

# Equipping public officials for the challenges of responsible governance: a South African perspective on lifelong learning

*Jacobus S. Wessels*

## **Introduction**

Public officials worldwide face an ever-changing situation. The environments in which they function have become increasingly complex over the past few decades, bringing varied and growing challenges in service delivery. They are confronted by shifting values, new governments, more assertive populations, multiple and pluralistic needs for public services, with new services being introduced and existing services being restructured, and with new tasks, new technology, new knowledge and new skills all being required. It is clear that their survival in this new century will depend on lifelong learning.

This discussion reflects on ways of equipping public officials for the learning challenges ahead of them. It proposes that the ever-changing environment in which they function means that they can no longer rely on traditional subject-based education to prepare them for the duration of their careers. A new approach is essential to meet future challenges.

## **The changing milieu of public officials**

Change, and more specifically the unpredictability of change, can be regarded as a key characteristic of the contemporary world. As Edwards (1997: 67) argues, change 'is the result of decisions and actions taken and positions adopted throughout the social formation and within the institutions of the state'. The rapid and ongoing changes that public officials face stem from such decisions and actions. The most significant broad influences on the state and officials can be summarized as follows.

1. There has been an incredible growth in the world's population and, according to projections, it will pass the 8 billion mark by 2019 (Sunter, 1996: 18). The countries experiencing this spectacular growth in their populations are countries from the so-called South. The notion of a 'demographic timebomb' apparently has a different meaning for countries in the North, which are

---

Jacobus S. Wessels is Associate Professor of Public Administration at the University of South Africa, Pretoria. CDU: 35.088.6(68).

*International Review of Administrative Sciences* [0020-8523(200006)66:2]  
Copyright © 2000 IAS. SAGE Publications (London, Thousand Oaks, CA and New Delhi), Vol. 66 (2000), 311-324; 013029

experiencing a decline in population growth and ageing populations (Edwards, 1997: 58–9).

2. Related to the rapid growth in population is the phenomenon of urbanization. It is predicted that the population in urban areas will very soon overtake the numbers in rural areas for the first time (Sunter, 1996: 31). This will inevitably affect the accessibility of all types of government services.

3. Industrialization has resulted, among other things, in the creation of job opportunities for millions of people, but also increased energy consumption and the release of harmful emissions into the atmosphere (Sunter, 1996: 26). The worsening world environmental situation impacts heavily on human welfare, prospects for development and the roles of the state (Stewart, 1999: 111).

4. New and more sophisticated technologies are replacing old ones, causing continual changes in society's needs, with governments engaged in efforts to remain abreast of technology and individuals struggling with the quest for appropriate skills. Technological developments have led to a net loss of jobs and thus have contributed to economic insecurity in the workforce (Edwards, 1997: 52). Also, especially as a result of the Internet, the 'very idea of boundary — the frontier boundary of the nation state, for example, or the physical boundaries of urban structures — has been rendered problematical' (Morley and Robins quoted in Edwards, 1997: 54).

5. Capital has become more internationalized and national economies more integrated into global market mechanisms. This increasing global competition has led to changes in domestic economies, with special emphasis on competitiveness and flexibility (Edwards, 1997: 30–1). Increased competitiveness and flexibility apparently have brought greater insecurity, unemployment, inequality and poverty (Hutton, 1995; Edwards, 1997: 40). Stewart (1999: 103) points out that while 'the *proportion* of the world's people living in absolute poverty has decreased . . . since 1960, the absolute number has increased to more than a billion due to population increases' (my emphasis).

6. There is an ever-increasing spread of new epidemics and diseases such as HIV and Aids. This has compelled governmental health services to reconsider their priorities and to adopt new methods of health care and delivery (Gorman, 1996: 34–5).

7. The roles of government and the structures of government institutions and agencies are being redefined and even re-invented (Edwards, 1997: 31). Although the public services of many countries from the South have recently been downsized as a result of structural adjustment programmes dictated by the IMF, public officials are now more than ever obliged to be flexible in their response to public needs (Stewart, 1999: 125).

8. Great social instability is experienced and wars are being fought in various regions of the globe. For example, nearly a third of Sub-Saharan Africa's 42 countries have been embroiled in armed conflict in recent years as more and more of their rulers have sought military solutions to political problems (Cilliers and Cornwell, 1999: 227).

