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National Qualifications Frameworks: Insights from South Africa[1]

Preamble

During the last thirty years, National Qualification Frameworks have emerged as an attempt by the state to 'manage' the relations between education, training and work. Drawing on South African experiences of thirteen years of development of a competency and outcomes based National Qualifications Framework (NQF), this paper highlights areas of greatest contestation and achievement; and our identified priorities for the future. (For details of our NQF's development we refer people to the SAQA website where a number of analytical and descriptive documents can be found.)

We argue here for a view of NQFs as works-in-progress and as contestable artefacts of modern society, which can provide an opportunity to address, in a modest manner, aspects of lifelong learning that contribute to economic development, social justice and personal empowerment. We stress the need to recognise that, like any educational innovation, the context within which the NQF is developed is a primary consideration, which includes the ways in which politics and pedagogy give it particular shape.

Introduction

[1] This paper draws substantially from a published article by Ben Parker and Shirley Walters "Competency based training and national qualification frameworks: insights from South Africa". **Asia Pacific Education Review** Volume 9 Number 1 February 2008

From the early years of the twentieth century, the relations between education, training and work have become increasingly complex and contested. One example of such contestation is apparent in discourses around Competency Based Training (CBT) and the relationship between this form of training and more classical forms of education that dominated the curriculum of schooling in Europe for hundreds of years and traces of which still remain (Bernstein, 1996: 82 – 90). During the last thirty years, competency based National Qualification Frameworks (NQFs) have emerged as an attempt to 'manage' the relations between education, training and work and, unsurprisingly, have been highly contested. South Africa provides an intriguing example of how a confluence of global influences were indigenised and adapted to meet national objectives and how, after thirteen years of development, the architecture and practices are being reshaped.

South Africa's NQF, which was conceived and established in the transition to a post-apartheid democracy, embodied many of the aspirations of the time, above all, transformation of the apartheid education system through an NQF that addressed access, redress, portability and progression and enabled people to become lifelong learners (Allais, 2007: 225). Given the idealism of the times, hindsight understands the impractical idealism of the model and of the qualifications and standards setting processes, which emerged as policy was implemented. This paper traces how, in the South African case, in the 1990s, an indigenised version of competency based training (CBT) became the dominant political discourse guiding educational reform and was 'implanted' in the education and training system through the creation of an NQF managed by the South African Qualifications Authority (SAQA) in concert with

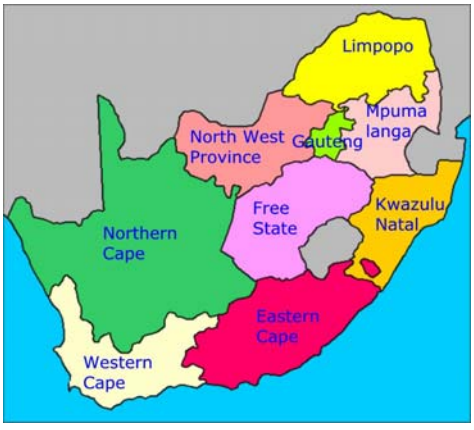
government, Sectoral Education and Training Authorities (SETAs) and other stakeholders.

Before exploring the particular NQF issues, we will present an illustrative snapshot of some of our specific context to assist you in understanding where we are coming from, and what the similarities and differences in our various contexts may be.

Context matters

A key observation in a middle income country like South Africa is the very large proportion of young people. The demographic profile is diametrically opposite to that of most of the developed economies, often referred to as the 'north`. Our country is very diverse in terms of geographic regions, ethnicities, languages, levels of poverty and wealth. It is therefore important to stress that even within our own country we have to be alive to the different approaches to education and training provision that may be required to meet the needs of the 48 million people. A quick illustration is given via a map of South Africa and its provinces:

Map of South Africa and its Provinces



The most populous province, Gauteng has a surface area of only 16,548 km^2, while the Northern Cape, with a population one-tenth the size, has a surface area more than 20 times bigger, at 372,889 km^{22}.

Another illustration is via the age profile of the South African population.

