

2012

LMIP WORKING PAPER 22

Review of Research on Skills Development and Qualifications Structures

Michelle Buchler

connecting capabilities individuals & institutions connecting capabilities individuals & institutions

connecting capabilities individuals & institutions connecting capabilities individuals & institutions



LABOUR MARKET
INTELLIGENCE PARTNERSHIP

Disclaimer

Working papers are preliminary works in progress. The HSRC-led consortium has released these working papers to inform debate, encourage different thinking about social problems, and stimulate the development of novel policies. These working papers do not themselves represent policy advice.

The ideas, opinions, conclusions or policy recommendations expressed in these working papers are strictly those of the author(s) and do not necessarily represent, and should not be reported as, those of the HSRC-led consortium or DHET.

The HSRC-led consortium and its funders take no responsibility for any content or syntax errors, omissions in, or for the accuracy of, the information contained in these working papers.

Author: Michelle Buchler
Institution: Centre for Education Policy Development
Email: michelle@cepd.org.za
Date: June 2012

Preface

One of the gravest economic challenges facing South Africa is high unemployment, but at the same time, a skills mismatch. The market demand for skilled labour is greater than the number of individuals completing post-school education and training. Prospective employers often complain that the education system does not give individuals the necessary skills to be productive in the workplace, or to start their own enterprises.

Government acknowledges that the unemployment crisis is a systematic problem and cannot be addressed by ad hoc interventions scattered across line departments. With this 'big picture' thinking in mind, DHET aims to create broad and equitable access to a full spectrum of post-school opportunities and lifelong learning encompassing adult education and training, workplace training, the FET college system, artisan and technical training, higher education and innovation.

DHET's ability to create these learning opportunities requires a network of partners to gather and maintain a labour market intelligence system. Such a system can provide analytical insights to support policies and intervention programmes.

In February 2012, therefore, DHET commissioned a HSRC led research consortium to support its capacity to create and maintain a labour market information and intelligence system, guided by the national Delivery Agreement 5. The primary focus is the development of a 'strategic intelligence capability' towards the establishment of 'a credible institutional mechanism for skills planning'. The HSRC coordinated research project is organised in terms of six interlocking research themes, two which focus on labour market information and four which focus on labour market intelligence:

- Theme 1. Establishing a foundation for labour market information systems in South Africa
- Theme 2. Skills forecasting: the supply and demand model (*a WITS EPU project*)
- Theme 3. Studies of selected priority sectors
- Theme 4. Reconfiguring the post-schooling sector
- Theme 5. Pathways through education and training and into the workplace
- Theme 6. Understanding changing artisanal occupational milieus and identities

The consortium made a strategic decision that their research must not duplicate or repeat existing research about the challenges facing South Africa's education and training system and labour markets. Their research must address gaps, promote synergies and explore complementarities.

Hence, as a first step, working papers were commissioned to inform the research agenda for each theme. Although the working papers cover different issues, each has four common dimensions: policy challenges to institutionalise and build a post-school education and training system in South Africa, lessons from seminal national and international research, conceptual frameworks, methodological issues and data challenges raised by this research, and potential research gaps.

One of the HSRC led consortium's goals is to create a living community of practice that researches and debates education, skills and labour market issues. These working papers were presented at a conference in May 2012 to start building such a research network.

The dissemination of these working papers is intended to encourage more individuals to join the research community. We look forward to individuals' comments. They can be emailed to agoldstuck@hsrc.za.za. Welcome to the research community!

Theme 1:	Theme 3:	Theme 4:	Theme 5:	Theme 6:
Establishing a foundation for labour market information system in South Africa	Studies of selected priority sectors	Reconfiguring the post-schooling sector	Pathways through education and training into the workplace	Understanding changing artisanal occupational milieus and identities
Simon McGrath Some international reflections on developing VET indicators	Haroon Bhorat and Morne Oosthuizen Studies of Selected Priority Sectors in the South African Labour Market: A Proposed Research Programme	Andre Kraak Private post-school education in South Africa	Michael Cosser Pathways through education and training and into the labour market	Angelique Wildschut Conceptualising the study of artisans
Phil Toner Establishing a foundation for labour market information systems in South Africa	Peter Jacobs and Tim Hart A critical review of the research on skills development in rural areas	Andre Kraak Differentiation in the post-school sector	Pundy Pillay Pathways through education and training and into the workplace: a concept paper	Jeanne Gamble Models and pathways to institutionalise apprenticeships
Anthony Gewer Developing a framework for institutional planning and monitoring in FET Colleges	Shirin Motala A critical review of research on skills development and labour market demand in the early childhood development sector	Joy Papier et al Contemporary issues in public FET colleges	Sharlene Swartz Navigational capacities for youth employment: A review of research, policies, frameworks and methodologies	
Carmel Marock Developing a framework for understanding SETA performance: Monitoring and evaluating their role in skills planning, steering and enabling a supply within their sector	Thembinkosi Twalo A comparative review of skills development in cooperatives	Veronica McKay A critical review on Adult Basic Education (ABET) in South Africa	Fiona Lewis Traffic jams or trees – how are South African youth progressing through the higher education sector? And what lessons can we learn from current studies?	

Theme 1:	Theme 3:	Theme 4:	Theme 5:	Theme 6:
Establishing a foundation for labour market information system in South Africa	Studies of selected priority sectors	Reconfiguring the post-schooling sector	Pathways through education and training into the workplace	Understanding changing artisanal occupational milieus and identities
Bongiwe Mncwango Towards a demand side firm level survey of labour information in South Africa	Margaret Chitiga and Stewart Development of a national skills forecasting model	Thenjiwe Meyiwa and Nolutho Diko The state of graduate teacher transitions to the labour market	Stephanie Alais Jobs? What jobs? Skills? What skills? An overview of studies examining relationships between education and training and labour markets	
Michael Cosser and Fabian Arendse Education and labour market indicators	Imraan Valodia Conceptualising skills development in the informal sector	Felix Maringe An overview of studies exploring systemic issues related to the South African post-school sector		
Joan Roodt National database sets and research on labour market demand		Peliwe Lolwana Is post-school education adult education and training? The shape and size of post-school education		
Mariette Visser National database sets available for post school sector (supply side)		Michelle Buchler A critical review of research on skills development qualifications structures		
Michael Gastrow Innovation, skills development and South African labour market intelligence		Volker Wedekind Towards responsiveness and employability in the post-school sector		