These developments indicate the enormity and variety of the changes confronting public officials. It is appropriate to ask officials how well their initial education and training have prepared them for personal and environmental uncertainty. Are they equipped to understand the issues and processes of change, and to cope with the risks, ambivalence and uncertainty of the new milieu? Are they in a position not only to adapt to change, but to engage in the discourses and processes shaping such change? To what extent will their engagement be enhanced or constrained by 'a sense of ethics and morality anchored in the 20th century' (Clapper, 1999: 148)?

All of these questions relate to the adequacy of the knowledge, skills and experience of public officials as a preparation for coping with present and future challenges. For many officials, particularly those in the South, change and transformation are perhaps the only permanent fixtures of their daily reality. Political parties and rulers come and go. Even the role of the state in protecting society is deteriorating, especially in Africa. Officials often have to deal with new players in the political arena, notably external non-state actors — the men with the guns (Cornwell, 1999: 75).

#### **The unsustainability of traditional education and training**

In addressing the need for public officials to understand and respond effectively to their ever-changing milieu, it is appropriate to question the extent to which traditional education and training assist in meeting the requirements of professional competence in the work place. The professional element focuses attention on unique skills, based on a distinct corpus of knowledge and theories (Larson, 1977; Louw, 1990; Pauw, 1995). The idea of competence extends the focus by referring to 'what a person knows and can do under ideal circumstances', embracing the structure of knowledge and abilities (Messick, 1984). According to Gonzi (1993: 5–6), the competence of professionals derives from their possessing a 'set of relevant attributes such as knowledge, skills and attitudes'. These attributes are often referred to as competencies which can be improved through training and development.

It is commonly accepted that the 'expert knowledge' of a profession is provided through academic study at higher education and often postgraduate level (Edwards, 1997: 95). Completion of academic study is commonly regarded as an indication to other professionals that the qualifying student has undergone adequate intellectual preparation, including a proper initiation into the values and tradition of the profession (Aronowitz and DiFazio, 1994: 209). To the world outside the profession, education and training seem to give professionals a degree of autonomy, control and power — the power that results from knowledge (Clapper, 1999: 141).

Although professions are characterized to a large extent by the best available technology and knowledge, in reality it is the skills, the tricks of the trade, and aptitude that distinguish professions (Pauw, 1995: 8). The provision of adequate training for professionals, say at a university, requires a practical, contextualized

form of rationality in which scientific knowledge is one of several resources to be utilized (Edwards, 1997: 150). The reason why the education and training of professionals such as medical doctors, lawyers and accountants have given them that autonomy, control and power in the eyes of the people outside the profession may be that traditionally their 'expert knowledge' was accompanied by the teaching of those skills that cannot be acquired from books. It is the combination of their theoretical knowledge, acquired skills and accepted ethos that makes such professionals competent to discharge their professional responsibilities.

Consequently, the crucial question for public administration professionals is: Does the conventional pattern of adult education and training provide such a practical, contextualized form of rationality which makes learning of the necessary competencies possible? The answer to this question is negative. The reason lies at the heart of the systems and practices of education and training with reference to government. The increasing demand for high-level, up-to-date knowledge and skills certainly raises doubts about the relevance of traditional once-off academic study at institutions of higher education.

Why is this so? This can be addressed by considering three major characteristics of the traditional adult education and training paradigm — or the 'instruction paradigm' as it is often called — namely its purposes, the criteria applied to determine its success, and its teaching and learning structures.

First, the purposes of conventional adult education and training seem to be to offer courses and programmes, to organize, provide or deliver instruction, and to transfer subject knowledge from lecturer to student (Barr and Tagg, 1995: 16–17). These purposes assume that some people have and retain superior knowledge in relation to other people. They also assume a long lifespan for the knowledge which is imparted through formal instruction. In making these assumptions, they tend to ignore the rapidly changing nature of the world and the rate at which knowledge can become outdated (Barr and Tagg, 1995: 16–17).

Second, adult education and training are characterized by the criteria applied to determine their success, namely the inputs and resources used, the quality of the students entering the courses or programmes, the growth in the number of students enrolled, the quality of the lecturing staff, and the methods of instruction (Barr and Tagg, 1995: 16–17). But are these criteria really valid for measuring success, and do the best available inputs and resources guarantee positive results? It is fashionable for prestigious institutions and professions to boast of their tough course selection requirements; but do these necessarily imply good quality education or training? Similarly, high quality staff and methods of instruction are no immediate guarantee of effective education or training.