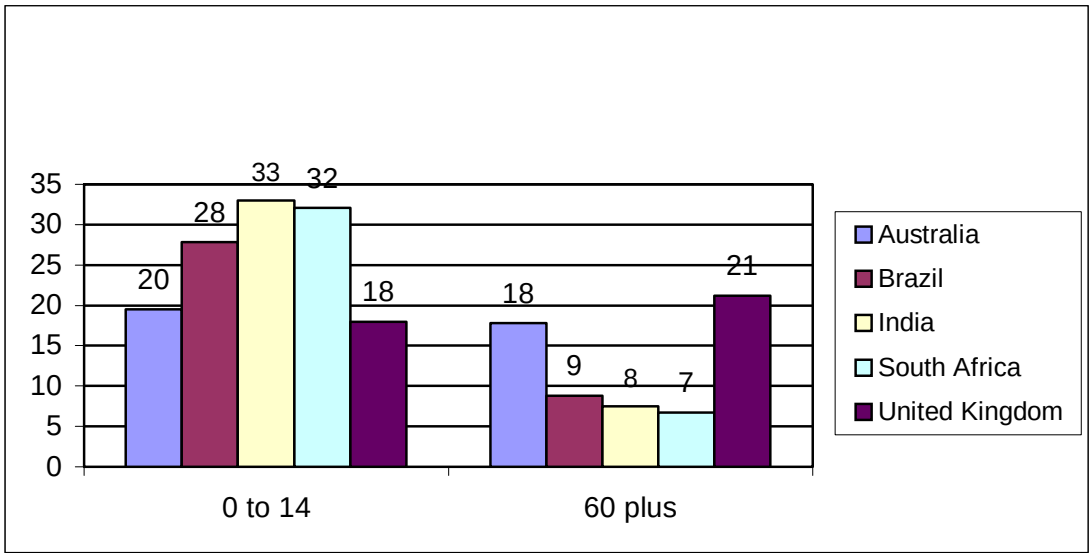
South African Population: Age Profile

51% of the South African population is below the age of 25. In comparison with a country such as UK, the young population is much higher and the old population much lower. This age feature of countries of the south is well illustrated by a comparison of the ages of a basket of more and less developed countries[3]:

Age Groups 0 to 14 and 60 plus as % of total population in 2005

[2] http://www.southafrica.info/about/geography/provinces.htm

[3] http://unstats.un.org/unsd/cdb/cdb_advanced_data_extract_fm.asp?HYrID=2005&HSrID=13680&HCrID=36%2C76%2C356%2C710%2C826&yrID=2005&continue=Continue+%3E%3E



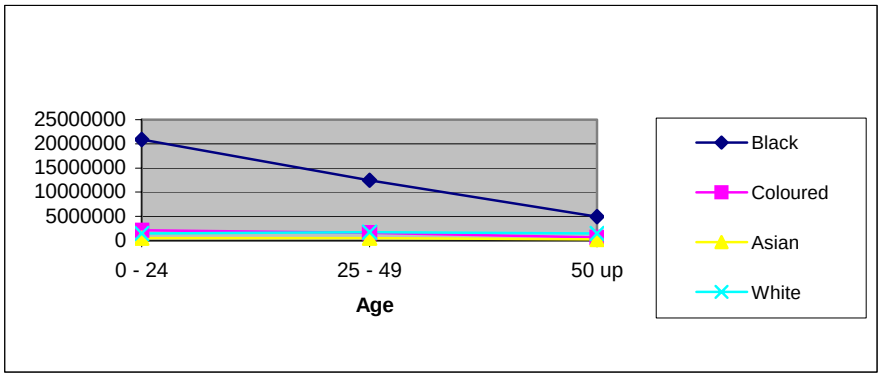
In addition, life expectancy at birth in South Africa in 2007 was 50[4]. This compares with UK figures for 2004-2006 of 77 for men and 81 for women[5]. These figures indicate the very different constituencies for school education and adult education in the different countries. How do (or should) the very different age profiles of our populations impact our thinking about lifelong learning and NQFs?

Given South Africa's history, racial differences are key in analysis of its statistics. The term 'population group' is used to denote the 4 racial subgroups of the population, which are Black African, Coloured, Asian and White. We follow this convention, and an age analysis by population group is revealing:

Age by Population Group

[4] http://www.hst.org.za/healthstats/82/data. Figures for 2004, disaggregated by population group, are: African 49, Coloured 56, Indian and White 63.

[5] http://www.statistics.gov.uk/cci/nugget.asp?id=168



The above demonstrates that the youth of the population is as a result of the youth of the Black African population. The age distribution of the other population groups is relatively even.

Employment and Unemployment

South Africa is regarded as a middle income country with a per capita income around US $ 3600, in the same category as Argentina, Brazil, Russia, Turkey and Venezuela. The South African economy displays elements of both development and underdevelopment, sometimes characterized respectively as the ‘first’ and ‘second’ economies. In the former, a small but growing proportion of the population enjoys a standard of living comparable with that in the industrialized world while in the latter there are significantly high levels of poverty.

With regard to poverty, recent estimates indicate that more than 45 percent of the population is living below a conservatively-estimated national poverty line (R354 per month). Poverty is also distributed unevenly by race, gender and region. For example, the proportion of black South Africans living on less than US $1 per day was estimated recently at just under 13%; the corresponding figures for coloured, Indian and white South Africans were respectively 3.6%, 3.1%, and 0.4% respectively. Regionally, using

the same measure of poverty, the incidence of poverty varies from 2.7% in the Western Cape to 15% in the Eastern Cape and 18% in Limpopo.

Vast inequalities in the distribution of income and wealth represent a formidable challenge and remain an important constraint to growth and an important factor in addressing problems of social cohesion. South Africa is one of the most unequal countries – as with poverty, the pattern of inequality manifests itself in its racial, gender and regional dimensions. In addition, a new trend of intra-black inequality is manifesting itself in the post-apartheid era. Underlying the poverty and inequality challenges is a high level of unemployment. The unemployment rate varies between 25 and 40% depending on the measure used. Unemployment is highest amongst black Africans (32%), and women (31%), and in rural areas.

This provides a glimpse into the context within which we are working to build the NQF and strengthen lifelong learning for the majority of the population.