CONTENTS

EXECUTIVE SUMMARY.....	1
1. INTRODUCTION	2
2. LEGISLATIVE AND POLICY FRAMEWORK AND CONTEXT	2
3. OVERVIEW OF CURRENT RESEARCH, IMPLEMENTATION AND TRENDS	5
3.1 International Trends and Issues	5
3.2 South Africa	5
3.2.1 Research based findings and conceptual issues.....	5
4. POLICY AND IMPLEMENTATION CHALLENGES	12
5. AREAS AND POSSIBILITIES FOR FURTHER RESEARCH.....	13
REFERENCES	15

EXECUTIVE SUMMARY

This paper seeks to explore the relationship between skills development, qualifications and the qualification structure in South Africa. This focus can be located in concerns that there appears to be a disjuncture between the development of knowledge, skills and competencies (supply-side education issues) and the labour market (demand-side), despite a highly sophisticated skills development strategy. Economic policy documents stress the need to expand economic growth in a context, on the one hand, of an inadequate supply of intermediate and high level skills in key sectors, and increasing pressures for poverty eradication (including the reduction of growing youth unemployment) and improved service delivery to communities by the state on the other hand.

It is in this context that the agreement signed by the Minister of Higher Education and Training – to deliver a skilled and capable workforce to support an inclusive growth path – frames the emerging thinking on an expanded, integrated post-school system of education and training. The HET delivery agreement (both Outputs 5.2 and 5.3) focuses on increasing access to programmes leading to both intermediate and high level learning as well as to occupationally directed programmes. Thus, a focus on qualifications and curriculum issues becomes a critical area of focus, especially in the current context of policy review and establishment of new structures such as the Quality Council for Trades and Occupations.

South African research indicates that there is an underpinning conceptual issue to the National Qualifications Framework and the outcomes-based approach it has undertaken. This has in turn created an unwieldy and contested approach to qualifications development and undermined a discipline-based approach to curriculum development. The result has been that qualifications and curriculum do not appear to be contributing to skills development. In addition, this has resulted in very different approaches to quality assurance.

1. INTRODUCTION

This paper seeks to explore the relationship between skills development, qualifications and the qualification structure in South Africa. This focus can be located in concerns that there appears to be a disjuncture between the development of knowledge, skills and competencies (supply-side education issues) and the labour market (demand-side), despite a highly sophisticated skills development strategy. Economic policy documents stress the need to expand economic growth in a context, on the one hand, of an inadequate supply of intermediate and high level skills in key sectors, and increasing pressures for poverty eradication and service delivery to communities by the state on the other hand.

Arguably one of the most important issues facing South Africa is that of unemployed youth. The research findings released by the Centre for Higher Education Transformation paint a very bleak picture of youth unemployment and potential social instability (Cloete 2009). The report indicates that based on 2007 statistics, just over 2.8 million 18-24 year olds in South Africa were not in employment or in education and training. Of these, just over 990,000 would have completed Grades 10 or 11, just over a half-a-million each had less secondary education less than Grade 10 or primary education only, and nearly 600,000 young people had Matric or equivalent but without a university exemption (Cloete 2009: 10). The different groups of 18-24 year olds without a senior school-leaving certificate made up a staggering 2 million in 2007.

It is in this context that the agreement signed by the Minister of Higher Education and Training – to deliver a skilled and capable workforce to support an inclusive growth path – frames the emerging thinking on an expanded, integrated post-school system of education and training. The HET delivery agreement (both Outputs 5.2 and 5.3) focuses on increasing access to programmes leading to both intermediate and high level learning as well as to occupationally directed programmes. Thus, a focus on qualifications and curriculum issues becomes a critical area of focus, especially in the current context of policy review and establishment of new structures such as the Quality Council for Trades and Occupations.

2. LEGISLATIVE AND POLICY FRAMEWORK AND CONTEXT

This section provides a chronological overview of the relevant legislative and policy framework and events which frame the skills development/qualifications focus of this paper.

South Africa established a National Qualifications Framework (NQF) in 1995, which is overseen by the South African Qualifications Authority (SAQA) and which was originally accountable to both the Departments of Education and Labour, with the original objectives being to:

- Create an integrated national framework for learning achievements;
- Facilitate access to education and training;
- Facilitate access to and mobility and progression within education, training and career paths;
- Enhance the quality of education and training;
- Accelerate the redress of unfair past discrimination in education, training and career opportunities; and thereby
- Contribute to the full personal development of each learner and the social and economic development of the nation at large (SAQA Act 1995).

South Africa's NQF can be considered outcomes-based (Allais 2007b). It was originally organised around 8 levels, with 12 learning areas that were underpinned by a structure of 12 National Standards Bodies (NSBs), and Standards Generating Bodies that developed qualifications and unit

standards under the oversight of the appropriate NSBs. According to Allais (2011a: 346), the original intention was that all existing qualifications would be replaced by 'new' outcomes-based qualifications, and that qualification development would be independent of education institutions. Institutions would be able to independently use/choose "their own content or knowledge" to achieve outcomes. It was anticipated that 'legacy' qualifications (those existing at the time of establishment of the NQF) would be used in the interim, and phased out as new outcomes-based qualifications were developed and taken up/delivered.

In 1998, the South African government legislated a skills development system for South Africa (RSA 1998b), and originally overseen by the Department of Labour, whereby the South African Revenue Service (SARS) collects a levy from companies equating to 1% of payroll (above a minimum threshold). 20% of the revenue collected goes to the National Skills Fund (NSF) and the rest to the Sector Education and Training Authorities (SETAs), of which there were originally 23 SETAs. Of the levy amount provided to SETAs, a maximum of 10% can be used to cover administration costs. Employers are entitled to claim as a Mandatory Grant 50% of the levy they paid, in return for submitting a Workplace Skills Plan (WSP) and an Annual Training Report (ATR). The levy income that is left after administration costs and disbursement of mandatory grants is available to the SETAs for discretionary grants. Apart from the system of administering the mandatory grants, the other critical task of the SETAs is the development of Sector Skills Plans (SSPs) based on research and analyses of the WSPs and ATRs and which should identify critical and scarce skills. SETAs are provided with the discretionary fund to enable them to implement their SSPs and to achieve sector development. The aim is for SETAs to use available funds to implement their SSPs by developing and implementing learnerships and skills programmes, developing providers, funding training for addressing scarce and critical skills needs and funding other relevant initiatives (CEPD 2012).

