CONTENTS

Acronyms and abbreviations	iv
Editorial comment	1
Chairperson's foreword	3
The relevance of the National Qualifications Framework Impact Study to qualification framework development in the Southern African Development Community	5
Ron Tuck, John Hart and James Keevy	
An integrated national framework for education and training in South Africa: Exploring the issues	30
Ronel Heyns and Seamus Needham	
Assesment strategies for work - integrated learning at higher education institutions	49
Brian Eagon Forbes	
Essential Embedded Knowledge - The forgotten dimension	67
Christoph Vorwerk	
Do good ideas matter?	87
Jonathan D. Jansen	
Response to Gary Granville	94
Botshabelo Maja	
Those unheard a review of the presentations on the occasion of the SAQA Chairman's Lecture, September 2004	100
Edward French	



THINKING AND DOING EDUCATION AND TRAINING ANEW

VOLUME 6 NUMBER 2

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SAQA BULLETIN

Volume 6 – Number 2

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FAX NUMBER: 012 431-5039.

WEBSITE: www.saqa.org.za
HELPDESK: 086 010 3188

EMAIL: saqainfo@saqa.org.za

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ACRONYMS AND ABBREVIATIONS

GENERAL

ABET	Adult Basic Education and Training
ANC	African National Congress
CARE	Centre for Applied Research in Education
CCFO	Critical Cross-Field Outcome
DoE	Department of Education
CHE	Council on Higher Education
CRI	Criterion Referenced Instruction
DoL	Department of Labour
FET	Further Education and Training
FETC	Further Education and Training Certificate
HEQC	Higher Education Quality Council
HEQF	Higher Education Qualifications Framework
MDGs	Millennium Development Goals
NATED	National Education Department Core Syllabus
NEPI	National Education Policy Initiative
NOS	National Occupational Standards
OBE	Outcomes-based Education
OBET	Outcomes-based Education and Training
OECD	Organisation for Economic Co-operation and Development
QAA	Quality Assurance Agency
RDP	Reconstruction and Development Programme
RPL	Recognition of Prior Learning
SCQF	Scottish Credit and Qualifications Framework
SETA	Sector Education and Training Authority
SMME	Small-, Medium- and Micro Enterprise
SQA	Scottish Qualifications Authority
VET	Vocational Education and Training

SAQA

ETQA	Education and Training Quality Assurance Body
NLRD	National Learners' Records Database
NQF	National Qualifications Framework
NSB	National Standards Body
SAQA	South African Qualifications Authority
SGB	Standards Generating Body

EDITORIAL COMMENT

The papers in this edition of the *SAQA Bulletin* have been drawn from the proceedings of the annual Qualification Africa Conference that was held at Gallagher Estate in September 2004. The conference theme "Thinking and doing education and training anew" proved to be very appropriate and attracted a variety of presentations and papers from South Africa, Ireland, Scotland, Germany and various African countries.

The first paper by Tuck, Hart and Keevy suggests ways in which the outcomes of the National Qualification Framework (NQF) Impact Study can inform qualification framework development in Southern African Development Community (SADC) countries. This lengthy but very informative discussion on National Qualifications Frameworks from an international perspective will be of interest to many readers.

Heyns and Needham explore the notoriously difficult topic of "integration". They try to unravel on three levels ranging from macro to micro what is meant by an integrated NQF. This presentation at the conference was particularly well attended suggesting that there is still much debate around this topic that forms such an important part of NQF implementation.

The paper by Brian Forbes focuses on assessment strategies in the higher education sector. His paper is an excellent example of how many NQF principles can be applied both in education and training.

The paper by Christoph Vorwerk explores another important topic, namely that of essential embedded knowledge. Vorwerk argues that the important role of embedded knowledge has been neglected when designing NQF unit standards.

The last three papers were commissioned by SAQA and relate to the third annual Chairperson's Lecture held at Gallagher Estate, Johannesburg on 14 September 2004. The papers by Jonathan Jansen and Botshabelo Maja are responses to a paper by Gary Granville, which was published in Volume 6:1 of the *SAQA Bulletin*. A third paper by Edward French presents not only a summary of these three papers (i.e. those by Granville, Jansen and Maja) but also offers a significant critique of the common theme, namely the NQF Impact Study. Collectively these papers present diverse opinions of SAQA's approach to measuring the impact of the NQF and encourage more debate around this important initiative.

FEEDBACK

Readers are invited to contribute to the NQF discourse by completing the feedback form at the end of the SAQA Bulletin. Comments and papers that contribute to the development of the NQF discourse will be considered for inclusion in future publications.

THE STATUS OF ARTICLES IN THE SAQA BULLETIN

SAQA re-asserts its statement in previous issues of the SAQA Bulletin that only those parts of the text clearly flagged as decisions or summaries of decisions taken by the Authority should be seen as reflecting SAQA policy.

CHAIRPERSON'S FOREWORD

As outgoing SAQA Chairperson it is my privilege to oversee another edition of the *SAQA Bulletin*. Over the past eight years the *Bulletin* has offered NQF stakeholders and partners a platform to publish research papers, workshop proceedings and speeches on NQF-related matters. I am sure that in the years to come such opportunities will increase in quality and number.

This edition of the *Bulletin* is aptly titled "Thinking and doing education and training anew". It is indeed time that the broader education and training community, together with SAQA and the Departments of Education and Labour, reflect on the past seven years of NQF implementation. Although most of us will argue that what we have now is a far cry from the pre-1994 dispensation, nevertheless we cannot become complacent, or even defensive about what "we" have achieved. The following statement by a friend and comrade of many years captures the point:

I agree with Granville ... that the "NQF grew from an idea first, then a system was constructed to carry the idea". This has come with its associated costs as indicated earlier, but paradoxically, it is what has carried the NQF system through and ensured that it continues to feature as a [unnecessary-contested] debate in this country. The challenge for us is how to take advantage of the idea, and the contestations it has generated, to craft what Granville refers to as "a model of learning that is appropriate to the diverse needs of the South African population" (Botshabelo Maja, 2004).1

Both Granville and Maja show us that the very origin of the NQF, as an idea to build a world-class education and training system that was followed by the systemic design, continues to surface as contestation, and I might add as a manifestation of incessant power struggles. Together with the NQF itself, SAQA as primary custodian has not been able to avoid the turbulence. As this Bulletin is published the new SAQA Board prepares for the challenges that are before them and the Ministers of Education and Labour are finalising the outcomes of the extended period of the NQF review. This is indeed the start of a new period of NQF development and implementation; a period that shows maturity that goes beyond our initial period of exhilaration and transformation – this is a time to accept that contestations are, and will most probably always be, part of the NQF implementation. Instead of labouring to avoid contestations, we should rather, as Granville and Maja point out, manage and extract the pearly ideas from the contestations so as to give renewed momentum to an improved NQF.

¹Maja's paper is included in this Bulletin.

If we are brave enough to "think education and training anew" it may also be time to accept that both SAQA and the NQF will be undergoing changes in the months to come – changes that will benefit both the education and training system and our young democracy.

Mokubung Nkomo South African Qualifications Authority November 2004

THE RELEVANCE OF THE NATIONAL QUALIFICATIONS FRAMEWORK IMPACT STUDY TO QUALIFICATION FRAMEWORK DEVELOPMENT IN THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY²

Ron Tuck
Independent educational consultant, Edinburgh, Scotland

John Hart
Independent educational consultant, Edinburgh, Scotland

James Keevy
South African Qualifications Authority, Pretoria, South Africa

Abstract

The development of National Qualifications Frameworks (NQFs) has become a world-wide phenomenon, not least in Southern Africa. There is a trend within Southern African Development Community (SADC) countries to implement qualifications frameworks, particularly in the technical vocational education and training sectors. Mauritius, Namibia, Botswana, Tanzania, Zambia and the Seychelles are all at various stages of NQF development. The South African NQF, along with those of New Zealand and Scotland, was one of the pioneering first generation of NQFs. The countries that are now at an earlier stage of NQF implementation have the opportunity to learn from the successes and mistakes of the first generation NQFs. The recent completion of the first cycle of the NQF Impact Study in South Africa has made a significant contribution to the identification of key lessons of NQF development that can be of benefit to second generation NQFs. Although initial results are only indicative, they represent a beginning of the process of developing a methodology for objective evaluation of the outcomes of NQF policy implementation. It is concluded that the measurement of the impact of the NQF on the South African education and training system is particularly useful to policy and decision makers in SADC countries that either are considering, or are in the process of implementing, qualifications frameworks in their own countries.

Introduction

This paper seeks to explore what may be learned from the experience of implementing National Qualifications Frameworks (NQFs) that could be of relevance to SADC countries. It draws on experience around the world including South Africa, Scotland, New Zealand, Australia, and Ireland. These countries constitute a first generation of NQFs, whose successes and failures may inform the development of a second generation of NQFs, especially in SADC and Eastern Europe.

²Paper prepared for the Qualification Africa Conference hosted by the South African Qualifications Authority at Gallagher Estate, Midrand, South Africa, 15-16 September 2004.

The first section reviews the purposes, scope and characteristics of NQFs and identifies some of the key issues arising from implementation. However, only in South Africa has there been a systematic attempt to begin measuring the success of an NQF in achieving its goals - the NQF Impact Study. The second section describes the aims, methodology and findings of this Study. The final section of the paper attempts to identify the main implications of international experience and the South African NQF Impact Study for countries in the SADC region.

National Qualifications Frameworks: the international experience

NQFs have their origins in the development of modular or unit-based systems pioneered over the last 20 years in Scotland, New Zealand and South Africa. Frameworks have now been developed (or are being developed) around the world: for example, in Australia, most SADC countries, many European Union (EU) and EU candidate countries, and in a number of former Soviet Republics. The SADC countries include Botswana, Mauritius, Namibia, the Seychelles, Tanzania and Zambia.

The term "National Qualifications Framework" is used here to include a wide range of Frameworks. At one time, the term "NQF" tended to be associated solely or mainly with Anglophone countries such as Scotland, New Zealand and South Africa. However recently, traditional qualifications systems such as that in France seem to be acquiring some of the characteristics of an NQF (Bouder 2003). In addition, many of the new member states of the EU and Accession countries are developing qualifications frameworks that have features derived both from first generation NQFs and EU practice (such as the European five level system). It seems appropriate therefore to employ a broad definition of an NQF, while recognising that within the range of frameworks there are significant differences.

Raffe (2003) suggests that qualifications frameworks vary in terms of *purpose*, scope, prescriptiveness, incrementalism and policy breadth. This author's approach to the analysis of NQF characteristics has been followed in our paper.

Purpose

The understanding of what a qualifications framework is and what it is intended to achieve will not only vary from country to country but may even vary within countries. These variations are tied to the political and cultural context of the country developing the framework. The main reasons for developing a framework can be clustered as follows:³

³This draws on Granville (2003).

- addressing issues of social justice
- 2. improving access to the qualifications system and progression within it
- 3. establishing standards, achieving comparability and intra-national or international benchmarking

South Africa's framework, as Granville (2004) points out, is the main (or perhaps sole) example of a framework primarily intended to contribute to a national programme of social reconstruction and, from that point of view alone, is worth study. However, it should be noted that while in many Eastern European countries the main stated aim may be of the second or third type, the impetus for reform which leads to the introduction of an NQF may well lie in the work of social reconstruction. Even in countries such as Scotland and Ireland, where the primary focus of the NQF is on access and progression, the implementation of the Framework will have at some level an association with social justice issues.

Most NQFs, however, appear to focus on the second and/or third cluster. Almost all espouse lifelong learning aims (cluster 2) and they may also have significant quality assurance aims (cluster 3).

The second cluster normally includes objectives such as:

- making the qualifications system easier to understand
- making progression routes easier and clearer/ improving career mobility
- increasing and improving credit transfer between qualifications
- improving the recognition of prior learning
- improving access to education and training opportunities

The third cluster embraces objectives such as:

- rationalising qualifications by removing duplication of provision
- ensuring that qualifications are relevant to perceived social and economic needs
- ensuring that education and training standards are defined and applied consistently
- ensuring that education and training providers meet certain quality standards
- securing international recognition for national qualifications

It should be noted that for many countries, especially in the SADC region and in the "new Europe" the last objective is often a high priority.

There is a second dimension of purpose to be taken into account. Bouder (2003) distinguishes between qualifications as *instruments of communication* and as *instruments of regulation*. This distinction applies also to qualification frameworks, but we suggest extending the latter category to include various forms of social or political intervention. The essence of the distinction is between using a framework to describe the existing system and seeking to effect change using an NQF as the vehicle. The former purpose requires only a classification system that provides guidance to learners about qualifications and progression pathways. Many European countries, such as France, have traditionally employed such classification systems. However, some countries also use an NQF to regulate qualifications and this is usually associated with concerns about quality (e.g. in the training provider market) or as the lever for ambitious qualifications reform (South Africa, New Zealand).

Of course, these are not absolute distinctions. As noted above (Bouder 2003), the French system is beginning to acquire some regulatory aspects. And while the Scottish Credit and Qualifications Framework (SCQF) is primarily a means of defining and communicating the relationships between existing qualifications, it imposes certain requirements on qualifications in terms of levelling, credit and quality assurance.

Some commentators believe that the real purposes of NQFs are based on hidden political and economic agendas. Allais (2003), for example, argues that while the rhetoric of the South African NQF relates to democratic transformation, its content is derived from the political goal of developing a neo-liberal economy.

Young (2003) suggests that governments embrace the idea of an NQF because it provides mechanisms for accountability and control. He sees an international trend on the part of governments to use qualifications as drivers of educational reform and suggests that this may be because government agendas "have less to do with improving the quality of education and more that an NQF provides a government with an instrument for making educational institutions more accountable and quantitative measures for comparing different national systems" (Young, 2003).

Scope

Some NQFs are confined to vocational qualifications; others apply only to higher education qualifications. Frequently, the development of an NQF has its origins in vocational education and training (VET), because governments identify a need to improve coherence, progression and quality in VET provision.

However, most NQFs seek eventually to increase their scope by redefining relationships among all categories of qualifications. The means of defining these

relationships varies. Howieson and Raffe developed a classification of education and training systems as being *tracked*, *linked*, or *unified*:

In a *tracked* system vocational and general education are organised in separate and distinctive tracks. A *linked* system has different tracks but emphasises their similarities and equivalence, with common structures and elements, and opportunities to mix or transfer between the tracks. A *unified* system does not use tracks to organise provision but brings all provision within a single system. The three types represent points on a continuum with tracked systems at one end and unified systems at the other (Howieson & Raffe, 1999: 2).

Traditionally, most countries favoured tracked systems because school education, university education, vocational education and vocational training were seen as distinct and largely unrelated. It is doubtful whether a pure tracked system could be regarded as an NQF. However, the expansion of education and training opportunities and the espousing of a lifelong learning agenda have led most countries in the direction of linkages or unification or a combination of the two. Australia and the UK (excluding Scotland) have linked systems. South Africa and New Zealand have been the strongest examples of unified systems, although a linked system has now been proposed for South Africa (DoE and DoL, 2003). Some countries such as New Zealand and Scotland should probably now be regarded as a hybrid of unified and linked. In Scotland, school and college-based provision is unified, while the relationship with higher education and work-based training is linked.

Prescriptiveness

The prescriptiveness of a qualifications framework refers to the stringency of the criteria which qualifications have to satisfy in order to be included (Raffe 2003). The degree of prescriptiveness adopted has been the single most contentious aspect of the implementation of first generation NQFs.

Young (2003) draws a distinction between "strong" and "weak" frameworks. We prefer to call them *tigh*t and *loose* because of the possibly derogatory connotation of "weak"; the meaning is the same, however.

Tight frameworks are those which are prescriptive about the way qualifications should be designed and quality assured. They also tend to proceed on the basis that common rules and procedures can be applied to different sectors of education and training. However, a tight framework could consist of distinct regulatory systems for its different tracks. Loose frameworks are more likely to be based on general principles, to accept that there are valid differences

between types of learning or education/training sectors, and to work with the grain of education and training institution practice. Again, this should be understood as a continuum rather than an absolute distinction. Most NQFs will have both tight and loose characteristics.

It may be helpful to relate this distinction to earlier ones identified in this paper. *Tight* frameworks always have a *regulatory* purpose and aim to achieve wider social goals such as redress, access or "parity of esteem" between academic and vocational education. *Loose* frameworks may only seek to *communicate* but they are likely also to be aiming to regulate to some extent and almost always to effect improvements to the quality of education and training. *Tight* frameworks are *unified* where they seek to apply the same or very similar regulatory mechanisms across all education and training sectors. *Loose* frameworks may be linked or unified. Where a *loose* framework is linked, one of its constituent tracks may nevertheless be *tight*.

The implementation of tight frameworks has generally been associated with controversy and contestation, largely arising from resistance in the university and school sectors to what may be perceived as the imposition of alien and inappropriate ideas and processes imported from VET. This has been evident both in South Africa and New Zealand, but also in Scotland where a particular reform (Higher Still) had tight features related to assessment that provoked some opposition in the school sector.

Tight and loose frameworks are distinguished primarily by the position taken on *integration*. The integration of education and training is a critical element in the conceptualisation of all NQFs. However, it has proved difficult and contentious to determine the *degree* of integration required to establish a single coherent framework. To what extent do the rules for qualifications design and quality assurance need to be the same or similar across all education/training sectors and qualifications types? How much scope is there for diversity without weakening the very concept of an NQF?

A 1996 South African discussion document (Ministerial Committee for Development Work on the NQF, 1996) neatly summarised the two main positions in the integration debate:

Essentially, the debate divided itself into two schools of thought, namely one which wanted no distinction drawn between education and training and one which wanted them to exist in parallel tracks, joined by some kind of umbrella body, a far more tentative approach towards the integration of education and training....The education sector was concerned that education would lose its "soul", that it would become narrow in focus,

concentrating only on teaching that which was required by the world of work - training, in other words. At the centre of their concern was the fear that education standards would decrease rapidly if training was to prescribe to education. ... The training sector, on the other hand, was afraid that the integration of education and training would lead to unreasonable demands for "high" academic standards in the training world; an imposition, it was claimed, that would make it difficult, if not impossible, for those who trained workers to adjust rapidly to employment demands when required (Ministerial Committee for Development Work on the NQF, 1996: 18).

The first of these schools of thought has been to the fore in seeking to create *tight* frameworks. The second has been associated with a *loose*, more federal (or tracked) model. However, a third position was hinted at by the *Report of the Ministerial Study Team on the Implementation of the NQF in South Africa*, who presented the concept of a "continuum of learning". This represents a *loose, unified* model.