The indigenisation of Competency Based Training and the development of South Africa's NQF

14 years after the election of South Africa's first democratic government, South Africans have become all too aware of the difficulties of education change posed by the challenges of transforming the legacies of Apartheid: the persistence of inequalities, learners lack of access and success, weak management practices and poor teaching practices. Our collective failure to produce significant successful change is all the more depressing because of the dazzling array of our transformative policy interventions. South Africa

has a strong and progressive constitution and comprehensive policy and regulations focused on achieving freedom, equality and human dignity. One of the major education policy initiatives of the newly elected government was signalled by the promulgation, in October 1995, of the South African Qualifications Act, which formally established the NQF. At the time, the NQF was seen as a key instrument for transformation. In 2001, however, the Minister of Education, set up a process to review the NQF. Six years later, the Ministers of Education and Labour had, in September 2007, issued a Joint Policy Statement (MoE and MoL, 2007a), which concludes the NQF Review process.

A new NQF Act has just gone through parliament and is waiting the President's signature to be enacted. This early and lengthy review process indicates ongoing intense political contestation surrounding the NQF and SAQA and their role in the transformation of South African education and the ways in which we can best understand different forms of learning and the relations between them (Allais, 2007: 34, Lugg, 2007: 182).

The overarching objectives and vision of the NQF were forged over a period of 10 years starting in the late1980s and were shaped by a confluence of external and internal dynamics (Allais, 2007: 72, Lugg, 2007: 46). The key external influences came from western developed countries where changing modes of economic production were placing increasing emphasis on the importance of a skilled flexible labour force, which was thought to require an integration of education and training and which lead to the emergence of NQFs (of particular importance were the New Zealand, English and Scottish models) (Mukora, 2006: 26). Internally, there were economic and political

imperatives prioritising a need to move away from the racial segregation of apartheid education, which excluded the majority of the population from access to education and training opportunities, towards an integrated education and training system promoting equity and development (Allais, 2007: 221, Parker and Harley, 2007: 18).

As part of an overall strategy to foster a culture of lifelong learning, SAQA focuses on ensuring the development of an NQF that is underpinned by systemic coordination, coherence and resource alignment in support of South Africa's Human Resource Development Strategy and the National Skills Development Strategy. The objectives of the NQF (which remain in the new Act) are stated in the SAQA Act: create an integrated national framework for learning achievements; facilitate access to and mobility and progression within education, training and career paths; enhance the quality of education and training; accelerate the redress of past unfair discrimination in education, training and employment opportunities; and, contribute to the full personal development of each learner and the social and economic development of the nation at large.

South Africa's NQF was conceived as a comprehensive and unified ladder of learning with multiple pathways enabling learners to move from one field of education to another and to progress up the ladder. Those excluded from educational opportunities in the past would be given access onto a rung of the ladder through recognition of their prior learning and experience (RPL). In addition to its focus on setting standards through pegging qualifications onto rungs of the ladder, SAQA has had responsibility for the overarching coordination and evaluation of the quality assurance, undertaken by

Education and Training Quality Assurance bodies, of the programmes that lead to qualifications and of the providers of those programmes.

All South African qualifications are included on the NQF, both those that were developed prior to the NQF (historical qualifications), and those developed through SAQA's standards setting structures (new qualifications). Education and training providers submitted their historical qualifications for registration on the NQF between 1998 and 2003 and had to align with NQF requirements, which included an outcomes-based format intended to provide a basis for comparability of learning achievements that would create a platform for mobility, portability, progression and RPL.

The use of an Outcomes Based Education (OBE) approach to standards setting has its origins in the CBT movement. In the early 1990s, South African educators and policy-makers drew strongly on developments in CBT in England, America and Australia. Broadly, CBT is an approach to vocational and occupational training that places emphasis on what a person can do in the workplace as a result of completing a programme of training where competency refers to knowledge, skills and values required to perform a specific occupation. Drawing on this approach, the idea emerged and took hold in what has become an international movement amongst governments, that competence could be expressed in the outcome statements of a qualification without '…prescribing any specific learning pathway or programme." (Young, 2005: 5).

In the South African debates, there was a concern that CBT could be too 'behaviourist' and 'atomistic' and narrowly focused on specific 'items' of skills performance. The fear was that knowledge and skills would be understood as referring only to performances that can be observed and measured thereby excluding the

'interiority' of the learner and reducing assessment to a checklist approach of 'correct behaviours'. A policy decision was made in the mid-1990s, to use the term 'Outcomes Based Education' to ensure a more holistic and 'constructivist' view of learning that would not reduce competence to only the observable but would include the consciousness and conscience of the learner (Moll, et. al.: 2005: 78 – 115, Moll, 2002: 7). With respect to psychological theories of learning this marked a shift from the behaviourism associated with the work of Skinner, to the constructivist theories of learning associated with Piaget and Vygotsky (Moll, 2007).

Currently, SAQA's operational structure is configured around three key strategic areas, namely standards setting, quality assurance and the electronic management of learner achievements through the National Learners' Records Database (NLRD). The key instrument in standards setting is the design of qualifications standards, which are expressed through outcome statements. Qualifications can be based on 'unit standards' which are 'units of learning' with specific learning outcomes but smaller than a full qualification. These units range in time demand from 20 hours of learning up to 160 hours of learning. Both qualifications and unit standards are registered on the NQF. The achievements of SAQA in its implementation of the NQF from 1997 to 2007 in relation to standards setting include:

- By July 2007, 74 SGBs were operating, and 787 new qualifications and 10 988 unit standards had been registered. In addition, there were 7 092 provider-generated qualifications recorded on the NQF (of which 492 were new qualifications, and 6 600 were historical qualifications).

