-southafrica.htm Accessed 11 March 2011.

Pressly, D. 2011. Doubts over hike in school finance. *The Sunday Independent: Business Report*. 24 July: p.19.

Pretorius, E.J. 2005. What do students do when they read to learn? Lessons from five case studies. *SAJHE*, 19(4): pp.790–812.

Pretorius, E.J. 2010. Do the rich get richer and the poor poorer? The effects of an intervention programme on reading in the home and school language in a high poverty multilingual context. *International Journal of Educational Development*, 30: pp.67–76.

School Libraries in South Africa: International debate 2011, June 20. Debate held at the Wits School of Education, Johannesburg.

Scholastic Library Publishing. 2008. School libraries work! (3rd ed.). Research Foundation Paper. <http://listbuilder.scholastic.com/content/stores/LibraryStore/pages/images/SLW3.pdf> Accessed 25 May 2010.

South Africa. Department of Arts and Culture. 2009. *Library and Information Services (LIS) Transformation Charter, July 2009. 6th draft.* http://www.dac.gov.za/publications/reports/2009Transformation%20charter-6th%20draft-22102009.pdf
Accessed 27 June 2010.

South Africa. Department of Arts and Culture. 2011. *LIS Transformation Charter: presentation to the Select Committee on Education and Recreation.* <http://www.pmg.org.za/report/20110216> Accessed 17 July 2011.

South Africa. Department of Basic Education. 2008. *Education for All (EFA) Country Report: South Africa*. <http://www.education.gov.za/>
Accessed 6 June 2010.

South Africa. Department of Basic Education. 2009, October. *Report of the Task Team for the Review of the Implementation of the National Curriculum Statement*. <http://www.info.gov.za/view/DownloadFileAction?id=123634>
Accessed 8 July 2010.

South Africa. Department of Basic Education. 2010a. *Action Plan to 2014: Towards the Realisation of Schooling 2025*. <http://www.education.gov.za>
Accessed 6 April 2011.

South Africa. Department of Basic Education. 2010b. *Delivery agreement for outcome 1: Improved quality of basic education*. <http://www.education.gov>
Accessed 1 June 2011.

South Africa. Department of Basic Education. 2010c. *Response to Equal Education's memorandum*. <www.equaleducation.org.za>
Accessed 11 June 2011.

South Africa. Department of Basic Education. 2010d. *Education for All (EFA) 2010 Country Report: South Africa*. <http://www.education.gov.za/>
Accessed 24 June 2010.

South Africa. Department of Basic Education. 2011a. *NEIMS (National Education Infrastructure Management System) reports May 2011.* <http://www.education.gov.za/LinkClick.aspx?fileticket=hHaBCAerGXc%3D&tabid=358&mid=1802>
Accessed 29 July 2011.

South Africa. Department of Basic Education. 2011b. *South African Country Report: Progress on the implementation of the Regional Education and Training Plan (integrating the Second Decade of Education in Africa and Protocol on Education and Training; SADC and COMEDAFV.* <http://www.education.gov.za/> Accessed 26 July 2011.

South Africa. Department of Basic Education. 2011c. *Report on the Annual National Assessments of 2011.* <http://www.education.gov.za /LinkClick.aspx?fileticket=1U5igeVjiqg%3D &tabid=358&mid=1325>
Accessed 29 July 2011.

South Africa. Department of Basic Education. 2012a. *National Guidelines for School Library and Information Services.* <http://www.education.gov.za/>
Accessed 14 January 2013.

South Africa. Department of Basic Education. 2012b. *Curriculum and Assessment Policy Statement: Intermediate Phase Grades 4–7. English Home Language.* <http://www.education.gov.za/> Accessed 16 January 2013.

South Africa. Department of Basic Education. 2012c. *Curriculum and Assessment Policy Statement: Intermediate Phase Grades 4-7. Social Sciences.* <http://www.education.gov.za/> Accessed 16 January 2013.

South Africa. Department of Education. 2002. *Revised National Curriculum Statement.* <www.info.gov.za> Accessed 11 August 2011.