The Study Team emphasises the importance of the rationale for an integrated approach sketched in the Education and Training White Paper. The concept preserves the valuable notion of a single inter-connected learning system, which has been of fundamental importance to the transformation process. ... But at the risk of going over old ground, we affirm that an integrated approach should not mean erasing all differences between education and training or making all qualifications fit a single set of criteria (except for the minimum necessary requirements). The perceived threat of such an idea of integration has given rise to fears, expressed in many submissions to the Study Team, that the essential, distinct purposes of education and training may be undermined.

As the White Paper suggests, education and training are best seen as representing a continuum of learning. While general and vocationally oriented programmes of learning have different purposes, these purposes overlap and can be profitably linked within a single framework. For one thing, many qualifications fall into neither the education nor training camps but are combinations of both. For another, learners need increasingly to move from one to the other, and one of the important contributions of the NQF is to make this happen more efficiently and coherently (DoE and DoL, 2002: 68).

There is a contrary view, however, namely that there are two epistemologically different modes of learning. Ensor, in her analysis of the South African NQF, argues:

Formal education and the NQF thus rest on two fundamentally different assumptions about knowledge, knowing and identity. Formal education and training aim to specialise academic and or professional identities through induction into largely disciplinary-based forms of knowledge, whereas the NQF wishes to background knowledge and emphasise a generic capacity to learn (Ensor, 2003: 341).

This position also seems to have been adopted by the South African Department of Education and Labour in their *Consultative Document* (2003), which points to a "demarcation" in practice between the two modes of learning that represents a "structural fault line in SAQA's current architecture" and argues that "the SAQA architecture is not holding". However, many South African stakeholders disagree with the Departments' position and the final outcome of the consultation process is not yet known.

There seems to be an international consensus developing around some kind of loose framework and this may resolve many of the tensions that have characterised NQF implementation. South Africa is proposing a revision that will give relative autonomy to higher education, general and further education, and trade occupational and professional sectors. In New Zealand, the universities remain outside the system and school qualifications are based on "achievement standards" rather than "unit standards". The Australian NQF allows a high degree of autonomy to school and higher education sectors. In Scotland, the SCQF is a voluntary partnership between Scottish Qalifications Authority (SQA) responsible for school, college and workplace qualifications and Quality Assurance Agency (QAA) and Universities Scotland (responsible for university education). Ireland, similarly, has opted for an enabling, rather than regulatory, framework.

However, this consensus may itself generate new issues. We pointed out above that loose frameworks may be unified or linked (federal). While loose frameworks may avoid debilitating conflict and facilitate "buy-in" more easily from the different education and training sectors, they perhaps run the risk of not achieving very much except communicating "what is". This may be especially true of loose *linked* frameworks.

Incrementalism

The question of incrementalism is worth discussing briefly. Raffe (2003) points out that, in Scotland, the creation of the SCQF was the culmination of some twenty years of reform in the different sectors of education and training. This meant that the Framework itself did not carry the burden of developing regulatory structures or introducing changes to improve access and progression. The foundations of such changes had been established by the

earlier reform programmes. Thus although the (loose) Scottish Framework is in itself mainly an instrument of communication rather than *regulation*, this is mainly because regulation and the pursuit of educational reform goals largely takes place at sub-system level.

Scotland's approach has generally been regarded by commentators as having been reasonably successful in building a unified framework and effecting some improvements in access, participation, progression and attainment, with a relative absence of conflict and controversy. However, its construction has taken a very long time. Countries such as South Africa, aiming for radical transformation, understandably wish to build their frameworks more quickly. Nevertheless, "second-generation NQF countries" may wish to consider the merits of some kind of incrementalist approach that concentrates initial framework-building activities in areas which will have maximum impact in relation to the intended social or educational goals such as expanding vocational education or widening access to higher education.

Policy Breadth

Policy breadth (Raffe, 2003) describes "the extent to which the establishment of the framework is directly and explicitly linked with other measures to influence how the framework is used".

This is an important issue. There can be exaggerated and unrealistic impressions of what the building of an NQF can achieve in isolation from other developments. This phenomenon has been quite marked in South Africa.

The Objectives of the NQF as set out in the SAQA Act are to:

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

As the Ministerial Study Team noted, the first Objective is "an obvious outcome of the NQF, for which only SAQA in collaboration with its partners has legal responsibility, and is well on the way to being realised" (DoE & DoL, 2001). However, the other four Objectives are ones to which the NQF only *contributes*:

The government intends the NQF to make a major impact on all of these, but the goals themselves - access, mobility, progression, quality, redress and development - are wider and deeper than the NQF. They describe the major part of the permanent combined agendas of the Ministries of Education and Labour, and require a range of other actions, including appropriate laws and policies, institutions, budgetary allocations, infrastructure development, professional development for teachers and trainers, and provision of learning resource materials (DoE & DoL, 2002: 65).

This has not always been fully understood by stakeholders in South Africa, giving rise to unrealistic expectations of the NQF and a tendency to lay responsibility for the slow pace of transformation at the door of the NQF.

A very useful distinction has been drawn between the *intrinsic logic* of a system and the *institutional logic* in which it is embedded (Raffe 1988, Raffe et al 1994). The intrinsic logic of an NQF arises from its design features, such as its flexible pathways and the establishment of equivalences between different qualifications. The institutional logic comprises the following:

The opportunities, incentives and constraints arising from such factors as the policies of educational institutions (in their roles as providers and selectors), funding and regulatory requirements, timetabling and resource constraints, the relative status of different fields of study and the influence of the labour market and the social structure. A qualifications framework may be ineffective if it is not complemented by measures to reform the surrounding institutional logic, for example local institutional agreements to promote credit transfer, or encouragement to employers to reflect credit values in their selection processes (emphasis added) (Raffe, 2003: 242).

An NQF implementation strategy that combines intrinsic and institutional logics requires strong central leadership and resources. All countries have found that NQF construction is a more demanding and costly exercise than initially envisaged. Government has an essential role to play in providing a framework of policies to support NQF development and to ensure fit with other relevant education policies. It must also provide adequate resources. Generally speaking, capacity building needs have been underestimated and insufficient funding has been provided by government. These problems have been most clearly documented in South Africa.

A major recommendation of the Study Team Report was that the Departments of Education and Labour should assert their leadership of the NQF.

Many submissions to the Study Team felt that there was less than full commitment to the NQF on the part of government. ... Lack of leadership, an absence of strategic and operational planning and uncertainty over the respective responsibilities of SAQA, DoE and DoL were among the issues raised most frequently in the submissions we received. SAQA itself was held responsible and therefore blamed for wrong priorities or delays, even in some matters over which it had no control (DoE & DoL, 2002: 66).

Stakeholders also drew attention to government under-funding of NQF development.

The submissions express disappointment that SAQA is not given sufficient financial and political support by the government to advance NQF implementation, and as a result is unable to carry out its functions as effectively as the importance of the NQF demands. The poor funding from the fiscus and the perceived poor support and leadership of the NQF from the Departments of Education and Labour are viewed as an indication that the government gives low priority to the NQF in the broader scheme of things. The DoE is regarded as having responsibility for leadership but is not considered to be exercising it. The scale of its grant to SAQA is regarded as evidence of failure to take the NQF seriously (DoE & DoL, 2002: 24).

These findings led the Study Team to suggest that an overall national plan for NQF implementation was needed that would match resources with NQF Objectives.

Two distinct but related concerns may be brought together here. One is that there are widespread and unrealistic expectations of what an NQF can achieve in isolation from other policies and initiatives. The second (see the subsection on Purposes above) is that the "real" Objectives of the NQF are different from its explicit Objectives. It could be argued that the means of resolution of both issues is the same: that those governments must make explicit what their NQF is expected to achieve and the purposes for which it will be used. A democratically elected government is entitled to use qualifications for the purpose of accountability if it so chooses. However, it should make transparent what these purposes are and open up the possibility of debate on potential conflict between particular purposes. Also, the NQF must be seen as an element (albeit a central one) of a wider plan for the transformation of education and training. Such a plan must address issues of infrastructure and professional development.

Drawing on the concepts of intrinsic and institutional logics, Young (2002) has distinguished outcomes-based and institution-based approaches to qualifications reforms and suggested that the former are unlikely to be successful unless they are "based in the shared values and practices of... communities of trust".

This refers to the trust established over time within professional and other occupational communities as well as between educational institutions and employers. In systems which rely on communities of trust, qualifications are seen as an organic part of the whole education training system, and learning outcomes are seen as just one element in a process that relies also on shared practice, traditions and experience.

Here we see another central dilemma of NQF strategy. Young is almost certainly right when he argues that NQF implementation is unlikely to be entirely successful unless it becomes embedded in these communities of trust, which in turn implies the need to accommodate the values and traditions of these communities. On the other hand, the origins of the NQF concept are based to a considerable extent on the need to *challenge* the hegemony of these communities because of the belief that their practices were "provider-led" and (to some degree) self-serving. It was argued that opening up access to education and training to previously excluded sections of society could only be achieved if the qualifications system became more transparent.

A challenge for future NQF implementation is to combine intrinsic and institutional logics while not subordinating social and educational goals to the needs of specific institutional interest groups.

System Features

A number of system features have come to be associated with NQFs. It is open to debate, however, as to what extent these features - or the ways in which these features have been interpreted and implemented - are actually intrinsic to the concept of an NQF.

These system features include:

- Modular or unitised qualifications (and an associated credit system)
- Outcomes-based qualifications
- Core skills/key skills/critical outcomes
- A single set of levels and level descriptors

From the 1980s a number of countries with less regulated VET systems seeking to simplify their VET qualifications and modernise them, did so by developing modular (or unitised), outcomes-based curricula and/or qualifications. Modularity was often associated with the development of credit accumulation and transfer systems. These often included the generic skills employers and economists were identifying as important for future economic and social success. These were variously named core skills, key skills, critical outcomes, etc.

These reforms often spread into secondary school education - by design or default - as governments sought to improve the employability of school students, create a better foundation for subsequent vocational education and make the curriculum more attractive to the increasing numbers of students continuing in post compulsory secondary education. There was also a link to changes in higher education. There were different ways this might happen. In some cases the institutions of higher education were themselves developing modular and/or credit-based systems to increase the flexibility of their own provision; in others, consortia developed arrangements, based on a common system, to widen access and/or improve progression routes from VET into higher education.

Modularity seems to be primarily about manageability. If larger qualifications or learning programmes are broken down into smaller components, this will have advantages for learners (particularly part-time learners), qualification and programme managers, and funders. For example, it will be easier to work with, get feedback on, review and revise these smaller components. There are possible gains when it comes to re-skilling and up-skilling, accumulating and transferring learning, creating new qualifications, addressing skills gaps.

At the heart of the modular movement however, particularly in VET, there are a number of other concepts which are associated with the idea of a module or unit. These include a focus on outcomes, an association with national (and international) definitions of competence, and an emphasis on practical learning and valid assessment. In fact it appears that many systems which are developing frameworks and adopting modular approaches are starting with the project of defining the skills and knowledge which combine to make for competence in a work role - what may be called National Occupational Standards (NOS).

In some NQFs the term "outcomes-based" is interpreted very flexibly, but it is usually agreed that qualifications cannot be assigned to levels unless their outcomes are clear and can be related to some kind of reference system - often described as level descriptors, which define the levels themselves in outcome terms.

All NQFs are built on a number of levels, although the number varies. Levels are generally defined by level descriptors expressed primarily in outcome terms. Particularly where the NQF includes a wide range of types of qualification, the need to write descriptors that apply to all types of education and training has resulted in fairly abstract descriptors which may need to be supplemented by exemplars (or indicators) to be of practical use. It is also now argued that in some systems (e.g. in South Africa) a different approach may be needed at some stage for general-academic and vocational-occupational outcomes.

It is also argued by some that a modular, outcomes-based approach is more appropriate for vocational-occupational programmes than for general-academic programmes.

Certainly in all countries the introduction of outcomes-based curricula and assessment in schools and universities has been to some extent contentious. Critics see these measures as impoverishing the curriculum, removing the independence of sectors or institutions and reducing the professionalism of teachers. The opponents of NQFs believe the result will be a system in which knowledge is undervalued and learning is reduced to very specific objectives, with no scope for reflection or the pursuit of breadth. On the other hand, proponents of the system see modular frameworks as having the opposite effect opening up learning to learners and creating routes and possibilities for endless development and self-improvement in a system freed from bureaucratic restrictions. They also argue that problems in introducing outcomes-based qualifications in these sectors are a result of attempts to impose narrow definitions of competence, rather than an intrinsic weakness in the concept itself.

There is no simple answer to the question: which of these system features are intrinsic to the very concept of an NQF and which are contingent. It would be difficult to imagine an NQF without levels therefore level descriptors are probably necessary. But they may be less important than the existing social understandings about the vertical and horizontal relationships between qualifications or they may merely *reflect or describe* or *validate* them.

Similarly, it is difficult to assign qualifications to levels unless there is an understanding of what it signified in terms of learner achievement, i.e. the outcomes of the qualifications. This need not imply a commitment to any particular approach to describing outcomes.

The central point is that each NQF is a *social construct* - a means by which the aims and values of stakeholders - politicians, practitioners, learners, and social

partners - are brought together in a single, very public, system. The system features of any country's NQF should be designed to be appropriate to its agreed aims and purposes. These in turn should reflect the values and aspirations of stakeholders. Not surprisingly, given the complexity of the change processes involved in designing and implementing an NQF, system development can seem to acquire "a life of its own" and the links with stakeholder-derived aims and purposes weakened.

Achievements

Naturally the achievements of national qualifications frameworks will vary depending on the stage of development and the length of time the framework has been in place. However, a number of achievements are claimed for the first generation NQFs.

One of these is to have provided a common language across the different sectors of education and training. The need to find ways of expressing ideas about levels of qualifications or quality assurance processes has led to the creation of a common terminology. The language used by NQFs sometimes may have been contentious and challenging, nevertheless the debates over language have contributed to the process of clarifying what unites and differentiates goals and practices in various sectors of education and training.

This has been particularly true in South Africa compared to other countries both because of the high aspirations set for its NQF and the higher NQF development profile. In South Africa, NQF terminology and the related structural and legislative changes have become part of the public discourse to a greater extent than elsewhere.

Many believe that in South Africa an awareness of the concepts associated with lifelong learning has increased dramatically as a result of NQF implementation. This does not mean to imply that there is universal agreement around these concepts or that they have become firmly rooted in practice. However, from a historical perspective the development of a widespread awareness of a set of concepts that are so antithetical to the dominant concepts of the previous apartheid system is in itself an important achievement.

The question may be asked: what has actually changed in practice? By looking at countries such as Scotland where construction of the qualifications framework began some twenty years ago, it is possible to identify some areas where, by general consensus, improvements have been achieved. It can be argued on behalf of the SCQF that:

Progression routes through the system have greatly improved

It is now easier for learners to progress from school to vocational education and training (VET) and from VET to higher education. The system offers more choice and greater access to qualifications. A generation ago, only a minority of the population gained recognised qualifications and academic qualifications predominated. Now qualifications are "for all" and are available for all subjects and occupations.

The system is more flexible

Almost all qualifications are modular, making part-time learning easier to sustain and increasing choice. Qualification opportunities are no longer confined to formal education institutions. Increased flexibility has in turn greatly increased participation by adults.

VET has higher status

Lastly, while the goal of "parity of esteem" between vocational and academic education has not been (and may never finally be) achieved, there is little doubt that the status of VET has been improved overall.

NQF critics or sceptics, on the other hand, would argue that, while there may have been some gains in the VET sector, NQF developments have had no beneficial impact on school or higher education.

Surprisingly however, the current debates about national qualifications frameworks have not been able to draw on any research that has sought to measure the impact of NQF implementation. For this reason in particular, the South African NQF Impact Study - described in the next section - is a noteworthy development.

The South African NQF Impact Study

The initial concept of an NQF Impact Study was set out in an internal SAQA Concept Document, which noted that in 1999 the SAQA "had agreed to institute a review of progress in the development and implementation of the NQF against the Objectives of the NQF outlined in the SAQA Act". It was proposed that the Impact Study should look at the extent to which the Objectives of the NQF have been achieved, with the purpose of establishing "a baseline against which future progress can be measured".

A project team was established within the SAQA Research Unit to carry out the research project. Two external international consultants (from Ireland and Scotland) were appointed to assist the project team in its work. The role and functions of the external consultants were to advise the project team in relation

to strategy and project design, to provide an international dimension to and context for the work and to ensure that professional objectivity and academic rigour underpinned the project.

The overall aims of the Impact Study were:

- to establish criteria against which to measure success,
- to establish a baseline against which to measure progress,
- to set and monitor targets, and
- to plan for the evaluation of the impact of the NQF.

The decision to conduct an Impact Study was highly significant. It is a landmark study not only in South Africa but also in the international context: the first time an open-ended and transparent rolling plan for review of a national qualifications system has been developed at a national level.

The Impact Study was bounded by the following assumptions:

- 1. The Study did not attempt to evaluate the rationale of the NQF as such, but to measure it against its stated rationale. (This is developed further below.)
- 2. The Study was undertaken in the knowledge that evaluative judgements on the attainment of the NQF Objectives could not be made with any finality for a considerable number of years.
- 3. The First Cycle Report was concerned with the establishment of the research design: the actual drawing of definitive conclusions from substantive data was less important than the piloting of the research design.

The design of the NQF Impact Study posed many challenges mainly due to the lack of comparative international examples. The research team proceeded to plan the NQF Impact Study as a longitudinal study that would take place over a number of cycles. The research design is illustrated in the following diagram:

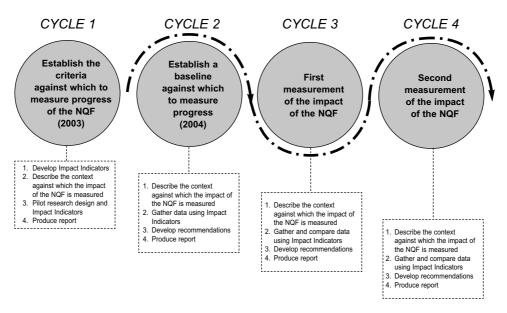


Diagram 1: Research design of the NQF Impact Study

The first cycle was completed in 2003 and was concerned mainly with the refinement of the initial research design. The second cycle (which is currently underway) focuses on the gathering of baseline data. Subsequent cycles would involve extensive measurements that could be compared with the baseline data or any other preceding measurements.