- By July 2007, 7.5 million learners' achievements were registered on the NLRD and there were 23 990 providers accredited for 6 683 qualifications. There were 31 accredited Education and Training Quality Assurance bodies (of which 25 are Sectoral Education and Training Authorities).

A comparison between "historical" qualifications developed by providers and "new" qualifications developed by SGBs after the NQF was established shows a significant increase in qualifications available at NQF levels 3, 4, and 5. The highest level of activity has been in Manufacturing, Engineering and Technology. Provider-generated qualifications are registered, in the main, at levels 5 and above. By contrast, unit standards have been registered primarily from levels 2 to 5.

Joint implementation plans have been entered into enabling Sector Education and Training Authorities, professional bodies, government departments and other bodies such as the Independent Electoral Commission to establish SGBs to generate qualifications and standards that meet their particular needs. By July 2007, over 35 joint implementation plans had been established. These included a broad range of partners and cover a variety of standards and qualifications including: Local Government and Water Services SETA, Mpumalanga Government, Services SETA, Financial and Accounting Services SETA, Health and Welfare SETA, National Department of Arts and Culture, Independent Electoral Commission, Mining Qualifications Authority and the National Treasury.

The impact of an outcomes led qualifications framework on qualifications and quality assurance in higher education and in schooling has been mixed. In the case of

higher education, institutions have become more aware of quality assurance issues and most have instituted quality assurance management systems and have done some standardising of their programmes and qualifications. The light-touch approach adopted by the Council on Higher Education and the Higher Education Quality Committee to outcomes and the developmental approach to quality assurance reviews and audits has encouraged academics to scrutinise their own curriculum, pedagogic and assessment practices without impinging overly on their academic autonomy, although some would express concern at the increased administrative loads now required as part of curriculum development and programme management.

The recent history of the schooling system is more complex. The specific interpretation of outcomes based education, which took hold in SA in the mid-1990s, informed the development of the NQF and of the school curriculum. However, the dominance of OBE was soon challenged within schooling and, in the last five years, there has been an increasing emphasis placed on providing detailed curriculum guidance, professional development of teachers and national external assessments. In higher education and schooling there are causes for serious concern about quality – especially the vast divergences in quality of provision, which suggest that our nascent quality managements systems are proving ineffective in addressing the weaknesses of the system.

In the field of occupational learning, weaknesses are most apparent in the persistence of both high levels of unemployment and high levels of skills shortages in key areas of the labour market, which lead to the establishment, in 2006, of the Accelerated and Shared Growth Initiative for South Africa (ASGISA) and the Joint Initiative on Priority

Skills Acquisition (JIPSA). Part of the explanation for this ineffectiveness lies in a lack of systemic coherence and collaboration between the role players and of clear differentiation of their roles and responsibilities. For example, the uptake of unit standards based qualifications is low. There are, however, myriad potential explanations for this failure, which attribute responsibility to different role players. Could it be that the Sectoral Education and Training Authority system, which should be the main channel for the flow of learners into unit standards based occupational qualifications has not functioned efficiently? Or is it the conceptual design model used by SAQA? Or perhaps, it just takes time for new kinds of qualifications to become established.

Implementation of the NQF has clearly been affected by the climate of uncertainty created by the lengthy review process, and the differences between standards setting and quality assurance practices across the three knowledge fields have impeded progress towards the NQF objectives. The release of the Joint Policy Statement (JPS), in September 2007, by the Ministers of Education and Labour attempts to address the challenges described above and is intended to mark the beginning of a new phase in the development of South Africa's NQF (MoE and MoL, 2007a).

The two major changes to South Africa's NQF are moves away from 'standardisation' to 'differentiation' and away from an up-front, design down and prescriptive approach to standards setting to a practice-based, design-up and descriptive approach. There will be a shift from an 8 level to a 10 level NQF to accommodate greater differentiation in higher education. The 8 level framework is open-ended and allows for all masters, doctoral, and post-doctoral qualifications to be registered at level 8. The original conceptualization tried to address the issues of articulation, access and

progression at the lower levels of the NQF and wanted to avoid unnecessary prescription at the higher end where learners with masters degrees and higher should be in able to manage their own career development. Higher education lobbied consistently to have a 10 level framework with discrete levels for masters and doctoral degrees and for the first degee to be awarded at level 7 and not at level 6 (as is the case in the 8 level framework). The standards setting and quality assurance functions carried out by SAQA will shift to three Quality Councils: the Quality Council on Higher Education (NQF Levels 5 to 10); the Quality Council for General and Further Education (Umalusi) (NQF Levels 1 to 4 – the schooling system and technical colleges); and, the Quality Council for Trades and Occupations (occupational qualifications: NQF Levels 1 to 10). This will allow for the emergence of different sub-frameworks shaped to the needs of each distinct knowledge field and its associated forms of learning.

The major changes to standards setting and the design and delivery of programmes and qualifications are likely to occur in the field of occupational qualifications. Currently, occupational qualifications are integrated with no formal distinction between different forms of learning, in future, they will contain three components: General ***knowledge and theory;*** General and occupationally relevant ***practical skills;*** and, requisite ***work experience***. These components can be learnt and assessed separately in different sites; their achievement will be recorded formally and will count towards certification of a unit standard or qualification made up of specific sets of components (DoL, 2007b: 3).

