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Knowledge production and higher education transformation in South Africa: Towards reflexivity in university teaching, research and community service

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Abstract. The central question this article addresses is whether the emergent shift in knowledge production can transform higher education in South Africa to the extent that it becomes socially more relevant. It is my contention that higher education transformation in South Africa can become socially more relevant if guided by the idea of a reflexive praxis which allows for the integration of "Mode 1" and "Mode 2" forms of knowledge production. I argue that Mode 1 or disciplinary knowledge should be supplemented by Mode 2 socially distributed knowledge which would cause academics to engender community service which integrates their research at universities and its application in the broader community. In other words, a reflexive praxis needs to be charted out on the part of academics which would not cause their service to be disengaged from the real problems in society, but rather, opens up possibilities for greater social relevance – a matter of "Mode 2" supplementing "Mode 1".

Keywords: community service, higher education, reflexivity, research, South Africa, teaching, transformation

Introduction

To be a university academic at the present time in post-apartheid South Africa should be both disturbing and challenging. Globally (including South Africa) there is a shift towards problem-solving or applied as opposed to disciplinary research (ways of experiencing and constructing knowledge) as a result of a growing demand for social relevance and accountability (Muller 1999, p. 10). In view of this emergent shift in knowledge production or formation (research), universities are increasingly being challenged in terms of their responsiveness and relevance to societal needs (Subotzky 1999, p. 17). Given the extent of world-wide moral, economic and social problems, there is increasing pressure on universities to bridge the gap between higher education and society and "to become active partners with parents, teachers, principals, community advocates, business leaders, community agencies, and general citizenry" (Braskamp and Wergin 1998, p. 62).

Moreover, international trends suggest that the merits of the research and teaching university relative to its considerable public costs is continuously under scrutiny in countries such as the United States, United Kingdom, Russia and Canada. This is so primarily as a result of a decline in economic growth, which forces governments to reduce their subsidies to public universities. In the face of these disturbing crises, a need for a different concept of higher education has emerged where universities excel in community service (in the form of providing integrated teaching and research-based services grounded in knowledge production in the context of its application), rather than a model in which universities focus exclusively on conventional academic research and teaching (Cummings 1998, pp. 1–3). The challenge that universities need to supplement teaching and research with community service whereby academics through teaching and research can provide applied knowledge to assist communities in the solution of social problems is obvious enough. In this way, universities and communities become jointly responsible for social change (Braskamp and Wergin 1998, p. 87).

Higher education transformation

Transformation is a form of change of one form into another (Harvey and Knight 1996, p. 10). It is with such an understanding of transformation in mind that I agree with Van Niekerk (1998, p. 65) when he states that "transformation is not its own goal; the goal is an improved, more just and more equitable society". When one *transforms* society from, say, the inequities of the present to a "more just and equitable society", one responds to a future one wishes to achieve through an ongoing process of rethinking – a process of change from one form to another. In support of this view of transformation, Carrim (1998, p. 301) states the following in relation to South African education:

> The system of apartheid seriously affected the nature of educational provision and order in South Africa. It ensured that South Africans were schooled in segregated environments. This meant that every level of schooling was cast in a racial mould; educational budget provisions, the structure of educational bureaucracies, the composition of staff and pupils in schools (and universities), the kind of curriculum followed, and the ethos prevalent in schools. Transforming education in South Africa, therefore, entails *erecting changes on all of these levels. This requires no less than an overhaul of the past educational order*, a redefinition of the culture prevalent in schools throughout the country and a shift in mentality, from being racist, undemocratic and authoritarian to being non-racial, democratic and enabling (my emphasis).

In the realm of higher education, change can be understood as a shift in the level of knowledge acquired, produced, implemented and questioned on the part of educators and learners – processes of coming to know, understand, implement, reflect. This makes transforming higher education more than just a process of producing "skilled acolytes" but also about

> ... producing people who can lead, who can produce new knowledge, who can see new problems and imagine new ways of approaching old problems. Higher education has a role to prepare people to go beyond the present and be able to respond to a future which cannot be imagined (Harvey and Knight 1996, p. 10).

Transformation in higher education involves a process of new knowledge production, reflexive action, which means seeing new problems and imagining new ways of approaching old problems and, deconstruction and reconstruction or constant exploring beneath surface appearances "to respond to a future that cannot be imagined". In this regard, Esterhuyse (1996, p. 79) is correct when he refers to transformation as a process where no "correct" projection can be made into the future in the light of present and past socio-political developments.

So transformation in higher education is not merely adding to students' knowledge base, skills and potential. At its core transformation refers to the *ongoing change* in the way educators and students approach the acquisition of knowledge and skills and relate them to a broader context (Harvey and Knight 1996, p. 12). By implication, transformation is about empowering those involved in the higher education process, to develop the critical ability of students and educators to the extent that they become self-determined (rational) and reflexive.

The legacy of unjustifiable inequalities generated by the apartheid system which characterised the higher education system in South Africa, in response to which the African National Congress published its discussion document on education and training in January 1994, is broadly summarised by Bunting (1994, pp. 224–227) through the following characteristics:

- Uneven *access* to higher education institutions which offered White South Africans a greater chance than Black South Africans of gaining admission to universities and technikons.
- *Success rates* of students (outputs) of previously administered House of Assembly (White) universities have been significantly better than those of other groupings of universities under the management of House of Delegates (Indians), House of Representatives (Coloureds) and the Department of Education and Training (Blacks).

- Unequal *employment opportunities* for those who are not White. In 1994 nearly Whites held nearly 90% of permanent academic posts in all South African universities and technikons.
- Under-representation of *women* in certain professional programmes and in senior academic and administrative ranks of higher education institutions.
- Unequal *staffing resources* in terms of student-lecturer ratio and better qualifications which favoured historically White universities (HWUs), and inequitable *financing* which had a bias towards HWUs.
- Lack of *responsiveness* (relevance) and "democratic accountability" of higher education institutions to the needs of the majority of South Africans.

A major challenge emerged for the government of national unity in 1994 to put educational policies into place that would help unwind the legacy of apartheid, and which would result in the establishment of a higher education system that would address the imperatives of transformative conditions such as equal access, development, accountability and quality. Morrow (1998, p. 387) makes the point that higher education institutions should not be exonerated from having perpetuated "patterns of injustice" propounded by the apartheid state. In his words,

> ... the Apartheid state can be seen as having made explicit what was merely implicit in colonialism. It imposed on society its own racially inspired definition of the groups which make up society and systematically consolidated those definitions in ramifying legislation. As part of that project the unequal dignity, status and privileges of the officially defined groups were reinforced in such a way that their advantages and disadvantages would be carried forward into the future. The gross and blatantly unjustifiable inequalities which this ideological regime spawned became more and more difficult either to ignore or to hide and the edifice, with all its rationalizations, collapsed. One way of putting this point is to say that Apartheid over-rode major and significant interest groups in society; many voices were excluded from collective decision making by being marginalized, ignored, silenced or "eliminated". But this political strategy could not last for ever. Eventually the mounting pressures of excluded interest groups destroyed the whole oppressive regime. ... In a way educational institutions, and particularly higher education institutions, can be seen as the *epitome of this pattern of injustice*. Such institutions are major distributors of benefits in society, especially those benefits which stretch forward into the future. Universities, in particular, are bastions of privilege and as soon as one presses the questions of who is paying for them and who their beneficiaries are, then their key role

> in the maintenance and perpetuation of an unjust society becomes clear (Morrow 1998, p. 387, my emphasis).