Third, adult education and training are characterized by specific teaching and learning structures such as independent disciplines and departments, comprehensive study materials, evaluation of learning within classes by lecturers, and end-of-course assessment (Barr and Tagg, 1995: 16–17). The implication of these structures is that each discipline and academic department operates on its own. Departments are afraid of losing students to other disciplines. Their over-

confidence in their own insights, approach to reality, response to the needs of society, and in-house-developed study material, make collaboration with similar departments at other institutions as well as with other disciplines not particularly attractive to them. Is such an approach open and responsive to the changes and challenges facing officials? Are Schools and Departments of Public Administration still the only or best vehicle to equip public officials for the future?

The traditional private, classroom-based and end-of-course systems of assessment and evaluation have as their foundation the independence of individual lecturers or institutions to teach what they think is necessary for students to know. Is this foundation necessarily relevant to the challenges of practice? If an institution teaches students only what it thinks they need to know, it makes sense that the institution will want to do its own evaluation and assessment. However, if it claims to equip students for a specific profession, this implies that the profession will have agreed on the competencies of the particular programme. It also implies that assessment and evaluation are open for inspection by the particular profession. This is normally not the situation regarding institutions that provide the education and training of public officials.

### **Lifelong learning**

With the unsustainability of the instruction paradigm becoming increasingly evident, different discourses on the learning society have become more prominent. It is clear that the concept of a learning society has various meanings. Some people see it as an educated society, committed to active citizenship, liberal democracy, and equal opportunities. Others see it as a learning market, with the usefulness or performance value of education and training as a guiding criterion. It is also viewed as a learning society in which learners adopt a learning approach to life, drawing on a wide range of resources to enable them to support their lifestyle practices. This latter view has become increasingly dominant in the discourse on adult learning. It shifts the focus quite clearly away from the provider towards the learner and learning (Edwards, 1997: 107, 183–4). This is perhaps the most fundamental respect in which it differs from the instruction paradigm.

The main characteristics of the learning paradigm can be described with reference (as before) to its mission and purpose, the criteria for its success, and its learning structures. First, the purpose of learning appears to be to produce learning (and not merely to provide instruction); to elicit student discovery and construction of knowledge (rather than just to transfer knowledge to students); to create powerful learning environments (as opposed to offering courses and programmes); and to improve the quality of learning (rather than instruction). Second, learning is characterized by the criteria applied to determine its success, namely learning and student outcomes (not inputs); the quality of exiting (not entering) students; the quantity and quality of outputs and outcomes (not resources); the aggregation of learning growth and efficiency (not of enrolment and revenue); and the quality of students (not lecturers) plus the quality of learning (not instruction). Third, learning is characterized by specific teaching and learn-

ing structures such as cross-disciplinary or interdepartmental collaboration (not independent disciplines and departments); specified learning results (not complete study packages); external (not internal) evaluation of learning; pre/during/post-assessment (not just at the end of a course); and public (not private) assessment (Barr and Tagg, 1995: 16–17).

With regard to assessment and quality assurance issues, Michael Gibbons (1998: 50), Secretary General of the Association of Commonwealth Universities, argues:

Quality has been a matter for academics and academics alone. It has been up to them to determine when quality in both teaching and research has been achieved. In the quality assurance processes which are now emerging, a much wider range of factors is being considered . . . Universities will not be able to insist on criteria which reflect their intellectual interests alone. Universities will be one actor amongst several.

Edwards (1997: 79) identifies what he calls a 'de-differentiation of the boundaries' between different formal providers of learning opportunities (those institutions whose sole task is to organize the provision of education and training); between formal and non-formal providers of learning opportunities (institutions, groups and organizations that provide learning opportunities as part of their function); between learning organized by institutions for others and informal learning organized by individuals and groups for themselves; and between learning as a dedicated activity and incidental learning which takes place as a result of other activities. These arrangements and the shift of control from the provider (e.g. a School of Public Administration) to the learner (a future or present public official) implies also a shift from the classroom to practice (Zuber-Skerritt, 1993: 53).