The main components of the research design are:

The NQF Objectives as key reference point

The five NQF Objectives (listed in the previous section) formed the fixed point of reference for the evolving research design. These Objectives are enshrined in legislation and are the clearly stated goals of the government in respect of the NQF. They therefore provided an indisputable foundation upon which to design the evaluation. It is also important to have reference points that remain relatively stable over time. It is critical that the study remain focused on measuring the impact of the NQF on the transformation of education and training in South Africa, as distinct from providing a commentary on currently contentious issues.

Impact Indicators as instruments to monitor NQF progress

The research design is based on indicators as instruments to monitor progress. This approach is not unique to the NQF Impact Study and has been used widely

in the international context, but not always in education (Granville, 2004). Based on extensive consultation and piloting, a common understanding of the purpose of an indicator in the context of the NQF Impact Study was agreed and initially 23 Impact Indicators were developed:⁴

[An Impact Indicator is] a policy-relevant, quantitative and/or qualitative statistic designed to provide a profile of the current condition, the stability or change, the functioning, and/or the effect of the NQF on the transformation of education and training in South Africa (SAQA, 2004: 11).

The first cycle of the Study generated a number of quantitative and qualitative evaluation instruments, designed to gather evidence relating to the Impact Indicators. These will be subject to further development and refinement in the second cycle.

Comparative and longitudinal

Another critical component of the research design was to approach the Impact Study as a comparative study that would take place over a number of years. It was decided that a baseline would first have to be established (Cycle 2). Thereafter comparisons would be possible as and when subsequent measurements are undertaken (Cycles 3, 4 etc.). It was also agreed that comparisons with the pre-NQF education and training system lay outside the scope of the Impact Study - the research design would not be developed with such comparisons in mind:

Although *NQF* architecture and processes remain an important part of the contextualisation of future cycles of the Study, it is important that the Study is not drawn into a debate that at the time of measurement may be in the public domain, but that will offer very limited researchable evidence. Implicit in the research design and the Impact Indicators is an attempt to provide a profile of the current condition, the stability or change, the functioning, and/or the effect of the NQF on the transformation of education and training in South Africa to provide policy makers with a broader understanding of factors influencing the implementation of the NQF. In summary, the NQF Impact Study should avoid becoming involved in current debates on NQF architecture; rather the Study should report on the impact of the NQF (SAQA, 2004: 72).

However, there are yet challenges to be addressed: balancing consistency of measurements used over time and responding to the ongoing evolution of the NQF.

⁴A detailed description of the research process that lead to the development of the Impact Indicators falls outside the scope of this paper, although it is necessary to highlight the fact that it was neither straightforward nor brief, and involved extensive involvement of all NQF stakeholders, including learners, employers, providers, quality assurance bodies and organised labour.

Repeatability and objectivity

The final component of the research design is a commitment to repeatability and objectivity. The research design of the Impact Study embraces the notion of outsourcing subsequent cycles, both from a costing perspective and to ensure acceptance from the wider education and training community:

Although the first cycle of the Study was conducted by SAQA, the research design allows for an external agency to conduct subsequent cycles. Outsourcing of further cycles (Cycles 3, 4, and so forth) of the Study may improve acceptance of the research results in the wider stakeholder community (SAQA, 2004: 66).

The First Cycle Report presents findings both on the research process and indicative outcomes. The former were more significant than the latter. Substantive findings on NQF impact will be possible only when baseline data have been generated and on the basis of a more substantial body of evidence. Overall, it was established that the research design had been sufficiently piloted to be repeated with some changes and improvements in the following cycles. The main outcome of the first cycle was the development of revised Impact Indicators, organised into four sets, with a clearer relationship to the five NQF Objectives. This is illustrated in Diagram 2 and Table 1 below.

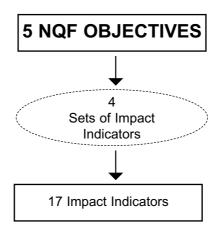


Diagram 2: Development in the research design

	Impact Indicators	Sets of Indicators
1. 2. 3. 4. 5. 6.	Number of qualifications Effectiveness of qualifications design Portability of qualifications Relevance of qualifications Qualifications uptake and achievements Integrative approach	The extent to which qualifications address the education and training needs of learners and the South African society
7. 8. 9. 10. 11.	Assessment practices	The extent to which the delivery of learning programmes addresses the education and training needs of learners and the South African society
13. 14. 15.	Number of accredited providers	The extent to which quality assurance arrangements enhance the effectiveness of education and training
16. 17.	Organisational, economic and societal benefits Contribution to other national strategies	The extent to which the NQF has had a wider social, economic and political impact in building a lifelong learning culture

Table 1: Impact Indicators

Relevance of the Impact Study to the development of NQFs in the SADC region

The first section of this paper reviewed the key issues that have arisen in the development of the first generation NQFs and the emerging conceptual tools that can assist analysis of NQF design and implementation. The second section described the first attempt in the world to develop ways of measuring the impact of NQFs in relation to their aims over a long period of time. This final section sets out an initial attempt to summarise what might be the implications for second generation NQFs, including those in the SADC region.

We have argued (as others before us) that NQFs are social constructs and therefore that they probably have few essential features other than those that are deemed to serve the agreed goals of the NQF reform. However, if the idea of the NQF as a social construct is to be taken seriously in practice, it will be necessary for SADC governments and stakeholders to facilitate a stakeholder-led process which clarifies the goals of the NQFs, makes decisions about system design based on these goals, ensures that NQF implementation is part of a broader supportive policy framework and adequately resourced, and that monitoring and evaluation is planned systematically.

Potentially the NQF Impact Study has a very significant contribution to make to this process and not solely as an evaluation mechanism introduced a few years after implementation. The discipline of identifying Impact Indicators and instruments for gathering evidence in relation to such indicators could have an important role in the process of clarifying goals and objectives at the outset of NQF implementation. There may also be merit in considering whether a common set of indicators could be used across the SADC region.

In conclusion, we suggest that the design of second generation NQFs might proceed on the basis of answers to the following clusters of questions:

Clarity of goals and purposes

Is the NQF intended to promote lifelong learning, improve the quality of education and training, or contribute to social justice?

Is the intention primarily to communicate or to regulate or bring about significant educational or social change?

Are there wider economic or political objectives? Have these been made transparent? Are there tensions between educational and political/economic objectives?

Scope and prescriptiveness

What is the scope of the framework? Is it intended to include all sectors of education and training? If all sectors are included, what relationship is envisaged among them?

Is the framework to be tight or loose? If loose, should it be linked (federal) or unified? Which of these models is most likely to gain stakeholder acceptance? Which is more likely to achieve the goals of the NQF?

Incrementalism

Should all parts of the NQF be built at the same time? Or is there any advantage in a staged approach, focusing initially on areas that will have the maximum educational, social or economic benefit?

Policy breadth

What policies and practices need to be implemented alongside NQF construction to ensure that the overall educational goals are capable of being achieved? How will these various policies be co-ordinated? Who will have the leading/co-ordinating role? Have the resource implications been identified and addressed?

Does the implementation plan take account of the institutional logic? Will it enable NQF ideas and practices to become embedded in communities of trust?

Does it ensure that traditional ideas and practices will be challenged where necessary?

System features

Have decisions about system features (modular/outcomes-based/critical outcomes/level descriptors) been made in the light of a clear identification of their contribution to the overall goals?

Monitoring and evaluation

Is it clear how progress towards attainment of NQF goals will be measured? What are the key indicators of success? Is there general agreement among stakeholders that these indicators represent valid measures of the NQF goals? Is the evaluation process repeatable and objective?

Over what period of time should impact be measured? How can the evaluation design be consistent over time while taking account of the changing and evolving nature of the NQF?

How will results be used to inform the implementation process?

Acknowledgements

We applaud SAQA for showing organisational maturity in initiating the NQF Impact Study and more importantly, taking the findings of the study into the public domain. We also acknowledge the contributions of the other members of the NQF Impact Study project team⁵ to the Cycle 1 Report.

⁵Gary Granville (project leader), Ronel Heyns and Seamus Needham.

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AN INTEGRATED NATIONAL FRAMEWORK FOR EDUCATION AND TRAINING IN SOUTH AFRICA: EXPLORING THE ISSUES

Ronel Heyns

Deputy Director: Research, the South African Qualifications Authority

Seamus Needham Regional Coordinator, the South African Qualifications Authority

Abstract

The first objective underpinning the establishment of the National Qualifications Framework (NQF) is to: "create an integrated national framework for learning achievements". However, an "integrated national framework" is probably one of the most contested ideals of the NQF. For example, the Study Team⁶ responsible for the review of the implementation of the NQF (DoE & DoL, 2002) suggested: "There is general concern that the integration of education and training has not been achieved". One of the reasons for the limited progress in the achievement of this objective is that there does not seem to be a common understanding of what is meant when we talk about "an integrated framework". The consequence of this lack of understanding is that the drivers of the NQF and their partners have interpreted this concept in different ways. This is marked by the territorial battles between the two Departments sponsoring the NQF. This paper will explore the different understandings of an integrated framework, hoping thereby to contribute to NQF implementation in South Africa and to raise awareness of this important principle in countries that are either developing or planning to develop qualifications frameworks.

Introduction

"All we are doing is fighting for turf. There is a need to have education and training under one roof". (Excerpt from a speech made by the Minister of Labour at the Northwest Growth and Development Summit, August 30 (Cape Times, 31 August 2004: 6)).

The first of the five objectives of the NQF is to "create an integrated national framework for learning achievements". The Report of the Study Team (Department of Education (DoE) and Department of Labour (DoL), 2002: 65) noted that this objective is "an obvious outcome of the NQF, for which ... SAQA in collaboration with its partners has legal responsibility", but that "there is general concern that the integration of education and training has not been achieved" (p.22). Yet, an "integrated framework" was completely central to the idea of the NQF. It was envisaged that such a framework could overcome the

⁶Report of the Study Team on the Implementation of the National Qualifications Framework published by the Department of Education and the Department of Labour in April 2002.

"traditional division between different types of qualifications, and between education and training" (Tikly & Motala, 1994, cited in Chisholm, Motala & Vally, 2003: 122). However, despite apparent widespread support in the initial stages of NQF conceptualisation, "an integrated framework" has been one of most hotly contested ideals of the NQF. One reason for the contestation, according to the Study Team (DoE & DoL, 2002: 67) is that so many different interpretations of the idea abound. The Study Team also hints at political differences between the two Departments responsible for education and training in South Africa when they state that the Departments "have made no attempt to analyse in further detail how the integrated approach to education and training should be operationalised, especially in areas where the departments do not see eye to eye". The result is that the South African Qualifications Authority (SAQA) has had to engage with the concept in the absence of clear direction. Such direction is still not forthcoming. Recently, in the Cape Times (31 August 2004) the differences between the two Departments were clearly stated by the Minister of Labour when he said that "he is frustrated at the lack of co-ordination between the Ministries of Education and Labour" and he added that "There is a need to have education and training under one roof". However, seven years into NQF implementation, the notion of "an integrated framework" is still unresolved.

This paper will explore some of the issues and contestations that have emerged from debates surrounding "an integrated national framework". The first and most obvious issue dealt with is the apparent political power struggle between the Department of Education and Labour and the rift that is becoming more evident between them. It is within this macro environment that an integrated framework is being structured.

The second issue is related to the first, but deals with philosophical and epistemological issues and in particular the emergence of a new mode of knowledge production. At this level it seems as if proponents of a separate and distinct (as opposed to an integrated) framework, find fuel for their fire in the political power struggles between the departments. In terms of the structure of the paper, we call this the meso level.

Finally at the micro level, the understanding of an integrated framework by practitioners of education and training is explored. In conclusion we investigate whether or not the different practitioners' understandings of an integrated framework are mutually exclusive and if so, how the process could be taken forward.

An integrated national framework for learning achievements - the macro level

It is evident in the emerging national and international literature on qualifications frameworks (for example Allias, 2003, Ensor, 2003, Mehl, 2004; Bouder, 2003, Granville, 2004, Tuck, 2004, Young, 2003) that "the integration of education and training is a critical element in the conceptualisation of all NQFs" (Tuck, Hart & Keevy, 2004: 5) and that it is at the heart of the establishment of a single, coherent framework. It therefore seems critical for the development of NQFs to define and clearly state what is meant by "an integrated framework".

As mentioned earlier, no such clarity existed when the South African NQF was conceptualised. The differing understanding and frames of reference of the partners and stakeholders of the NQF seems to have resulted in an increasing move away from the notion of "an integrated framework". An example of this is the statement in the *Consultative Document* (DoE & DoL, 2003: 9) by the Departments that "there are clear indications that the SAQA architecture is not holding". In this quote, the Departments highlight a particular understanding of "an integrated framework", namely the *integration of education and training*. This understanding reveals the power struggle between the two Departments. For example, in their response to The *Consultative Document* (DoE & DoL, 2003), the National Professional Teachers' Organisation of South Africa (NAPTOSA) states that:

It is perhaps appropriate, at this time, to begin to ask some difficult questions in order to get beyond the policy framework to the realisation of the vision and transformation agenda of the NQF. To achieve this, commitment from all parties (especially the two departments) is essential. Clearly, there is resistance to change. However, this does not seem to be based on the NQF itself but is the result of naked contestations by people/departments that are (or should be) on the same side! It needs to be recognised that the tensions are probably as a result of power imbalances and that power is an end in itself and a way of protecting entrenched interests (NAPTOSA, 2003: 71).

This response confirms the political power struggles that emerged during the Study Team's review in 2002. These contestations have been felt since the early implementation of the NQF, but were up to now, stated relatively mildly. In NAPTOSA's latest response to the draft *Higher Education Qualification Framework* (HEQF) policy ((NAPTOSA 2004: 1), however, their views on the political differences between the Departments were stated much more forcefully:

NAPTOSA finds it perplexing and frustrating that the tensions between the Departments of Education and Labour are such that there is a very real

danger that the rift will result in "territorial" imperatives and protection of sectoral interests (along the DoE/DoL, education/training, academic/vocational divide) at the cost of integration across education and training and across formal, non-formal education and training opportunities (NAPTOSA, 2004: 1).

Yet, in the conceptualisation of the South African NQF, integration was absolutely central to the idea and was rooted in a *socio-political* decision taken prior to its establishment. An integrated framework where disparities of esteem are reduced was considered important because:

The way in which society recognises, rewards and measures learning achievement is through qualifications. It is society that provides the ultimate validation of qualifications and accords respect to the bearer. Society awards status and also opportunities and privilege (Mehl, 2004: 22).

Therefore, the intention of "an integrated framework" was to remove disparities of esteem. First, either between learning attained in formal educational institutions or in workplaces (the formal - non-formal divide), and second, between various institutions (the status of institutions). At the same time, according to Christie (1997: 89-90), it was understood that an integrated framework "would allow different curricula to work within it, to meet the needs of different situations and different sets of learners, while achieving equivalence in outcome". In other words, an integrated framework would make it possible for learners to enter education and training from different pathways because such pathways would be equally valuable. Mehl (2004: 22) notes that "the great integrating vision" of the NQF stemmed from "the recognition that if there is no change in the way in which qualifications are awarded in society, then little else will change easily". The apartheid legacy, in particular the lack of opportunities and the non-recognition for learning attained in workplaces, and the fact that organised labour was one of the strongest proponents of the NQF, resulted in demands that non-formal learning be brought into a formalised system. Therefore "an integrated framework" was seen as a mechanism to acknowledge in no small measure the workers' contribution to the struggle for freedom.

This vision found expression in the first objective of the NQF and was linked to the notion of access, redress and mobility of workers and learners. It was underpinned by the principle of articulation with other components of the education and training system to enable progression within the framework. It was believed that "a ladder-like qualifications framework with credit transfer to foster learning and worker mobility" (DoE & DoL, 2002: 5) would achieve "coherence within the system so that access and portability can become a

reality" (Mehl, 2004: 25). It seems that political territoriality has replaced the socio-political desire to improve access, recognition and portability of learning to such an extent that Jansen (2004a: 50) notes that "reviews [such as the *Report of the Study Team* and the *Consultative Document*] represent ... political interventions intended to revisit, revise or even reverse policies around which the political agenda has shifted".

This is happening despite international recognition of the importance and value of integrating education and training. Internationally in the developments of NQFs, the principles of "coherence, access and portability" are the main drivers for their establishment. Tuck et al. (2004: 5) say that unlike South Africa, where the establishment of an NQF was strongly linked to issues of social justice, other NQFs are being developed to improve access and progression within qualifications systems and to establish standards for comparability and benchmarking, i.e. systemic coherence. According to them some of the objectives of systemic coherence include (Tuck et al., 2004: 5):

- Making progression routes easier and clearer/improving career mobility
- Increasing and improving credit transfer between qualifications
- Improving the recognition of prior learning
- Improving access to education and training opportunities
- Ensuring that qualifications are relevant to perceived social and economic needs.

As recently as August 2004, the Directorate-General for Education and Culture of the European Commission, expressed this same sentiment for a proposed European Qualifications Framework. Such a framework would provide the "means [to structure] sector activity so that it becomes coherent and integrated with work in other sectors" (European Commission, 2004: 3).

This notion resonates with the comments of the Study Team (DoE & DoL, 2002: 72), namely that an integrated qualifications framework should entail "a single framework that includes all qualifications, and that academic and vocational qualifications represent a continuum of education and training, not a division between them" (emphasis added).

This could have been achieved in South Africa had a single Ministry for Education and Training been established as mooted in the pre-NQF days. However, a single Ministry was not created and according to the Study Team (DoE & DoL, 2002: 67) "the goal of an integrated system was replaced by the idea of 'an integrated approach' to education and training". The notion of "an

integrated approach" was considered a setback to the development and implementation of the NQF. Isaacs (1998: 20), for example, predicted that this shift in nuance "is going to come back and haunt us".

Indeed.

However, as noted in the introduction, "an integrated framework" or "an integrated approach" were not only understood in a *socio-political* or in a *systemic* sense, but stood proxy for other deeply rooted ideas about the very nature and purpose of learning.

A continuum of learning - the meso level

In the introduction to the *Consultative Document* (DoE & DoL, 2003: 1) the Departments state that despite the difficulties in implementing a transformed education and training system in South Africa, "the NQF concept and its objectives continue to command widespread support". In addition, "the idea of an integrated framework of quality assured qualifications is a reference point for all new developments in our national learning system".

For the thousands of South Africans who have worked tirelessly (and often thanklessly) to develop and implement the NQF, those words are encouraging. However, it has become quite evident to all the stakeholders that the Departments are sidestepping the tensions that are apparent. Instead they say that their rationale for a new configuration of the NQF lies in the differences in the nature and purpose of learning in institutions (discipline-based) and workplaces (skills development). Therefore, as Isaacs noted (DoE & DoL, 2002: 67):

For some, [an integrated approach] is actually an integrated system. For others, it is two systems running side by side and if you occasionally look over the fence dividing the two, that's the integrated approach.