Also in 1998, Education and Training Quality Assurance (ETQA) bodies were established under the SAQA Act. All SETAs then established ETQAs to oversee "monitoring and auditing of national standards or qualifications (RSA 1998a). In a nutshell, then, the process is one where SETA implementation of its SSP and contribution to broader sector development is funded through the provision of learning and skills development programmes (both qualifications and unit standards) which is monitored and quality assured by the ETQA.

In 2000, the Departments of Education and Labour began a review of the NQF. However, the review took some years to finalise, ostensibly because the two Departments could not agree on the way forward (Allais 2011a). During this hiatus period, some changes to the original thinking and implementation of the NQF occurred, inter alia:

- The 'legacy' qualifications (referred to above) were extended and were now called 'provider' qualifications,
- The Higher Education Qualifications Framework (HEQF) raised the levels from 8 to 10, and became a "register of qualification types" (Allais 2011a: 350), and
- The NSBs were disbanded and interim arrangements for standards setting were put in place (Allais 2011a: 351).

Once the Departments of Education and Labour finalised the review of the NQF, the NQF Act of 2008 was passed (RSA 2008). The following changes to the NQF and SAQA's role were made:

- The NQF's levels have changed from 8 to 10.
- The Quality Council for Trades and Occupations (QCTO) has been established and joins the two existing quality councils (the Higher Education Quality Committee (HEQC) and Umalusi, the quality council for general and further education and training) as the quality council responsible for occupational learning and qualifications.

- The establishment of the QCTO also means that it will replace the ETQAs over time as the original outcomes-based qualifications and unit standards developed after 1995 (and which were quality assured by the ETQAs) expire or are withdrawn. The future role, functions and form of the SETA ETQAs is still somewhat uncertain, as the QCTO is still in the process of defining the approach it will take to standards setting and quality assurance.
- Related to the above is that SAQA will no longer generate and register qualifications as this function now devolves to the 3 quality councils.

In 2009, after the general election, the new President of South Africa made a significant change to the education and training landscape by splitting the Department of Education into two Departments: Basic Education (DBE), and Higher Education and Training (DHET). In addition, the skills development area was moved from the Department of Labour to DHET. DHET's remit includes not only Higher Education and skills development, but also Adult Basic Education and Training (ABET) and the further education and training (FET) college sector. In addition, DHET administers the Human Resources Development Strategy, whose Council is chaired by the Deputy President.

As a result of the establishment of the QCTO, work is currently underway to establish the three qualifications sub-frameworks of the NQF, with DHET calling for comments on the proposed qualifications sub-frameworks in the 1st quarter of 2012 (DHET 2011). In the introduction to this document, the Minister notes issues in particular:

- "That sufficient articulation of the proposed sub-frameworks has not yet been achieved although the need is recognized in all three draft documents", and
- That anomalies relating to level 5 qualifications will be dealt with at the revision stage (DHET 2011: 4).

Alongside the above changes to the NQF, SAQA's role and the establishment of the QCTO, is the release of the *Green Paper for Post-School Education and Training* (hereafter referred to as the *Green Paper*) by the Department of Higher Education and Training (DHET) towards the end of 2011. The purpose of the *Green Paper* has been articulated as follows:

The establishment of the DHET created the opportunity to build and sustain a single, coherent, differentiated and highly articulated post-school education and training system. This *Green Paper* provides a vision for such a system (DHET 2011: 4).

The *Green Paper* considers issues around: diversification and differentiation of both institutional types and qualifications, articulation between institutional types and qualifications¹, and coherence of the post-school system. In addition, DHET has already begun to act on some of the provisions/suggestions in the *Green Paper*, such as:

- establishing a Ministerial Task Team to establish the proposed Institute for Vocational and Continuing Education;
- drafting an amendment to the FET Colleges Act to make provision for new college types (eg the Community Education and Training Centres referred to in the *Green Paper*, and for which a Ministerial Task Team has been established);
- establishing a Ministerial Task Team to consider various aspects of a national Recognition of Prior Learning (RPL) implementation strategy amid concerns that RPL has not been sufficiently developed to be a useful tool within an improved HRD approach (since issues of skills development, qualifications/curriculum and career-pathing/planning have implications for RPL).

¹ The Minister of Higher Education and Training has, in a number of recent speeches, raised issues relating to articulation possibilities and obstacles from FET colleges into universities. He has also informally raised issues relating to articulation problems posed by learnerships and SETA level 4 qualifications into universities with the author of this paper.

3. OVERVIEW OF CURRENT RESEARCH, IMPLEMENTATION AND TRENDS

3.1 INTERNATIONAL TRENDS AND ISSUES

Some of the recent international research and literature on education and training (for example, the extensive support for the expansion of technical and vocational systems, as well as the proliferation of NQFs, especially in developing countries) is increasingly expressing concern about the assumptions underpinning these developments and their appropriateness and sustainability. In addition, there is a well-established research tradition in workplace-based learning. This section highlights only a very small selection of international work, given that the brief for the paper was to focus on South African research.

King, in reflecting on Education for All (EFA), the Millenium Development Goals (MDGs) and the expansion of technical and vocational skills development in developing countries, is concerned that there has been little work done in terms of understanding the sustainability of the achievements made so far, and whether developing countries “have an economic and political environment that will continue to secure them” (2009: 175). King also raises the concern also that technical and vocational skills development (TVSD) has been expanding internationally and in many developing countries, but “valuable though TSVD might be for school leavers, it too is not a guarantee of work or a job, whether in the formal or informal sectors. There is no automatic connection amongst school, skills and work” (ibid: 175). In fact, King (2009: 179) notes that “in many countries, EFA/MDG expansion has been accompanied by jobless growth”, raising the question of the ability of developing countries to sustain these initiatives which in turn place pressure on governments to expand at least secondary and vocational education.

Allais (2010: 2), in a 16 country comparison of NQFs indicates that “this research found little evidence that NQFs are achieving their goals” even in the older, more established frameworks. In addition, there is “little evidence that NQFs have substantially improved communication between education and training systems and labour markets” (ibid: 2). Comparative work undertaken by Young (2007, 2008, 2010) supports Allais’ 2010 work, and also indicates “that the experience of introducing NQFs has thrown up negative and unintended consequences as much if not more than their benefits” (Young 2007: 446).

There is a well-established tradition in the UK, Europe and North America of researching and theorising working and learning, including work-based and work-integrated learning (see for example Felstead et al 2009; Walters and Cooper 2009).

