

Reprinted with permission.
Copyright 2002 by the Association
of American Colleges and
Universities.

Curriculum Reform in Higher Education in South Africa: How Academicians Respond

Johan Muller, University of Cape Town; Nthabiseng Ogude,
The South African Universities' Vice Chancellors' Association



Introduction

The higher education system in South Africa comprises twenty-one universities, fifteen technikons (technical colleges), several colleges of education, nursing, and agriculture,

moting and auditing institutional and program quality, which it has delegated to the Higher Education Quality Committee (HEQC). The HEQC is accredited by SAQA as the education and training quality assurance body for higher education.

Phases in the Transformation of the Education System in South Africa

While it might seem at first glance that the transformation of higher education in South Africa is proceeding apace with vision and resolve, the history of reform has actually been turbulent and fraught with conflict and contending interests. Kraak (1999) describes the following three phases:

Phase 1. In the mid-1980's educational reform focused on the struggle against apartheid. It was the era of "People's Education," which viewed the classroom as a central site for negating apartheid. It advocated democratization of education through community participation and by bridging the gap between theoretical knowledge and practical life. Education was viewed as a tool in a broader struggle rather than as an end in itself.

Phase 2. The period from the late 1980's to 1994 saw the rise of a more systematic discourse on educational reform. Its most important features were advocacy of a unified education and training system, and the call for a unified framework for regulating the system.

Phase 3. Beginning in 1994 the discourse on educational reform has been increasingly influenced by an outcomes-based approach to education and training.

While the positions and contributions of such stakeholders as business, labor, community organizations, and government departments are well documented in these three phases, the response of universities has received less attention. In this paper we analyze the past and current responses of the higher education institutions, especially the universities, to the challenges of reform in the third phase.

The paper focuses on two periods within this rapidly unfolding phase. They are the period between the 1994 elections and the establishment of the South African Qualifications Authority in 1996, and the period since the establishment of SAQA. Our review of the academic response to this phase of reform is divided into three parts. In the first, we will discuss the role of the Committee of University Principals (CUP) and its successor organization, the South African Universities' Vice Chancellors' Association (SAUVCA), which came into being in 1997. In the second, we will assess the experience of universities in complying with the requirements of the National Qualifications Framework. In the third and concluding part, we will discuss the major issues of institutional autonomy, curricular relevance, and the coherence of knowledge — issues that have accompanied, perhaps plagued the debates on educational reform in South Africa.

The Early Role of the Committee of University Principals

By 1993, the Committee of University Principals was keenly aware that change was imminent in higher education. Between 1993 and the elections in April 1994, CUP held several consultations with the African National Congress' Center for Education Policy. At these meetings, the ANC delegation described the process it envisioned for restructuring education and indicated that the process would be open, consultative, and research-driven. It also announced that it would view the entire education system holistically and that higher education would be embedded in it.

Intensive interaction and negotiation continued between CUP and the new democratic government after it came into office. At the same time, CUP had begun its own deliberations on how to transform higher education. One of its urgent concerns was retaining an important role for itself in the transformation process.

CUP's Education Committee proposed the establishment of working groups to consider key policy areas such as quality, equity, and articulation. Sub-committees on Quality Promotion, and Access and Admissions were constituted and gave recommendations on key policy issues. The sub-committee on Quality Promotion recommended the formation of a Quality Promotion Unit under the control of CUP to establish a framework for accreditation within the system. The Education Committee had earlier signaled its opposition to a quality assurance process that would be controlled by an external body.

The sub-committee on Access and Admissions put forward a set of findings and recommendations on the following topics:

- *Admissions criteria.* The tension between open admissions and admissions based on merit was cited. The sub-committee called for investigation into a system that would base admissions decisions on a determination of learning potential.
- *Distance versus contact education.* Distance education must play a major role in access.
- *The size of the university system.* The system must expand and diversify. Resources should be deployed and facilities planned on a regional basis.
- *Intermediate exit points.* Students who do not complete degrees should receive recognized qualifications (certifications of achievement) at intermediate levels. CUP should develop an appropriate qualifications structure.
- *Articulation.* CUP should investigate a certification and accreditation system, and institutions should explore articulation with others in the region.
- *Underprepared students.* A community college system should be developed and funded from the central higher education budget.
- *Alignment of student enrollments with the labor market.* There is a need to increase the number of science graduates and teachers.