In the White Paper on Science and Technology: *Preparing for the twenty-first century* (DACST, 1996: 6) (talking about National Systems of Innovation), the traditional discipline-based/workplace-based divide was strongly questioned:

Traditional ways of producing knowledge within single disciplines and institutions are being supplemented by knowledge generated within various applied contexts. This is knowledge that is collaboratively created within multi-disciplinary and trans-disciplinary research programmes directed to specific problems identified with social and economic systems.

Despite this, the *Consultative Document* and the subsequent draft HEQF policy increasingly seem to lean towards an "over the fence" interpretation of an integrated framework. A respondent to Cycle 1 of the NQF Impact Study (SAQA, 2004: 31), expresses this position as follows: "advocates of integration in education and training really ignore the fundamental difference [in their] epistemological basis."

The Human Sciences Research Council (HSRC, 1995: 36) suggested that the initial debates about integration were about an understanding of "outcomes" and "competence":

"Training-minded" participants were concerned about the inclusion of theoretical or academic [competence] and felt that competence might "not reflect sufficiently" the measurable demonstration of performance standards in explicit behavioural terms ... "Education-minded" participants were concerned about whose standards would be used to determine competence and didn't want education to "become the handmaiden of the economy".

These debates were most pronounced in the discussions about unit-standard based and non-unit standard based (or "whole") qualifications and the appropriateness of such qualifications within different components of the system and were most marked in the attempts to develop common level and qualification descriptors.

Mokgalane, Vally and Greenstein (1996) captured these differing points of view a number of years before these issues were expressed in the *Consultative Document*:

The principle of integrating education and training through a national qualifications framework which enables learners access to and progression through and between different pathways is widely recognized and supported. However, a number of concerns raised ... have still not been adequately addressed. Looking at the qualifications framework from the perspective of school-based practice raises the difficulty of how to identify equivalent outcomes for education in the classroom and training in the workplace. It has been pointed out that "it is quite different to learn a specific skill in the workplace through modular and outcome based" curricula than to develop a broad understanding of art, the humanities and social sciences in the classroom.

Further the focus on acquiring specific and clearly identifiable competencies or outcomes runs counter to the need for holistic development of the individual, not only in the classroom but in a work situation as well.

Therefore, despite the White Paper on Education and Training's (1995) statement that "education and training are each essential elements of human resource development", the *Consultative Document* (DoE & DoL, 2003: 8) argues that the NQF does not sufficiently acknowledge "the distinct purposes of the constituencies responsible for institutional and workplace learning" and therefore proposes three streams in the NQF: a discipline-based stream, an occupational context-based (workplace) stream, and in between these two ends in the "continuum of learning" (DoE & DoL, 2002), a general vocational/career-focused stream. So, the Departments seemed to have given up on the notion of "an integrated framework" and instead will stop "attempts" to bridge the conceptual divide with level descriptor statements of broader and broader generality" and therefore propose "fit-for-purpose level descriptors for each learning mode" (p.13).

Mehl (2004: 34) argues that this is a significant departure from the original integrating vision of the NQF. He maintains that neither the public further nor higher education sectors have made any attempt to integrate learning areas that fall outside of "established, traditional models". This is because, according to the Departments, the fundamental differences between the epistemologies of education and training seem to be too great to be reconciled within a single NQF.

In the recently released draft HEQF policy (DoE, 2004), which clearly builds on the recommendations of the *Consultative Document*, the "dis-integration" of the NQF almost seems to be a *fait accompli*. In SAQA's response to this discussion document, the point is made that

Prolonged national commitment to an integrated approach to education and training is at great risk of being swept under the carpet apparently in order to accommodate the traditional view of one specific sector (SAQA, 2004: 11).

In SAQA's view the draft HEQF policy seems to

Revert to a traditional view of the role of higher education, the ways in which higher learning can be attained and the type of knowledge considered to be valuable within that context (SAQA, 2004: 19).

The proposed *dis-integration* of the qualifications framework is most apparent in the development of the Further Education and Training Certificates (FETC), which was intended to give access to higher education. Three FETCs are currently being developed at the interface between further and higher education

- one developed by the Department of Education for secondary schools, a vocational FETC and an FETC through SAQA registered processes.

The Department of Education has finalised their National Curriculum Statement for the secondary school FETC (June 2002-August 2003), which outlines an FETC consisting of 130 credits. The central reason underpinning the introduction of additional credits above the minimum 120 credits required for a SAQA registered qualification is that the fundamental section of this qualification includes:

- communication consisting of two languages at NQF Level 4 (20 credits each);
- numeracy consisting of additional Mathematical Literacy/Mathematics (20 credits) requirements at the same level; and
- Life Orientation (10 credits).

A further two subjects (notably not called learning areas, which seems to reflect the language and mind-set of the previous system) must be taken from the core section of the qualification, each counting for 20 credits and an elective part of the qualification accounts for the final 20 credits.

The fundamental qualification requirements of the secondary school FETC accounts for 70 credits of the 130-credit qualification, which is in contrast to SAQA's requirements for the formulation of an FETC.

The second and third FETC's consist of 120 credits and can be achieved either through a work-based route to a qualification, namely a learnership, or through the achievement of a vocationally based qualification within an FET institution. The fundamental qualification requirements for this form of FETC at NQF Level 4 are 36 credits, which include 20 credits for communication and 16 credits for numeracy.

The principle of different pathways to higher education is supported and enabled by an integrated framework where multiple routes to the same end are acknowledged. The central idea was that these FETCs would carry equal weight and would be considered equally valuable in terms of access to higher education. In a discussion document published by the Department of Education (2000: 2), for example, an integrated framework "seeks to ... lay the foundation for entrance to higher education; and facilitate the transition from school to work". However, the draft HEQF policy (July 2004) recently published for public comment does not propose this view:

The minimum requirement for admission to a Higher Education institution is the FETC whose specifications were approved by the Minister of Education in the National Curriculum Statement Grades 10-12 (General) and Policy, Government Gazette, Vol. 460, No. 25545, 2003. Given the diversity of programmes and qualifications in higher education it is necessary to determine minimum norms for entry into undergraduate certificate, diploma and degree programmes based on *subject combinations* and levels of achievement (our emphasis) (DoE, 2004: 14).

The draft HEQF policy does not include the other two FETCs as appropriate forms of admission to higher education. In essence, the schooling FETC remains the only approved route to enter into higher education studies. This proposal effectively perpetuates the pre-NQF system and entrenches disparities of esteem, not only between providers of education and training, but also between qualifications attained in different components of the education and training system. All of this is done under the guise of epistemological concerns. alternative view of the relationship between based/workplace/vocational learning, evident in the earlier discussions about the NQF, seems to have been taken off the agenda. Mehl (2004: 35) notes that "NQFs worldwide have developed particularly because of the mismatch between the products of formal educational institutions and the requirements of the modern workplace". Within the proposals of the Consultative Document and the draft HEQF policy, these concerns seem to be effectively ignored, despite the Department of Education's earlier finding that the current system is characterised by poor articulation of FET programmes that "inhibit learner mobility across programmes and providers/learning sites" (DoE, 2000: 5).

It seems therefore, that both the *Consultative Document* and *The Higher Education Qualifications Framework* are proposing a less <u>unified</u>⁷ system and are moving towards a <u>tracked</u>⁸ system (Howieson & Raffe, 1999 cited in Tuck et al., 2004: 5) despite claims that "[the framework] should reflect the present requirements of the unitary national ... education system" (DoE, 2004: i). This conclusion is evident both from the title and substance of the *Consultative Document*, i.e. "An Interdependent National Qualifications Framework System" - no longer "an integrated framework" or even "an integrated approach".

The SAQA response to the draft HEQF policy (2004: 11) underlines the extent to which these shifts in nuance have "come back [to] haunt us":

SAQA is of the opinion that many of the gains made over the past seven years to ensure parity of esteem between academic and vocational training will be lost to future generations.

⁷A <u>unified</u> system brings all provision within a single system (Howieson & Raffe, 1999: 2 cited in Tuck et al., 2004).
⁸A <u>tracked</u> system organises vocational and general education in separate and distinctive tracks (Howieson & Raffe, 1999: 2 cited in Tuck et al., 2004)

This is despite widespread international acknowledgement (for example Gibbons et al., 1994 and Scott, 1997 cited in Kraak, 2000) that new forms of knowledge production are emerging. Mehl, (2004: 28) confirms this and maintains.

It has become apparent that the notion of workplaces as focused users of narrow skills with very limited portability to other economic sectors is completely outdated. Within what is now called the "knowledge economy", workplaces are recognised as multi-faceted, inter-disciplinary knowledge environments not at all limited to a narrow technical skills-base. The emphasis in today's workplaces on values, life skills, communication, management as well as a diversity of sector-specific knowledge-areas, redefines it as a developer of specific, general and highly portable competencies.

These views are supported in the SAQA response to the draft HEQF policy (2004: 11). The response notes with alarm that the draft HEQF policy apparently intends to

Sacrifice learning in the "context of application" for a philosophical return to a classical discipline-based approach to higher learning. Not only is a broader range of perspectives ignored, but a mode of knowledge, which is more "socially accountable", "reflexive" (Gibbons, cited in Kraak, 2000: 40) and responsive to social and economic needs, is marginalized.

It would appear that it is currently not possible to talk about a common understanding of integration. We are also not convinced that the *Consultative Document*, in particular, is honest about its concerns about epistemological differences - for observers it seems that it is the political power struggles, rather than the epistemological concerns, that are inhibiting the development of a common, agreed understanding of an integrated national framework for learning achievements. This observation seems to be supported by the recent statements made by the Minister of Labour. As noted by Mehl (2004: 33), at public institutional levels, there have been very few attempts to conceptualise and operationalise the integration of education and training:

Clearly, the great mobility of learning envisaged by the NQF is nowhere visible in the developments within the DoE. Essentially education to NQF level 4 via the DoE remains a fairly impermeable and impenetrable structure with limited articulation and integration with other developing parts of the education and training environment.

An integrated approach to education and training therefore currently appears to be defined by mutually exclusive understandings of this term by state departments, sectors and institutions. Where does this realisation leave the emerging education and training system and the learners who have to make their way in the system? One possible way of proceeding is to look at the final understanding of integration, namely of the integration of theory and practice.

The integration of theory and practice - the micro level

In the Department of Education's discussion document on FET (2000: 5), a number of deficiencies in the current school-leaving system are identified, including "a separation of theory and practice, giving rise to irrelevant programmes that fail to meet the needs of learners and the changing demands of the economy and society". In the FET, as well as the higher education band, the notion of "applied competence" or "applied learning", to address the separation of theory and practice appears to have been widely accepted. This is evident from statements such as:

The integration of knowledge and skills across subjects and terrains of practice is crucial for achieving applied competencethe NCS [National Curriculum Statements] seeks to promote an integrated learning of theory, practice and reflection (DoE, 2002: 6).

Instead of simply writing about performance, students should be required to perform in authentic or simulated real-world contexts (CHE, 2001: 112).

This is a different understanding of integration -or is it? The Ministry of Education (DoE & DoL, 2002: 67) maintains that

Rather than viewing [education and training] as parallel activities, the Ministry of Education believes that they are in fact closely related ... and sees this as a vital underlying concept for a national Human Resource Development (HRD) strategy.

An integrated approach implies a view of learning which rejects a rigid division between "academic" and "applied", "theory" and "practice".... Such divisions have ... helped to reproduce very old occupational and class distinctions ... and have been closely associated in the past with the ethnic structure of opportunity and power.

In the first two sections of this paper we have explored some of the more evident political and epistemological issues. However, it is at the micro level, i.e. at the sites of learning, that the lack of clear direction and the varied understandings

⁹Applied competence has been defined as :the ability to put into practice in the relevant context the learning outcomes acquired in obtaining a qualification (SAQA, 2001: 9).

of "an integrated framework" are most keenly felt. In a number of interviews for the first cycle of the NQF Impact Study¹⁰ with education and training providers, interviewees responded to the issue of integration as follows:

[An integrated approach] is still a problem of public versus private sector. The public sector is reluctant to allow us into the system even though those programmes are registered and accredited, there is still a problem (SAQA, 2004: Annexure 9:6).

Disparities of esteem between different providers (in this case public and private providers) are still very much in place. There is no trust, particularly from the point of view of public providers, in the quality of the education and training offered by private providers despite the fact that private providers have had to meet very stringent accreditation criteria. The lack of integration of theory (institutional learning) and practice (workplace learning) therefore seems to be exacerbated by political and structural uncertainties, which, according to another respondent, is to no small degree a result of power struggles:

We are stuck because institutions have not demonstrated willingness to recognise this [the equivalence between institutions]. The issue of equivalence of institutions and the power play between the institutions is a disadvantage to the learners. The policies are exclusionary (SAQA, 2004: Annexure 9:6).

Other responses indicated that an integrated framework was understood as partnerships - between an education and training provider and a workplace and between a provider and another provider. The interface between provider and workplace was seen as an opportunity for learners to apply theory in authentic situations, while the interface between different providers was seen as opportunities for credit transfer between career-focused and academic qualifications. For example, one public further education and training institution responded as follows:

The college offers various programmes in partnership with employers and other local and international partners. It is specifically these courses that are found to be relevant to learners (SAQA, 2004: Annexure 9:32).

A private institution, on the other hand, reflected more clearly the notion of applied competence, i.e. that knowledge, within an integrated framework, is viewed as reflecting an integration of foundational (theory), practical and reflexive learning:

¹⁰A longitudinal study to determine the extent to which the implementation of the NQF has had an impact on the transformation of education and training in South Africa. Report 1, entitled *National Qualifications Framework Impact Study. Establishing the criteria against which to measure progress of the NQF (2003)* is available at www.saqa.org.za

We have realised that the real problem-based learning approach must have theory introduced, so we are looking at an approach that has both foundational and theoretical knowledge and application in the workplace and a reflection back to theory (SAQA, 2004: Annexure 9:25).

As can be seen in the example of the FETC in the previous section, despite professed support for an integrated framework, the current disputes and discussions about different epistemologies, does not enable the integration of education and training. Yet at the level of the provider and the workplaces, the separation between education and training appears to be more blurred. A good example of this is the introduction of service learning at South African universities from 1999 through the implementation of the Community Higher Education Service Partnership (CHESP) initiative¹¹. For the purposes of this paper, service learning is defined as an accredited form of community service within higher education programmes and qualifications. Within the CHESP programmes, a university in the Western Cape taught Environmental Geographical Science undergraduate students, "social mapping" skills. The learners were required to apply their theoretical knowledge in a Western Cape township to draw up a social services directory for community residents, businesses and organisations. Their reflection on both the theory and application of their skills was handed in as a paper that counted towards their year mark. This approach is supported in the draft New Academic Policy for Programmes and Qualifications in Higher Education (CHE, 2001: 109):

An enhanced curriculum that offers a range of rich learning environments that allow students to be part of a "community of practice", serving cognitive and social apprenticeship in authentic domain activities. This suggests that initiatives such as community-based and workplace learning should be encouraged.

"Integration" in the sense of *partnerships* between education and training and the value that these two opposite poles of the learning spectrum could add to the other, in terms of opportunities to apply knowledge and inform knowledge production, therefore seems to be accepted and understood. For example, in a colloquium held by the Council on Higher Education (CHE 2002: 16) it was noted that the leaders in the knowledge economy were often not in higher education but in industry. Furthermore, that

The division between the producers of knowledge [higher education institutions] and the "recipients" of knowledge [workplaces] was a false division as knowledge was being produced everywhere.

¹¹CHESP is a JET funded initiative, aimed at building community service into higher education curricula through a three way partnership between community organisations, service sector organisations and higher education institutions.

It is our contention that partnerships between education and training hold the greatest promise for the achievement of an integrated framework. Models for such partnerships already exist: The Centre for Extended Learning (CEL) is a Section 21, non-profit company established on behalf of six further education and training institutions and four higher education institutions in the Western Cape. CEL acts as a broker in competing for large-scale workplace-based training that is conducted by Western Cape further education and training institutions, technikons and universities and includes education and training from Adult Basic Education and Training (ABET) levels to NQF level 8. In addition to offering the core and elective components of NQF qualifications, further education and training institutions and higher education institutions are also offering comprehensive fundamental components (including numeracy and communication) for these qualifications. The commitment of Western Cape public FET and higher education institutions to the CEL also opens the possibility of articulated programmes between FET and higher education institutions. The CEL provides an example of ways in which education and training institutions are able to take on the integration of education and training despite systemic blockages.

In our view, such an understanding of "integration" will go a long way to clarifying what it is that we want to achieve with "an integrated framework". Such a framework, through meaningful partnerships, will assist learners not only to become educated, but to apply their learning appropriately. If this is what we desire in our emerging education and training system, and if such multi-disciplinary and trans-disciplinary arrangements are coming into being, then the system must support and enable these developments.

Conclusion

In this paper we argue that, in particular, political power struggles prevent the achievement of the first objective of the National Qualifications Framework. In no small measure this situation can be blamed on the lack of "a shared language, understanding and agreement around areas of initiative and cooperation" (Badat, 2002: 20).

We have also discovered that epistemological concerns about the respective nature and purposes of education and training, prevent us from shaping our understanding and agreement. However in the colloquium held by the Council on Higher Education (CHE, 2002: 17) it is argued that "if higher education and business were not posited as opposites and if both parties could transcend "the vocabulary of condemnation" it would be possible to construct sound relationships between the partners in education and training.

In fact, it is in the area of partnerships where good models of practice are already emerging - often across, and despite, systemic and political divides.

We conclude with the suggestion that political players in education and training should look critically at emerging practice and, based on such investigations, make decisions about what the system should look like that will enable us to produce learners who have:

High quality skills and competencies in all fields. We must be able to produce research that will build our economy and make us significant players on the global stage. We must be able to create a learning society that draws in people of all ages and from all walks of life and gives them the opportunity to advance, develop and enrich themselves, both intellectually and materially (Min of Education, Prof Kader Asmal, in *The National Plan for Higher Education*, DoE, 2001: 2).

The original thinking in the conceptualisation of a South African National Qualifications Framework was that "an integrated national framework for learning achievements" would achieve these ideals. Political power struggles should now be put aside and all parties should honestly engage with each other to find ways in which this ideal can become a reality to "ensure the development of an integrated NQF as the country moves to the notion of a 'Ministry of Learning' in principle, if not in practice" (Mehl, 2004: 44).