The latter shift brings a very important concept to the fore, namely 'praxis', which involves a movement away from critical thinking as problem-solving (the traditional classroom activity) to critical thinking as a process in which knowledge and action are *dialectically* related through the process of *critical reflection* (Van Aswegen, 1998: 279). The process of critical reflection leads to authentic knowledge (knowledge not reproduced from textbooks) and autonomous action (action not prescribed in detail in procedural manuals). Critical reflective practice is that form of practice that 'seeks to problematize many situations of professional performance so that they can become potential learning situations and so that the practitioner can continue to learn, grow and develop in and through their practice' (Van Aswegen, 1998: 281). Critical reflection is thus a crucial element of effective lifelong learning (Boud et al., 1985; Edwards, 1997; Wessels and Pauw, 1999).

### **Learning systems and techniques for public officials**

The ascendancy of the learning paradigm concerns directly what is currently a hotly debated matter in South Africa: outcomes-based education (OBE). OBE has its origin in the significance of the intended outputs as opposed to the inputs

which feature prominently in the instruction paradigm. In this regard, an outcome, as Spady (1992: 7) puts it, is

a culminating demonstration of the entire range of learning experiences and capabilities that underlie it, and it occurs in performance context that directly influences what it is and how it is carried out. These defining elements clearly tell us that an outcome is not simply the name of the learning content, or the name of a concept, or the name of a competence, or a grade or test score, but an actual demonstration in authentic context.

Outcomes are demonstrations of competence — what learners can do and what they know — in settings that embody a variety of challenges (Spady et al., 1999). In the learning paradigm, they occupy the same position as ‘objectives’ do in the instruction paradigm. Thus (South Africa, 1996a: 27):

- Outcomes focus on what the student will do; objectives focus on what the teacher will do.
- Outcomes describe the results of learning; objectives describe the intent of teaching.
- Outcomes emphasize how learning is used in new areas; objectives focus on opportunities provided for learning.
- Outcomes require flexible allocation of time; objectives involve estimating the amount that can be learned in a given period of time.

OBE for public officials implies that their learning will be designed directly round the intended learning demonstration that is necessary for them to cope with the challenges of a changing milieu (South Africa, 1996a: 24). This is why curriculum developers work backwards from agreed desired outcomes which are supposed to state clearly what the learner should be able to demonstrate, to understand, or to apply (South Africa, 1996a: 25). Learning programmes are designed to help learners to achieve these outcomes.

OBE for public officials fits into the broader scheme of the National Qualifications Framework (NQF), which is a framework for providing and funding life-long learning opportunities. The first official endorsements of the key role of the NQF for education and training in South Africa appeared in the Reconstruction and Development Programme (RDP) White Paper (South Africa, 1994) and the Education and Training White Paper (South Africa, 1995a). An Inter-ministerial Working Group was established to draft the NQF Bill which was passed into law as the South African Qualifications Authority (SAQA) Act (South Africa, 1995b). The process of defining outcomes in terms of the NQF is overseen by the SAQA (South Africa, 1995b).

South Africa is certainly not alone in this type of development. The Scottish Qualifications Authority, for example, is responsible for most types of qualifications in Scotland, which range from the Standard Grade, Higher Grade, and National Certificate Modules that almost all school pupils take, to Higher National Certificates, Higher National Diplomas and Scottish Vocational Qualifications. Also, prior to October 1997, subject reviews (previously called ‘quality assessments’) in England were carried out by the Higher Education

Funding Council for England (HEFCE). Subject reviews are now carried out by the Quality Assurance Agency for Higher Education on behalf of the HEFCE (Greenwood and Robins, 1998).

In the various debates on OBE and the shift from the instruction paradigm to the learning paradigm, it is often asked with reference to the preparation of public officials: If outcomes are abilities to do something quite tangible in the real world of governance, will it really be possible to formulate outcomes with unknown future challenges in mind? It is also asked: How in practice will this new paradigm affect the preparation of officials for the future?

Regarding the argument about the unknown nature of future challenges, it is worthwhile looking at the learning outcomes formulated by SAQA. There are two categories of outcomes, namely the critical cross-field education and training outcomes (the 'critical outcomes'), and the developmental outcomes. The critical outcomes are (South Africa, 1996b):

1. identify and solve problems in which responses demonstrate that responsible decisions using critical and creative thinking have been made;
2. work effectively with others as a member of a team, group, organization, community;
3. organize and manage oneself and one's activities responsibly and effectively;
4. collect, analyse, organize and critically evaluate information (in other words, research);
5. communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation;
6. Use science and technology effectively and critically, showing responsibility towards the environment and health of others;
7. demonstrate an understanding of the world as a set of related systems by recognizing that problem-solving contexts do not exist in isolation (developing a macrovision).