3.2 SOUTH AFRICA

3.2.1 Research based findings and conceptual issues

3.2.1.1 Understandings of, and issues relating to, the National Qualifications Framework

Critique of the NQF and the outcomes-based approach (and its attendant structures and approach) adopted has been well-documented and critiqued in the schooling sector (see for example Fiske and Ladd, 2004; Harley and Wedekind, 2004; Jansen, 1998; Muller, 2004), but less so in the post-schooling sector. In this regard, Stephanie Allais has systematically undertaken research into the South African NQF with a focus on the NQF in relation to skills development and vocational education and training. Her focus is mainly on issues relating to qualifications and curriculum, but

framing these within the broader context of skills development and prevailing economic development imperatives. I therefore present a selection of her work in some detail.

The establishment of South Africa's NQF must be located in the context of the apartheid legacy and the way in which the apartheid state had used education as a means to limit access to social, political and economic opportunities for black people. Allais (2007a; 2011) notes that the idea of a NQF was supported by the trade union movement during the transition to democracy². At the same time, it seemed that industry, the unions and the state were in agreement that the low education and skill levels of the majority of South Africans were hampering South Africa's competitive re-entry into the global economy, and were in agreement that the solution would be the development of a "highly skilled labour force" (Allais 2011: 344). In this context,

The NQF was proposed as a mechanism which could create sense and coherence out of the fragmented education and training system, but also which could drive the creation of the desired type of education and training system. Thus the NQF was seen as the core..... of educational transformation. (Allais 2011: 344)

However, Allais (2007b: 66) makes the point that although the introduction of the NQF was driven by a progressive agenda, the issue is that it coincided with neo-liberal economic reform: "Although the outcomes-based qualifications framework was perceived as part of the transition to democracy, it was just as embedded in a transition to neo-liberalism".

Locating the NQF 'project' within a neo-liberal trajectory³ is the starting point for Allais' critique of the South African NQF and its implementation:

- Public sector managerial reform promotes a results-based approach that emphasises effectiveness, efficiency and measurement of performance. In this context, Outcomes-based qualifications and qualifications frameworks claim to be able to provide a basis for the measurement of private provision as well as the regulation and control of public provision. They claim to be able to do this through providing explicit, formal and measurable standards against which all education must be measured. These standards are captured in the form of outcome statements, which learners must be able to meet. *The qualifications themselves become the tools for driving the education system* (Allais 2007b: 65-66; my emphasis).
- Education is seen as the solution to economic problems, such as unemployment. In this context, education therefore needs to "be relevant to the needs of the economy", and "[r]edesigning curricula on competency-based lines has been seen as necessary in order to promote flexible specialization, which is seen as the route to a highly skilled, mobile workforce, and therefore to international competitiveness" (Allais 2007b: 67; citing Foley 1994). Conversely, "where there are no jobs, improving levels of qualifications may not assist people" (Allais 2011: 354), similar to the concern raised by King (2009) in the previous section.
- The focus on learning outcomes undermined a discipline-based approach to curriculum development, in part due to the influence of social constructivism which became influential in education debates at the time (Allais 2007b: 70-71):
The outcomes-based qualifications approach believes that outcomes provide a better basis for the selection of learning content and pedagogy than subjects or disciplines. This is based

2 This position taken by the trade union movement at the time is also noted in Ballim, Omar and Ralphs (2000), and Cooper (1998).

3 In A later article, Allais (2012a) further develops the argument (drawing on the work of Stephen Ball (2007; cited in Allais 2012a: 253) that "ideas which have been naturalised in education policy derive from neoclassical economics" (hence the concept 'economics imperialism').

on the assumption that outcomes have a clear meaning independent of the context of a learning programme and that no area of knowledge has intrinsic value” (Allais 2007b: 73).

Related to the above learning content/curriculum aspect is the idea that:

The positioning of qualifications and unit standards at different levels on the [national qualifications] framework is supposed to be based on levels of cognitive complexity and to send a message to society about the relative value of different qualifications. In other words, according to the NQF, an individual can be functioning at the same ‘level’ of cognitive complexity regardless of the types of knowledge being worked with. To put it in a different way, levels of cognitive complexity can be defined in the absence of a specified field of knowledge.

‘Level descriptors’ which describe each level of the qualifications framework were created to capture this cognitive functioning outside of specific knowledge area or practices (Allais 2007a: 527).

Therefore different learning programmes at the same ‘level’ which were constructed independently of each other against the same learning outcomes, “would be testing the same ‘level’ of ‘competence’ in different areas, and both would be testing the same ‘generic competences’, such as problem-solving” (Allais 2007a: 527). Problems with generic level descriptor approaches have been noted in Allais’ (2010) international comparative study.

In addition, it was assumed that organising qualifications in this way (in a hierarchy of levels with level descriptors) would improve the value attached to vocational (as opposed to academic) qualifications (Allais 2007a: 531).

The original approach underpinning standards generation was that of stakeholder participation (Allais 2007a), and also that the outcomes-based approach is premised on the idea that standards or outcomes can be nationally determined (Allais 2007a) (and often internationally benchmarked).

- The approach to qualifications and unit standards is so unwieldy that it has undermined the NQF’s objectives, and led to problematic quality assurance models (Allais 2007a; Allais 2011: 352), (particularly in the SETA ETQA context, I would argue). The unwieldiness is at two levels: the over-specification of the learning outcomes (resulting in unit standards and especially unit-standard based qualifications being extremely lengthy and difficult to work with), and the sheer volume of the number of unit standards and qualifications that have been developed⁴.

Lugg’s work (2009) focuses on a discursive analysis of the construction of the NQF, through an analysis of the key stages of its development, by drawing on Laclau and Mouffe’s (1985, cited in Lugg 2009) discourse analysis. One discourse underpinning the NQF was that of “the ‘single system’ of education and training” or an ‘integrated system (Lugg 2009: 44) which emerged out of the progressive trade union movement during the transition to democracy, “with equivalence of learning pathways constructed through qualifications” (Lugg 2009: 45). Supporting this was the practice of stakeholder consultation (a practice which emerged in the political transition as part of a negotiated settlement).

However, the location of the skills development structures and oversight in the Department of Labour “were constructed in antagonism to education”; this schism equated supply-side issues with

⁴ Allais (2012: 634) notes that although over 787 qualifications and over 10,000 unit standards had been registered on the NQF, by 2007 only 172 unit standards-based qualifications and 2211 unit standards had awards made against them.

the Department of Education (ie public institutions) while “the Department of Labour’s policies were concerned with meeting the ‘demand for skills and employment’” (Lugg 2009: 49). She further argues that by the end of the government of national unity, there were three competing discourses:

Discursive practices building the NQF, skills development and the ‘single system’ of education and training competed for hegemonic expansion, contributing to a developing rupture in state policy. Intense conflict emerged over two elements articulated by each: standards and quality assurance” (Lugg 2009: 50).