Part One: South Africa

The findings and recommendations of these two sub-committees demonstrate that CUP preferred self-regulation to external regulation. But CUP was slow to implement some of its proposed changes. Its cumbersome committee structure, in which all twenty-one universities were represented, often led to the postponement of meetings. It was also difficult to engage senior university managers in policy deliberations when they had to address major challenges, such as student unrest, within their own universities. CUP's efforts were also hampered by the lack of mechanisms for implementing recommended changes. The *de facto* division of universities into historically black and white universities may also have been a complicating factor in the implementation of the recommendations. But above all, what this phase of higher education policy making had in common with education policy deliberations generally was an exclusive emphasis on grand policy design and an all but total neglect of plans for implementation.

When the new government came to power, political imperatives seemed to require that the whole education system be overhauled as speedily as possible to respond to the gross inequalities of the past. This would entail making higher education accessible to previously disadvantaged Black (includes the groups designated under apartheid as African, Colored, and Indian) and working-class communities. These imperatives appear to have been decisive in persuading policy-makers to propose that the higher education system be steered away from an elite, stratified system toward an open and unified one that could better serve the national agenda for reconstruction and skills development (Luckett 1999).

Concerns About the National Qualifications Framework, SAQA, the Government's White Paper, and the Council on Higher Education

The universities agreed in principle that change was needed in higher education. In 1994 they informed the Minister of Education of their support for the proposed National Commission on Higher Education (NCHE) and their desire to cooperate with it. Once the NCHE was constituted in 1995, CUP along with many others in the higher education sector participated in the various task groups that formed the basis for the NCHE's final report. There was a view within CUP that the recommendations made by the NCHE were comprehensive and would bring about the desired systemic changes. In particular, they welcomed the NCHE's apparent reservations about the inclusion of higher education in a national qualifications framework. While it advocated inclusion in its final report, it was cautious about moving from so-called whole qualifications, which applied to the standards for diplomas and degrees, to unit standards, which would apply to individual programs of study.

When the newly established SAQA appeared to advocate the introduction of unit standards as well, many in the higher education constituency were disappointed. Other major

- The impression that political imperatives were dictating the pace of reform
- The lack of proper consultation with higher education providers
- The absence of an explicit commitment to the principles of academic freedom and accountability
- The possible erosion of institutional autonomy in academic matters
- The authority of the Minister of Education to appoint members of the Council on Higher Education (CHE)
- The lack of emphasis on the centrality of research as a core function of universities
- The lack of a clear strategy for financing the new system
- The inadequate representation of higher education providers in key structures such as SAQA and the CHE
- The proposed linkage between evaluation of university performance and the funding system
- The revocation of CUP's statutory authority to set university entrance requirements
- The perceived drift toward rigid curricula and prescribed educational programs
- SAQA's interpretation that a coordinated educational system was to be achieved through the use of unit qualifications and an outcomes-based approach at all levels of education.

CUP and its successor — the South African Universities' Vice-Chancellors' Association (SAUVCA) — were given an opportunity to respond during the draft stages of the legislation that created SAQA and the CHE, and in the final legislation a number of provisions were included that were designed to relieve university anxieties. The main change required SAQA to consult with affected parties before implementing the new qualifications framework. The representation of the academic community on the CHE was also increased. But among members of the academic community there remained a feeling that the process was being pushed forward too rapidly and without adequate consultation with university faculties.

The passage of the SAQA Act put an end to CUP's attempt to implement its vision of change. In 1997 the organization was succeeded by SAUCA, and much of its authority, including its oversight of university entrance requirements and quality assurance, was transferred.