In South Africa the Higher Education Act of 1997 emphasises the establishment of a single co-ordinated higher education system that responds to the needs of society and communities served by institutions. In line with this, I contend that teaching and research universities in South Africa also need to expand their community service orientation in order to prepare and develop academics for the needs of effective provision in higher education.

The concept of community service that will be developed later on in this article is grounded in the emerging mode of knowledge production called "Mode 2", that is, knowledge which is socially accountable, reflexive, transdisciplinary and problem-oriented. Knowledge produced in the context of its application gives rise to a concept of community service that does not undermine the merits of research and teaching. Rather, community service integrates with teaching and research through "the delivery, installation, and maintenance of knowledge-based applications to clients" within and outside the university (Cummings 1998, p. 1). In other words, the article holds the position that teaching and research universities should carefully "go service" and also become "Mode 2" knowledge producing agencies without harming their positions as teaching and research universities with sound "Mode 1" disciplinary bases. Instead, I contend that community service should be viewed as a potential engine for the effective preparation and continuing development of academics for their various roles in higher education, unlike conventional notions which depict service as voluntary charitable work (Henning 1998, p. 44) and merely "part of good citizenship" (Gordon 1997, 75). In a different way, I shall argue that teaching and research universities in South Africa should "become more responsive to *social* problems and to function as a forum for the expression and negotiation of social discourse" (Subotzky 1999, pp. 16–17).

Unlike the traditional disciplinary teaching and research university, where the research problem originates with the problematics of the discipline, the problem for problem-solving research arises in a context of application. This means that knowledge is increasingly produced through addressing the political and social problems in South Africa directly. Such problem-oriented research is often financed by the private sector and less and less by traditional statutory councils (Muller 1999, p. 10). These fiscal limits encountered by universities invariably affect the role academics need to assume if they intend contributing effectively towards establishing a new higher education system that can also be socially accountable and relevant. Many external influences which impact the role academics should fulfill are:

- the newly proposed National Qualifications Framework (NQF) which emphasises competencies and closer links between education, training and the recognition of prior learning;
- the Higher Education Act's (1997) demand that new, flexible and appropriate curricula be developed which integrate knowledge with skills and that standards be defined in terms of learning outcomes and appropriate assessment procedures;
- the Ministry of Education and the South African Qualifications Authority's (SAQA) priority to link one level of learning to another and enable successful learners to progress to higher levels without restriction from any starting point within the higher education system; and
- a new accreditation system for higher education to be promoted and developed by various role players in collaboration with prospective Education and Training Quality Assurers (ETQAs) (Lategan 1998, p. 62).

I contend that an increased demand on universities to change akin to external variables should have the effect whereby academics develop better skills to deal effectively with the teaching and research processes. I shall argue in this article that university academics ought to develop a reflexive praxis. I contend that such a practice would contribute towards ensuring that the exclusivity of the traditional academic and disciplinary based teaching and research university does not remain isolated from the social problems of the broader South African society, irrespective of reduced state subsidies for universities. In addition, as I shall argue in the article, for academics to pursue a reflexive praxis the achievement of transformation within higher education more specifically equal access, development, accountability and quality may not necessarily be unattainable. This brings me to a discussion of a reflexive praxis.

Reflexive praxis

Much has been written on the subject of praxis. Briefly, in my reading of Aristotle's (1955, p. v) *Nichomachean Ethics*, the history of the concept clearly reveals that it is a practice of "doing something", that is, engaging in morally committed actions such as education and other ethical, political and social discourses. In an Aristotelian sense praxis is a discourse concerned with the "bios praktikos" – a practice committed to right living through the pursuit of the human good (Aristotle 1955, p. v). More specifically praxis is an educational discourse concerned with how to promote "intrinsically worthwhile ends" (Peters 1966, p. 54). Praxis is different from "poiesis" or "making action", that is, action by which the end is to bring some specific product

or object into existence such as a ship or a brick wall. Carr (1998, p. 175), drawing on the Aristotelian tradition of epistemological presuppositions of praxis, explains the concept as "a form of 'doing action' precisely because its end can only be realised 'through' action and can only exist in the action (discourse) itself".

It is with the above historical understanding of praxis as a form of "doing action" in mind that I shall now explore the notion of reflexivity.

Schwandt (1997, p. 135) refers to reflexivity or reflectivity as two different ideas informing qualitative inquiry: (1) the process of critical self-reflection on one's biases, theoretical predispositions, preferences, and so on; and (2) critical examination of *how* one's personal and theoretical commitments serve as resources for generating particular constructions of meaning in particular contexts, meanings one would probably not have thought about. It is in this sense that I make sense of reflexive action as a logically necessary condition of praxis which "can itself transform the 'theory' which guides it" (Carr 1998, p. 180), in this instance, critical educational discourse. In a different way, reflexive action involves critically examining one's personal and theoretical dispositions and, at the same time, investigating how one's personal and theoretical commitments can transform patterns of critical educational discourse.

Briefly, critical educational discourse is driven by the emancipatory interest; that is, its purpose is to contribute to change in people's understanding of themselves and their practices and thus free them from constraints of society (Carr 1983; Giroux 1983; Aronowitz and Giroux 1992). A critical educational discourse strives to engender self-reflective enquiry amongst individuals to bring about the clear articulation of arguments in an atmosphere of openness to overcome ideological distortions generated within social relations and institutions (Carr and Kemmis 1986, p. 162). A critical approach to educational discourse aims to generate critical action in others and gives rise to conditions to replace one distorted set of practices with another, hopefully less distorted set of practices (Carr and Kemmis 1986, p. 197).

The question arises: How can a reflexive praxis contribute towards transforming teaching and research within higher education in order for such institutions to become more responsive to *social* problems?

Knowledge production within higher education transformation

After the demise of the dominance of the apartheid education model for several decades, the higher education system in South Africa has undergone major restructuring. The current higher education policy framework is guided by the 1996 report of the National Commission on Higher Educa-

tion (NCHE) which provided the framework for its reconstruction and laid the foundation for the 1997 Education White Paper 3 on Higher Education and the subsequent Higher Education Act (1997). This framework is heavily informed by international financing, quality assurance, governance and national qualifications models from the United Kingdom, Australia, Canada and New Zealand (Subotzky 1999, p. 15).