Lugg (2009) further indicates that the practices surrounding the building of the NQF were increasingly associated with the skills development sector (and emerging private provision) while

In sectors in which programmes remained most closely tied to public providers – the FET and HE sectors – standards and qualifications were less easily articulated by practices emanating from SAQA. These sectors presented robust frontiers to the hegemonic expansion of the NQF (Lugg 2009: 51)

Furthermore,

Limits to expansion were most starkly revealed in fierce contests articulated by each discourse – quality assurance. The existence of multiple ETQAs operating within sectors, and thus within individual provider institutions, gave rise to intense conflict between ‘Band ETQAs’ (the education quality assurance bodies) and SETA/ETQAs (the skills development quality assurance bodies) over meanings and practices of quality assurance (Lugg 2009: 51-52).⁵

Lugg’s (2009: 53-54) analysis of the review of the NQF and the time it took to resolve is that “the implementation of the NQF was stalled at a frontier between two different constructions of the state at work in different sites within it. SAQA could no longer suture the rift between education and skills development.” In 2007, the then Ministers of Labour and Education agreed on a joint policy statement to end the uncertainty of the review process: the two existing band quality assurance QC and Umalusi) would continue in an expanded form that includes standards generation, and the QCTO would be established for workplace learning, with SAQA reporting to the Minister of Education and the QCTO reporting to the Minister of Labour. Thus, according to Lugg (2009: 54), “Equivalence would now be built across *three* sites of difference through shared involvement in the NQF, and collaboration on quality assurance and qualifications design” (author’s emphasis).

Recent qualitative research undertaken by Marock (2011: 3-4), as part of the process of informing the *Green Paper*, identifies a few areas of debate and contestation emerging from the changes to the NQF and the establishment of the QCTO:

- The original approach in the NQF to the development of qualifications and standards was mainly taken up by the occupational training sector, but led to a large number of qualifications and unit standards being registered but not always used (or usable, ie they did not lead to either entry into the workplace or further learning/qualification opportunities). This has led to different views as to what should be registered on the NQF – only occupationally directed qualifications (linked to the Organising Framework for Occupations [OFO] or all programmes in order to ensure a systematic approach to the quality assurance of *all* learning programmes.
- The original approach of the NQF was to decentralize assessment with registered assessors, moderators and verifiers. Again, this was only taken up within the occupationally focused education and training sub-sector, and underpinned the SETA quality assurance approach,

⁵ In particular, Lugg (2009: 52) notes the autonomous position of the quality assurance body for general and further education – Umalusi – and that the position it took vis-a-vis the SETA ETQAs meant that it did not engage with SAQA, and presented a limit to the expansion of the NQF.

where the focus is on accrediting education and training providers, and registering assessors, moderators and verifiers (the training of which also generated its own mini-industry). Indications are that the QCTO might use an adapted version of this approach. However, this approach is not used by either Umalusi or the HEQC.

- Location and ownership of Level 5 qualifications in terms of the 3 quality councils: there is some debate about whether all level 5 qualifications fall within the ambit of higher education, or whether some of these should be allocated to Umalusi or the QCTO. There is further contestation between Umalusi and the QCTO as to whether the QCTO should take on all level 5 qualifications that are not explicitly occupationally focused.

3.2.1.2 Examples of recent curriculum mapping and alignment work⁶

The analyses in the previous section begin to point to a number of areas of concern. One of these would seem to be current approaches to curriculum development with enormous lack of coherence and connectivity, with a great deal of fragmentation (across qualifications, and unit standards, even in cognate areas). I provide here two case studies of curriculum/qualification initiatives that may assist in informing future work in curriculum and qualifications development.

At a recent conference on articulation between Further Education and Training (FET) colleges and higher education, Heather Nel of the Nelson Mandela Metropolitan University (NMMU) (Nel 2012) pointed to the importance of ensuring that articulation arrangements between FET colleges and universities are underpinned by evidence-based strategies for curriculum alignment. She indicated that the University of Johannesburg (UJ) and NMMU have conducted in-depth research on articulation pathways between diploma and degree programmes in cognate fields of study. This was a four-year project that led to further research on articulation pathways and curriculum alignment in respect of FET college qualifications such as the National Certificate Vocational (NCV) and learnerships and higher education qualifications offered by NMMU.

Nel presented the outcomes of the research for one of the fields of study, that of Mechatronics (a combination of electrical and mechanical engineering) and a scarce skill in South Africa. The study looked at the NCV in Mechatronics, the National Diploma in Mechanical Engineering and the Bachelor of Engineering in Mechatronics and analysed the “knowledge types” for each of these programmes. A continuum of knowledge typologies was adopted as part of the conceptual framework that was applied, ranging from contextual (the external purposes of the curriculum) to conceptual (conceptual building blocks of a particular discipline) knowledge and the level of cognitive complexity was assessed for each module constituting the programmes. One of the key findings was the need for re-curriculation in both directions for both the NCV and diploma in mechanical engineering. The implication for FET colleges and universities was that they had to ensure that articulation was facilitated in a bi-directional manner. The findings also show that in order for articulation and vertical progression to happen meaningfully, one needs to look at the core components that make up the curriculum of the different programmes as well as the knowledge types that are dominant in these programmes. This will, in turn, inform interventions around bridging and foundation programmes as one will be able to identify knowledge gaps in these programmes. Nel suggested that the current HEQF alignment processes within universities and the NCV curriculum review provide an ideal opportunity to recalibrate curricula in cognate fields of study so as to facilitate articulation and progression.