The development of occupational qualifications and unit standards will be informed by the development of a curriculum, which will structure knowledge, skills and values into a

meaningful process of developing occupational competence through selecting, sequencing, pacing and assessment and includes classroom activities, practical activities and workplace experience and a strong emphasis will be placed on the role of external national assessments in quality assurance (DoL, 2007b: 5). The key shift here is that the process of curriculum development begins with work place practices rather than with outcome statements. The perception that outcome statements are developed in isolation from workplace practices needs to be challenged as the persons that are drawn into the standards-setting processes are all drawn from expert practitioners. The issues relate to who sets the standards and is reminiscent of the debates about who develops the curriculum.

The government expects these changes to make the system simpler and more efficient by recognising different forms of learning in the different parts of the education and training system. Broadly, this is move away from a top-down model that tried to use OBE as a prescribed 'common ground' applicable to all education and training towards a bottom-up model that allows for differentiation and sees the NQF as a 'common ground' that will be constructed slowly and incrementally.

Underneath the surface: a brief overview of key debates that have informed the development of South Africa's NQF

In South Africa, the early ambitious dreams of what could be achieved through national qualifications frameworks have been replaced by more modest views of NQFs as frameworks of communication that grow incrementally. Parker and Harley (2007: 18)

draw a distinction between two archetypes of NQFs that distinguish between frameworks that describe and coordinate *'what is'* and frameworks that try and prescribe *'what ought to be'*, with the former being favoured by developed countries and the latter by developing countries. The descriptive frameworks of developed countries develop incrementally towards 'common standards'. By contrast, the normative frameworks of developing countries tend towards a radical rupturing with the past and are intended to transform education and training systems. The review of South Africa's NQF marks a shift from a normative approach to a descriptive approach to standards setting.

The initial impetus for the development of NQFs was focused strongly on articulating academic schooling with vocational or occupationally oriented education, and education and training more generally with the economy. This has been supplemented, in the last decade, by an increasing need for a free flow of intellectual capital and skilled labour and a growing economic need to commodify and massify education and training. This tramples on traditional autonomies and vested interests leading to contestation over the meaning and purposes of qualifications and the curriculum, pedagogic and assessment practices associated with them. Developing communicative articulating frameworks, which enable a free flow of intellectual capital and skilled labour is an exercise in harmonisation and standardisation - creating rules of recognition and evaluation by which diverse qualifications can be compared and categorised as having x, y, and z in 'common'. Whether one approaches this with a 'transformative' and prescriptive approach to reform (by *diktat*) or an incremental and generative approach (by recognition of 'good' practices), the target remains harmonisation and/or standardisation.

Access, redress, mobility, portability and progression all depend in some or other way on the assumption that it is possible to recognise and evaluate "something" that is comparable between different qualifications or different forms of learning. The original design of South Africa's NQF located this function in the learning outcomes of a qualification. Whether a qualification was discipline-based and achieved through an institution or craft-based and achieved through workplace experience, the learning outcomes embedded in the qualification were supposed to be 'learning – mode' neutral and could therefore be used as a 'proxy-function' to map one set of knowledge, skills, and values onto another.

It is this aspect of South Africa's NQF that has been most contested. At the heart of these debates lie two very distinct understandings of learning processes and their outcomes, which are grounded in the debates between behaviourist and constructivist views of learning. The latter extol the esoteric nature of learning: knowledge, skills and values can only be acquired through initiation into 'worthwhile practices and grammars' of a specific knowledge discourse (Ensor, 2003: 330). This takes time and a conducive environment, motivated and intelligent learners and appropriate curriculum, pedagogic and assessment practices. From this perspective, outcome statements are 'formal' rather than substantive standards and provide little specification of the selection, pacing, sequencing, progression and evaluation criteria that will characterise the curriculum and there is no indication of appropriate depths of content knowledge and levels of cognitive demand (Allais, 2003: 308). While this allows for a significant degree of autonomy over the curriculum, it presupposes that educators can read the criteria in a way that is meaningful and 'aligned with' the meaning intended by the designers.

From a behaviourist perspective, outcome statements are descriptions of observable and measurable behaviours. However, because learning can't be captured by simple descriptions of behaviour, outcome statements become increasingly specified (Allais, 2007: 272). The risk is that what is supposed to be a platform for public communication and participation instead becomes a domain of esoteric jargon understood only by experts - leaving learners, providers and employers struggling to make sense of basic matters like curriculum and assessment. Trying to prescribe quality up front through ever increasing levels of specification and complexity is a doomed enterprise, which assumes that outcome statements are transparent descriptions of 'competence'. A design down approach, which begins with outcome statements, is oriented away from actual curriculum, pedagogic and assessment practices towards policy and design criteria. Approval of qualifications becomes a matter of compliance with technical regulations rather than a fit-for purpose practice oriented approach. As indicated earlier there needs to be a closer scrutiny of those involved in the design of outcome statements and the extent to which they are involved in curriculum development and implementation. It may very well transpire that a significant part of the problem resides in this area.

In recent South African debates, emphasis has been placed on a distinction between 'competency standards' and 'academic standards'. Competency standards are linked to job descriptions and their associated skills sets, which are expressed through outcome statements. A person who has a qualification and designation as a 'plumber' must be able 'to do the job' and can have their performance evaluated against a set of 'performance/outcome statements'. Although these descriptions of practices can never be 'thick' enough to capture everything we expect of a person who has certified

occupational or professional competence, they do provide a ‘rule of thumb’ sufficient for the purposes of a rather crude performance management tool.