South Africa. Department of Education. 2004, September. *White Paper on e-Education: Transforming learning and teaching through information and communications technology. Notice 1922 of 2004.*
http://www.education.gov.za/LinkClick.aspx?fileticket=Keu0%2fBkee%2bM%3d&tabid=191&mid=484
Accessed 15 August 2009.

South Africa. Government Gazette. 2007. *No 31 of 2007: Education Laws Amendment Act, 2007*.
<http://www.info.gov.za/view/DownloadFileAction?id=77779>
Accessed 6 June 2010.

South Africa. National Assembly. 2009, September 25. *For written reply Question 1418*. <www.equaleducation.org.za> Accessed 15 June 2011.

South Africa. National Assembly. 2010, April 19. For written reply Question 1188. <www.equaleducation.org.za> Accessed 15 June 2011.

South Africa. National Assembly. 2010. *For written reply Question 2500.* <www.equaleducation.org.za> Accessed 15 June 2011.

Stilwell, C. 2009. Mapping the fit: library and information services and the national transformation agenda in South Africa, Part 11. *South African Journal of Library and Information Science*, 75(1): pp.1–11.

Taylor, N. 2002, January. *Accountability and support: improving public schooling in South Africa: a systemic framework*. Paper presented to the National Consultation on School Development Department of Education.
http://www.jet.org.za/publications/research/Taylor_Accountability%20and%20support%20Taylor%20DoE%202002.pdf/view
Accessed 4 June 2010.

Taylor, N. 2007. *Equity, efficiency and the development of South African schools*.
http://www.jet.org.za/publications/research/Taylor%20Equity%20efficiency.pdf
Accessed 6 June 2010.

Thomson, I. 2010. *School libraries fundamental to pupils' success.*
<http://blogs.uct.ac.za/blog/sa-libraries-in-the-news/school-libraries>
Accessed 18 July 2011.

Toffoli, H.P. 2011. Real people doing unreal things: the school crusade. *Financial Mail*. Retrieved 1 July 2013, 11 March from
http://www.accessmylibrary.com/article-1G1-251315229/real-people-doing-unreal.html

United Nations Educational, Scientific and Cultural Organisation. 2009. *Education for all (EFA) global monitoring report 2006*. <http:www.unesco.org/en/efareport/reports/2006-literacy/> Accessed 4 August 2009.

Van der Berg, S. 2006. *How effective are poor schools? Poverty and educational outcomes in South Africa*. Stellenbosch Economic Working Papers:06/06. <http://ideas.repec.org/p/sza/wpaper/wpapers20.html> Accessed 26 May 2010.

Vollgraaff, R. 2011. SA's education woes laid bare. *Sunday Times: Business Report,* 24 July: p.7.

Walker, C.M. 2007. *LIASA 1997 – 2007: Background and recent history*. <www.dissanet.com/ifla/pdf/LIASA%2013%20Walker.pdf> Accessed 16 January 2013.

Zinn, S. 2006. Have trained school librarians made a difference for school libraries in South Africa? *Innovation*, 33: pp.21–35. Now available at a fee at http://www.ajol.info/index.php/innovation/article/view/26520 Accessed 20 May 2011.

Zinn, S. 2011. *School libraries in South Africa: international debate*. Johannesburg: Wits School of Education.

Margie Paton-Ash
Di Wilmot
Department of Education
Rhodes University

margiepash@gmail.com
d.wilmot@ru.ac.za

Journal of Education

Periodical of the Kenton Education Association

School of Education and Development
School of Adult and Higher Education
University of KwaZulu-Natal

The *Journal of Education* is an interdisciplinary publication of original research and writing on education. The Journal aims to provide a forum for the scholarly understanding of the field of education. A general focus of the journal is on curriculum. Curriculum is understood in a wide and interdisciplinary sense, encompassing curriculum theory, history, policy and development at all levels of the education system (e.g. schooling, adult education and training, higher education). Contributions that span the divide between theory and practice are particularly welcome. Although principally concerned with the social sciences, the journal encourages contributions from a wider field.