The preamble of the Higher Education Act of 1997 is mainly concerned with issues of equality, development, accountability and quality. It states that the purposes of the Act are to:

1. Establish a single co-ordinated higher education system which promotes co-operative governance and provides for programme-based higher education.
2. Restructure and transform programmes and institutions to respond better to the human resource, economic and *development* needs of the Republic.
3. Redress past discrimination and ensure representation and *equal access*.
4. Provide optimal opportunities for learning and the creation of knowledge.
5. Promote the values which underlie an open and democratic society based on human dignity, *equality* and freedom.
6. Respect freedom of religion, belief and opinion.
7. Respect and encourage democracy, academic freedom, freedom of speech and expression, creativity, scholarship and research.
8. Pursue excellence, promote the full realisation of the potential of every student and employee, tolerance of ideas and appreciation of diversity.
9. Respond to the needs of the Republic and of the communities served by the institutions.
10. Contribute to the advancement of all forms of knowledge and scholarship, in keeping with international standards of academic *quality*.
11. Enjoy freedom and autonomy in relation with the State within the context of public *accountability* and the national need for advanced skills and scientific knowledge.

A reflexive praxis as has been argued for can contribute towards transforming higher education institutions. Like any other concept, praxis occurs in particular contexts of meaning making or what has now become common to refer to as "modes of knowledge production". Therefore to understand how a reflexive praxis can shape higher education, I first need to expound on current debates about knowledge production.

Muller (1999, p. 3) explains the increasing salience of knowledge as a form of symbolic capital increasingly being organised as *the* central form of productive capital as follows.

- In the economy: knowledge in the form of data, plans, blueprints, patents, programmes and theories become *immediately* productive in the sense that it decreasingly requires labour and machines as intermediaries before it produces value.
- In politics and civil society: knowledge of all sorts is increasingly sought by groups, communities, as well as individuals as they conduct themselves and pursue their interests in the bewildering complexity of modern civic life. Recent examples would include contests around desirability of mineral extraction, land rights claims, abortion, the environment, and so on.
- In private life: knowledge becomes the tool with which individuals negotiate the complexities of everyday life, from taxation (tax counselors) to unfair labour practices (shop stewards and human resource personnel); from relationships (marriage counselors) and diet (nutritional knowledge) to health and consumption (consumer information agencies).

By implication the work of knowledge producers and reconfigurers becomes central to the life of all citizens (Muller 1999, p. 4). I shall now examine two different ways in which knowledge production can be mapped out.

"Modes" of knowledge production and higher education policy

As a preliminary I shall briefly refer to the nature of knowledge itself, a concept central to the discussion of a reflexive praxis at higher education level. Following Hirst's (1998, p. 255) explanation of the nature of knowledge, I deduce that to acquire knowledge is to become mindful of organised, rational (meaningful) human experience of the world in "a way otherwise unknown, and thereby come to have a mind in the fuller sense". What does Hirst mean by structured and rational human experience? Hirst (1998, p. 260) contends that structured and rational human experience "involves the use of symbols and the making of judgments in ways that cannot (always) be expressed in words and can only be learnt in a tradition". These traditions or modes of knowledge include: (1) distinct subdivisible disciplines such as mathematics, physical sciences, human sciences, history, religion, literature and the fine arts, philosophy and, (2) theoretical and practical fields of knowledge (such as geography and politics) which are not themselves disciplines or subdivisions of any discipline and are formed by building together around practical pursuits and rooted in more than one discipline. It is with such an understanding in mind that I shall examine these two traditions of knowledge production, that is, structured, organised and rational human experience.

Gibbons et al. (1994) distinguish between two modes (traditions) of knowledge production, namely, "Mode 1" and "Mode 2". "Mode 1" knowledge production refers to

> . . . a complex of ideas, methods, values, norms – that has grown up to control the diffusion of the Newtonian model to more and more fields of inquiry and ensure its compliance with what is considered sound scientific practice. Mode 1 is meant to summarise in a single phrase the cognitive and social norms, which must be followed in the production, legitimation and diffusion of knowledge of this kind. For many, Mode 1 is identical with what is meant by science. Its cognitive and social norms determine what shall count as significant problems, who shall be allowed to practise science and what constitutes good science. Forms of practice which adhere to these rules are by definition scientific while those that violate them are not (1994, p. 3).

"Mode 2" in contrast to "Mode 1" knowledge production is articulated by Gibbons et al. (1994, p. vii) as follows:

> Our view is that while Mode 2 may not be replacing Mode 1, Mode 2 is different from Mode 1 – in nearly every respect. The new mode operates within a context of application in that problems are not set within a disciplinary framework. It is transdisciplinary rather than mono- or multi-disciplinary. It is carried out in non-hierarchical, heterogeneously organised forms which are essentially transient. It is not being institutionalised primarily within university structures. Mode 2 involves the close interaction of many actors throughout the process of knowledge production and this means that knowledge production is becoming more and more socially accountable. One consequence of these changes is that Mode 2 makes use of a wider range of criteria in judging quality control. Overall, the process of knowledge production is becoming more reflexive and affects at the deepest levels what shall count as "good science".

The constitutive features which distinguish "Mode 2" from "Mode 1" knowledge production as stated above can be considered in more detail in terms of five categories: knowledge in the context of application (socially distributed knowledge), transdisciplinarity, heterogeneity and organisational diversity, social accountability and reflexivity, and quality control.

Knowledge in the context of application

"Mode 1" problem solving is conducted within a disciplinary context, whereas "Mode 2" problem solving is performed in specific contexts

of application. In these contexts of application, knowledge is negotiated whereby people (educators, students, parents, communities, academics and other groups) make sense of their own worlds, to determine their own interests, both individual and collective, and connect their experiences to relevant social issues.

Transdisciplinarity

"Mode 2" transdisciplinary knowledge arises in "a continuous linking and re-linking, in specific (disciplinary) clusterings and configurations of knowledge" and therefore it is "generated in the context of application". Gibbons et al. (1994, p. 29) argue that

> (a) transdisciplinary mode consists in a continuous linking and re-linking, in specific clusterings and configurations of knowledge which is brought together on a temporary basis in specific contexts of application. Thus it is strongly oriented towards and driven by problem solving. Its theoretical methodological core, while cross-cutting through well-established disciplinary cores, is often locally driven and locally constituted, thus, any such core is highly sensitive to further local mutations depending on the context of application.

Emerging clusters of transdisciplinary knowledge according to Gibbons et al. (1994, p. 29) include cultural studies, urban studies, women's studies, and so on, which are not developed first and applied later (Kraak 1999, p. 4). It is in this regard that I think McLaren (1991, p. 10) makes sense when he claims that "all knowledge is relational and can only be understood within the context of production, its distributions, and the way it is taken up by different individuals and groups". Put differently, knowledge does not comprise a universal, value-free body of facts, independent of the understandings of people. Rather, it is produced, located and understood within existing social and cultural formations (Giroux 1999, p. 17). Hence, Gibbons et al. (1994, p. 11) explains transdisciplinarity as "problem solving capability on the move".