The Experience of Universities with the National Qualifications Framework

After the establishment of SAQA in August 1996, the "Authority," as it became known, met every month and soon created a complex bureaucratic machinery that included National Standards Bodies, Standards Generating Bodies, and Education and Training Quality Assurance Bodies. It also created an administrative staff and began the process of explaining to the universities the aims of the National Qualifications Framework and the regulatory role of the Authority. The focus was on outcomes-based education, which provided the language and formats in terms of which the universities would be required to articulate and justify their educational activities and objectives. Despite SAQA's efforts to assure the universities that the qualifications framework was a "social construct" whose "development and implementation calls for democratic participation, intellectual scrutiny, and adequate resource input" (SAQA Report to the CHE 1999), many academicians remained skeptical of the outcomes-based framework within which the intellectual scrutiny appeared to be confined. In 1997 academicians at the University of the Western Cape complained to SAQA (CUP Minutes September 1997) that it was drifting toward "technicism," abandoning deep philosophical commitment to educational process, losing sight of the real transformation issues of redress and equity, and focusing the discussion of educational reform narrowly on bureaucratic matters such as procedures for registering qualifications and assigning academic credits.

The academic community also expressed misgivings about the premises on which the qualifications framework was based and about the appropriateness of outcomes-based education for universities, and especially for programs in the humanities. Academicians complained that the new system ran counter to traditional academic culture and might be using a paradigm of curriculum that was incompatible with the paradigm in use in universities (Luckett 1999). They noted that the same concerns had been raised in New Zealand, a source of much South African thinking about outcomes-based education (Muller 1998).

Not all academicians were skeptical of the new dispensation. Some accepted the entire framework and engaged happily in the national qualifications discourse. Many in this category felt that the process forced the academic community to be more reflective about the design of its programs. At the other extreme were those who questioned the entire basis for outcomes-based education (Jansen 1997).

It soon became evident to most university managers that the requirement for universities to redefine their curricula and register their qualifications with SAQA was not negotiable. This reality became apparent as the bureaucratic machinery for the registration of qualifications in an outcomes-based format got underway. Although qualifications did not have to be registered in the National Qualifications Framework, those that were not registered would not be endorsed by SAQA and might eventually lose funding.

In light of this, some institutions have accommodated themselves to the process of recording and registering their qualifications and have become more amenable to SAQA discourse. Others, on the other hand, have expressed amazement at the acquiescence of universities in embracing a process that they designate academic dictatorship" (Jeevanantham 1999).

Whereas discussions continue on the original policy goals, the flurry of activity at institutions to meet the deadlines set by SAQA dominates the process. The focus has been first on the recording of existing qualifications and secondly on the interim registration of the recorded qualifications in an outcomes-based format. The process of interim registration of recorded qualifications has been characterized by widespread dissatisfaction.

The Recording of Qualifications and Interim Registration of Recorded Qualifications

All universities submitted a comprehensive document to SAQA in which all the qualifications offered by the institution were spelled out. These qualifications were then recorded by SAQA in June 1998. The next step is for the universities to describe the programs leading to these qualifications in an outcomes-based format. Each description must include a statement of purpose, projected learning outcomes, exit level outcomes, total credits required, minimum credits required at various levels, an integrated assessment strategy, and articulation possibilities. These materials must be developed before a program leading to a qualification can commence (Gevers, Luckett, and Ogude 1999).

The process involves redesigning curricula, creating new degree programs, modifying those already in place, reorganizing subjects into programs, introducing modular systems, and setting up administrative mechanisms for describing educational content and process in outcomes-based formats.

The response of institutions has varied. Some have responded slowly, others rapidly. Some have used a top-down approach, starting with their mission statements and creating a broad planning framework, including the development of planning manuals and program books. Others have reorganized academic departments into schools and assigned each school the responsibility for program planning and design. Variations of these two approaches also exist (Parekh, Habib, and Jansen 1999). In most cases institutions have conducted workshops in which they explain the aims of the process and develop specific planning tools. Many institutions have either set up a new structure to oversee this process or have delegated the function to an existing unit such as a Quality Promotion Unit.

Many faculty members, especially in the humanities and social sciences, have registered their discontent with the process and have resisted the program planning exercises (Dowling 1998; Nel and van der Westhuizen 1998).