The developmental outcomes are (South Africa, 1996b):

8. reflecting on and exploring a variety of strategies to learn more effectively;
9. participating as responsible citizens in the life of local, national and global communities;
10. being culturally and aesthetically sensitive across a range of social contexts;
11. exploring education and career opportunities;
12. developing entrepreneurial opportunities.

Spady et al. (1999) cluster these 12 outcomes into three categories, namely life-roles, underlying abilities and thinking enablers.

#### *Life-roles*

- Responsible self-manager: organize and manage oneself and one's activities responsibly and effectively.
- Responsible citizen: use science and technology effectively and critically,



show responsibility towards the environment and health of others, and participate as responsible citizens in the life of local, national and global communities.

- Lifelong learner: explore education and career opportunities.
- Entrepreneur: develop entrepreneurial opportunities.

#### *Underlying abilities*

- Problem or information-based decision-making: reflect on and explore a variety of strategies to learn more effectively, and collect, analyse, organize and critically evaluate information (in other words, research).
- Effective teaming/collaboration: work effectively with others as a member of a team, group, organization, community.
- Effective communication: communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation.

#### *Thinking enablers*

- Broad systems thinking: demonstrate an understanding of the world as a set of related systems by recognizing that problem-solving contexts do not exist in isolation (develop a macrovision).
- Effective learning strategies: reflect on and explore a variety of strategies to learn more effectively.
- Cultural/aesthetic sensitivity: be culturally and aesthetically sensitive across a range of social contexts.

Irrespective of the way in which these expected outcomes are organized, it is clear that they are defined to prepare learners not only for a future career, but also for future success in their personal, civic and economic lives. The emphasis is on the complete person. Contrary to what some people might fear, these outcomes are open and not time or context specific. Also, unlike the learning of theories and facts which will quickly become obsolete, they are supposed to remain valid for all learners, regardless of their present or future careers, and despite changes in their milieu.

What competencies are required to equip public officials within the present and future context? The White Paper on Public Service Training and Education (South Africa, 1997: Appendix C) suggests at least ten possible public service competencies (see Table 1), including leadership (also teamwork), thinking skills, communication and action management. Once again, these competencies are also not time, technology or knowledge specific with the risk of becoming obsolete (see Table 1).

Within universities as providers of learning opportunities for current or future public officials, it makes sense for learning processes or learning experiences to be programmed. By doing that, different programmes may be offered for different contextual or occupational needs. This applies to all groups of learners, including public officials.

According to Spady et al. (1999), the ten outcomes in their framework form a hierarchy, with the life-role applications being the most complex and superordi-

**TABLE 1**  
**Illustration of possible public service competencies**

Characteristics	Frontline	Supervisor	Middle manager	Director	Chief Director	Deputy Director General
Basic literacy (8), numeracy, and communication skills (5)	Required	Required	Assumed	Assumed	Assumed	Assumed
Judgement, integrity, self-confidence, flexibility initiative, perseverance creativity (1 & 3)	Required	Required	Required	Required	Required	Required
Leadership (2)	Teamwork	Teamwork and motivating	Providing challenge	Employee development	Organizational influence	Creating vision and values
Thinking skills (1, 4 & 7)	Empowered to innovate where necessary	Operational problem-solving	Problem formulation and anticipation	Integration perspective	Strategic meaning	Extracting
Organizational awareness (10)	Being part of the culture and purpose	Same, plus knows how to use the system	Same, plus develops linkages	Organizational know-how	Building support	Political acumen
Interpersonal relations (2)	Supportive	Same, plus sensitivity	Same, plus handling group situations	Managing sensitive interpersonal situations	Diplomacy	Interpersonal versatility
Communication (5)	Required	Required	Briefing	High impact communication	Strategic communication	Instilling communication
Action management (3, 9 & 6)	Best results come from teamwork	Coordination	Planning	Direction/delegation	Orchestration	Sustaining action
Knowledge (8)	Required	Required	Required	Required	Required	Required

*Source:* South Africa, 1997: Appendix C.  
*Note:* Numbers indicate SAQA outcomes.

nate component. The outcomes of underlying abilities provide a basis for and directly support the life-role applications. The same also holds for the thinking enablers.