Heterogeneity and organisational diversity

"Mode 2" knowledge is organisationally diverse and heterogenous unlike "Mode 1" which is homogenous, that is, disciplinary knowledge is rigidly institutionalised. Organisational diversity arises because "Mode 2" is the outcome of "sites of knowledge production". Located at these sites are temporary teams of knowledge producers with diverse backgrounds such as academics, production engineers, skilled craftspersons and social scientists,

researchers and so on (Kraak 1999, p. 14). In other words, in addition to the traditional university, other diverse sites of knowledge production may include government and industrial laboratories and research centres, think-tanks, consultancies and civil society organisations. Gibbons et al. (1994, p. 6) refer to such transient clusters of temporary teams and networks as new organisational forms of "Mode 2" knowledge production:

> (Teams of knowledge producers) dissolve when a problem is solved or redefined. Members may then reassemble in different groups involving different people, often in different loci, around different problems. ... Though problems may be transient and groups short-lived, the organisation and communication patterns persists as a matrix from which further groups and networks, dedicated to different problems, will be formed.

Social accountability and reflexivity

"Mode 2" knowledge is produced through engaging people critically and reflexively in action for the reason that "the issue on which research is based cannot be answered in scientific and technical terms alone" (Gibbons et al. 1994, p. 7). Teams of diverse workers constitute a collaborative group of critical inquiry that links the need for greater social accountability to the acknowledgement of other viewpoints. They are different, yet they inter-subjectively share and negotiate patterns of meaning in order to broaden the conditions for the production of socially relevant knowledge. They become more reflexive and sensitive to the broad social implications of their work in varying contexts. In this way, people are self-critical, yet remain socially engaged, that is, in "constant dialogue" with others (educators, researchers, planners, community groups, and so on) and other viewpoints to address the most pressing social (educational) and political problems of their time (Giroux 1992, p. 20).

Quality control

In "Mode 1" the main criterion for judging the quality of knowledge produced is "peer review". In "Mode 2" additional role players, whether from the university, research councils, government departments or industry, bring "external criteria" to the review process. This combination between "peer review" and external merit judgements in "Mode 2" knowledge production raises questions about social acceptability, cost-effectiveness, widening of knowledge applicability in a market-oriented society and about what constitutes "good science". In assessing the quality of knowledge produced Gibbons et al. (1994, p. 8) claim the following:

> So, the peer review process is one in which quality and control mutually reinforce one another. It has both cognitive and social dimensions, in that there is professional control over what problems and techniques are deemed important to work on as well as who is qualified to pursue their solution. In disciplinary science, peer review operates to channel individuals to work on problems judged to be central to the advance of the discipline. These problems are defined largely in terms of criteria which reflect the intellectual interests and preoccupations of the discipline and its gatekeepers ... (In "Mode 2") since it is no longer limited strictly to the judgement of disciplinary peers, the fear is that control will be weaker and result in lower quality work. Although the quality control process in Mode 2 is more broadly based, it does not follow that because a wider range of expertise is brought to bear on a problem it will necessarily be of lower quality. It is of a more composite, multidimensional kind.

Hence, in "Mode 1" knowledge production is sanctioned by a community of specialists, whereas in transdisciplinary "Mode 2" different criteria are applied in quality control allowing for experimental planning to deal with uncertainties, continuous evaluation, and sensitivity to changes in social, economic and technical environments.

In sum, Gibbons et al. (1994, p. 6) see the shift to "Mode 2" knowledge production coherently in terms of knowledge in the context of application (socially distributed knowledge), transdisciplinarity, heterogeneity and organisational diversity, social accountability and reflexivity, and quality control. The two modes of knowledge production are related in two ways: Firstly, "Mode 2" is viewed as an outgrowth of "Mode 1", existing parallel to it without replacing it. Secondly, each mode represents distinct ways of knowledge production but also interacts in complementary ways. Drawing on Muller's (1999, p. 9) critique of the replacement of "Mode 1" by "Mode 2", I infer that "Mode 1" is orthodox, disciplinary knowledge production which is not going to disappear but rather which is affected by the "degree and emergence of Mode 2". Instead "Mode 2" knowledge production depends upon a sound "Mode 1" disciplinary base (Muller 1999, p. 9). In this regard he claims that

> ... (t)he most effective examples of Mode 2 (supplementing Mode 1) are research projects which configure disciplinary specialists within an organisational format that produces a knowledge outcome that could not be produced by one disciplinary input ... (which) should not mean that all higher education courses (including community service activities) should now become interdisciplinary, or practical, or skills-based ... (Muller 1999, p. 10).

In the light of the above explanation of the shift towards "Mode 2" knowledge production, I shall now examine some of the implications of knowledge in the context of application (socially distributed knowledge), transdisciplinarity, heterogeneity and organisational diversity, social accountability and reflexivity, and quality control for a reflexive praxis.

Implications of the shift towards "Mode 2" for a reflexive praxis

Earlier, I argued that a reflexive praxis can be considered "doing action" which can engender equality, development, accountability and quality related to higher education transformation. I shall briefly look at how the emerging shift towards "Mode 2" knowledge production strengthens the idea of a reflexive praxis for the reason that "Mode 2" knowledge production is a form of knowledge. My contention is that the notions of access, relevance and dialogism unfold in the shift towards "Mode 2" knowledge production, which in turn reinforces the idea of a reflexive praxis.

First, the shift from "Mode 1" to "Mode 2" knowledge production, that is, knowledge produced in the context of application characterised by transdisciplinarity, heterogeneity, organisational diversity and increased social accountability and reflexivity accompanied by new forms of quality control, has the effect whereby universities in particular will have to adjust from being adept producers of mainly disciplinary knowledge to being creative reconfigurers of knowledge in solving increasingly complex problems (Subotzky 1999, p. 17). Gibbons (1998, p. 1) claims that the pursuit of knowledge *only* for its own sake seems to have been supplanted by the view that universities "are meant to serve society, primarily by supporting the economy and promoting the quality of life of its citizens".

To my mind "citizens" include those who attend, do not attend, might/can attend or want to attend higher education institutions. In other words promoting quality of "citizens" brings into play the notion of access of students, particularly from the disadvantaged sector, to universities. Students first need to gain equal access to higher education institutions before one can talk of enhancing their quality and that of the institutions they attend. Bearing in mind that the idea of a reflexive praxis is inextricably linked to initiating equal access and enhancing quality in a complementary way, the notion of "promoting quality of citizens" within the shift towards "Mode 2" knowledge production reinforces the idea of a reflexive praxis. In fact, "Mode 2" knowledge production allows space for a more diverse student population at higher education institutions due to increased access to students from the historically disadvantaged sector in terms of class, race and/or gender factors.

Hence, promoting quality *through* access makes the idea of a reflexive praxis unavoidable.

Second, the shift towards "Mode 2" offers challenges to higher education institutions summarised by Scott (1995) as follows.