The Role of SAUVCA (formerly CUP) During this Period

The South African Universities' Vice-Chancellors' Association (SAUVCA) has softened its resistance to the qualifications framework since 1997 and has subsequently adopted a far more positive stance towards SAQA than have many of its constituent institutions. It has adopted a program to assist the universities in meeting the requirements of the qualifications registration process. A SAUVCA SAQA Action Group was formed in January 1999 as a sub-committee of the SAUVCA Education Committee to develop materials, including a handbook on the registration process, and set up an interactive help desk in the SAUVCA office (Gevers et al. 1999). The Action Group is chaired by the SAUVCA representative to SAQA, who lobbies in behalf of the vice-chancellors' group. One of SAUVCA's major achievements has been the agreement by SAQA to accept registration of whole qualifications (those associated with diplomas and degrees) as well as unit qualifications associated with smaller-scale learning outcomes.

In June 1999, the SAUVCA SAQA Action Group surveyed the progress the twenty-one universities had made toward meeting SAQA's June 2000 deadline for completion of interim registration. The questionnaire also asked the universities to describe significant problems they had experienced and to indicate areas in which SAUVCA could assist.

By October 1999 sixteen universities (76 percent) had responded that the process towards interim registration was proceeding either smoothly without any difficulty, or slowly, and that they expected to meet the June 2000 deadline. However, though a high level of institutional compliance is projected, the qualifications process has presented institutions with great difficulties and

062 Tng(outcomes) Tj0 Tc(hr) Tj0.152 Tw0.673

In the next section, we deal in greater detail with the concerns of academicians about institutional autonomy and academic freedom.

The Ends of Knowledge?

As the previous section has shown, academic responses to the new policy environment provided by the NCHE and the White Paper on the one hand, and by the drive toward implementation of the National Qualifications Framework (NQF) on the other, have been decidedly diverse. There are those who have embraced the new discourse with enthusiasm, already put their academic offerings in programmatic formats required by NQF (due by mid-2000), and are happily participating in the new NQF organizational landscape of National Standards Bodies and Standards Generating Bodies. But at the other end of the spectrum are those who have, through a kind of stubborn immobility, responded by doing nothing at all; who have not begun in any way to participate either in curriculum reform or in preparation of their courses for NQF registration. In between these two responses is a third, characterized by strong reservations about this or that feature of the new policy environment. As the earlier section made clear, these reservations are mainly expressed as concern about threats to academic freedom and the autonomy both of individual institutions and the academic community. Such concerns can, of course, easily be written off as the recalcitrant resistance of a largely white, male, privileged old guard against *curricular transformation*. Nevertheless, unpacking the concern about autonomy is a useful way into the thorny issues surrounding university curriculum reform in South Africa today.

First, it is plain that academicians see the threat as emanating from two quite different agents: the NQF, or SAQA itself, which is perceived as a proxy for bureaucratic government, even though SAQA, albeit a statutory body, is functionally separate from government. Here, all the classic fears of external bureaucratic control can be found: a fear of atomization and what South Africans call "technicism" as a consequence of external determination of the form and quality of academic work, and also suspicion about the motives of the SAQA functionaries (Jansen 1998). On a curricular level, the battle was joined, here in South Africa as it was in New Zealand, over the question of whether academic offerings should be registered as whole qualifications or as unit standards. Although the whole-qualification position seems to be the one that has prevailed, fears about the bureaucratic and technocratic dismemberment of academic units persist. At the heart of these fears lies the distinction between conceptual and instrumental knowledge. Many believe that only the latter is susceptible of the kind of unitization and standardization mandated by the NQF. Conceptual knowledge, on the other hand, is viewed as integral and indivisible, and any attempt to specify its constituent parts simply does violence to it.