A second presentation at the above-mentioned articulation conference was done by Seamus Needham of the FET Institute at the University of the Western Cape (UWC) (Needham 2012). He

⁶ This section has been extracted from the CEPD and Bronx Community College conference report focusing on articulation between FET and HE (2012).

suggested that although historically there have been numerous partnerships established between FET colleges and universities, South Africa does not have enough articulation between education and training sectors. Some of the key debates on FETC-university articulation relate to: access to HEIs; the scope of the qualification frameworks (for example the contestation around NQF Level 5 and the fact that N4 to N6 qualifications are not certified by any of the three qualification frameworks); demand-driven versus supply-side debates (or knowledge economy versus human capital debates) and curriculum debates (outcomes-based versus disciplinary knowledge debates). Needham went on to speak about an articulation project conducted by the FET Institute and put in place for financial planning qualifications between the Western Cape FET colleges and UWC. The project began in 2007. A NQF Level 5 qualification was put in place at five FET colleges. This is a professional qualification required by all insurance employees to practice as financial planners in addition to writing the Financial Services Board regulatory exams. It was delivered through a learnership, effectively using a workplace-based mode of delivery. FETI obtained an agreement with UWC that this qualification would articulate directly into an NQF Level 6 diploma (an advanced diploma in Management Studies). UWC was responsible for aligning the diploma to the financial planning qualification. The financial planning qualification was delivered from 2011 and 100 students were placed across five FET colleges. Upon completion of the qualification, 77 graduated and 25 went on the study at the School of Business and Finance at UWC. In addition, NMMU was asked to do a mapping exercise against their B.Com degree in Financial Planning and the result was the development of an articulation route similar to that at UWC. Some of the key learnings from the project include the following. Firstly, one cannot underestimate the role played by both the Financial Planning Institute (FPI, a professional qualifications body) and the Insurance SETA (INSETA) in working with the universities and colleges in the establishment of these articulation routes, in terms of funding support and well as their commitment and flexibility. Secondly, it is very difficult to map unit standards based qualifications against disciplinary based degree programmes but that it is possible to develop an articulated professional qualifications pathways between FET colleges and universities. The role of FETI as an intermediate was essential to the articulation process. There were varying levels of college support. It was a partnership through a project management approach that involved all stakeholders including industry. Based on the success of the initial pilot, INSETA is looking at expanding this into several other provinces going forward.

3.2.1.3 Research into education and training in the skills development environment

There appears to be a paucity of research in the skills development environment. Certainly, a scan of SETA websites did not produce many research reports commissioned by the SETAs themselves. In addition, it has been established that research into areas such as vocational and professional education, work-based/work-integrated and workplace learning, and the SETA/ETQA system itself, is very small although growing incrementally (Deacon, Osman and Buchler 2009).

In this context of a small body of research, some of the available research focuses on skills development strategies and plans within companies or state entities but does not necessarily go into issues of the learning programmes and qualifications that might support or underpin these skills development strategies (see for example Davids and Esau 2012).

More recently, there has been systemic research into aspects of the National Skills Development Strategy II (CEPD 2012; HSRC/DPRU 2012).

The Centre for Education Policy Development (CEPD) undertook a research (as opposed to 'forensic') audit of discretionary fund spending during the period of the National Skills Development Strategy II (NSDSII) from 2005 to 2011, in support of the work of the Ministerial Task Team that examined the functioning and performance of the SETAs in order to make recommendations to the Minister of

Higher Education and Training for improving the performance of SETAs (CEPD 2012)⁷. Data was collected (to varying degrees – see data issues below) from all 21 SETAs.

The report highlights the importance of the discretionary grant:

SETAs are provided with the discretionary fund to enable them to implement their Sector Skills Plans (SSPs) and in particular achieve sector development. The aim is for SETAs to use available funds to implement their Sector Skills Plans by means of developing and implementing learnerships and skills programmes, developing providers, funding training for addressing scarce and critical skills needs and funding other relevant initiatives.

The discretionary fund is therefore the fund available to do sector development work and make an impact. The extent to which a SETA is effective in performing its role in sector development is to a large extent dependent on how the SETA allocates and manages these funds (CEPD 2012: 7).

Some of the main issues emerging from the research, and which are relevant to this paper, include:

- Key data issues include the fact that the reconfiguration of the SETAs were from 23 to 21 means that merged/reconstituted SETAs experienced difficulties in consolidating the different data systems and data sets; data tended to be captured according to the original Department of Labour (DOL) reporting requirements, and therefore providing reorganized data to the research team sometimes proved challenging; and even within SETAs different data management systems may be used for different learning programme areas, eg for apprenticeships, learnerships, etc.
- In terms of the intended purpose of the discretionary grant, it was found that, overall, actual spending did not match the purpose, and that the main beneficiaries (at the employer level) of the discretionary grant appears to be large employers (CEPD 2012: 28), who seem to see the discretionary grant as a source of income.
- In terms of learner beneficiaries, it was found that the beneficiaries of the R 15.1 billion discretionary spend [under NSDSII] include learners on ABET, employed and unemployed learners as well as workplace experiential learners and new venture creation learners. In terms of ABET, there were over 234,000 learners which are typically low skilled workers in occupational categories such as elementary workers, some sales workers, machine operators and drivers. Over 538,000 employed and 323,000 unemployed learners were the beneficiaries of the discretionary spend (CEPD 2012: 42)⁸.

However, if we consider ABET more closely⁹, then it emerges that only 37.2% of learners who enrolled on ABET programmes over the period of NSDS II actually received a qualification (CEPD 2012). Because of the scope and approach of this research, our understanding of the reasons for the low completion rate of ABET learners can be supplemented by the (few) sectoral reports that are available. For example, research conducted by CEPD (2006) for the Mining Qualifications

⁷ It should be noted that this report has not yet been signed off by the Ministerial Task Team or the Department of Higher Education and Training. It is briefly reported on in this paper to contribute to the overall picture of related research in this focus area.

⁸ The report notes that it was not within the ambit of this research to determine (even if it is possible) whether the vast amount of money spent through discretionary grants was spent on 'real' or properly identified scarce and critical skills. However, the concern was raised that (given the fact that the scarce and critical skills list was last published in 2008, and that DHET recently expressed some unhappiness with the quality of many of the SSPs submitted) there are questions about the focus and appropriateness of the training (and underpinning activities such as qualifications and curriculum development) undertaken during most of NSDSII. The New Venture Creation learnership is used as an example (CEPD 2012: 44).

⁹ The HET Delivery Agreement includes increasing the number of ABET learners at Levels 1-4.

Authority indicates that there are a range of blockages to the attainment of ABET level qualifications, including the availability of providers who offer ABET level 4 programmes in the often rural areas in which the mines are located. This presented a particularly vexing problem in the sector, as without the attainment of ABET level 4, workers were unable to proceed to the entry level qualification for the mining and minerals sector at NQF level 1. Another blockage identified was the issue of workers being able to attend ABET classes regularly, especially in a context of shift work, and the economic difficulties of releasing workers from work for sustained periods of time, because it was found that the expectation that workers would be able to attend classes part-time did not always work out. The Manufacturing, Engineering and Related Services SETA (MERSETA 2008), in an evaluation of its support of ABET through discretionary funds found that there was a dropout rate of at least 37%, that dropout included reasons relating to learner motivation and expectations of remuneration for attending classes. In both the MQA and MERSETA research, it was found that employers are increasingly employing people with a Matric/NSC¹⁰, which implies that there will increasingly be less employer support for ABET programmes for their employees.