- Higher education institutions will no longer remain the supreme provider of both new knowledge and skills for the reason they must compete with other public and private institutions.
- Socially distributed knowledge emerges as an important source of knowledge in accredited learning programmes and research as academics and the public come to disregard the distinction between disciplinary academic knowledge and relevant knowledge.
- Programmes of learning will increasingly become modularised to ensure greater flexibility to society's diverse needs.

My interest is in "Mode 2" shaping learning programmes to be more flexible, transdisciplinary and relevant to competitive market forces. And, considering that a reflexive democratic praxis invokes the notion of relevance, the shift to "Mode 2" knowledge production further reinforces the idea of a reflexive praxis.

Third, "Mode 2" knowledge production not only makes it possible for different kinds of knowledge (scientific, technological and industrial) to co-exist, but also increases the level of co-operation between people located in different institutions. For example, research scientists, business people, patent lawyers, production engineers, and so on, develop dialogical partnerships through which they become jointly responsible for effectiveness of student learning, curriculum development, research and community development. In this way, the shift towards "Mode 2" knowledge production lends itself to what constitutes a reflexive democratic praxis, for the reason that the latter constantly asserts its bias towards dialogism as a commitment to collective action, referred to by Gibbons (1998, p. 54) as the notion of partnership.

In essence, the shift to "Mode 2" knowledge production and its implications for higher education reinforces the idea of a reflexive praxis. I am not suggesting that a reflexive praxis can operate better if "Mode 2" replaces "Mode 1" knowledge production. In other words, my argument was not for elitist, disciplinary knowledge to be replaced by more diverse forms of knowledge. Instead, my contention is that a reflexive praxis could operate better if practised in a context of meaning making whereby "Mode 2" complements "Mode 1" knowledge production. This is so for the reason that "Mode 2" competence depends on a prior disciplinary "Mode 1" competence. Gibbons (1998, p. 54) explains below the complementary link between "Mode 1" and "Mode 2" knowledge production.

> To meet both national and community needs a different organisation of knowledge production than Mode 1 is required. The elements of that organisation lie not necessarily in the wholesale abandonment of Mode 1, but rather in the developing of linkages between Mode 1 and Mode 2.

In addition, a reflexive praxis within the context of the emergent "Mode 2" form of knowledge production and higher education transformation places an increasing demand on the roles universities need to chart out to meet the imperatives of equality, development, accountability and quality. Before I move on to a discussion of the roles of academics at universities in relation to the idea of a reflexive praxis, I shall first offer a few remarks about a "Mode 1" research university. Research in this instance refers to developing or producing knowledge which contributes to our individual and collective understanding of the world and new ways of seeing things in the world (including seeing our own experiences) (Marton 1998, pp. 184–185). In different way, research is seen as ways of experiencing and understanding the world around us "oriented towards the knowledge to be gained or the object about which knowledge is to be gained" (Marton 1998, p. 196). The research university is anchored in the traditional arts and science disciplines and has a programme of instruction that "moves from the basic principles of these disciplines to the most specialised levels" (Cummings 1998, p. 1). Knowledge production at the research university is formal and coded according to canonical rules and procedures of academic disciplines often isolated from real-world problems (Gibbons 1998, p. 56). Some more typical characteristics of the "Mode 1" research university can be summarised as follows.

- Instruction is conveyed in year long traditional disciplinary courses taught by personnel with life-long appointments.
- Research organisation is layered on top of the academic teaching programme.
- Decentralised choice of research agenda whereby individual personnel determine their research objectives and then seek grants from public sources to fund their work (Cummings 1998, pp. 1–2).
- Conventional norms of academic freedom, critical reflection, peer-review evaluation, rewards and curiosity-driven research exist (Subotzky 1999, p. 6).

The research university with its life-long appointment of most of its personnel relies on public and state-supported funding. However, the decline in economic growth led to the reduction of subsidies to public research universities. This impetus together with wastes in university budgets, deceptive practices in overhead accounting, inadequate instruction provided by graduate assistants while full-time professors spend their time on personal projects, brings into question the legitimacy of the traditional research univer-

sity (Cummings 1998, p. 1). This brings me to a discussion of the roles of academics at higher education institutions, in particular universities.

The role of academics

The roles of academics are numerous. Combining the views of Boyer (1990) and Gordon (1997), with a reasonable degree of generality these roles of academics can be narrowed down into four core functions: research, teaching, management and service (Gordon 1997):

- Usually academics as researchers have acquired higher degrees and/or developed research interests (Gordon 1997, p. 74). These academics "systematically trained in research in their own higher degrees studies" (Kogan et al. 1994) cultivate their research through various developmental initiatives, university teaching qualifications and teaching journals.
- Generally academics are expected to perform several managerial roles individually, in teams, and in collaboration with those responsible for education provision for cohorts of students. In all probability most academics acquire additional managerial roles such as supervisors of research students, managers of research projects, curriculum developers, members of committees, chairs of committees, consultants, etc. (Gordon 1997, p. 73).
- Literature on effective teaching and learning abounds. Colling (1994, p. 2) suggests that an effective teacher in higher education demonstrates subject expertise, awareness of developments in the teaching of their subject, understanding of how students learn, the systematic use of a wide variety of teaching methods, a capacity to reflect upon his/her practice, a willingness to develop himself/herself, effective planning of teaching sessions and courses/materials, skills in course review and evaluation of student learning, expertise in a variety of assessment methods, awareness of diversity of student population, understanding of equitable practice and ability in providing examples of learning for students. Additional perspectives on the effective teacher in higher education are that they act as "creators and facilitators of high technology learning materials" (Williams and Fry 1994, p. 48), "reflective practitioners" (Martin and Ramsden 1994), and educational developers within departments/programmes (Gibbs 1996).
- Service roles can include activities within the institution and for the institution, as well as those for the discipline or profession and for the external community, usually learners from formal, non-formal and informal education settings, policy analysts, teacher educators and

trainers in business and industry (Gordon 1997, p. 74). These service activities can take the form of "rudimentary research projects" in the community. Several such projects in the South African context are described below.

1. A project to empower communities to address the current problem surrounding the perpetual plight of street children.
2. A project where support is provided to disadvantaged schools focussing on teachers of mathematics and science and their language abilities in these fields (as well as the general quality of teaching through the development of managerial and government capacity in schools).
3. A programme that aims to establish alternative ways of dealing with strife and friction within and between communities and to teach children how to resolve conflict.
4. A problem-centred approach to mathematics teaching and learning aimed to assist and support educators in their professional development so that conceptual growth can take place in learners and key mathematical abilities are developed.
5. A project which makes available a number of tried and tested educational activities designed to supplement school curricula in especially the natural sciences, and to help teachers to use features of the immediate environment to teach the principles of environmental education.
6. Literacy for life skills project which aims to improve the quality of life of a community (CENEDUS 1998, pp. 2–6).