In structuring a learning programme for public officials, it is necessary to organize one's thinking around a matrix (see Table 2). The columns in the matrix respond to the question: What are the various life-roles of a public official? Each column determines a separate life-role, namely the role as official (career), entrepreneur, citizen, private person, and learner, with each representing one of the complex and superordinate life-roles already identified.

The rows of the matrix will comprise the underlying abilities and the thinking enablers. Only one of the eight rows is concerned with knowledge — the so-called foundational competence.

A subject such as Public Administration will be only one of several subjects selected to fit the outcomes of the learning programme. As such, it should integrate the specific knowledge (information, concepts, theories and methodologies), skills, and values required for the inculcation of competencies in present and future public officials. Learners will have more options than in the past. Only those subjects which facilitate competencies which are seen as supporting outcomes that are needed to cope with future occupational and life challenges will be selected by learners as part of their learning programmes. Similarly, only those learning programmes fulfilling the real life needs of learners will attract the necessary numbers of learners to be financially viable.

The fact that the learning outcomes are not technique specific should enable learners now and in the future to cope with unknown challenges. Also, the new paradigm as a whole ought to equip public officials to be lifelong learners and thus to seek constantly to cope with new challenges.

The implications of this for Public Administration as a subject are that programmes, courses or modules that are entirely fact- and theory-based are probably already obsolete. It also implies that Departments and Schools of Public Administration cannot claim any monopoly regarding public administration related knowledge and skills in order to secure their positions within learning programmes or universities. Therefore, those who try to undertake the challenge of equipping public officials for the future on their own will probably soon lose the battle for survival.

### **Concluding comments**

There is no doubt that the world of public officials within the next few years is likely to look much different. Changes in their milieu will mean that existing knowledge will become outdated and more and more new questions and challenges will arise.

The conventional education and training system which makes provision for fixed graduate or diploma programmes is no longer the solution. Public officials need to refresh and supplement their knowledge on a regular basis in order to meet the challenges of a constantly changing work and world environment.

**TABLE 2**  
Curriculum design matrix

	Outcomes (SAQA)	Career	Entrepreneurial (12)	Civic (6 & 9)	Personal (3)	Learner (11)
Essential technical skills?	Problem or information-based decision-making (1 & 4)					
Essential interpersonal skills?	Relational	Effective teaming/collaboration (2)				
	Communication	Effective communicating (5)				
Essential management skills?	Self	Organize and manage oneself (3)				
	People	Participate in the life of local, national and global communities (9)				
	Things	Use science and technology effectively (6)				
Essential values and principles?		Suggested by Spady et al.				
Essential life orientations?		Broad systems thinking (7); cultural/aesthetic sensitivity (10)				
Essential knowledge?		Learning strategies (8)				

*Note:* Numbers indicate SAQA outcomes.  
*Source:* Based on matrix in Spady et al. (1999).

It is also evident that knowledge alone will not be adequate to equip public officials for the real world in which they live. Consequently, institutions providing learning opportunities will be expected to facilitate the integration of such knowledge, together with skills and values, into the learners' practice in a participatory and reflective manner.

The new understanding resulting from the process of critical reflection brings praxis to the fore in all learning situations. Praxis involves authentic knowledge and autonomous action by lifelong learning and the fostering of reflective capacities on the part of practitioners.

Learning programmes which are still based on the conventional instruction paradigm will, without doubt, be inadequate to equip public officials for the challenges ahead of them. What is necessary is a definite switch to a learning paradigm which will prepare present and future officials to be lifelong learners. Only lifelong learners will be able to cope with the ever-changing challenges in the process of rendering efficient, effective, accountable and democratic public services.

#### Note

This article would not have been possible without sources provided by and discussions with Marie Nothling, Bureau of University Teaching, University of South Africa.