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ASSESSMENT STRATEGIES FOR WORK - INTEGRATED LEARNING AT HIGHER EDUCATION INSTITUTIONS

Brian Eagon Forbes

Introduction

The policy and legislative commitment of the South African Government as evidenced by the Education White Paper 3 of 1997, the National Plan for Higher Education 2001 and the establishment of the Higher Education Quality Committee (HEQC) of the Council on Higher Education (CHE) have articulated the purpose of higher education to meeting the learning needs and aspirations of individuals. This would include the higher level knowledge and skills needs for growth and prosperity through economic development. Prosperity would also encompass learning interventions to support social and development societal needs, toward improved active citizenship.

There have been repeated calls for higher education to be more responsive, accountable, relevant and accessible. This implies a possible disjuncture between policy objectives and the ability of higher education institutions to deliver on their mandate. Discussion documents and debates on a Human Resource Development Strategy, along with the South African Qualifications Authority (SAQA) Act (1995) and the Skills Development Act (1998), creates opportunities to focus on work-integrated learning as a co-operative education model for applied learning.

Higher education institutions in line with the objectives of the National Qualification Framework (NQF) and the principles embedded in an outcomes-based approach to teaching and learning have an obligation to review curriculum development and implementation strategies. This is to ensure that the integration of academic and work-based learning provides a model, in preparing graduates for the world of work.

Relevance

Technikons have since their inception about 25 years ago been on a development and growth trajectory to be career focussed in their vision and mission. As higher education and particularly Universities of Technology we need to expand on many of the positive distinctive features of Technikons.

These would include:

- 1. Links with Industry
- 2. Research (Applied)
- 3. Entrepreneurship
- 4. Co-operative Education
- 5. Innovation and Commercialisation
- 6. Science and Technology Transfer
- 7. Quality Service Delivery
- 8. Community Outreach

The above all speak of a renewed and ongoing understanding of responsiveness to economic and social development needs. This responsiveness means to have an appreciation of the changing requirements of knowledge, skills and competencies in the world of work and the implications and their application in higher education. This would also embrace a more overarching focus on societal goals and a critical citizenry that recognises and engages with a range of key stakeholders from government, labour, the private sector, social and community partnership.

Curriculum Development

Curriculum development that incorporates a work-based or work-integrated prescribed learning outcome should be informed by and curriculated in partnership with commerce and industry. The decision to prescribe a block of experiential learning time in industry should be informed by the assessment criteria of the structured learning outcome components.

Work-integrated learning must be understood to be a learning and development experience that focuses on the student needs. The experiential learning in the workplace must be carefully planned to accommodate the particular workplace environment and its integration with the academic learning at the institution. To effectively manage the learning process, in preparation for and during the experiential learning, needs to enjoy similar priority in terms of infrastructure and resource allocation as is the case for the academic learning environment.

The following diagram serves to highlight some of the aspects that contribute to a supportive learning environment.

LEARNING ENVIRONMENT

ACADEMIC		EXPIERIENTIAL LEARNING
Orientation		Work-preparedness Skills
Classrooms		Guidelines and Policy
Lecturers		Placement Facilitation
Study Guides	Staff	Marketing Co-op / Industry
Time Tables		Programme Design
Learning Materials		Monitoring / Visitation
Assessment	Infrastructure	Mentor / Supervision
Laboratories		Assessment / Evidence
Libraries		Evaluation / Credits
Computer Support	Funding	Review / Feedback
Access and Bridging		
Student Counselling		

Figure 1: Supportive learning environment

An outcomes-based approach, in line with NQF, is the ideal mechanism to structure learning experiences for students. These learning areas are:

- Orientation (Work-prepared skills programmes)
- The placement learning process
- Structured workplace learning and assessment

Outcomes-based Education and Training in a National Qualifications Framework

The NQF arose out of a need for an integrated approach to education and training. The fundamental need was for articulation between education and training which positioned and recognised all education and training in a national framework. This approach supported career paths that included the recognition of prior learning (RPL), different combinations of education and training, as the basis for progression through recognised levels and across educational bands. The proposed 10 levels of the NQF are structured to reflect increasing

complexity for learning performance and competence, in relation to skills, knowledge, problem solving analysis and accountability, within a wide range of contexts and disciplines.

The outcomes-based approach places the primary focus and emphasis on the outcomes of learning and a move away from traditional content driven objectives. The result is a student centred approach that encourages self-confidence, reflections on learning and the enhancement of critical outcomes (soft skills) as a direct link to the successful integration and application of contextual or discipline specific learning.

The implications of Outcomes-based Education and Training (OBET) for curriculum development create opportunities for re-curriculation that should promote new paradigms and approaches to teaching and learning, assessment and service delivery facilitation. The role of the lecturer changes from provider of knowledge content, to manager of the learning process. This facilitation starts with the whole qualification exit level outcomes and the associated assessment criteria. These outcomes cascade down to smaller enabling or sub-outcomes, each with their own assessment criteria that could be devolved down to a unit standard as the smallest unit of learning. Academic credit allocation now relates to notional hours of learning and such accumulation of credits as can be clustered into flexible modules, for ease of progression and articulation.

The most positive aspect of Outcomes-based Education (OBE) for work-integrated experiential learning is that specific outcomes within the qualification can be identified which could best be achieved in the workplace. The accumulation of these specific outcomes along with the associated credits and notional hours should inform structured learning programmes and timeframes for experiential learning. At the same time, level descriptors as currency for staged levels of complexity can be infused into critical cross-field benchmarks, as the basis for generic assessment criteria in any programme discipline.

The above scenario presents many challenges and opportunities, but can only be realised if supported by adequate funding and dedicated resources for curriculum development, while the core business activities of teaching and learning have to be maintained.

Quality Assurance

The integrity of the NQF is achieved through the auditing and review of quality learning provision. Quality assurance of service and programme delivery represents an ongoing cycle of continual growth and development. Quality should be viewed as a transformative process of implementation, accountability and the

pursuit of excellence. A clear understanding of quality definition should underpin approaches to quality delivery mechanisms. The following distinctions should be noted:

- Quality Management System: A combination of processes to ensure that the degree of excellence specified, is achieved.
- Quality Assurance: The sum of activities / elements that assure the quality of products and services.
- Quality Audit: Activities undertaken to measure the quality of products and services.
- Quality Control: Undertaken by the persons who make the product or deliver the service.

Given that the establishment of the NQF is aimed at transformation at the level of programme delivery, it becomes necessary for higher education institutions to demonstrate programme delivery in line with NQF principles. To this end the following questions specifically relate to work-integrated experiential learning and form part of the Co-operative Education partnership model:

- What are the learning components (modules) that make up the programme?
- How is learner-centeredness ensured in the delivery?
- How are learners given feedback on their performance?
- Do the programme outcomes ensure that the learner is able to integrate the knowledge theory through work-based provider linkages?

Co-operative Education provides an overarching framework for learning integration between higher education institutions and work-based learning as illustrated in Figure 2.

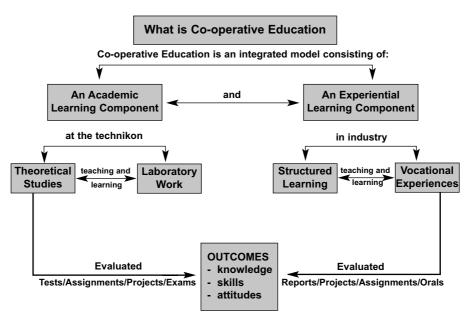


Figure 2: Co-operative Education

It is generally recognised that academic learning at the institution is planned, resourced and structured to ensure an environment that supports the student experience of learning. Examples would include orientation, subject syllabi guidelines, assessment methods, timetables, lecture and teaching methodology, support intervention for access, bridging programmes, libraries, laboratories, tutorship and extended programmes.

As the workplace is not a learning institution, but rather a place for productivity and profit, it stands to reason that for work-based learning to be successful the obligation would rest on the higher education institution to ensure that similar emphasis is placed on ensuring processes that track the student's development, learning and transition from the higher education institution into the workplace, until the return to the institution at the end of the experiential period.

Best Practice

Best practice refers to the operational implementation of core elements that, linked together, will ensure that the experiential learning experience of the student becomes a total experience that enhances development. Best practice therefore recognises the didactic as well as the educational management of the entire experiential learning experience. These operational elements are illustrated as follows:

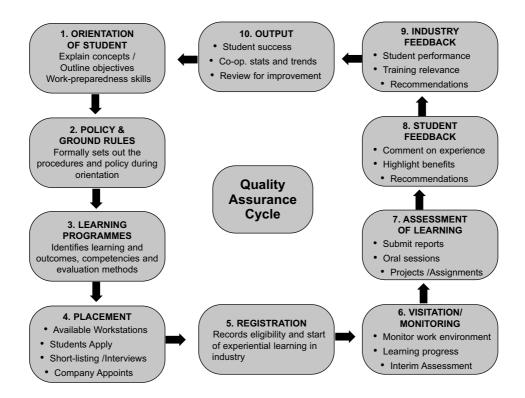


Figure 3: Elements of the experiential learning cycle

Each operational element as a contributor to student learning could then be examined in detail to define best practice parameters as a minimum standard benchmark for regular review and improvement. Each aspect has its own learning outcome and added value to the student learning and experience. The best practice and outcomes are defined in sequence as follows:

(a) Orientation: Work-Preparedness and Life Skills Programme

Students receive instruction to prepare them for the world of work. Policy and ground rules clarify roles and the obligations of the students, higher education institutions and industry in the co-operative education partnership.

Students acquire job-seeking skills such as CV writing, application procedures, interview and presentation skills. Other life skills such as time management, team building and communication are also introduced.

A work-preparedness skills programme **cannot** be achieved by gathering students in a hall for one hour. Students have to be **prepared** for the workplace over a period of time.

OBE gives us the opportunity to identify specific learning outcomes and assessment criteria that will generate activities and tasks which will allow the student to demonstrate knowledge and competence across a range of learning areas that will prepare them to apply the generic critical skills in preparation for the world of work. This learning process should attract notional hour credits when done correctly.

(b) The Placement Process

The higher education institution's markets and promotes co-operative education to commerce, industry and government and secures accredited workstation placement opportunities. Learners are introduced to a range of companies and have to apply and secure their own placements. Higher education institution's facilitate the application and interview process as required and students are selected by the companies after short-listing and interview processes.

Placement is **not** an administrative exercise of allocating students to companies. It must be understood to be a learning experience for the students where they have to acquire knowledge, skills and competencies to prepare for and secure their own placement as an outcome of the placement learning experience. This placement learning process therefore has specific outcomes and assessment criteria along with credits to measure success. Students have to meet minimum criteria and then have to apply and experience the short-listing and interview process, which should lead to the successful outcome of securing a placement. Mock interviews are part of the learning which must be assessed formatively.

The acquisition of industry support to participate in the programme, requires resources which must not be underestimated. The remark of "insufficient availability of workstations" is more often than not the inability of institutions to provide sufficient and competent staff to market and negotiate good quality workstations to meet the learning needs of the programme. Once the company agrees to participate competent staff are needed to facilitate the placement learning experience of the student into industry.

(c) Learning Programme

Learning criteria and specific outcomes are documented to give guidance

to the student and mentors on the work-based training and learning areas for the specific disciplines. Students are guided on how the work learning experiences should be integrated and recorded. Assessment criteria and evaluation timeframes are documented and clarified.

The structured learning begins to unfold once the student has been placed. Although the learning programme and obligation are clarified during orientations, the student has to be supported once in the learning environment. The relationship between workplace supervisor/mentor has to be monitored by technikon staff. Problems associated with interpretations of learning programme, student and industry expectations, actual workstation conditions need to be supported so that valuable time is not lost or morale dampened which could negatively impact on the learning process.

(d) Visitation and Monitoring

Higher education institution staff visits students to ensure that their learning experience meets the expectations of all parties. The students, mentors and academic staff meet to discuss progress. Logbook entries, presentations or any other agreed evidence portfolios or artefacts may be used to assess student progress.

Visits to students at the workplace are planned in time and by appointment. Frequency of visits will depend on geographical location, costs and related factors.

(e) Assessment

Interim and continuous assessment occurs throughout the experiential learning period. Assessment and evaluation is performed by mentors, technikon staff or external examiners. Logbooks, assignment reports, projects, presentations or any other agreed evidence portfolios may be used to assess and evaluate student learning. Marks, credits or records of OBE competence may be used to reflect student success and learning outcomes. Structured and recorded feedback by students and employers in industry can serve as a quality assurance tool for review and improvement.

Best practice in the context of the student learning and development now takes on a process logic with learning outcomes for each of the above categories. Each learning area can now be unpacked and defined using the quality template of input, process and output for each learning element (Figure 4). In an outcomes-based curriculum, learning outcomes and assessment criteria for

each element above will have to relate to the nature of the knowledge, skills and competencies for the progressive development of the student as they move through the work-based experience.

Each element has its own resource demands and accountability for outputs. This approach can now meaningfully address funding provision linked to specific learning outcomes.

Assessment

Assessment is fundamental to the design of any curriculum. Assessment is a process of collecting and interpreting evidence, in order to make judgements on the outcomes of predetermined processes or procedures in a system, towards achieving defined goals or objectives. Evidence can be generated and collected at different times and places with the use of various methods, instruments, modes and even media.

A significant point of departure in presenting notions of assessment in this paper is the inter-relationship between the parallel processes of:

- 1. Work-integrated assessment of the learner performance.
- 2. Quality Assurance in the Educational Management of the work-based learning operations and service delivery environment.

The outcome of the above assessment strategies will depend on the many stakeholders who have an interest and involvement in the successful performance of the student. These would include the students themselves, parents, sponsors, employers, mentors, supervisors and lecturers.

The HEQC has statutory responsibility to conduct assessment audits as indicated in the Higher Education Act of 1997.

The nature of such assessment does not seek to measure actual quality of outputs in relation to teaching and learning performance but rather to:

- Establish the nature and extent of the quality management systems in place; what policies, systems, available resources, strategies and targets exist for the development and enhancement of quality.
- Evaluate the effectiveness of such systems on the basis of evidence produced by the institution that will provide indicators of success and effectiveness.

When work-integrated learning forms part of and is integral to the exit level outcomes of the qualification, then it is incumbent on the higher education institution to ensure that the assessment and evaluation of the student's learning experience is managed and measured with the same rigour and credits that apply to the theoretical component of the curriculum.

It is common cause that work-based learning is very often not well structured or meaningfully integrated into the curriculum. The quality and quantity of workplace provision is at times inadequate and the opportunities for maximising student learning and development are compromised. This has serious and negative implications for funding provision.

The Quality Cycle Approach

The HEQC proposes to use the quality cycle approach to quality management as an assessment paradigm for audits and for the formulation of audit criteria.

It could be argued that the elements that make up this model could be used as key performance indicators for a management framework at the level of student performance and institutional management compliance of the work-based learning support environment. Broadly these activities would be the following:

Quality Management Framework	Learner Performance
 Policy Development Implementation Evaluation /Review Improvement Implementation 	Planning for Learning Outcomes Preparation Placement Curriculum Monitor /Visitation Assessment Feedback Curriculum Levaluation /Review Student Success Satisfaction Surveys

In this context the approach would be to ensure that the documented evidence of the entire operational and learning outcome chain is organised. Operational and networking procedures have to be agreed upon to ensure daily delivery. Communication networks between students, the academic staff and industry mentors have to be structured not only in terms of frequency but more significantly in terms of outputs of evidence, decision making and problem identification, formative assessment interventions and referral strategies for added value improvement.

The following diagram illustrates how the system generates built-in accountability measures.

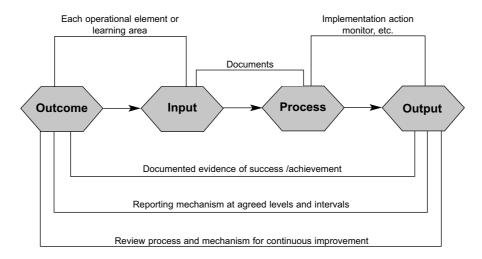


Figure 4: Accountability measures

Work-based Learning Criteria, Student Assessment and Success

In the Audit Framework, the HEQC has identified teaching and learning as the critical focus area for its quality related activities. In this regard two activity areas have been targeted as priorities as follows:

- 1. Programme development and review
- 2. Student assessment and success

The HEQC believes that systematic institutional attention to work-integrated learning validated by the audit process would cover a number of critical learning dimensions not adequately addressed in the past.

Within an audit context, the nature and arrangements for institutional planning, design and management of academic programmes are important indicators of the effectiveness of educational provision. Effective procedures in this area could ensure that programmes meet the needs of students and other stakeholders, are intellectually credible, and enable ongoing improvement in design and delivery. The same applies to professional and work-based learning in vocational programmes, where the monitoring of teaching and learning arrangements in the workplace is critical to ensuring the credibility of qualifications. The effectiveness of institutional programme management is also an important consideration, amongst others, in the eventual awarding of self-accreditation status to institutions by the HEQC.

Student assessment and success is a central indicator of teaching and learning effectiveness. The transformation goals of widening access, improving retention and throughput rates and producing graduates with appropriate knowledge and skills, can be supported and directed by an effective assessment system.

Although the curriculum may target skills, knowledge and attitudes appropriate to the goals of social and economic transformation, if assessment procedures fail to prioritise and test these competences, students are unlikely to acquire the intended learning outcomes. Finally, assessment has a critical influence on the quality of teaching and learning and can be used as a powerful point of leverage for change and improvement in education.

The HEQC has formulated a number of criteria for programme development and review in the case of work-integrated and work-based learning. These include criterion statements and are indicated below.

Criterion 1

Sub-Area: Characteristics and needs of professional and vocational

education

Criterion: The characteristics and requirements of professional and

vocational education are accounted for in the development of

the programme

In order to meet the criterion, the following are examples of what would be expected:

- i. The programme promotes an understanding on the part of the student of the specific occupation for which he/she is being trained.
- ii. The programme has a balance of theoretical and practical or applied knowledge. The student masters the techniques and skills which are required by a specific profession or occupation.
- iii. Work-based learning forms an integral part of the curriculum and placement in a work-based environment is regarded as an essential component of the programme.
- iv. All relevant stakeholders, including employers and professional bodies (where applicable) are involved in the development of the programme.