While competency standards speak to skill sets and job description/performance measurement indicators, ‘academic standards’ relate to domains of knowledge and the curriculum and assessment practices by which they are achieved. The thinness of outcome statements in relation to these institution-based educational practices prevents them from playing a similar measurement and grading role. Confusion abounds when an NQF attempts to construct overarching ‘qualification standards’ to bridge the divide and describe knowledge domains, curriculum and assessment practices, skill sets and job descriptions in a common language. There is a necessary impossibility about these endeavours; however elaborate our languages of description we cannot create a ‘perfect picture’. Outcome statements are not the same as outcomes or competences. Ironically, within current debates in South Africa, academics are defending idealism (the intrinsic worth of knowledge) by grounding their standards in real educational practices, while their counterparts in the occupational learning system are defending realism (skills outcomes) by grounding their standards in the ideal world of design policy and tools. This suggests the importance of a strong distinction between mastery of a body of knowledge certified by a qualification and the achievement of a set of competencies certified by a professional or occupational designation.

Building opportunities for life-long learning requires a clear understanding of ‘comparability’ and ‘transferability’ and reiterates the importance of initiatives such as credit accumulation and transfer and recognition of prior learning, which are understood to have the potential to improve access, progression, mobility and portability - nationally

and internationally. What instruments, tools and practices can be used for comparability? Moving away from outcomes implies moving towards different approaches to recognising and evaluating different 'units of comparability'. By themselves, specifications of curriculum content and of assessments do not avoid the conundrums of interpretation.

If we can no longer pre-specify the 'unit of comparability', how do we begin to establish a framework for developing communicative models that articulate different forms of learning? We believe that the best way to address these challenges is through research driven policy, which informs the political and organisational shape of the NQF. In the South African case, there is already a considerable body of research on learning and on the NQF that can provide a foundation for future research. Two theoretical approaches that have become prominent within this research draw on Bernstein's (1996: 169 – 180) account of different knowledge fields and the power and control relations between and within these fields and on Lave and Wenger's (1991: 53) notion of communities of practice as learning communities which emerge in work places.

Although we are not advocating the use of these two particular theorists, we are suggesting that their already existing productive use in South African research, indicates that it is possible to conceptualise a vantage point from which to develop languages of description to explore the development of quality management systems and the role of qualification frameworks within these systems. Recognising differences between the fields, understanding the nature of their boundaries and hence the possibility of boundary crossings will inform how we develop an integrated approach to a national qualifications

framework with articulations that enable comparability between different forms of learning and the different knowledge fields within which learning takes place and between these fields and the world of work.

There have been some suggestions, within South African debates, that the boundaries between the academic field and the 'everyday' field, between school and street knowledge, are very strong and that institutions, curriculum and assessment should be the primary foci of qualifications design and quality assurance. There is a particular emphasis on the importance of institutions as bedrock of quality education and training. This is obviously correct when applied to schooling and higher education. However, many occupational qualifications are delivered by non-institutional providers or in the work place, thus raising questions about approaches to quality assurance and development in non-institutional settings. Although the knowledge field of occupationally oriented education is far more context specific and delivery is less institutionalised, this does not mean that this non-academic knowledge field is content-less, nor that curriculum, pedagogy and assessment are less important. Rather than dichotomising and demonising the everyday knowledge field, we should be researching curriculum, pedagogic and assessment practices in these fields to better understand how we can improve quality. Although, the existence of different knowledge fields and communities of practice does make agreement and articulation difficult to achieve, it does perhaps, make it all the more worthwhile.

Some insights on Competency Based Training and National Qualifications Frameworks from South Africa's experience

South Africa's experience illuminates the importance of coherent and systemic implementation and the slow nature of educational transformation. Qualifications frameworks can play an important role in the transformation of education and training system, provided that they are seen as a platform for communication and coordination rather than an arena of contestation and confusion. South Africa's NQF has already made some progress towards achieving its objectives and the changes proposed by the new NQF Act should further enhance the efficacy and efficiency of the NQF. Amongst other benefits, NQFs should enable: the development of relevant and appropriate qualifications, which address national and personal needs; improvements in quality assurance systems; and, monitoring and evaluation of progress towards national education and training objectives

The NQF introduced new language, procedures and processes, which some found opaque and complex. Systems have continued to be simplified and streamlined in response to this and the NQF is now `coming of age` with citizens more familiar with its workings. However, we are aware that not enough has yet been done to develop 'navigational tools' to assist the population across all age groups to find their way. Guidance and counselling across the system is the next area that requires our concerted attention.

A particularly important achievement of setting up the NQF has been the development of a world-class electronic management information system, the National Learners' Records Database (NLRD). Given the fact that the collection, management and analysis of data present huge challenges in developing countries, the NLRD has been

recognised as a replicable model for building effective and efficient databases for similar applications. (For completeness, Appendix 2 at the end of this paper provides a succinct overview of the NLRD).

After 13 years of development the South African NQF is seen as an important reference point for new national and regional qualifications frameworks that are developing in many parts of the world. We are intimately involved in the exploration of the Southern African Qualifications Framework, South African experience indicates that qualifications frameworks should be built cautiously, modestly and incrementally. Development should have a strong experimental scientific approach in which failures or falsifications are seen as evidence. (For completeness, a brief account of SAQA's involvement in international partnerships is provided as Appendix 1 at the end of this paper).