The above project roles, which could be occupied by academics, accentuate the view that community service can co-exist with teaching and research. In all the six projects mentioned above, project participants at the Centre for Education Development of the University of Stellenbosch (CENEDUS) cultivate their research through various education development initiatives as in the roles of managers, consultants, facilitators, reflective practitioners and developers. In this way, service does not necessarily have to rank below teaching and research, but can be integrated equally with the latter two roles. This view is evinced by Kogan et al. (1994, p. 70) for whom the "core functions of academic staff are teaching and research, complemented by service to the institution, to the professions, and to society". The literature in the field of academic workloads consistently suggests that the main tasks of academics include teaching, undertaking research and serving the community (Berrell 1998, p. 78).

In essence, community service cannot merely be conceived as "part of good citizenship" for the reason that many of the academic personnel (like

the CENEDUS staff) are in fact providing service integrated with reasonable research and teaching. In fact, this integration of service with teaching and research on the part of higher education practitioners complies with the idea of a lifelong learning perspective whereby university academics can perform the following functions:

- bridge the divide between secondary and higher education. All those secondary learners who might aspire to study at university level can be encouraged by academics to do so. Academics could provide them substantial and highly accessible information about study opportunities, career options and to think about (on the part of higher education practitioners) adapting programmes, teaching and learning to student needs and interests; and
- foster closer co-operation with the business sector in programmes, teaching and learning via student projects, part-time educators from business and industry and learning organised at work sites (Wagner 1999, p. 61).

Challenges to higher education institutions

As has been alluded to earlier, the increased pressures on the funding of higher education together with major challenges could impact upon the preparation and development of academics at universities not merely to be effective managers, teachers and researchers, but also providers of efficient community service. Gordon (1997, p. 76) posits that the major challenges to higher education systems are likely to include:

- providing greater flexibility in educational provision;
- changing modes and methods of teaching;
- equipping students to handle an uncertain employment market;
- resolving the tension between research and teaching;
- efficiently using new technologies for effective learning;
- reconciling the tension between institutional competition and collaboration;
- re-articulating and assuring standards in more diverse mass systems of higher education;
- meeting the challenges of providing for life-long learning;
- recruiting, motivating, rewarding and developing all employees;
- reconciling globalisation and localisation (the international world of knowledge and/or servant of local communities);
- addressing equity and ethical issues; and
- acting strategically whilst responding tactically to short term fluctuations.

The above-mentioned demands of the future also require that higher education programmes in South Africa should become diverse and educationally transformative. These programmes should:

- build contextually on learners' existing frames of reference;
- be learner-centred and experiential;
- be value adding;
- develop attitudes of critical inquiry and power of analysis; and
- prepare students for continued learning in a world of technological and cultural change (CHET 1998, p. 4).

To ensure the above, a changing South African higher education system should be constituted by a broad range of functions: "the realm of higher knowledge by sustaining scholarly and scientific practices, the generation of higher knowledge through research activities across a spectrum from discipline-driven research through strategic research, applied or applications-driven research to product-related research, and the dissemination of higher knowledge through systematic programmes of teaching and training, including continuing education and other forms of community service" (CHET 1998, p. 4). Central to such a changing higher education system is the notion that research, teaching and community service should be integrated in all of its programmes. The upshot of this is that service at higher education levels should be integrated with research and teaching. In this way, the university may shift away from breeding only academics whose teaching and research are far removed from the education-related developments in their communities. Berrell (1998, p. 78) argues that universities' core resource will remain their academics and their teaching and research expertise, but there needs to be a shift "to a dispersed community of life-long learners". In a different way, academics should possess a specialist knowledge base, autonomy (both teaching and research) and a service orientation (Eraut 1994). Hence academics should be committed teachers, researchers and service providers.

I want to flesh out the concepts of research and community service more clearly using "Mode 1" and "Mode 2" forms of knowledge production in order to make the argument for their integration more plausible.

The supplementary relationship between "Mode 1" and "Mode 2"

Service is a relatively ambiguous concept in the higher education lexicon (Cummings 1998, p. 1). On the one hand, various parts of universities' administration have come to describe their work as service, for example, health and social services, student services, international student services, library services, information technology services, maintenance services, nursery

services and academic development services. On the other hand, academic personnel in faculties provide services to external communities which may include running hospitals that help people, legal services, services to local schools, conducting programmes of continuing education to meet the needs of working adults, and other community activities such as those which address the plight of the homeless and street children.

The view of community service articulated in this article focuses on the integration of research at universities and its application in the community. In other words, community service means that universities should not be disengaged from the real problems in society, but rather, should open up possibilities, through research, for greater social relevance – a matter of "Mode 2" supplementing "Mode 1".

The question arises: What view of community service can be engendered by the supplementary relationship between "Mode 1" and "Mode 2" forms of knowledge production? Drawing once again on Muller's (1999, p. 9) critique of the replacement of "Mode 1" by "Mode 2", I infer that "Mode 1" is orthodox, disciplinary knowledge production which is not going to disappear, but it will rather be affected by the "degree and emergence of Mode 2". Instead "Mode 2 knowledge production, as has been alluded to earlier, depends upon a sound Mode 1 disciplinary base" (Muller 1999, p. 10).

In the light of this, community service initiatives must integrate theoretical, disciplinary based knowledge with practical, problem-oriented and transdisciplinary knowledge to become more responsive and relevant to current social, economic, political and environmental problems. For community service, transdisciplinarity involves problem-oriented research programmes which develop the necessary basic (theoretical) skills to apply knowledge in a socially distributed, applications-driven "Mode 2" way (Gibbons 1998, p. 56).

The supplementary relationship between "Mode 1" and "Mode 2" knowledge production clearly points to the value of linking research and community service. The literature in the field of such a definition of community service suggests that the concept should be coupled with academics' roles as teachers and researchers (Berrell 1998, p. 78; Ladd and Lipsett 1976). Generally teaching (which I consider as a form of research) includes time spent on lecturing, conducting tutorials or workshops, developing course material, marking assignments, consulting with students, writing and marking exams, and attending meetings (Berrell 1998, p. 78). Research *per se* includes time expended in identifying a problem, designing a procedure or instrument to address the problem, collecting and analysing data, and presenting or publishing the findings (Berrell 1998, p. 80). Community service usually takes the form of project work that draws on the considerable experience

of academics in research (CENEDUS 1998). In this regard Gibbons (1998, p. 55) argues that the challenge for research universities is to

> ... use their Mode 1 resources to extend their capabilities by means of programmes of collaboration in which the sharing of resources is central. This effort at extension will draw these universities into the distributed knowledge production system, focus their attention on the needs of their communities, direct their efforts to understanding of local and national complex systems, and, in the end, create a new culture of teaching and research – with relevance built in!

For example, a rudimentary mathematics service project for learners in the foundation phase relies overwhelmingly on the research findings as well as teaching experience of its core team. In this way, a link exists between academics as community service providers and their roles as researchers with a teaching function using both "Mode 1" and "Mode 2" knowledge production (CENEDUS 1998, p. 8). In fact, time devoted to community service in the mathematics programme co-ordinated and implemented by CENEDUS, includes conducting workshops for the training of educators, developing flexible course material, problem resolution and data analyses – all pragmatic activities which constitute the notions of teaching and research under discussion. In essence, to pursue community service may invariably integrate key dimensions of research grounded in problem-oriented and theoretical knowledge, that is, "Mode 2" and "Mode 1". The value of integrating teaching, research and community service at universities has the potential "to improve the lives of the underprivileged communities through provision of practical services, and infusing the curriculum with greater relevance through a focus on current social, economic, political and environmental problems" (Subotzky 1999, p. 19).