As we will see below, this distinction between conceptual and instrumental knowledge approaches the terrain of the second agent seen as threatening to autonomy, namely, the market. The fear of the market stems originally from the central argument of the NCHE, which was that higher education institutions in South Africa,

Part One: South Africa

as elsewhere, were atrophying because they were too insular, and that they must become more responsive to the outside world if they are to survive in the new knowledge-rich environment of late modernity (NCHE 1996). Here, three previously opposed advocates found common cause. In the first group were those who wanted the universities to become more responsive for political reasons concerned largely with equity. In the second group were those who, following various versions of the knowledge argument, reasoned that a knowledge-based society and economy were best served by a new form of research (or "knowledge production") that broke with academically driven inquiry, and moved far more centrally into research in the context of application, that is, problem-solving research. This could only happen if academicians abandoned their insular disciplinary concerns and became more outward looking, that is, responsive to social and economic needs. This second group also implicitly supported a certain view of curricular reform, which is discussed below. The third advocacy group supporting responsiveness was made up of the traditional employers who periodically raise the complaint that universities do not provide the skills needed by the labor market (Teichler 1998). These three groups became a powerful lobby for responsiveness in the final NCHE report.

Academicians fear the politicians who might tell them what to teach; they fear that external funding sources will favor problem-solving research and dictate what scholars can study; and they fear the employers who might tell them that they must focus their instruction on what is immediately and instrumentally practical (see J.M. Coetzee's recent novel *Disgrace*, 1999, for a mordant comment on this trend at a fictional institution). These fears rest upon, and are reacting to, an emerging definition of scholarly and curricular relevance, or at least to its re-assertion as a curricular priority. It is within competing definitions of relevance that most of the key issues for curriculum reform reside.

Problematizing Curricular Relevance

When we ask the questions about what higher education should be relevant to, the answer comes in either one of three forms, rarely in all three together. The first relates relevance to the age-old concept of *Bildung*, that is, to personal growth and the development of moral character. Whether this moral development as the growth of personal autonomy (Appiah 1997), or as a social ideal of maturity in the face of valuing diversity (Schneider 1997), or as education for responsible citizenship (Moodley 1997), it is the personal/cultural dimension of life that this answer to the relevance question has foremost in mind.

The second answer relates relevance to the seemingly more modern notion of functionality, to skills for employment, for the workplace, for the labor market. The third notion of relevance is connected to advanced learning, to skills that will enable students to pursue postgraduate studies at a high level of cognitive competence.

The personal/cultural understanding of relevance has spawned a curricular debate between the apostles of diversity (the multiculturalists) and the apostles of

nation (or pan-nation) building. For reasons spelled out in an earlier diversity meeting (see Cloete, Muller, Makgoba, and Ekong 1997), many South Africans are inclined more toward nation-building (here the key term is *African Renaissance*) and to common parameters of national identity and morality than they are to the often uncritically postmodern celebration of difference that some multiculturalists espouse (Muller 1997). This long-running debate seems to be sustained mainly by the evangelical multiculturalists who pursue diversity education as an end in itself, as if that were all higher education was for.

Taking relevance for work and relevance for further study together, the major discussions have to do with espousing the priority of one or the other, a rather stale and sterile debate. For the central question is what skills the ideal graduate needs to succeed both in higher degree study and in the world of work (Muller 2000). Put in this way, we can see that the crucial curricular debates cut across all three of the senses of relevance. In what follows, we hope to clarify some of the curricular issues at stake when advocates take up a position for or against various understandings of relevance. We will do this by examining the following:

- The generic versus specialized skills debate
- The disciplinary versus interdisciplinary skills debate
- The issue of coherence

These matters are of course interlinked and are discussed separately in the interest of clarity.

Do Generic Skills Exist?

Should the undergraduate curriculum provide the beginning student with a broad-based general education — the *studium generale* of the early European universities or the liberal arts and science curriculum of some U.S. universities — or should it attempt to induct students as soon as possible into a specialized field of study, as some contemporary British universities attempt to do? Underlying the former position are two general assumptions. First, that the entire enterprise of knowledge is of *one piece* (Tauber 1999, 392), and that it matters little where we begin, since, taken far enough, all knowledge paths converge. Superficially, this seems like an equalitarian, even democratic, position to espouse, but it is actually a covert elitism, since it is only the rich (and idle) or the peculiarly gifted who can these days afford to meander through the entire network of knowledge to the place where all paths converge. The broadly educated scholar and polymath — the Encyclopaedists in revolutionary France, or General Jan Smuts, who while Prime Minister of South Africa, still regularly wrote the annual review of national scientific progress for the Royal Society — is an increasingly isolated exception. These exceptions are still presented as the presumptive ideal by the advocates of liberal education, but in the view of the not-