Criterion 2

Sub-Area: Management of work-based learning

Criterion: The management of work-based learning is done efficiently in

order to promote quality in all the components of the

programme

In order to meet the criterion, the following are examples of what would be expected:

- Effective policies, processes and procedures are in place for the management of work-based learning and are consistently applied across the institution.
- ii. Learning contracts are utilised as a means by which the student, the higher education institution and the employer can negotiate, approve and assess the objectives and outcomes of the learning process. The roles of the various parties involved in work-based learning, i.e. the institution, students, mentors and employers, are clearly spelled out in the contract.
- iii. Regular and efficient communication takes place between the institution, students, mentors and employers involved in work-based learning.
- iv. A system is in place (both institutional and at the place of employment) to record the contents and progress of the student's learning experience in the workplace.
- v. Monitoring of work-based learning is done regularly and systematically. Feedback is utilised for improving the practice of work-based learning.

Criterion 3

Sub-Area: Mentoring System

Criterion: An effective mentoring system provides support for the

student in the workplace

In order to meet the criterion, the following are examples of what would be expected:

- i. The mentoring system is educative, i.e. it enables the student to recognise strengths and weaknesses in his/her work, to develop existing and new abilities, and to gain knowledge of work practices.
- ii. The mentoring system is supportive, i.e. it offers opportunities to nurture and develop students.

Incorporation of OBET Paradigm

Burchell Hodges and Rainsbury (1999) suggest that employers value all competencies in students which would include both technical competencies (i.e. hard and cognitive skills) and non-technical competencies (i.e. soft or behavioural skills).

The assessment of work placements therefore should measure contextual learning outcomes and these have to be integrated with the generic (soft skills) critical cross-field outcomes which would include:

- To identify and solve problems
- To collect, analyse and evaluate information
- To organise oneself and others
- To engage in teamwork
- To communicate effectively
- To use technology to enhance learning

Given the understanding that the workplace environment in which students conduct their placements are highly complex environments, the assessment criteria has to factor in the unpredictable variables such as student needs, backgrounds, social skills, physical, mental and emotional attributes. Therefore to record the skills of students in a way which divorces them from the infinitely variable context in which they work, is to miss the essence of what it is to be a learner.

The way forward for the assessment of experiential learning in work placements is to combine summative assessment with formative assessment. In the formative mode of assessment student and faculty focus on learning rather than accountability, and emphasise growth and development over "final judgement".

The development of an individual capable of reflective practice (Schon, 1983, 1987) and diagnostic evaluation of their own strengths and weaknesses as practitioner in whatever field they are engaged in (Stones, 1994), will likely be of more long-term benefit than assessment based on a rather spurious mark or grade that is based, at best, on a sampling or snapshot of a students' ability on the day or days in which it was conducted. Instead of leaving their programme of study with a "pass" for their work placement, students can leave with a profile or portfolio of their abilities. This also will enable future employers to ascertain if these individuals possess the skills and attributes desired.

Models for Assessment of Work Placements

The complexity of work-based assessment has to be acknowledged and any attempt to propose that a simple pass/fail system would be in conflict with the spirit and objective of an outcomes-based approach to assessment. A multi-model arrangement has to be negotiated between stakeholders which could include:

- Employer's views on the quality and competence of student performance.
- The student records on reflective understanding and the integration of workexperience with academic learning.
- The preparation of assignments and portfolios profiles.

Accumulation of learning outcomes credits

The outcomes-based approach to curriculum design creates an opportunity to allocate credits for work-based learning derived from the curriculum design process of the whole qualification.

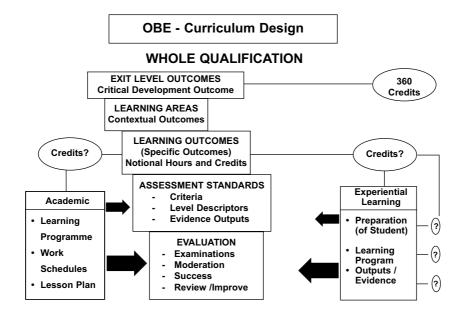


Figure 5: OBE Curriculum design

The approach would be to select a Learning Area (i.e. a discipline context such as Civil Engineering, Tourism Management or Information Technology, etc.) and then to make statements of specific outcomes of achievement along with the assessment standards. The assessment standards would include:

- The criteria itself
- The level of complexity (level descriptor)
- Evidence of outputs

The outcomes would now be negotiated with industry to select which outcomes can best be achieved in the work environment. Agreement then has to be reached on assessment criteria, assessment instruments and outputs of evidence.

Work-based learning outcomes can now be structured based on notional hours as a generic critical outcome and then credit allocations can be guided by the time frame of 1 Credit = 10 Notional Hours (i.e. the time it takes an average learner to learn, experience and achieve [through assessment] a particular learning outcome).

Prescriptions on time used in this context are not intended as a judgement for success but rather an incentive to motivate acceptable standards for work ethic and productivity considerations.

Conclusion

A higher education institution faces many challenges as it strives to position itself as a major player in the development of human capital through qualifications which are responsive to technological developments, economic and social development needs.

Work-integrated experiential learning programmes are a specific learning intervention strategy that has significant benefits for students, academic staff and industry. The challenge is to ensure that quality and adequate resourcing underpins service delivery and implementation that can guarantee the student a vertical added value knowledge learning progression through the work-based learning programme as part of the curriculum.

Work-based learning must be viewed as a learning programme experience whereby the "classroom" is transferred to the workplace and therefore the Institution and the Department of Co-operative Education have an obligation to ensure that the necessary infrastructure and support to underpin successful

learning outcomes is given the same *priority and financial support* as is done in a more controlled and managed environment for the academic programme at the institutions. Similarly work-integrated curriculum design must ensure that the assessment criteria and instrument can match the intellectual and pedagogic rigour of pure academic programmes.

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ESSENTIAL EMBEDDED KNOWLEDGE - THE FORGOTTEN DIMENSION

Christoph Vorwerk

Background

Tucked away in Section 7 of the National Qualifications Framework (NQF) Regulations of March 1998 (RSA 1998) there are two references to essential embedded knowledge. Section 7 describes what is required for unit standards. Elsewhere in the regulations there are several references to "knowledge, skills and values" in relation to specific outcomes and to levels but otherwise there is no further definition, explanation or set of criteria given for this term.

As a person who has been involved in the development of processes related to the NQF, and of the NQF itself, from its earliest beginnings to its implementation and current re-configuration, the role of knowledge in the NQF has been a constant challenge.

This paper allows me to review some of the experiences, describe some current practices and make some proposals which I trust will contribute to the learning revolution which forms the theme of this conference. Many of the observations I will make and the experiences I will describe have been derived from facilitating countless workshops with a broad range of actors in the NQF. In posing questions, both theoretical and practical, and in enabling people to discuss these questions, the generally accepted understanding of concepts and mental models held by people become evident.

Introduction

Knowledge forms a key part of the NQF. From its earliest conceptualisation to its current implementation, knowledge and how to treat it has formed an integral part of the debates and discussions. It still lies at the heart of the current debates on reconfiguring the NQF, as is evidenced by the long discussion in Chapter 2 of the Consultative Document published by the Ministries of Education and Labour in 2003:

The distinction between the learning of "espoused", "formal" or "declarative" knowledge and the learning of "knowledge-in-use" or "practice-based learning and activities". (Department of Education (DoE) and Department of Labour (DoL), 2003).

SAQA also describes applied competence in terms of foundational, practical and reflexive competence which "are all necessary for the meaningful accomplishment of a task in any real world context" (SAQA, undated).

If one poses the question, "What knowledge is required for each kind of competence?" it becomes clear that traditional views of knowledge need to be reconfigured and adapted. As SAQA itself stated:

Associated with the recognition that knowledge needs redefinition is the recognition that sites of learning are many and varied (SAQA, undated).

The most common knowledge taxonomy is one based on fields and disciplines. Knowledge is allocated to categories such as those used to distinguish fields of learning at universities. The choice of learning fields used by the National Standards Bodies (NSBs) is an example of this type of classification. Knowledge and knowledge classification of this kind is quite appropriate to foundational competence.

Practical and reflexive competence, however, require a broadening of the concept of knowledge. It can no longer just be simply that which is passed on during formal learning processes (explicit knowledge, theory, etc).

Practical competence may require a whole range of other forms of knowledge which allows the learner to become a competent practitioner. But what of reflexive competence? What knowledge is required in order to achieve this kind of competence?

The challenge then becomes how we should:

- 1. ascertain what knowledge is required for the full range of competences
- 2. reflect that knowledge in standards (unit standards and qualifications)
- 3. integrate such knowledge in curricula and learning programmes
- 4. assess such knowledge during formative and summative assessment, including assessment for purposes of recognising prior learning

However, even a cursory glance at registered unit standards and qualifications shows that knowledge is treated in an inconsistent, often cursory, way. This leads to inconsistencies in other aspects of the overall system, such as difficulties in implementing and assessing learning.

Some of the current practices evident in registered qualifications and unit standards are:

- 1. the lack of a specification of knowledge overall
- unit standards which only specify the acquisition of declarative knowledge

limiting knowledge to that required to comply with company or industry standards

To achieve a more consistent approach, we would need to have the following:

- 1. a model of the learning process
- 2. a tool for unpacking requisite and relevant knowledge
- 3. a method of describing it
- 4. a method for building the acquisition of knowledge into learning programmes
- 5. a method of assessing the acquisition of requisite and relevant knowledge

What is essential embedded knowledge?

In the Regulations the concept of essential embedded knowledge is referred to in section 7, which specifies the contents of a unit standard:

...the assessment criteria, including essential embedded knowledge; and a "notes" category which must include the critical outcomes contemplated in regulation 7(4) supported by the unit standard; should include references to essential embedded knowledge if not addressed under assessment criteria and may include other supplementary information on the unit standard.

Elsewhere knowledge is referred to in a much more general way, mostly in the phrase "knowledge, skills and values".

These statements highlight the important role of knowledge in the unit standards and, by implication, in the associated qualifications. Yet despite that, approaches to recording essential embedded knowledge are varied and in many cases inadequate. As curriculum and material developers are now discovering, there is often inadequate information in the unit standards on which to base decisions relating to content. Nor are assessors finding it easy to assess knowledge in an integrated way.

Why has essential embedded knowledge as a category not evolved into a substantive component of unit standards? There are a range of factors that could have led to essential embedded knowledge not being sufficiently developed in unit standards and other aspects of the NQF:

1. The NSB Regulations of 1998 did not provide any clues on how to deal with essential embedded knowledge

- 2. It was a new term
- 3. Essential embedded knowledge is confused with Learning assumed to be in place
- 4. Qualifications do not have to reflect knowledge in any particular way
- 5. Unit standard-setting methodologies based on imported models do not have a way of formally dealing with essential embedded knowledge
- 6. The most common approach to developing essential embedded knowledge items in unit standards is to brainstorm a few at the end of the standard setting process
- 7. The lessons learned from pilot projects have not been incorporated into the standards-setting methodologies

Nor is this phrase a generally accepted term outside of the NQF. We will have to arrive at a meaning.

In order to arrive at a meaning for this term, it would be quite instructive to look at early attempts to define the role of knowledge in competence.

Some early attempts

Two stage process

During the early 1990's when I was reviewing overseas trends in preparation for developing a training strategy for the Plastics Industry Training Board, for the first time I was exposed to National Vocational Qualification Awards in the United Kingdom. The notion of developing standards for workplace performance was a fairly new one at the time. To specify the end-performance rather than the inputs seemed such an elegant way of dealing with the issue of curriculum design for workplace performance and of ensuring transfer of learning.

But even then I felt it wasn't an entirely satisfactory approach. Apart from the odd fact that the standards had to be purchased and were kept secret until they had been purchased, the standards themselves seemed to be very superficial. They dealt with tasks and not decision making. Nor did they specify what a leaner had to know in order to perform effectively.

My first attempt to construct standards was to try and combine the acquisition of knowledge and the performance standard. This early approach was based on the most commonly held theory of action relating to teaching and learning, which can be summarised as follows:

If we put learners through learning processes which expose them to a relevant body of knowledge and if we evaluate whether they have successfully acquired the salient parts of this body of knowledge, then the learners will be able to apply that knowledge in a practical context and they will rapidly become competent practitioners.

In diagrammatic form this could be described as a two-stage learning process:

Stage 1	Stage 2	
Formative Qualification	On-job Experience	= Award

The first "skills standard" I developed as a prototype was based on this theory of action. I specified the outcomes in terms of performance as well as the inputs in terms of subjects or courses. While this at first seemed to be a good solution, there was still an area of uncertainty.

What was missing, of course, was the link between the two. How would the workplace influence the content of courses in public institutions? How would we ensure that what was learned in the classroom was applied in the workplace? To provide those linkages a generic course map (see Annexure 1) was formulated which specified types of learning and to some extent the sequence in which learning took place. This first attempt also made use of a taxonomy of skills and knowledge for the manufacturing environment, namely Material, Process, Quality, Care & Maintenance, Safety, Management & Interaction and Personal Skills. This taxonomy was based on work we had done in developing a programme for a specific company in the plastics industry during the mid-1980s. The programme would today be called a learnership. Personal Skills was, broadly speaking, what we today refer to as the critical cross-field education and training outcomes which are embedded in the NQF.

Achieving the award was then based on successfully first passing the courses and then completing a trade test type evaluation after acquiring the requisite practical experience.

To this end we developed and registered N2 and N3 Plastics Technology syllabi with the Department of Education. At the higher level there was already a Diploma in Plastics Technology that would form the basis of the formal learning processes.

An integrated learning model

These early attempts coincided with the release of the National Training Strategy Initiative document published by the National Training Board in early 1994 after an extensive process, one in which for the first time unions participated on an equal footing with other constituencies. These proposals were

presented, along with proposals from other industries, to various forums and workshops which initially were extensions of the National Training Strategy Initiative process. This process eventually culminated in the HSRC publication Ways of Seeing the National Qualifications Framework.

What I presented, although called a skills standard, was in fact more like a qualification or an occupation award. The main thrust of the discussions and debates centred on how to break individual components down to what we today call unit standards. The motivation was to improve the integration of the stage one and stage two types of learning. One of the strongest influences on this process was Robert Mager's criterion referenced instruction (CRI). This approach was based on, amongst other things:

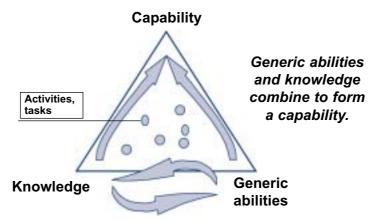
- detailed analysis of the task or skill to establish what needed to be learned
- 2. performance objectives which specified exactly what outcomes were to be accomplished and how they were to be evaluated (the criteria)
- 3. criterion referenced testing which evaluated the learning in terms of both the knowledge and the skills specified in the objectives
- 4. learning modules tied to the specific objectives.

Using the CRI approach shifts the focus away from courses and large chunks of learning to smaller units of achievement, allowing for a more modular basis for learning. Each module could then represent credits towards a qualification or award.

In addition to knowledge and skills, a third element was also emerging in stating performance objectives, namely key competencies based on the Mayer report in Australia (Mayer, 1992). Our local shorthand for these key competencies was generic abilities.

The debate was still continuing vigorously and I was reluctant to settle for the previous solution if it was going to be overhauled by a new national model. But the Plastics Industry Training Board eventually insisted that in order to implement their plan, they needed to have something to guide the learning. I then was requested to develop standards for the workforce in the industry for levels equivalent to NQF levels 1-5.

To do this I conceptualised a new model of learning. The model looked as follows:



For each skill or activity, the requisite knowledge and how the generic abilities applied were described. Based on this, I then generated capabilities for three levels of worker, from operator to technical supervisor. For an example of such a capability see Annexure 2.

The original document was not conceptualised as a collection of individual unit standards but as a learning programme. The document had to provide sufficient guidance for actors and role players to engage in:

- Assessment (pre-, self, formative, summative)
- Curriculum and course development
- Contextualisation for various materials, products, processes and contexts.

To further assist curriculum and course development, the final section at each level listed knowledge items extracted from the capabilities (see Annexure 3) but organised into a discipline- or subject-based taxonomy. This provided the bridge between context specific performance and learning processes in the classroom. But even the knowledge component was described in terms of performance by using verbs such as "describe" or "explain". The verb that was used often to ensure the connection between concept and reality was "relate", e.g. Relate the various types, grades and mixes found in my company to the final product and its properties.

Assessment criteria would then have been developed in context since the document covered a host of different processes, materials and manufactured products. Assessment criteria would also have differed depending on the size of the company, the level of technology being used and the type of product being produced, the market which would be using the product, etc. Products intended for the packing of foodstuffs would have been dealt with differently from products being made for the automotive industry.

This approach resulted in the development of some innovative learning programmes. It allowed companies and individuals to structure the learning in a variety of ways. While it made the learning outcomes more explicit, it also did not dictate where one started. It was an open system. The most common approach was to allow learners to establish what they did know and then to structure learning processes that built on this for what they did not know. Between 1995 and 2000, when the industry training board was absorbed into a Sector Education and Training Authority (SETA), 14 000 employees and new entrants were assessed, trained and qualified using this system. Feedback from many plants, participants and trainers indicated that the document allowed learners to understand the connection between knowledge and performance.

A revised knowledge taxonomy

During 1996, the model described above was used as the basis for developing unit standards in the Department of Labour's NQF pilot project: Engineering and Manufacturing Processes. Some of the working groups tested the knowledge taxonomy I had developed for the plastics industry, i.e. materials, processes, quality, etc, (as listed above) when dealing with what we then called underpinning knowledge. Others tested alternative approaches. The "plastics" taxonomy was, however, not quite broad enough.

In analysing the content of the items listed under the "plastics" taxonomy headings, it became apparent that there was another classification system, one based on types of knowledge rather than types of content. The first list consisted of about six items. Using these as a base, it was further extended as working groups started to apply the technique. This resulted in the following list which was then used to generate and refine all unit standards:

- 1. Names & functions of ...
- 2. Attributes, descriptions, characteristics & properties of ...
- 3. Sensory cues
- 4. Purpose of ...
- 5. Events, causes and effects, implications

- 6. Categories
- 7. Procedures
- 8. Regulations, legislation
- 9. Rules, principles, laws
- 10. Relationships

This taxonomy has been used in slightly modified form since then and has proved to be fairly robust and flexible enough for a wide range of contexts.

Arriving at a definition of essential embedded knowledge

Defining knowledge and what knowledge means, how it is derived and how it is used, has been the subject of discussion and debate in the Western tradition since the time of classical Greece.

To offer a simplistic definition in the present context would be to ignore the complexity of what knowledge represents. Knowledge can range from casual recall of facts or bits of information to deeply held convictions; it can be derived from the external environment through our sensory organs or be constructed by cognitive processes; it can be articulated through language or be tacit understanding at a pre-conscious level; it can be at the level of consciousness or part of the "gut-feeling".