While it is intended that the journal will remain academic in nature, the readers are considered to be educational generalists and articles which are of interest to such readers will receive preference. Potential contributors are asked to ensure that submissions conform to the guidelines outlined at the back of the journal.

The journal is freely available in Adobe Acrobat format on the World Wide Web at http://joe.ukzn.ac.za. Though there is no system of subscription, a limited number of hard copies are published for holding libraries and authors.

Editorial Committee

Editorial Board

Notes for Contributors

Journal of Education will appear at least twice per year.

Submissions

Unsolicited papers are welcome for consideration and should be addressed to the Editor of the *Journal of Education*. Submitting authors should note that a per page fee of R100 will be levied on published submissions. Institutional Research Offices of higher education institutions usually pay this type of fee. Authors whose affiliated organisation may not have instituted this practice are asked to contact the Editor, as the levy is a means of sustaining the journal, and is not intended as a deterrent to aspiring authors!

Articles and review essays are reviewed by anonymous external referees. Appropriate papers will be refereed for significance and soundness. Papers are accepted on the understanding that they have not been published or accepted for publication elsewhere.

Articles and essay reviews (maximum 6 000 words); debate, discussion and research notes (2 500 words); book reviews (2 000 words); and book notes (200 words) will be considered.

Contributors should submit an electronic version of the article by e-mail to the Editor at JoE@ukzn.ac.za. This should not be formatted, and preferably not use a variety of fonts and font sizes or use paragraph styles. Where necessary, however, authors may wish to indicate levels of subheadings (i.e. first level, second level). Each paper should be accompanied by a 100–150 word abstract. Footnotes should be kept to a minimum, and authors are asked to keep tables and diagrams to the most feasible level of size and simplicity. Tables and diagrams should also be sent in separate files. The name(s) and full address(es) of the author/s should appear on a separate sheet.

Each author will receive a copy of the journal in which the paper appears.

Educators or publishers outside South Africa wishing to reproduce articles in publications or compilations of readings should contact the Editor.

Referencing style

Journal of Education style of referencing is a requirement. References in the text should appear as follows:

> No country in the world can afford the schooling its people want (Reimer, 1971) and it has been argued that "of all 'false utilities', school is the most insidious" (Illich, 1971, p.60).

The references should be listed in full at the end of the paper in an acceptable standard format, preferably the following:

Books

> Surname(s), Initial(s). Year of publication. *Title: additional title information*. Edition (if other than the first). Place of publication: Publisher.

Chapters in edited or compiled books

> Surname(s), Initial(s). Year of publication. Title of chapter or article. In Surname(s), Initial(s) of editor(s) or compiler(s). (Eds). or (Comps). *Title of book*. Edition (if other than first). Place of publication: Publisher. Inclusive page numbers of the chapter.

Journal articles

> Surname(s), Initial(s). Year of publication. Title of article. *Name of journal* volume number (part number (if there is not continuous pagination)): inclusive page numbers.

Articles and reports in magazines and newspapers

> Surname(s), Initial(s). Year of publication. Title of article. *Name of magazine or newspaper* day and month: inclusive (and additional) page numbers.

Book reviews

Surname of reviewer, Initial(s). Year of publication. Title of review (if there is one). [Review of] *Title of book reviewed* by Name of author in its most familiar form. *Name of periodical* volume number (part number) or date (if applicable): inclusive page numbers.

Theses and dissertations

Surname, Initial(s). Year. Title: additional title information. Description of work. Location of university: name of university.

Seminar papers

Surname, Initial(s). Year. Title: additional title information. Unpublished seminar paper. Location of university: name of university, name of department, programme or unit.

Conference papers (unpublished)

Surname(s), Initial(s). Year. Title: additional title information. Description of occasion (including the nature and subject of the conference or meeting, name of the society or group, the place at which it was held and the date(s) on which it was held).

Duplicated materials

Surname(s), Initial(s). Year. Title: additional title information. Description of material. Location of issuing body: name of issuing body.