Part One: South Africa

ed educational reformer Emile Durkheim, they are highly undesirable for a society looking to cultivate civitas and cooperation:

This culture generale, formerly lavishly praised, now appears to us a loose and flabby discipline. We disapprove of those men whose unique care is to organize and develop all their faculties as if each man were sufficient unto himself, and constituted an independent world. It seems to us that this state of detachment and indeterminism has something anti-social about it. The praiseworthy man of former times is only a dilettante to us (Durkheim 1964, 42-43).

Contrary to Durkheim, then, it is clear that advocates of general education would espouse the virtues of interdisciplinary over disciplinary study, a theme pursued further below. More germane at this point, the cardinal assumption underlying the general education position is the assumption of generic or transferable skills. This view holds that there are basic skills of thinking that, once learned, can be deployed in a multitude of situations. Equipped with the core basic skills, the scholar is then ready for any knowledge exigency.

At a certain common-sense level, this is of course correct. The point is: what are these generic skills, how are they learned, and are they always transferable? There is an increasingly influential school of thought in the anthropology of learning (Lave and Wenger 1991) and activity theory (Engestrom 1991) that casts serious doubt both on the generic character and the transferability of skills. For these contextualists, all cognitive skills are specific to a discourse or context, with very little transferability possible between contexts (for a good review, see Breier 1998). The empirical literature, too, suggests that transferability, is learned in specific situations, or within a coherent disciplinary matrix, and only then is it generalizable. In other words, when generic skills are transferable, this occurs only when someone has learned a relatively high-level skill in a particular context and then has learned to generalize it. Yet general education programs, at least as they are presented at some institutions, are based on the notion of the generic skill, taught in generic or "foundation" courses, to beginning undergraduates (Hall 1998). Remarkably, the unease of academicians in this kind of environment is rarely expressed as a curricular one, but rather in terms of the erosion of academic freedom, usually mixed in with some compound fear of bureaucratic meddling (see Watson 1999; Mamdani 1998).

Interdisciplinarity

Periodically, when society experiences knowledge as an explosion characterized by increasing complexity and specialization, as is the case in this early stage of the knowledge society, fears surface about the fragmentation of knowledge, which seems to betoken the fragmentation of society. The epistemological holists then gird their loins and reassert the unity of knowledge, as if social division could be overcome by representational means. Constituencies as diverse as the techno-optimists of the Internet and the program holists leading higher education curricular reform in South Africa

(Gevers 1998) can be seen as trying to recast society in the image of a past mythical unity. The most interesting thing about this response is that it is neither novel nor effective (Noble 1997, 1998a, 1998b).

A notable earlier example of programmatic holism was the Chicago School with Dewey, Mead, Veblen, Angell, Boas, and James in the van (Klein 1990). Dewey was famous for insisting on task-orientated learning, scoffing that learning for self-esteem (the personal/cultural curriculum referred to above) could only emerge from the accomplishment of the former (see Ryan 1995). Common to all these holistic reassertions is the priority assigned to interdisciplinarity, the presumed redeemer of disciplinary specialization. One must distinguish interdisciplinary research from the interdisciplinary curriculum, though these two are often conflated, at least by their protagonists (like Gibbons 1998). Nevertheless, one can espouse interdisciplinary research without advocating the holistic interdisciplinary undergraduate curriculum (as the recent CHE Report 1999 does). Most responses from holists, though, do not draw such careful distinctions.

Generally speaking, we can discern two broad programmatic responses in regard to interdisciplinarity. The first, exemplified by the University of Port Elizabeth (UPE), is to raze the disciplines and their institutional redoubts, the departments, altogether; to institute interdisciplinary schools; and to define programs at the undergraduate level in interdisciplinary and often functional terms. Here, programs come to play the role that disciplines formerly played as the most important organizers of knowledge. The second, exemplified ironically enough by Rhodes University, UPE's nearest collegiate neighbor, is to retain the disciplines at the undergraduate level, and to define programs in terms of cognate disciplinary clusters. At Rhodes, programs are merely curricular vehicles for disciplinary knowledge.