South Africa's initial move to privilege CBT or OBE as the template for the whole education and training system through the use of outcomes statements as an up-front, prescriptive and design-down approach, which was intended to create a 'communication's platform' for portability of learning between different knowledge and occupational fields, has not succeeded. The schooling and higher education systems did not 'buy-in' to the approach, nor has South Africa's skills development system prospered. South Africa's deepening skills crisis, which is 'blamed' by many politicians and business leaders on disjunctures between schooling and higher education on the one side and the economy and labour market on the other side, has been exacerbated by the massive decline in apprenticeships and other types of work based learning. The number of apprenticeships has declined from a high of 80 000 per annum in the mid 1980s to 5

000 in the mid 2000s. South Africa's NQF has not met the expectations of business with respect to improving the supply of appropriately trained skilled labour or intellectual capital nor, the expectations of labour with respect to increasing access to educational and occupational opportunities. Far from contributing to the development of a lifelong learning system, some critics say that the NQF appears to have impeded South Africa's progress towards these objectives.

The reasons for this failure lie in factors internal and external to an outcomes based NQF. Key amongst external factors was an underestimation of the weaknesses of institutions and the lack of competent educators and trainers inherited from Apartheid. Key amongst the internal factors was conceptual confusions and contestations over what was meant by competences and outcomes (and forms of learning underpinning their achievement) and how they might best be described in qualification statements and used for quality assurance. Central to both sets of factors was a lack of clarity about the purposes of the NQF with stakeholders having very different perspectives and objectives ranging from the state's perspective of an administratively driven quality management system that could steer the education and training system towards its economic and political objectives to organised labour's view of the NQF as a portal to lifelong learning with strong emancipatory and empowering objectives.

NQFs are best understood as a works-in-progress and as contestable artefacts of modern society, which can contribute in a modest way to how a society manages the relations between education, training and work by finding 'common ground' between distinct forms of learning and their articulation with work place practices. This can best be done through a strong research driven collaborative approach to NQF development

that seeks ‘means of portability’, ways of enabling boundary crossings, of improving quality and relevance and of understanding better, different forms and sites of learning. There is no doubt that NQFs can become divisive and make little, if any contribution, to life long learning or educational reform. This is not pre-ordained, however, as NQFs can provide an opportunity to address, in a modest manner, aspects of lifelong learning in ways which contribute to economic development, social justice and personal empowerment.

We welcome this opportunity to talk and network with colleagues, to build partnerships which can add to our collective understandings of the intellectual, pedagogical and political challenges that we all face, and to strengthen our institutions which aspire to attainment of greater social justice for the majority of girls, boys, women and men.

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APPENDIX 1

International Partnerships

Since NQF development was first considered in South Africa, an emphasis was placed on partnerships between, initially the South African Department of Education, and later on the South African Qualifications Authority, and a range of international counterparts. While funding form the mainstay of these partnerships in the early years, notably with the European Union, and the Canadian International Development Agency, the partnerships matured in later years to include projects that were of mutual benefit to South Africa and the international partner. In this regard the development of the National Learners' Records Database (with CIDA) and the study on the impact of the South African NQF

(with the EU) stand out as two pioneering initiatives that have subsequently drawn interest from various parts of the globe. More recently SAQA has partnered with international agencies to assist in qualifications framework and quality assurance related projects, including the Commonwealth Secretariat (for research into teacher qualifications), the Commonwealth of Learning (for the development of a transnational qualifications framework) and the Southern African Development Community Secretariat (for regional benchmarking and the development of the SADC regional qualifications framework). Through the United Nations Development Programme and the Italian Contribution to the Education Sector Development Programme in Ethiopia, SAQA has also been to contribute significantly to NQF development in the Seychelles and Ethiopia respectively. Closer ties have been built with the OECD through the international initiative on the recognition of non-formal and informal learning, and the Caribbean Community (CARICOM), through the recognition of teacher qualifications. Today SAQA is an active partner and contributor in NQF related developments continentally and internationally.

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APPENDIX 2

The National Learners' Records Database

At only nine years old, SAQA's National Learners' Records Database (NLRD) has already proven itself to be world-class, and has been called upon to assist several other countries as they contemplate the development of similar systems.

The NLRD is a misnomer: before it was developed, its sponsor, the Canadian International Development Agency (CIDA), needed a quick name to include in its project charter, and the name stuck. While this name does at least put learners at the centre of everything, the NLRD is in fact a massive system rather than simply a database: it is the integrated electronic management information system of South Africa's National

Qualifications Framework (NQF), and should more accurately be named the "NQFMIS". But be that as it may.

The two main functions of the NLRD are the macro one, which is to provide policy makers and decision makers with comprehensive information on education and training, and on labour market supply; and the more micro, or personal, one, which is to track the paths of individual learners, providing them and their employers with proof of qualifications obtained.

Developed in modular fashion, so that further information needs can be met as they arise, the NLRD has, since its inception, accommodated South African qualifications and unit standards and learners' achievements of these, and has more recently been expanded to accommodate professional designations and learnerships. With ever-increasing learner numbers flowing into the NLRD from all of South Africa's Education and Training Quality Assurance bodies (ETQAs), SAQA is in a position to perform various analyses of this information, to verify the achievements of learners, and to ensure that the uptake of the qualifications and unit standards registered on the NQF is understood.