To work with knowledge for purposes of unit standards I propose to use four broad categories or types of knowledge as the basis for defining essential embedded knowledge:

Туре	Also called	Examples			
1. know what	declarative	explicit information, rules, principles based on language mostly			
2. know how	procedural	actions, responses, ways, options, often tacit or embodied knowledge			
3. know why	causal	causes and effects, symptoms, issues			
4. know about	contextual	familiarity with people, situations, contexts and even cultures			

Types 1-3 are identified fairly commonly as constructs for the development of curricula and learning materials. Contextual knowledge is not commonly emphasised. However, the development of a contextual qualifications model within the South African framework highlights the importance of this aspect of knowledge (Vorwerk, 2002).

Essential knowledge is that which is required in order to achieve the outcomes. Without this key knowledge, the performance cannot be considered adequate and, therefore, the performer cannot be considered competent. The outcomes will not just require doing something but will also require having a level of understanding appropriate to the level of the activity. Essential may be considered at two levels:

- 1. required in order to perform in general terms
- 2. required in order to perform in that particular context

Essential knowledge could also include such aspects as:

- what can go wrong and how to anticipate and prevent that
- the key quality requirements (e.g. what constitutes acceptable practice or performance)
- the tools, materials and processes that are used in the performance
- values and ethical requirements
- safety, health and environmental considerations
- customer relations

Embedded implies that something is inextricably bound in, stuck in or linked to a greater whole, e.g. the process of making concrete is a process about embedding sand, stones and steel rods in cement.

Embedded in the context of unit standards means the knowledge is intimately linked to the performance and the understanding of the performance, its purpose and context. This implies such elements as:

- experience
- internalisation
- common practice, common sense and conventions
- history, tradition, rules, laws, principles
- contextual issues related to ethical, legislative and policy-related considerations

Another way of describing this kind of knowledge would be **requisite knowledge** - i.e. that knowledge which is required to perform successfully in a specific context. In assessing learners we want to ensure that they have the requisite knowledge. In terms of SAQA Regulations this means assessing the degree "to which knowledge, skills and values in a sub-field have been acquired and the critical sub-field outcomes incorporated into the assessable performance as a whole" (RSA, 1998).

The specified requisite knowledge is so embedded in the learner that applied competence as defined by the NQF Regulations really means that the proficient learner embodies the knowledge - it is embodied knowledge that guides the surgeon's knife at the moment of the first cut.

In the context of unit standards and the NQF, essential embedded knowledge specifies the:

- 1. general material which is embodied in the theory, principles and practice
- 2. specific knowledge which is derived through the conscious and unconscious learning processes which lead to competence

What is specified as essential embedded knowledge in the standards is then built into learning programmes both in the form of content as well as in terms of activities. After the learning process the assessor assesses the knowledge embodied in the assessable performance of the learner to determine applied competence.

A proposed taxonomy for essential embedded knowledge

Just as critical cross-field education training outcomes have been broken down into 12 types; it is useful to have a taxonomy of knowledge items that need to be considered during standard-setting. Having a taxonomy enables us to consistently determine what knowledge is required for a particular skill. This consistency makes it easier to develop learning programmes, activities and materials, as well as devise a more repeatable assessment process across different contexts.

Categories in the taxonomy

The following categories make up the taxonomy:

1. Names, functions, locations	objects, concepts or phenomena, entities, components				
2. Attributes, descriptions, characteristics, properties	features or qualities that characterise objects, etc, in 1 above or differentiate them from other similar ones				
3. Purpose	the meaning of or reason for objects, activities, etc				
4. Processes, events, incidents	planned or structured ordering of activities, occurrences				

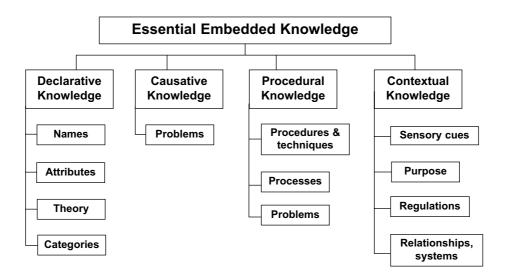
5. Problems, causes and effects, implications	knowledge which underpins and derives from problem solving, responsibility and accountability
6. Procedures, techniques	formalised ways of carrying out tasks and activities; different methods of performing tasks and activities
7. Sensory cues	signals or signs relating to conditions or changes in the environment; seldom found in text books but passed on by experts or acquired through experience
Regulations, legislation, agreements, policies, standards	the legal or agreed framework which guides or circumscribes what we do
9. Theory (rules, principles, laws)	explanations or proposals that try to explain the physical or natural world
10. Categories	ways of grouping, ordering or classifying information
11.Relationships, networks, systems	components of systems thinking links between elements within a larger view; the way in which things work together

The order of the categories is not particularly important. There is a slight shift in emphasis for different levels of learning:

- Categories 1-5 dominate in the Further Education and Training (FET) band
- Categories 5-11 dominate in the Higher Education and Training (HET) band

But most categories are required for each skill or activity at all levels.

Using the four types of knowledge identified above we can also arrange the categories into a taxonomy:



This taxonomy is merely indicative as there are overlaps and linkages between the categories, e.g. regulations can influence both processes and procedural issues.

Knowledge and the language trap

Knowledge is a noun representing a complex set of concepts. Because it is a noun it appears to be something tangible and concrete. Observations, past experiences and understanding can be distilled, sorted and organised into words - the knowledge becomes frozen. Once frozen in the form of text, it can be further worked with as summaries, quotations and building blocks in the development of new knowledge. It can be:

- · encapsulated into greater texts
- linked to other kinds of knowledge
- learned as an entity by others
- the object of scrutiny, critical thinking, translation, abuse and derision

This way of dealing with knowledge creates a view of knowledge that makes it external to us - a thing. This results in the classical Cartesian split, the division of mind and matter.

But knowledge also implies knowing, and knowing is something dynamic, changing and individual. Knowing is the result of processing information, translating it into models, scripts and decisions, reflection, learning and

experience. It derives from sifting information from the environment, linking the information with acquired knowledge and then shifting or adapting in response to minute changes in the environment. Knowing is heuristic, learning for one's self. In this way knowledge then actually becomes embedded in the performance - the skill represents knowledge in action.

Many of the discussions and arguments relating to the nature and shape of the NQF are based on two viewpoints which are sometimes perceived to be in conflict:

- Knowledge production or the epistemic imperative (Mouton, 1996)
- Knowledge utilisation

For the purposes of the NQF the knowledge that we are focused on is primarily the individual learner's knowledge production and utilisation, i.e. personal knowledge, and not knowledge production and utilisation in the broader sense as in research and knowledge management processes.

Essential embedded knowledge and standards-setting

Developing unit standards is hard work. Adding to the workload by interrogating the knowledge requirements stretches participants, not just physically but intellectually and emotionally too.

For participants new to the standards-setting process, there is the first learning period when they are uncertain of what is required of them. Once familiar with the process, participants become result driven and the "race course" effect becomes apparent: "let's see how quickly we can complete this one".

These situations result in superficial treatments of essential embedded knowledge. The process of identifying requisite knowledge can be made easier if one uses the following techniques:

- Step through each of the knowledge categories in turn to establish the kind of knowledge required for each specific outcome and each assessment criterion
- 2 Use training manuals, text books and course outlines as a further resource to identify requisite knowledge

This can become tedious after a while, but across a range of related unit standards similar lists emerge, so it is only the first few which are a problem.

An example of the use of this method is contained in Annexure 4.

Essential embedded knowledge and learning Curriculum

Learning programmes describe and sequence learning activities. A learning activity encompasses the internalisation and application of discrete and relevant information which leads to the development of new skills and ultimately competence (i.e. when assessed). A curriculum guides the process of developing learning programmes and designing learning activities. It specifies at the very least:

- 1. what must be learned (content)
- 2. how it should be learned and how to adapt it to different groups of learners
- 3. how it can be assessed

The following points should, however, be made.

- A unit standard is not a curriculum, learning programme or module it is a set of learning outcomes (RSA, 1998). A learner does not learn the unit standard but his or her learning is assessed against the unit standard.
- 2. Unit standards are generally linked to other unit standards for the purpose of a qualification or part of a qualification.
- 3. To quantify and organise what has to be learned we need to analyse the group of unit standards as a whole. There will be repetition and related items running across the standards.
- 4. In the case of essential embedded knowledge items these can then be compiled and linked to instructional units (modules, courses, projects)

For a learner to be successful during an assessment, the learning programme should contain activities which link the explicit knowledge to the procedural components while developing the contextual and causative knowledge as well.

By creating unit standards and qualifications which explicitly list requisite knowledge, the construction of learning programmes is in fact made easier. Learning programmes can also make use of the knowledge taxonomy (see above) to structure and sequence learning. By applying the taxonomy, explicit knowledge can be linked to the development of competency through sets of graded exercises or activities. Context can be introduced first in a simulated fashion and then later in real time to build up the learner's personal knowledge of the performance and to develop competence.

What we discovered in the plastics industry in the late nineties was that learning processes were invoked in learners by providing a context for knowledge, by

systemising it and by linking it to specific activities. Workers who engaged in reading the "Learning Programme" would start to engage in conversations or discussions about what was written there: they approved, agreed with, disputed or re-interpreted the information. While we conducted no formal studies, our observations and reports received from learning facilitators indicated that people were able to assimilate this information and then directed themselves to wider and deeper levels of enquiry.

By creating relationships between various kinds of knowledge, between explicit knowledge and the critical cross-field education and training outcomes and between knowledge and context, learning becomes purposive. Adult learners, especially, engage more readily in this type of situation.

Learning materials

By applying the above approach, we can reduce the role of learning materials as a substitute for curriculum. Knowledge can be acquired from a wide variety of sources, not just text books or course manuals. Authentic documents related to the skills and knowledge areas can replace standardised learning texts.

Assessment

Including a detailed guide to the requisite knowledge enables the assessor to more easily develop an assessment guide which focuses on the knowledge and understanding. The assessor can test for the "knowing" in a number of ways:

- 1. responses to directed questions
- 2. observations of the actual performance, including
 - discussions and problem solving conversations
 - · assisting, training and educating others

One aspect that creates confusion is the role of knowledge tests. Assessors report that often within the first few minutes of engaging in or observing a discussion, they can conclude that the learner has an understanding of the explicit, procedural and contextual knowledge. This is especially the case in the assessment of prior learning. In these instances, the explicit knowledge has become internalised to such an extent that often the learner has "forgotten" the "text book" knowledge. However, this is not so much the forgetting, as the inability to reconstruct the knowledge in that form. Through discussing the issues or listening to the stories, the assessor can more easily establish if the learner has the requisite understanding of the issues, the dynamics, the relationships and the structures.

Conclusion

In the context of unit standards and the NQF, the part played by essential embedded knowledge has not been sufficiently acknowledged or reflected in unit standards. The knowledge category is, however, crucial to the development of applied competence and learning processes. A systematic analysis and capturing of the essential embedded knowledge related to a specific set of activities provides a platform to improve the linking of knowledge and action, to transform teaching and learning practices and to improve the value of assessment.

To be systematic the analysis and capturing process needs to be guided by a knowledge taxonomy as well as a set of knowledge categories.

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ANNEXURE 1
Generalised Course Map for all Skill Levels

EXTERNAL EVALUATION			
Elective Stage	2 of any extra modules at core or specialist stage, if preceding modules have been done	Personal skills	
Specialist Stage	Company, product and process specific skills. The modules at this level would generally contain the so-called "company secrets" under the headings below	Additional personal skills	
Core Stage	Knowledge and skills common to all companies and people involved in a specific process and with specific materials, under the headings below	Additional personal skills	

Skill areas	Material	Process	Quality	Care & Maintenance		Safety	Management & Interaction	Personal skills
Formal Stage	N1 - N6 T1 - 6	Plastics techno- logy	Maths, Science, Polymer chemistry	Basic hand skills				
Remedial Stage	Literacy, Numeracy, Adult Basic Education, Matric, N1-N3							
Induction	Company	T	lastics Indus raining Boar PITB) & train	d d	Plastics Industry		ıstry	
Sign a Tra	Sign a Training Contract : Register with the PITB for a development phase							

ANNEXURE 2

Extract 1 from Plastics Learning Programme - the 'standards component'

1.1.3 Feed the machine with the correct material or monitor the machine feeding process.

Typical activities would include one or more of the following:

- Slit open bag, lift and pour into hopper, mould or bin
- Open drum, lift and pour into...
- Attach feeding hoses, insert feeding hoses, start feeding equipment
- Reseal and store leftovers
- Replace lids or covers
- Place sheets on feed rack
- Attach reel
- Measure and pour powder into mould

Mhat I must learn about:

What is the function, purpose and meaning of labels, signs, and batch or grade numbers? What is the correct appearance or material? Things like the state of the material, the consistency, colour, particle size and shape, other constituents to mix.

- P What are the names, functions and purpose of feeding components or assemblies to related marks, sight glasses or instrumentation? What are the correct procedures for using these, what are the steps involved in carrying out the feeding process: slitting of bags, opening of valves, the insertion of hoses necessary to begin the feeding process?
 - What are the effects and consequences of feeding incorrect materials? What damage can be caused by not feeding the machine at all?

What I must learn to do (my fundamental abilities):

Communicate

In many cases what you learn to do here will have to be in a second language such as English

I must learn to:

- Use correctly the words related to materials and material feed.
- Read or listen to, understand and follow instructions or procedures for feeding material into the process.
- Complete documentation required for the ordering, indenting, requisitioning or returning of materials.
- Make oral reports about incidents, problems and difficulties or make requests to team members, superiors or partners in other departments.

- What are the most common problem areas, checking procedures? How do I clear blockages?
- C What are the general requirements for moving and lifting materials? How should I try to avoid injury?
 General requirements and procedures for feeding the machine.

 S Effects and consequences of unsafe
- and unauthorised actions.

 Management: What is my
 - Management: What is my programme of checks and actions?At the start of the shift, week,
- order or job?

 At the end of the shift, week,
- At the end of the shift, week, order or job?
 - During the shift, each hour, each cycle or at the times that the process requires, instruments or measuring checks suggest or procedures require?
 - What checks should I be conducting regularly, at what intervals?
 - Interaction: Whom can I call for help?
 When, how and to whom should
 - When, how and to whom should I report when I see the material is wrong, or things start to go wrong?
 - What documentation is required for the transfer, drawing or return of materials?

What else should I know that will help me do this better, more quickly or more safely?

Solve problems and make decisions

I must learn to:

- Observe material feed or read instructions or check sight glasses or read any other checking devices relating to material feed.
- Recognise point at which a decision needs to be made, and determine when to feed, call for more material.
- Recognise the early warning signs of regular problems.
- If there are additional problems, decide whether to act on my own or call in assistance or advice.

Use and look after hand tools, power tools and instruments

I must learn to:

 Use and look after hand tools and equipment, typically: lifts and hoists, trolleys, bins, racks, steps, ladders, knives, blades and shears.

Learn to learn

I must learn to:

- Recognise and connect the names, functions and purpose of things to my activity.
- Connect these things with the other parts and the process or equipment as a whole.
- Formulate and ask questions which help me understand how to work better.
- Describe the effects and consequences of incorrect material feeding procedures.

Μ

DO GOOD IDEAS MATTER?12

Jonathan D. Jansen University of Pretoria

It is my privilege to respond to the 2004 SAQA Chairperson's Lecture in the form of the excellent paper by Prof Gary Granville from the Faculty of Education in the National College of Art and Design in Dublin, Ireland.

I wish to start, however, by saying something about the people who constitute the leadership of the South African Qualifications Authority (SAQA) and those privileged to participate in this massive transformation project. There are few organisations in South Africa where both the Chairperson of the Board and the Chief Executive Officer are persons so widely regarded for their integrity, their humanity and their commitment. There are few projects which have given such sincere and deep meaning to the word "participation" through the active involvement of ordinary South Africans in the implementation of the National Qualifications Framework (NQF). There are few policy initiatives which have consciously dubbed its major reform as "a social construct" - with all the risk entailed in such an open-ended conception of the NQF. And there are no other national education initiatives that I know of that have so consistently opened itself to what the SAQA CEO likes to call "intellectual scrutiny". This project to measure the implementation progress and impact of the NQF on own initiative is a superb example of this commitment to intellectual scrutiny. I wish to congratulate SAQA for this public stance, and for meaning it.

The paper by Gary Granville is a polite and yet honest report; it is funny in parts and deadly serious in others; it has a point of view without being doctrinaire; and it is thoroughly engaging and refreshing in its 'take' on issues of evaluation, assessment, policy and change that stretch far beyond the immediate concerns of the NQF. Its real value lies in stimulating further reflection and debate on education reform and I wish to share some of my own thoughts that arose as I read this important contribution of Prof Granville to policy deliberation in South Africa. I will as always speak largely to my own experience, and in this respect I will refer mainly to what I observe within higher education institutions generally and universities in particular.

One of the things I keep asking myself when I reflect on the NQF is this: "how did such a good idea fall on such hard times?" The idea of access and mobility; of quality and redress; of integration and achievement; of personal and social

 $^{^{12}\!\}text{A}$ response to the SAQA Chairperson's Lecture titled: "The National Qualifications Framework and the Shaping of a New South Africa" - paper commissioned by SAQA.

development; of progression and opportunity...how did such good ideas struggle to find expression in the practice of education and training? It does not help us as South Africans to avoid addressing this question in an honest, open and responsible way. One of the great difficulties in public engagement on policy of any kind is the knee-jerk defensiveness in response to any criticism; I am hoping that as our democracy matures, we will begin to understand criticism and commitment to be the same thing, and to recognise that there is nothing to be gained in chanting slogans ten years after such ambitious experiments were first launched.

The first reason the NQF has had minimal impact in the South African education and training system is quite simply that the NQF promised what it could never deliver in practice. This in part has to do with the nature and complexity of practice, but it has a lot to do with the idealism and euphoria of policymaking in the years immediately preceding and following the formal installation of a democratic government in 1994. Put bluntly, we got carried away. This is not the place to repeat what some of us have called the over-investment in policy symbolism or others have observed as the tremendous moral imperatives that underwrote the education and training policies of the first post-apartheid government. The NQF was to address 'employment opportunities' as well as 'economic development' as well as 'career paths' and of course 'redress past unfair discrimination.' I know of no policy in the world that can address all of these things in the ways envisaged, let alone all at the same time. Yet we believed in the redemptive power of policy, and we are paying the price.