#### References

- Aronowitz, S. and DiFazio, W. (1994) *The Jobless Future: Sci-tech and the Dogma of Work*. Minneapolis: University of Minnesota Press.
- Barr, R.B. and Tagg, J. (1995) 'From Teaching to Learning: A New Paradigm for Undergraduate Education', *Change: The Magazine of Higher Learning* 27(6): 12-25.
- Boud, D., Cohen, R. and Walker, D. (eds) (1985) *Reflection: Turning Experience into Learning*. London: Kogan.
- Cilliers, J. and Cornwell, R. (1999) 'Africa: From the Privatisation of Security to the Privatisation of War?', in J. Cilliers and P. Mason (eds) *Peace, Profit or Plunder? The Privatisation of Security in War-torn African Societies*. Halfway House: Institute for Security Studies.
- Clapper, V.A. (1999) 'Ethics and Public Administration and Management in the Twenty-first Century', in J.S. Wessels and J.C. Pauw (eds) *Reflective Public Administration: Views from the South*. Cape Town: Oxford University Press.
- Cornwell, R. (1999) 'The Collapse of the African State', in J. Cilliers and P. Mason (eds) *Peace, Profit or Plunder? The Privatisation of Security in War-torn African Societies*. Halfway House: Institute for Security Studies.
- Edwards, R. (1997) *Changing Places? Flexibility, Lifelong Learning and a Learning Society*. London: Routledge.
- Gibbons, M. (1998) *Higher Education Relevance in the 21st Century Education*. Washington, DC: World Bank.
- Gonzi, A. (1993) as quoted on p. 178 in M. Eraut (1994) *Developing Professional Knowledge and Competence*. London: Falmer Press.
- Gorman, C. (1996) 'The Disease Detective', *Time* 148(29): 56-66.
- Greenwood, John and Robins, Lynton (1998) 'Public Administration Curriculum Development in Britain: Outsider or Insider Influence?', *International Review of Administrative Sciences* 64(3): 409-21.
- Hutton, W. (1995) *The State We're In*. London: Jonathan Cape.

- Larson, M.S. (1977) *The Rise of Professionalism: A Sociological Analysis*. Berkley, CA: University of California Press.
- Louw, J. (1990) *Professionalizing Psychology*. Pretoria: HSRC.
- Messick, S. (1984) as quoted on p. 179 in M. Eraut (1994) *Developing Professional Knowledge and Competence*. London: Falmer Press.
- Pauw, J.C. (1995) 'Kan Universiteitsonderrig Beroepsgerig én Wetenskaplik wees?' Intreerede gelewer met die aanvaarding van die amp van hoogleraar in die Departement Publieke Administrasie aan die Universiteit van Suid-Afrika op 21 Augustus 1995. Pretoria: Universiteit van Suid-Afrika.
- South Africa (1994) 'White Paper on Reconstruction and Development: Government Strategy for Fundamental Transformation' (The RDP White Paper). Cape Town: Republic of South Africa.
- South Africa (1995a) 'White Paper on Education and Training'. Cape Town: Department of Education.
- South Africa (1995b) South African Qualifications Authority (SAQA) Act, Act 58 of 1995 (4 October 1995, *Government Gazette*, 16725).
- South Africa (1996a) Ministerial Committee for Development Work on the NQF, *Lifelong Learning Through a National Qualifications Framework: Discussion Document*. Pretoria: Department of Education.
- South Africa (1996b) South African Qualifications Authority (SAQA), decision 0204/96. Online, available at URL: <http://www.saqa.org.za/docs.main.html> (downloaded 11 June 1999).
- South Africa (1997) 'White Paper: Public Service Training and Education'. Online, available at URL: <http://www.saqa.org.za/docs.main.html> (downloaded 11 June 1999).
- Spady, W.G. (1992) as quoted in South Africa (1996a) Ministerial Committee for Development Work on the NQF, *Lifelong Learning Through a National Qualifications Framework: Discussion Document*. Pretoria: Department of Education.
- Spady, W.G., Killen, R. and Rand, J. (1999) 'Understanding and Planning the SAQA Critical Outcomes in Curriculum Planning', Paper presented at a seminar (in March) on Outcome Based Education, University of South Africa.
- Stewart, P. (1999) 'Development at the Dawn of the Twenty-first Century', in J.S. Wessels and J.C. Pauw (eds) *Reflective Public Administration: Views from the South*. Cape Town: Oxford University Press.
- Sunter, C. (1996) *The High Road: Where Are We Now?* Cape Town: Tafelberg.
- Van Aswegen, E.J. (1998) 'Critical Reflective Practice: Conceptual Exploration and Model Construction', unpublished dissertation submitted in accordance with requirements for the degree of Doctor of Literature and Philosophy in the subject Nursing Science at the University of South Africa, Pretoria.
- Wessels, J.S. and Pauw, J.C. (eds) (1999) *Reflective Public Administration: Views from the South*. Cape Town: Oxford University Press.
- Zuber-Skerritt, O. (1993) 'Improving Learning and Teaching Through Action Learning and Action Research', *Higher Education Research and Development* 12(1): 46-57.