An example of such analysis is a key publication of the NLRD: the report, *Trends in Public Higher Education in South Africa*, launched by the Minister of Education each time it is produced. She recently used this report to highlight the fact that, from the mid-nineties to the mid-'noughties', the number of graduates in the available pool in South Africa grew from approximately half-a-million to 1.18 million, with the number of black people in the pool increasing from one in four to one in two. She added, however, that "the depth of the historical legacy of apartheid damage and distortion is evident in the simple fact that the majority of black graduates are in the social sciences and not in the engineering sciences and technology." Another important trend shown by the report is that, while the number of black people and women in the pool has increased dramatically, the majority of these do not undertake postgraduate studies, and the vast majority of Masters and Doctorates are held by white people, especially men.

Analysis of the NLRD data on the uptake by learners of the new NQF qualifications is currently in progress. Preliminary results are that the NQF field showing the highest uptake is Manufacturing, Engineering and Technology (with 58 000 learners recorded on the NLRD to date), its most popular qualification being the National Certificate: Introduction to Mining and Minerals, which provides skills in mining operations – essential for South Africa's extensive mining industry. The Services field has the second-highest number of learners (40 000), its most popular qualification being the National Certificate: Tourism: Guiding, developed to enable the creation of innovative and exciting guided experiences, and highly relevant to the tourism industry in Southern Africa.

A further publication of the NLRD, the searchable database of the content of all qualifications and unit standards on the NQF, is entirely web-based. The colourful and user-friendly search utility accesses records in seconds, and these can be printed or saved in summary or in detail. Subscribers also have the facility to download these records, in their entirety, into their own databases and to update these regularly.

In total, the NLRD contains records of 8 million learners and their achievements; 51 000 assessors; 31 000 providers of education and training (large and small), and their accreditation to offer qualifications and unit standards; 829 new NQF qualifications (and a further 325 that completed their cycles without being reregistered); 8 000 qualifications that existed before the NQF and were submitted by their providers and added to the database; 9 500 new unit standards (and a further 4 200 that completed their cycles without being reregistered). If all of the text and numbers contained in this system were to be printed out, they would cover hundreds of thousands of pages.

South Africa is in the process of setting up a national Human Resources Database, to track key labour market issues, especially skills provision and skills development. The Joint Initiative on Priority Skills Acquisition (JIPSA) commissioned research into whether the NLRD should, in fact, become this database. It was found that, while the *supply* aspect of the labour market is indeed the core business of the NLRD, the *demand*

aspect is not; thus, it was rather recommended that the NLRD should be used as a basis and model for how the HR Database should function, and should be a key contributor of information to it. SAQA has committed to supporting this process.

The NLRD is also helping Statistics South Africa to pilot a method for declaring national data systems to be official statistics, in terms of the South African Statistics Quality Assurance Framework (SASQAF). Statistics South Africa usually declares specific reports (rather than entire data systems) to be official statistics, but has risen to the challenge of SAQA's request that the NLRD should be declared thus.

A key challenge experienced by the NLRD (in line with similar challenges world-wide) is that of facilitating the relationship between people and the information that they manage – assisting the NLRD's data suppliers to understand the requirements of the system (the NLRD Load Specifications) and to submit robust data. To this end, some creative solutions have been developed, including Edu.Dex, a comprehensive data-testing system used by the data suppliers themselves; a Minimum Standard for data submissions; and league tables measuring their compliance with this standard and their performance.

As part of its assistance to ETQAs, the NLRD is engaged in a three-year project to offer intensive assistance to the Higher Education Quality Council (HEQC) of the Council on Higher Education (itself an ETQA), to gather information concerning its 100 Private Higher Education Institutions and load this onto the NLRD. To this end an information system, the HEQCIS, which has been designed and built by an IT service provider, is hosted by the NLRD on a SAQA server, and the HEQCIS Manager is stationed within the NLRD Directorate. The NLRD Load Specifications, Edu.Dex and Minimum Standard have been modified for this system and rolled out to these institutions.

The NLRD runs a service whereby learner achievements can be verified. This consists of several options, the main ones being that individuals can contact SAQA concerning their own records and receive a free transcript of their records held on the NLRD, and subscribing organisations can request third-party verifications of the learning

achievements of prospective or current employees, for any number from one to hundreds of thousands of records.

A related project was recently completed for South Africa's Department of Public Service and Administration (DPSA), which submitted its entire employee list to the NLRD for matching and then producing aggregated statistics of how many employees were qualified at which levels and in which fields. Work is also being done for the Department of Labour's project, Employment Services of South Africa (ESSA), matching data from its database with verification data from the NLRD, thereby providing acknowledgement from SAQA for all the matched records in the ESSA database published by the DoL.

The NLRD has a staff complement of 18 people, eight of whom are engaged in the two-year Information Administrator learnership and gain their employment experience as the NLRD's specialised data capturers. They study the National Certificate in Datametrics concurrently. The third intake has just successfully completed the learnership, and the fourth intake is due to commence during February.

SAQA staff and external service providers jointly ensure that the NLRD is well maintained and supported, that database administration is of the highest quality, that the required enhancements and developments are correctly specified and implemented, that disaster recovery measures are available if required, and that the NLRD system continues to function robustly.

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