However, I am by no means suggesting that "Mode 2" should be predominant over "Mode 1" knowledge production. My argument is for "Mode 2" supplementing "Mode 1". The claim that universities should carefully move towards becoming "service" institutions does not imply that they should abandon their status, what Morrow (1998, p. 393) refers to as "constitutive institutions". In other words, the business of universities should not be to serve primarily as "all-purpose welfare agencies for society" such as industrial training schools, prisons, hospitals, mental asylums, armies, art galleries, and so on (Morrow 1998, pp. 393–394). Rather, universities should constitute the public space in which the shared interest for higher knowledge or "Mode 1" academic practice can be pursued in the light of "standards of excellence" in order to fulfill their function as service institutions *through* the use of higher knowledge "deeply embedded in the traditions of disciplined

thinking" (Morrow 1998, p. 394) supplemented by "Mode 2" socially distributed knowledge which would enhance their service purpose to the common interest of society.

The question arises: What does the above explanation of the roles of academics and/or educators at higher education institutions have to do with a reflexive praxis? A reflexive praxis shapes the practices of higher education practitioners in such a way whereby they can "adjust from being adept producers of (mainly disciplinary) knowledge to being creative reconfigurers of knowledge in solving increasingly complex (social) problems" (Subotzky 1999, p. 19). In other words, the roles of academics as researchers and teachers should also shift to that of serving society, primarily by "supporting the economy and promoting the quality of life of its citizens" (Gibbons 1998, p. 1). In this sense the disciplinary-based research roles of academics have been challenged by a more pragmatic role of community service provision which calls for the production of socially relevant "Mode 2" based knowledge. The above-mentioned research based projects also draw upon the collaborative actions of private donors, local communities, diverse disciplinary based academics, education department officials, teachers, learners and members of the corporate sector. This is a central feature of "Mode 2" knowledge production whereby universities which "intend to practice research at the forefront of many areas, are going to have to organise themselves ... to become more open, porous institutions, more aggressive in seeking partnerships and alliances that they are currently" (Gibbons 1998, p. 10). In this way the roles of academics in a climate of "Mode 2" knowledge production seems to be compatible with the idea of a reflexive praxis.

Conclusion: Towards a concept of community service

What should the concept of community service guided by a reflexive praxis look like? In the context of the afore-mentioned discussion regarding the inextricable link between research, teaching and service, I want to propose a concept whereby it is possible to combine a university's responsibility to protect the free search for knowledge and its implementation (through teaching), with an active involvement to put research results into practical use (through service). By transforming research results into practical use through service initiatives, universities would remain higher education institutions which acknowledge curiosity and wondering as legitimate reasons for conducting research. At the same time, it gives teachers and researchers the possibility to try out new ideas or challenge commonly accepted truths through service functions, that is, giving the research results a practical and socially relevant implementation.

Implementing the service function of universities would also increase the chances to receive funding from external sources. The financial constraints faced by South African higher education institutions necessitate the taking of initiatives to create new revenue. In this regard, the service function of universities, without interfering in what teachers and researchers choose to research, can also facilitate finding new sources of funding. Moreover, "going service" without threatening research and research-based teaching, would make universities even more sensitive to the rest of our societal system whereby academics and researchers would be encouraged to do research on topics of great interest for the South African nation. In the words of Perold (1998, p. 2) "community service in higher education has the potential to contribute to the reconstruction and development goals of the new government".

A strong community service ethos emerged in South Africa during the 1980s (Subotzky 1999, p. 19). Several community service programmes at universities such as Pretoria, Free State, University of the Western Cape, Natal and Stellenbosch provide evidence of the integration of teaching and research within a community service setting (Subotzky 1999, p. 17). Some faculties at many universities have developed apparatuses to manage service. However, in line with international trends, the general lack of an administrative instrument at central level is the main hindrance to enabling faculties to take up profitable service activities (Tjeldvoll and Holtet 1998, p. 27). Universities need apparatuses in their own structures to take care of service functions. Such a central administrative apparatus would also enable a university to be capable of taking responsibility for its own financing. To be sensitive to the service needs of the various sectors of communities, including industry and business, may give new impulses to stimulate creative thinking in research and teaching within many universities.

In essence a concept of community service which should drive South African universities should articulate the role of service as an integral function that cross-cuts the traditional activities of teaching and research but they should also shift their focus outward to external communities. Community service in the context of this article calls for the co-existence of "Mode 1" and "Mode 2" forms of knowledge production by which universities can directly serve social development. Most institutions in South Africa identify community service "as part of the universally recognised function of the modern university, namely, teaching, research and outreach" (Subotzky 1999, p. 15).

Of course, strong academic environments tend to attract the best researchers and the best students, and hence have the best results. Also, they have the best chances to receive funding from external sources. Any

academic teaching and research university wants to be in this desirable position. However, the desire to find better solutions to practical problems concerning economic and social development in the country may be an important motivating factor for research, and that research can give substantial contributions to material wealth accumulation as well as to improve the quality of life. The National Commission on Higher Education (1996) identified that research and teaching at higher education institutions are out of balance with national requirements. Fisher (1998, p. 58) highlights three such imbalances:

- an over-subscription of humanities and social sciences programmes coupled with insufficient enrolments in science and technology;
- a dearth of applied and developmental research geared to meeting South African needs and solving South African problems; and
- the highly variable quality of teaching and research, with scarce resources invested in programmes of dubious relevance and worth.

The question arises: how can the above concept of community service be implemented in the South African context? With reference to educational development initiatives I am actively engaged with in the Northern Cape Province of South Africa over the past two years (1999–2000), I shall attempt to show how university community service initiatives can be engendered. My involvement with educational development initiatives precisely want to establish conditions and possibilities for school communities (parents, educators, learners and education managers/administrators) on the basis that their potentialities can be evoked. In the Postmasburg area of the Northern Cape province I worked mainly in two historically disadvantaged secondary schools: Maikaelelo Combined and Ratang Thuto. The two schools are ex-DET (Department of Education and Training) schools and mainly consist of black learners and educators. These schools are fairly isolated from the nearest towns, namely Olifantshoek and Postmasburg. In the main, learners are from the surrounding rural areas whose parents are mostly farm workers, with some of them working at the nearest military base in Lowatla (approximately 100 km from both Olifantshoek and Postmasburg). The lack of employment opportunities is alarming and is further exacerbated by the absence of big business operations. The nearest higher education institutions are in Upington and Kimberley, approximately 200 km from both Postmasburg and Olifantshoek. My joint endeavour with the three schools involves improving the school governance which, we contend, can engender a climate of reflexive dialogism among various stakeholders that can in turn lead to improved teaching and learning with reference to Mathematics and Science subjects. Over the past two years I have conducted six three-hour workshops with Maikaelelo Combined and Ratang Thuto.