- A diversity of approaches and inconsistency was found in relation to the provision of skills programmes. In one example, 27 credits (270 notional learning hours) was provided through a 3 day training course (CEPD 2012: 46).
- A concern has been raised by the very high pass rates (96.6%) of learners in skills programmes, and the question raised as to whether the way the grants system operates is contributing to this, ie employers only pay providers for the learners that pass (CEPD 2012: 48) which means that there is huge pressure on providers to ensure high pass rates.
- In terms of learnerships for unemployed people, the pass rate is lower at 64.1% (CEPD 2012: 49).
- 90% of discretionary grant spend on training went to private providers (CEPD 2012: 81), and there is a very apparent urban and Gauteng province bias in terms of the geographical spread of private providers (CEPD 2012: 83).
- CEPD (2012: 97) also highlights problems in the SETA ETQA system, in that while the focus is on ensuring providers are accredited and assessors and moderators registered, etc, very few of the ETQAs monitor actual quality of learning programmes and interventions, and are not required by SAQA to do so, pointing to a quality assurance system in the SETAs that is merely compliant at the level of systems and procedures.

4. POLICY AND IMPLEMENTATION CHALLENGES

The research and conceptual analyses in the preceding section, together with the current policy environment and imperatives, point to a number of issues that need further consideration.

Even though they use different theoretical frameworks and starting points for their analyses, Allais (2007a & b; 2010; 2011; 2012a & b) and Lugg (2009) have several areas of overlap. One critical area that relates to issues with the quality assurance system and the diversity of approaches across ETQAs. This signifies some potential problems for the QCTO in terms of the current transition to a new quality assurance system in which the current form, scope and functions of SETA ETQAs is not certain or yet determined. In addition, contestation is emerging between Umalusi and the QCTO in relation to vocationally directed programmes, even those outside of unit-standards based

¹⁰ This practice is also indicative of a trend identified by Leibrandt (2010, cited in Wildschut et al 2012: 1) that “there are fewer jobs available for those with low or no education”.

qualifications, with the QCTO wanting to assume responsibility for all programmes that have any vocational dimension.

An issue not dealt with by Lugg (2009) in her analysis of the quality assurance system problems is that, while SETA ETQA quality assurance practices differ from the band ETQAs as she has noted, the variation in approach to quality assurance within the SETA ETQA system can also be very wide. This has impacted on all levels of practices across SETA ETQAs, including the Recognition of Prior Learning. In a review of SETA ETQA approaches to RPL, Malgas (2012) has documented the array of approaches to and practices of RPL, and concluded that this lack of coherence has undermined the wider-scale implementation of RPL.

It could be argued that despite the stakeholder approach (including some employer representation) in the early phase of qualification development within SAQA, it was still very supply driven rather than demand driven (if we think of the number of qualifications and unit standards developed but never taken up). Demand driven qualifications development should see a much closer link to the sector skills planning process overseen by the SETAs, which has been missing from NSDS I and NSDS II (I would argue). But there needs to be much greater agreement on the components of qualifications to meet the competing goals of citizenship/social development *and* (broad) skills development. Therefore, we need to develop a much stronger conceptualization of curriculum development approaches to underpin qualifications development, especially with regard to the discipline based foundations and fundamentals. These issues are particularly critical in relation to the proposed QCTO approach to qualification development through what are being termed Development Quality Partners (and which could operate in a similar fashion to NSBs and SGBs, if we are not careful).

In conclusion to thinking about qualification and curriculum development moving forward, Allais' argument (2012b: 640) has merit:

The collapse of the original model of the South African NQF will not, on its own, lead to a shift away from a 'market of qualifications'. It does, though, open the space for more coherent policy on qualifications and curriculum..... Protecting vocational education from the *immediate short-term* needs of employers and from a *narrow* labour market focus may be the best way of improving it, in the absence of strong social policy and well-regulated occupations. Having a strong sense of curriculum, developed through a clear knowledge base, is key to strengthening educational institutions, as it is the only way they can have a distinctive identity, instead of being service providers whose 'product' is redefined for each 'client'. But insight into the knowledge base of vocational qualifications is weak. Many learnerships in South Africa were created in areas without an established knowledge base.

5. AREAS AND POSSIBILITIES FOR FURTHER RESEARCH

Based on the preceding analysis and identification of issues, there are a number of possible research areas:

- a) Allais (2012b: 640) has identified two key research areas emerging from her own work:
 - i. "What is the knowledge base which is the basis of vocational qualifications and occupations? How is it produced, understood and valued?"
 - ii. "What are the relationships between the regulatory framework of vocational qualifications, the structure and content of provision, understandings of knowledge and fields of knowledge, the labour process and deployment of labour in the labour market, and the currency of qualifications in the labour market?"
- b) Related to the above:

- i. case studies of sub-sector approaches to occupational qualifications and curriculum development, and their implementation and outcomes (in terms of entering the labour market, accessing further education and training opportunities and relationship to career progression) over time. Current examples of implementation work that could be supported by such research includes the qualifications and curriculum development work being undertaken by INSETA and FASSET, or further work such as that undertaken by NMMU and UJ.
 - ii. Subsector research into skills development and related qualification needs (especially where qualifications start at NQF level 4 but where potential learners are below that and in some instances are not even at NQF level 1), eg ECD, ABET, Community Development.
 - iii. Research into approaches to work experience: 1) as part of obtaining a qualification, and relating to curriculum development and assessment practices and approaches, and 2) the impact on transition to employment.
- c) At a more pragmatic level, an audit to map the location of education and training providers (both public and private) by NQF level and programmes, which could be linked to local and regional training needs as per skills development requirements may be useful to inform processes to build capacity in geographical areas that are under-served by education and training providers and which face particular scarce and critical ¹¹.
- d) A critical review of SETA ETQA approaches to quality assurance with a view to informing emerging QCTO policies and frameworks in order to develop a more coherent approach to quality management more broadly.
- e) Research into the way in which ABET has been implemented by the SETAs as part of the discretionary grants' NSDSII targets would be useful to inform a reconceptualisation of the current (fragmented) approach to ABET.

¹¹ This is a possible project that was mooted by DHET with CEPD in 2011 and a draft proposal was developed, but the idea was placed on hold.