Interviews

Surname of person interviewed, Initial(s). Year. Interviewed by initial(s) and surname of interviewer. Place where interview occurred, further details of date (day and month). Details of location of transcript, if available.

Personal communications

Surname of person with whom communicated, Initial(s). Year. Description of communication, further details of date (day, month).

Microforms, audio-visual material, CD-ROMs etc.

> As for works above but with the addition of the format in square brackets at the end of the reference, e.g. [Microfilm] or [Videotape] or [CD-ROM], etc.

Online sources of information (published or unpublished)

> Surname(s), Initial(s). Year of publication. *Title.* Version (if any). Place of publication: Publisher.
> <Address of web page between> Day, month (and year if different to publication year) of visit to site.

Correspondence should be addressed to:

The Editor
Journal of Education
School of Education
University of KwaZulu-Natal
Private Bag X01
Scottsville 3209

Telephone: +27 033 – 260 6091/6206
Fax: +27 033 – 260 5080
E-mail: JoE@ukzn.ac.za

Frequently asked questions

Is the Journal of Education SAPSE accredited?
Yes

How many issues per year?
In terms of a recent policy decision, we aim to produce at least two 'normal' editions of the journal each year in addition to at least two special issues (one of which will be the Kenton Special Edition).

Most journals now have a per page fee which contributors are required to meet should their articles be accepted. Does the Journal of Education levy such charges?
Yes. This step was necessary to cover the costs of the increased number of issues each year. A levy of R100 per page will be applied to successful articles submitted to our office. The central research offices in most institutions of higher education routinely arrange for such payments to be made. We encourage individual authors who do not have such cover to contact us.

Are articles peer reviewed?
Yes. Our goal is for articles to be refereed by three experts in the field.

What is the waiting period after submission?
Referees provide their crucially important service for no reward, and are sometimes unable to oblige on time but we endeavour to respond within three months.

Can I send my submission by e-mail?
Yes. The electronic version of the article should be sent as an email attachment.

To what extent should an article being submitted be presented in 'the style' of the journal?
Citation and referencing should be in the style of the journal (see the previous section 'Notes for Contributors'). Authors are not expected to reproduce the particular fonts and font sizes used in the journal, but the levels of headings and subheadings should be clear. With regard to the electronic version of the article, we prefer as little formatting as possible.

Does the journal have a policy to encourage and support budding novice researchers?
Unfortunately not – this is simply beyond our capacity. While we welcome extended comment that referees may be able to offer, we cannot impose on their good services beyond the expectation of an overall judgement on the article, together with brief justification of that judgement.

What is the rate of acceptance/ rejection?
The following statistics for 2008 and 2009 provide an indication of the pattern of acceptance/ non acceptance:

Year	Accepted with no or minor revisions	Accepted after revisions	Not accepted
2011	4	24	58
2012	1	11	30

Even an increase in the number of issues each year will not keep pace with the ever-increasing number of submissions. We can do little to mitigate the competition engendered by state funding policy and the kinds of incentive schemes that have become a feature of the higher education landscape.

Is there an appeal mechanism should my article not be accepted?
Beyond summarizing reasons for rejection – where applicable – we regret that we are unable to enter into detailed discussion on decisions reached by the Editorial Committee on the basis of referee reports.

The journal describes itself as providing "a forum for scholarly understanding of the field of education". What does this really mean?
We understand this as implying that articles should represent a rigorous enquiry (conducted through argumentation or empirically) into the understanding of educational issues. Such inquiry originates in a problem rather than a solution, and it is rare for such enquiry to have no reference to, or engagement with, a broader literature and theory. Advocacy in the form of prescriptions or 'how to do it' recipe knowledge for practitioners seldom finds favour with referees. The question of audience is key. The assumed audience is the collective body of researchers rather than those more narrowly concerned with the effective implementation of specific policies.

Recent non-acceptances include a high proportion of undeveloped research reports, summaries of dissertations, and even sound but small-scale case studies that are purely context specific and unconnected with broader issues, literature or theory. Similarly, even a successful conference paper is usually in need of further development before it merits publication.