This brings me to the question: what made our community service initiatives through which various stakeholders engaged in at Maikaelelo Combined and Ratang Thuto a genuinely joint and transformative endeavour? From the outset educators at both schools had the confidence and courage to raise sensitive issues related to lack of learner and educator discipline, such as late coming of learners, absenteeism from classes and learner loitering. Other difficult issues raised include: the lack of educator motivation, conflicting staff relations, time wasting, lack of teamwork, unco-ordinated planning on the part of educators, vandalism, unruly learner behaviour and daily interruptions. At both schools educators, learners and parents of the school governing bodies (SGBs) agreed to formulate the following strategies in order to address various problems identified at the schools:

- A vision which embraces notions such as producing effective learners, improving the status of the schools, developing educational standards, re-skilling teachers and harnessing the civic responsibility of learners;
- Mission statements which relate to improving discipline, student achievement, educator development, parental involvement and collaboration with neighbouring schools;
- Short- and long-term action steps related to late coming (such as the implementation of detention classes), vandalism (through the implementation of a ground duty system), unruly student behaviour, poor school attendance and the devaluation of the schools; and
- Action plans to deal with motivation, self-management and time-management of educators (including how to motivate learners).

What emerges from the compromise reached among educators, learners and parents at the two schools is that their dialogism extended and radicalised the notion of community service. This made possible a situation whereby different stakeholders in the education process could share and live together in solidarity, whereby educators, learners and parents wanted their actions to be directed by the community of which they are members. Jones (1998, p. 50) adequately summarises this sort of dialogism:

> This is not the usual debate about truth and who is right or wrong. It is an attempt to understand others and ourselves as people from different backgrounds and is the basis for a compromise aimed at allowing us to live together as a functioning and unified social unit rather than as a collection of warring factions living in geographical proximity.

The various stakeholders at the two schools throughout our community service workshops sessions always considered (rationally I would say) how conflict can be avoided and how tolerance and compromise towards different points of view can be encouraged. Educators, learners and parents

acknowledged that to maintain an unjustifiable partiality for their respective prejudices without encouraging dialogism would have been a violation of the notion of community. They knew that mutual respect for one another, without educators imposing their dominant views on learners and parents, made dialogism even more unavoidable.

For educational development to be a genuinely joint and transformative endeavour, dialogism and its recognition of the universality of prejudices should constantly be asserted. We cannot hope to succeed in achieving effective community service if we do not rationally consider dialogism as a commitment to collective action.

Moreover, in collaboration with the circuit manager and regional director of the Postmasburg area, both the SGBs of Maikaelelo Combined and Ratang Thuto willingly agreed to a kind of mutual action. They did not want to let each other down and emphasised their concern and care about solving educational problems at the schools. Some of the strategies they suggested involved the following:

- Implementing a "Matric Intervention Programme" initiated by the circuit manager from 28–31 March 2000 to empower educators with subject content and methodological strategies;
- Using uniform examination question papers for schools involving Grades 10–12;
- Providing guidance to school management teams (SMTs) with the aim to "turn around" the low performance levels at the schools;
- Assisting with the training of SGBs, bearing in mind that illiteracy in the community is on the increase;
- Monitoring the schools with respect to preparation for teaching, completion of syllabi, and management and leadership; and
- Initiating the schools into the complexities of labour relations policies and procedures, in particular the envisaged rules of contract between educators and school administrators advocated strongly by the teacher unions.

These initiatives on the part of SGBs and the Northern Cape Education Department (NCED) administrators are very much attuned to what can be understood as transformative community service, whereby people trigger a sense of caring towards one another. By this is meant that these role-players' strategies are grounded in a kind of mutual action whereby they do not want to let themselves and others down. Mutual action whereby people do not want to let themselves and others down suggests that people have a responsibility to develop a sense of care in their relations with each other at an individual level and at the same time relate their care to societal issues.

If we do not care, then we do not engage personally in community service; thorough educational development (what I assume happened at the schools and among the various role players) must be care-full. Fielding (2000, p. 407) framed his understanding of the community service by linking it to a heightened sense of caring which engenders "confidence and trust" amongst people, as well as enhancing people's interest in one another in a way that would enable them to exhibit "a generosity of spirit and a willingness to contribute in some way".

In essence, what constitutes our community service drive in the Northern Cape Province is that human beings engage willingly in collective action, whereby through caring they develop confidence and trust in one another in order not to let themselves and others down. And for people not to want to let themselves and others down means they want to develop a deepened and shared mutuality, that is, a community, where they feel that the real point of engaging in educational development is the hope that their creative capacities would come to the surface and that they would acquire new forms of human freedom to solve educational problems. In this sense, the point of human engagement and caring is to encourage the widest possible social co-operation and trust among different people. Fielding (2000, p. 408) makes the point that community service through human engagement which is constituted by care, co-operation and trust "is at once a profoundly personal undertaking, that is to say one that is ultimately about human being and becoming and also an undertaking that is, if not utopian, then infused with hope". This is what happened at both Maikaelelo Combined and Ratang Thuto. For educators, learners and parents to improve the conditions at the two schools is a "profoundly personal undertaking". These people are aware that their broader community is "ill-informed and poorly educated", which impacts negatively on their effectiveness in functioning as SGBs. Yet they are optimistic and hopeful that their SGBs would be successful in achieving the following:

- Creating structures and opportunities to accommodate participation on the part of community members;
- Playing an important role in fostering awareness amongst the community of its indispensable role in the process of providing quality education to learners, in particular, considering the poor 1999 matriculation results of learners. (If this situation continues, the possibility exists that the new matriculants (2001) might be sent to another school in the area. This would result in certain staff members having to be redeployed and the principal demoted.);
- Gaining more clarity about the different roles the SGBs should perform in the effective governance of the school. (For them our workshops

were held at the "correct time", as the SGBs had only been recently constituted.)

In essence, and with specific reference to educational development initiatives at two rural schools in the Postmasburg area, I have I have shown how community service can function primarily as a process of human engagement dictated by care, co-operation and trust – important goods to ensure social development. In tune with the notion of a reflexive praxis, higher education institutions, in particular universities, should not in any serious meaning move away from traditional roles of research and teaching. Rather, they should move towards integrating aspects of their research and teaching agendas more relevantly with community service functions such as what happened in rural schools in the Northern Cape. This understanding of community service in the form of educational development links strongly with Byrne's (1999, p. 75) notion of "The Engaged Institution". For him engagement on the part of universities is more than outreach or uni-directional extension of the universities' services to the people or organisations they serve. Engagement includes the mutual development of goals and the two-way sharing of expertise with elements of society. South African society with its deep-rooted social, cultural and economic problems can benefit from universities that can provide research-based community services. These universities can take careful steps in the direction of service without harming their status of research institutions of quality.

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