REFERENCES

- Allais, S. 2007a. Why the South African NQF failed: lessons for countries wanting to introduce national qualifications frameworks. *European Journal of Education* Vol. 42, No. 4, pp. 523-547.
- Allais, S. 2007b. Education service delivery: The disastrous case of outcomes-based qualifications frameworks. *Progress in Development Studies*, Vol. 7, No. 1, pp. 65-78.
- Allais, S. 2010. The implementation and impact of National Qualifications Frameworks: Report of a study in 16 countries. Geneva: International Labour Organisation.
- Allais, S. 2011. The changing faces of the South African national qualifications framework. *Journal of Education and Work*, Vol. 24, Nos. 3-4, pp. 343-358.
- Allais, S. 2012a. 'Economics imperialism', education policy and educational theory. *Journal of Education Policy*, Vol. 27, No. 2, pp. 253-274.
- Allais, S. 2012b. Will skills save us? Rethinking the relationships between vocational education, skills development policies, and social policy in South Africa. *International Journal of Educational Development* 32: pp. 632-642.
- Ballim, Y., Omar, R. and Ralphs, A. 2000. Learning assessment in South Africa. In N. Evans (ed), *Experiential learning around the world: employability and the global economy*. London: Jessica Kingsley Publishers.
- Centre for Education Policy Development. 2006. Research into the state of Adult Basic Education and Training (ABET) in the Mining and Minerals sector. Report of research commissioned by the Mining Qualifications Authority.
- Centre for Education Policy Development. 2012. Audit of the allocation and management of discretionary funds during NSDSII. Draft research report submitted to the DHET Ministerial Task Team on SETA performance.
- Centre for Education Policy Development and Bronx Community College. 2012. New Linkages: Strengthening Pathways between Colleges and Universities. Report of a conference held on 23 & 24 April 2012, at the Birchwood Hotel and OR Tambo Conference Centre.
- Cooper, L. 1998. From 'Rolling Mass Action' to 'RPL': the changing discourse of experience and learning in the South African Labour Movement. *Studies in Continuing Education*, 20: pp. 143-157.
- Cloete, N. (ed). 2009. *Responding to the educational needs of post-school youth: determining the scope of the problem and developing a capacity-building model*. Cape Town: Centre for Higher Education Transformation.
- Davids, B. And Esau, M. 2012. The prevailing skills crisis in South Africa: an exploration of the skills development strategy of the City of Cape Town. *Journal of Developing Societies*, Vol. 28, No. 1, pp. 81-113.
- Deacon, R., Osman, R. and Buchler, M. 2009. Audit and Interpretative Analysis of Education Research in South Africa: What Have We Learnt? Research report submitted to the National Research Foundation, Pretoria.

Department of Higher Education and Training. 2011. *Green Paper for Post-School Education and Training*. Pretoria: Department of Higher Education and Training.

Felstead, A., Fuller, A., Jewson, N. and Unwin, L. 2009. *Improving working as learning*. London: Routledge.

Fiske, E. B. and Ladd, H. F. 2004. *Equity: education reform in post-apartheid South Africa*. Cape Town: HSRC Press.

Harley, K. and Wedekind, V. 2004. Political change, curriculum change and social formation, 1990 to 2002. In L. Chisholm (ed), *Changing class: education and social change in post-apartheid South Africa*. Cape Town: HSRC Press.

Jansen, J. 1998. Curriculum reform in South Africa: a critical analysis of outcomes-based education. *Cambridge Journal of Education*, Vol. 28 No. 3, pp. 321-331.

King, K. 2009. Education, skills, sustainability and growth: complex relations. *International Journal of Educational Development*, Vol. 29, pp 175-181.

Lugg, R. 2009. Making different equal? Rifts and rupture in state policy: the National Qualifications Framework in South Africa. In S. Walters and L. Cooper (eds), *Learning/work: turning work and lifelong learning inside out*. Cape Town: HSRC Press.

Malgas, B. 2012. Research to determine the extent of SETA involvement in RPL activities. Draft report to the Ministerial Task Team on Recognition of Prior Learning.

Marock, C. 2011. Considering key themes relating to the objectives of the NQF and post-school objectives. Centre for Education Policy Development. (Research paper commissioned to support the work of the developers of the Green Paper).

MERSETA. 2008. MERSETA ABET project final report.

Muller, J. 2004. Assessment, qualifications and the National Qualifications Framework in South African schooling. In L. Chisholm (ed), *Changing class: education and social change in post-apartheid South Africa*. Cape Town: HSRC Press.

Needham, S. 2012. Articulation Pathway in Financial Planning Qualifications. Presentation at the “New Linkages: Strengthening Pathways between Colleges and Universities” Conference hosted by the Centre for Education Policy Development and Bronx Community College on 23 & 24 April 2012, at the Birchwood Hotel and OR Tambo Conference Centre.

Nel, H. 2012. FET college curriculum issues and challenges: Case study of Mechatronics. Presentation at the “New Linkages: Strengthening Pathways between Colleges and Universities” Conference hosted by the Centre for Education Policy Development and Bronx Community College on 23 & 24 April 2012, at the Birchwood Hotel and OR Tambo Conference Centre.

Republic of South Africa. 1995. *South African Qualifications Authority Act, No. 58 of 1995*. Government Gazette No. 1521. Pretoria.

Republic of South Africa. 1998a. *Regulations under the South African Qualifications Authority Act (Education and Training Quality Assurance Bodies), No. 58 of 1995*. Government Gazette Vol 399, No. 19231. Pretoria.

Republic of South Africa. 1998b. *Skills Development Act, No. 97 of 1998*. Government Gazette Vol 401, No. 19420. Pretoria.

Republic of South Africa. 2008. *National Qualifications Framework Act, No. 67 of 2008*. Government Gazette Vol. 524, No. 31909. Pretoria.

Walters, S. and Cooper, L (eds). 2009. *Learning/work: turning work and lifelong learning inside out*. Cape Town: HSRC Press.

Wildschut, A., Kruss, G., Janse van Rensburg, D., Haupt, G. And Visser, M. 2012. Learnerships and Apprenticeships Survey 2010 Technical Report. Human Sciences Research Council and Development Policy Research Unit.

Young, M. 2003. National qualifications frameworks as a global phenomenon: a comparative perspective. *Journal of Education and Work*, Vol. 16, No. 3, pp. 223-237.

Young, M. 2007. Qualifications frameworks: some conceptual issues. *European Journal of Education*, Vol. 42, No. 4, pp. 445-457.

Young, M. 2008. Towards a European qualifications framework: some cautionary observations. *Journal of European Industrial Training*, Vol 32, No. 2, pp. 128-137.