It is too early to judge which programmatic approach will turn out to be more effective for teaching students higher cognitive skills. For crusading holists like Gibbons (1998), no evidence is necessary to demonstrate the superiority of the interdisciplinary curriculum. But reservations about interdisciplinary learning are increasingly being raised (Muller 2000), and writers like Delanty worry about the drift of interdisciplinarity into what he calls postdisciplinarity. With the decline of the disciplines, all system and rigor are lost, and the disciplines themselves, with their intellectual resources progressively depleted, become increasingly defenseless against control and domination by bureaucratic and financial goals (Delanty 1999,12), and against what Slaughter and Leslie (1997) call the entrepreneurial university.

Coherence

As we said above, the interdisciplinary holists often make their case for interdisciplinary programs on the basis of the supposed *incoherence* of the discipline-based learning programs. What they mean by this is that the individual disciplines do not speak to one another, and that students therefore end up in self-enclosed disciplinary streams that the students must integrate on their own, if at all. Interdisciplinarity,

Part One: South Africa

they argue, forges coherence by creating horizontal linkages within programs of study. Coherence, in other words, means horizontal coherence. It can be achieved either through what Ensor (1999) calls academic *cognacy* — that is, by putting academically cognate subjects together into a program, (for example, development studies), or by instrumental cognacy — putting together subjects that share relevance to some theme, task, or social goal, like women's studies, for example.

It should not be surprising that the disciplinary programs have a different idea of coherence, one based more directly on different conceptual levels and concentrating on linkages between orders of difficulty and abstraction, both between and within years of study, but all within one particular discipline. Ensor (1999) calls pro betwee

tutions are quick to deny that it is they who are driving this bureaucratic-technocratic revolution (Maughan 1999), but it is clear that management does exercise power, often with the best intentions. Maughan's own institution has, for instance, inclined more to the UPE than to the Rhodes route, yet it is not clear that academicians at his institution even know they had a choice.

Of course, as we said at the outset, there are obdurate academicians and institutions who have responded to the new policy regime through stolid inaction, and there are those who close their eyes to the ambiguities and choices and proceed as if programs and unit standards were logically and rationally prescribed. ItincliTj0 Tc(s) Tj1.09

Part One: South Africa

Committee of University Principals and South African Universities' Vice Chancellors' Association. Minutes from January 1993 - December 1998 (unpublished).

Delanty, G. 1999. *Social theory in a changing world: Conceptions of modernity*. Cambridge, UK: Polity Press.

Dowling, K.W. 1998. Utilitarianism, the humanities, and the university curriculum. *Bulletin: News from the Human Sciences*, 5:1, 2.

Durkheim, E. 1964. *The division of labour in society*. G. Simpson, trans. Glencoe, IL: Free Press.

Engestrom, Y. 1991. *Non scolae sed vitae discimus*: Towards overcoming the encapsulation of school learning. *Learning and Instruction*, 1: 243.

Ensor, P. 1998. Access, coherence and relevance: Debating curriculum in higher education. *Social Dynamics*, 24:2, 93-105.

Ensor, P. 1999. Axes of choice in curriculum planning: A commentary on the Grahamstown Seminar. In Centre for Higher Education Transformation, ed. *The new qualifications framework for higher education: A second reader*. Pretoria, South Africa: Centre for Higher Education Transformation.

French, E. 1997. Ways of understanding the integration of NQF. *South Africa Qualifications Authority Bulletin*, 2:2, 17.

Gevers, W. 1998. University and technikon qualifications in relation to the NQF: Background question-and-answer paper. In Centre for Higher Education Transformation, ed. *The new qualifications framework* Tj0 Tc(.872 Tw0.34cgher) Tj1tion: reade.189 Tw0 world: ...

Klein, J.T. 1990. *Interdisciplinarity: History, theory and practice*. Detroit, MI: Wayne State University Press.

Kraak, A. 1998. *Competing education and training policies: A systemic versus unit standards approach*. Human Sciences Research Council, Occasional Papers, 1: 1-49.

Lave, J. and E. Wenger. 1991. *Situated learning*. Cambridge: Cambridge University Press.

Luckett, K. July 1999. Negotiating a way into the NQF: A humanities perspective. Paper Presented at the Biennial SAARDHE Conference, on the Reconstruction of Higher Education in South Africa and the Role of SAQA and the NQF, Cape Town.

Mamdani, M. 1998. Teaching Africa at the post-apartheid University of Cape Town. *Social Dynamics*, 24: 2, 1-32.

Maughan, B. D. 12 September 1999. Focus academic freedom debate on national policy. *The Sunday Independent*.

Moodley, K. 1997. On diversity education for South Africa: Some critical reflections. In N. Cloete, J. Muller, M. Makgoba, and D. Ekong, eds. *Knowledge, identity and curriculum transformation in Africa*. Cape Town, South Africa: Maskew Miller Longman.

Muller, J. 1997. Citizenship and curriculum. In N. Cloete, J. Muller, M. Makgoba, and D. Ekong, eds. *Knowledge, identity and curriculum transformation in Africa*. Cape Town, South Africa: Maskew Miller Longman.

Muller, J. 1998. The well-tempered learner: Self-regulation, pedagogical models and teacher education policy. *Comparative Education*, 34: 2, 177-193.

Muller, J. 2000. *Reclaiming knowledge: Social theory, curriculum and education policy*. London: Falmer Press.

National Commission on Higher Education. 1996. An overview of a new policy framework for higher education transformation, [on-line] Available at <http://star.hsrc.ac.za/nche/press/policy.html>.

Neave, G. 1992. *The teaching nation. Prospects for teacher education in the European Union*. London: Falmer Press.

Nel, J.C. and P.C. van der Westhuizen. 1998. Programme-based education within the humanities: Ostranenie revisited? *Bulletin: News from the Human Sciences*, 5:1, 6.

Nissani, M. 1995. Fruits, salads, and smoothies: A working definition of interdisciplinarity. *Journal of Educational Thought*, 29: 2, 121-128.

Noble, D. 1997. Digital diploma mills, Part I: The automation of higher education, [on-line] Available at http://www.firstmonday.dk/issues/issue3_1/noble.

Noble, D. 1998a. Digital diploma mills, Part II: The coming battle over online instruction, [on-line] <http://communication.ucsd.edu/dl/ddm2.html>.

Noble, D. 1998b. Digital diploma mills, Part III: The bloom is off the rose, [on-line] <http://www.vpaa.uillinois.edu/tid/resources/noble.html>.

Part One: South Africa

Parekh, A., A. Habib, and J. Jansen. 1999. Transforming higher education: Learning programmes and academic re-organisation. In *The new qualifications framework for higher education: A second reader*. Pretoria, South Africa: Centre for Higher Education Transformation.

Ryan, A. 1995. *John Dewey and the high tide of American liberalism*. New York: W.W. Norton and Co.

Schneider, C. 1997. From diversity to engaging difference: A framework for the higher education curriculum. In N. Cloete, J. Muller, M. Makgoba, and D. Ekong, eds. *Knowledge, identity and curriculum transformation in Africa*. Cape Town, South Africa: Maskew Miller Longman.

Slaughter, S. and L. Leslie. 1997. *Academic capitalism: Politics, policies and the entrepreneurial university*. Baltimore, MD: The John Hopkins University Press.

South African Qualification Report to the Council on Higher Education. 1996.

Tauber, A. 1999. Review essay, science. *Technology and Human Values*, 24:3, 384-410.

Teichler, U. 1998. *The requirements of the world of work*. Paris: UNESCO.

Trowler, R. September 1999. Captured by the discourse? The socially constitutive power of new higher education discourse in the UK. Paper prepared for Re-organising Knowledge: Trans-forming Institutions, Knowing, Knowledge and the University in the 21st Century. University of Massachusetts, Amherst.

Watson, S. 5 September 1999. Academic freedom is now a management decision. *The Sunday Independent*.