The second reason the NQF struggled through implementation was that it was compromised from the very beginning. It does not take much logic to recognise that installing a department of education separate from a department of labour would immediately cancel out any profound expectations of creating 'an integrated national framework for learning achievements.' Add to this compromise a lack of substantial and sustainable funding from the South African Government, rather than the helpful but unsustainable funding from donors, and there is very little that well-meaning, hard-working people can achieve in the real world of institutional practice. Reform costs money, it is as simple as that. There was nothing in our national commitment to resources that came close to the ambitions set out in legislation for the national qualifications framework. There is an ominous parallel reform in which we seem to be going down exactly the same track of unbridled optimism to be followed by unmitigated exasperationand that is the FET system. It is very clear to me that the technical colleges will never be able to overcome their apartheid legacy unless there is a massive injection of sustained state funding to take these poor cousins of the post-school system and make them competitive, productive and high-status institutions that deliver on the training needs and priorities of business and industry, and on the aspirations and dreams of adults and youth.

The third reason the NQF struggled to find its way into the norms of everyday institutional practice is because it lacked a credible theory of action that would take these good ideas and implant them in educational practice. The most obvious example is RPL policy. I know of few universities that have chosen to take the opportunities offered in this policy position and broaden access to higher education as a result. The introduction of RPL in higher education deliberations remains highly contested. On the one hand, familiar charges of protecting "standards" invariably wash-out any sensible or sustained discussion on how supposed standards compromise commonsense and fail to remediate disadvantage. On the other hand, the push for RPL has often underestimated the real differences of learning and knowledge acquisition in different contexts. I do not regard these arguments and counter-arguments as constituting insurmountable charges against implementation; our failure was and is the lack of hard thinking through the political strategies and intellectual arguments that would enable RPL to advance learning opportunities within and across institutions in an educationally honest way.

The fourth reason the NQF struggled to gain credibility in practice is that the manageable set of good ideas soon found itself engulfed and overpowered by a powerful bureaucratic and administrative apparatus so that the simple founding principles were completely lost to ordinary people. This observation is not unique to the NQF but appears more and more to be a South African response to policy reform. Whether it was outcomes-based education or institutional quality audits or whole school evaluation, we can for once claim South African exceptionalism through reference to this inordinate capacity to make the simple so complex that is inaccessible to practitioners. I have long wondered where this behaviour comes from. Is it our deep lack of self-confidence below that miracle facade with which we claim so much from this democracy? Is it our English colonial legacy that confuses arcane language or excessive wordiness with intelligence? Is it our need to elevate policy authority beyond the reach of ordinary citizens, thereby retaining power at the center-the way magicians operate? I am not sure. But I do know that making the simple appear complex has been a major stumbling block en route to sensible implementation of good ideas.

Does this mean the NQF should be abolished? I think not, for what the NQF has established is a discourse of educational change among ordinary citizens; it has generated hope and optimism among those most marginalised from the education and training opportunities; it has bequeathed a profound philosophy

of education and training wrapped up in those five simple statements of ambition; it has brought together hundreds of people from across fields and sectors, and from all parts of the population to build the NQF and give meaning to this 'social construct'; and it has not become cynical about 'participation' at the very point that the delivery agenda of the central government has cast suspicion on this highly valued legacy of the struggle for education.

I believe that the appropriate route to follow is to return to the first principles of the NQF and to ask what simple pathways could enable these good ideas to take root and flourish within the education and training system.

The Impact Study project of SAQA is easily one of the most sophisticated measurement and monitoring systems that I have yet witnessed to emerge in South Africa. Its sophistication lies in its self-critical posture and its consciousness of the limits and potential of impact studies, especially in its more quantitative conception. I suspect that a useful starting point in institutions is to examine the diversity of implementation pathways followed in practice. Our research based on end-user practices with respect to the NQF shows a rich variation-one that should intrigue rather than concern us. For example, in a university with a strong sense of institutional commitment to governmental action, we found in various Faculties examples of *policy avoidance* (finding innovative ways to avoid dealing with the NQF), *policy compliance* (complying with NQF guidelines in a routine and mechanical manner), and *policy adaptation* (adjusting practice based on a selective adoption of NQF guidelines in the light of experience, capacity and competing external pressures).

I raise these examples of institutional practice for a number of reasons. First, to underline the point that a mature and useful impact study will not seek to straightjacket practice on the basis of some centralised and uniform reading of the NQF and what it demands, but recognise the value, utility and richness of ways in which institutions seek to attain the goals of the framework. Second, to privilege an understanding of practice rather than a valorisation of policy. If we work from the presumption that institutions do what they do for reasons that make sense to practitioners, and if research and evaluation seeks to unlock those compelling logics of practice, then we might come closer to solving the implementation puzzle that constrains all education policy in South Africa. Rather than condemn the stone age resisters or attribute racial or ideological motives to those who fail to change, it might be useful to begin with the halfscary assumption that there is a more persuasive logic locked up in daily practice that needs to be understood in order to be changed. Third, to engender humility about policy reform in ways that bring greater maturity to our ambitions to change the education and training system. It is time for us as South Africans to grow up. Change happens slowly. Change costs money. Change seldom responds to profound and moving policy dictates. And change might not happen at all.

In this regard it might be useful to take a somber look at the variable of time as it is often used to defend the slowness of change. Invariably, those in government-and the self-interested international consultants who benefit from the lack of change-would make the point that change may take many decades and even centuries before it becomes reality in our institutions. This kind of positioning is disingenuous at best, deceptive at worst. Of course change takes time....but how do we know that this kind of posturing is not an excuse for non-action or a defense for the lack of resource inputs or a mask behind which lies state intransigence and a lack of political will?

Well, the acid test of change or reform lies in how we respond to a number of critical questions. Another way of putting this is, how do you know whether government (or another lead agency) is serious about a particular change proposal or policy reform?

The framework provided in these ten questions empowers those who work on the receiving end of policy reform to judge the credibility and adequacy of change proposals.

- what kinds of resources have been dedicated to enable change to happen?
- what kinds of plans have been put in place to make change happen? Are the plans feasible, and do they articulate a clear and persuasive logic of implementation?
- what kinds of **timeframes** have been stipulated against which reasonable progress can be measured? Are the timeframes realistic?
- what kinds of contexts have been described, in all their variations, as the
 receptive sites within which the change has to happen? Is there sufficient
 capacity within these contexts to make sense of, engage and implement the
 proposed changes?
- what kinds of support for the change have been built among practitioners, policymakers and planners to ensure smooth implementation?
- what kinds of key personnel have been identified to lead the change process? That is, is there sufficient expertise and capacity at the center to drive the change process?
- what kinds of obstacles and impediments to change have been anticipated, and how will these concerns be addressed in the implementation process?

- what kinds of concrete benefits flow from the change plan? In other words, why should (would) practitioners buy into the change plan to begin with?
- what kinds of **consequences** result from non-implementation? Who is held accountable, and under what conditions, for implementation failure?
- what kinds of evidence exists that this change proposal can make a positive difference in practice? In other words, is the plan credible on the ground?

The value of the NQF Impact Study lies in its attention to several of these variables and, principally, the question of evidence ... how do we know that the NQF is really making a difference?

The key question that remains is whether there is sufficient maturity in the education and training system to deal with the outcome of such an impact assessment. For if the evidence tells us that our principal achievements have been at the symbolic and political level or in terms of the mechanical achievements of administrative goals, then we should have the courage to end the dance, and move on.

The NQF presents to South Africa what is arguably the most cogent and progressive set of ideas for transforming the education and training system. These core ideas have mobilised and inspired millions, and offered hope to those long excluded from this system. Those entrusted with this national project have taken the bold step of shining a bright and honest light on the achievements of the NQF.

More than anything else, it is this courage of introspection and integrity of leadership that might well secure for the NQF a continuing and central role in the transformation of education and training for many decades to come.

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Granville, G. (2004). The National Qualifications Framework and the shaping of a new South Africa: Indications of the impact of the NQF in practice. *SAQA Bulletin*, Vol. 6:1, pp. 3-19.

RESPONSE TO GARY GRANVILLE¹³

Botshabelo Maja Department of Labour, Labour Market Policy

The Premise

The response to the Impact Study, and the paper by G. Granville, is premised on the basis of assumption 2.3 contained in the executive summary that guided the Cycle 1 of the NQF Impact Study - which was "concerned with the establishment of the research design: and the actual drawing of definitive conclusions from substantive data was less important than the piloting of the research design and the draft Impact Indicators". The response in this paper is shaped in two key ways. First it attempts to grapple with the key debates that ultimately shaped the design of a National Qualifications Framework (NQF). In doing so, a debate begins to emerge which examines the extent to which in designing the NQF system (i.e. the Act, SAQA, NSBs, SGBs, ETQAs etc.) we had begun to loose touch with some of the key and very essential rationale of why a National Qualifications Framework was necessary in the first place. Having presented this argument, the paper then reconnects with the notion of impact, and how to contextualise impact within these debates in ways that our research design and the questions that we ask do not perpetuate our own logic, which might not necessarily be correct, of what difference the NQF has made.

The logic of a National Qualifications Framework

The early 1990s, in the build-up to the advent of democracy in 1994, was a period of intense policy debates in South Africa, shaped by a primary concern of building a new society free from discrimination and oppression. The broad democratic movement and the African National Congress (ANC) in particular, published a series of documents aimed at facilitating the South Africa that is only beginning to make sense ten years on in 2004. These were the days of the ANC policy documents such as "Ready to Govern" and the yellow book on education, the period of National Education Policy Initiative (NEPI) documents and the National Education Coordinating Committee. It is a period in which constituencies, commonly referred to as stakeholders, began to draft policy positions on what kind of new South Africa would they like to see post apartheid. These include the government of the day, labour, business, academia, and the broad liberation movement led by the ANC. At the time, the government was also attempting to reposition itself, and this saw the publication in the same period of the Education Renewal Strategy.

¹³A response to the SAQA Chairperson's Lecture titled: "The National Qualifications Framework and the Shaping of a New South Africa" - paper commissioned by SAQA.

Whilst no substantive policies where promulgated during this period subject to an agreement on the new South Africa, the policy debates at the time (particularly those emerging from the broad democratic movement) later were to shape policies adopted by the new democratic government post 1994.

Certain key ideas on education and training were being espoused during this period. These debates began in the labour movement. Their concerns at the time, and I would argue these continue to today, were poor pay and lack of career opportunities for their mainly black members. The labour movement further debated how, in up-skilling workers, one recognises what they already know and are competent in, that is - RPL. Thus the debate on the link between the world of work and that of education gained momentum. Debates began to focus on how South Africa, post 1994, could begin to create a coherent and nationally integrated education and training system. The National Education Coordinating Committee at the time talked of a "national vocational qualifications system fully integrated with formal academic qualifications" (1992: 41). In its "Ready to Govern" policy document, the ANC committed itself to "the establishment of a nationally integrated system of education and training. All sector-specific training, including training for the public sector, welfare and sports, will take place within the national framework to ensure that skills acquired are nationally recognised, portable and contribute to career-pathing" ("Ready to Govern", ANC policy guidelines for a democratic South Africa, adopted at the National Conference 28-31 May 1992).

At that time a set of key policy dispositions commonly ran through the policy debates. We continue to grapple with them even today. These include: the opening up of career opportunities and up-skilling South Africa's workforce; recognition of prior learning; creating a coherent and nationally integrated system; and portability. All these are the noble intentions that Granville's paper alludes to and that have been enacted in our policies. Thus the question we must grapple with today is, how far have we come?

Ten years on - how far have we come?

As pointed out by Maja and Meyer (2003:14):

Although significant changes and shifts have already been achieved in terms of parity and alignment of education and training since the democratic transition in 1994, the integration that was foreseen in early policy documents has not occurred. The two systems are moving rather towards alignment and articulation, particularly through the NQF, and also through implementation of the HRD strategy. As education policy implementation research has shown, this ambitious project will require consistent efforts

over time to shift mindsets and build new institutional cultures (Fuhrman et al, 1988; Fullan, 1991; McLaughlin, 1987).

It is not my intention in this paper to go deeper into the current reviews on the NQF however, it would be helpful to provide an analytical summary of where we are. I found a paper by S. Allais (SAIDE, 2003) to the point in this regard. She points out that:

Ten years after the idea of setting up a National Qualifications Framework first gained prominence and popularity in South Africa, there is much debate on how the NQF is being implemented. Problems are becoming increasingly evident. These include the time taken to register standards and qualifications, the complexity of the systems, and a general feeling of alienation from the proliferation of jargon and the burgeoning bureaucracy (Departments of Education and Labour, 2002: 143). Much energy has been spent trying to work out the relationships between areas of responsibility of each structure of the system; the more structures that are involved, the greater the amount of time which is needed to negotiate solutions (Parker, 2001).

She goes further to point out that:

Also significant is the slow take-up of the newly designed and registered qualifications. SAQA had generated about 258 qualifications by August 2002, but few learners in South Africa have yet, been confronted with these SAQA generated and registered qualifications (SAIDE, 2002). In other words, the time consuming and costly processes have generated qualifications which have populated a framework, but have not, as yet, been significantly used (Allais, 2003).

Reconnecting with Impact

South Africa has gradually matured from the process of *policy formulation* and has begun the process of *policy implementation*. During the next five years we will have to grapple much more with the notion of *policy impact*, and thus the NQF Impact Study is timely in this regard.

Policy formulation in South Africa faced two key challenges - a low and skewed information systems base; and limited and skewed human resource capacity in various key areas. These challenges have continued to haunt the implementation processes that flowed from policy. Nonetheless, whilst the period of policy formulation and implementation presented its own challenges, the period of policy impact will produce a new set of challenges. During this time

we will attempt not only to understand the relations between policy formulation and implementation, but also seek to understand the impact the two processes have on the country's development imperatives.

The next five years, with the likely emphasis being on policy impact, will in all likelihood be guided by two key imperatives. These will be alignment and articulation. These imperatives will attempt to scan how the various policies talk to and feed into each other, and how such cross fertilisation can be maximised. Areas of impact will include education and training, theory and practice, and others. The respective policies of various government departments already talk this language, and the various ministries have begun talking the same language.

Four key points about the NQF Impact Study in Granville's paper stand out for me. First, I agree with Granville, as my earlier inputs show, that the "NQF grew from an idea first, then a system was constructed to carry the idea". This has come about with its associated costs as indicated earlier, but paradoxically, it is what has carried the NQF system through and ensured that it continues to feature as a contested debate in this country. The challenge for us is how to take advantage of the idea, and the contestations it has generated, to craft what Granville refers to as "a model of learning that is appropriate to the diverse needs of the South African population".

Second, I also agree with Granville, as shown earlier in this paper, that what distinguishes South Africa's NQF system is its "location in the political and social transformation of South Africa". The question therefore, in talking about impact, is the extent thus far to which the system has been able to respond to this challenge. I shall come back to this matter later when talking about the indicators used.

Third, I think Granville's point on Recognition of Prior Learning (RPL), and the Impact Study's reflection on RPL is inadequate. Whilst I admit that recognising prior learning, in the context of systems and processes that have traditionally never acknowledged prior learning is a challenge, we cannot afford to relegate RPL to being a "sleeping giant of the NQF". In his opening paragraph on RPL, Granville begins by pointing out that "qualifications themselves can do little about redress". I agree with the statement generally, but the fact that it comes up as a proviso to an RPL discussion is itself very telling. We need to remind ourselves continually, whilst accepting that our NQF system is both a political and social construct, of the origins of the NQF system mentioned earlier. In particular, how are we to ensure career-pathing of South Africa's workforce if we continually fail, in both policy and practice (impact), to recognise prior learning? This leads me to the fourth point, which deals with the impact indicators.

The Impact indicators

The Impact Study identifies four key Sets of Impact Indicators to guide its analysis. Of these indicators, I intend to focus on the fourth indicator, which talks about "the extent to which the NQF has had wider social, economic and political impact in building a lifelong learning culture". This, in my view, is a key and central indicator to the NQF process, which is crosscutting in nature. Its centrality and importance to the NQF process needs to be elevated in a number of key ways. The core of the NQF system, albeit its political and social nature, is to enable South Africa and its citizens to participate competitively in an ever changing globalised world. This therefore implies that a debate on the NQF cannot be immune from the global debate on Millennium Development Goals. At the end of the Millennium Summit held in New York in September 2000, the Millennium Declaration was endorsed by all 189 member states of the United Nations.

The declaration listed eight Millennium Development Goals (MDGs) that would combat hunger and poverty and improve education, health, the status of women, and the environment by the year 2015. These goals are an international commitment by all governments, agreed to by the heads of states. They are interrelated, so achieving one helps to achieve the others. The first seven goals include measures of human development in poor countries. Each goal has one or more targets, and several quantifiable indicators measure each target. Each country should adapt the MDGs to its particular national context and report on its progress accordingly.

At the Millennium Summit, world leaders also took on several qualitative targets applicable to rich countries, later collected together and included as an eighth Goal. The key elements of Goal Eight, reaffirmed by heads of states at the International Financing for Development Conference in 2002, pledge financial support and policy changes in debt relief, trade and economic governance to assist poor countries' domestic efforts to meet the first seven Goals.

Whilst SAQA cannot exclusively be responsible for enhancing South Africa's chances of achieving the MDG by 2014, it however remains one of the key players towards the achievement of these goals.

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THOSE UNHEARD ... A REVIEW OF THE PRESENTATIONS ON THE OCCASION OF THE SAQA CHAIRMAN'S LECTURE, SEPTEMBER 2004¹⁴

Edward French

Heard melodies are sweet, but those unheard Are sweeter; ... Keats, Ode on a Grecian Urn

Overview

The Chairperson's Lecture was a learned and thoughtful account of the first cycle of a long-term study of the impact of the National Qualifications Framework (NQF). This was followed by two responses which engaged as much with the destiny of the NQF in general as with the specific matters relating to the NQF Impact Study. After a résumé of the three presentations this review considers why the presentations generated no significant debate, or even discussion. The review draws on subsequent discussions and reflections, unheard during the actual event, to construct two sets of questions relating to the three presentations. The first set of questions centres on the political context of the study, the second on broader methodological issues. These sets of questions consolidate various concerns and ask for some attention to issues about which the presentations, for all their transparency, were veiled or silent.

The main lecture

In the main lecture Professor Gary Granville offered a reading of a substantial part of his paper. (As the paper was published in full in the last SAQA Bulletin (Vol 6, No 1) I will use it as the point of reference). The lecture started with a statement about the boldness and daring of the South African NQF when compared with other NQFs. This boldness lay in the NQF's purposeful intent to play an important part in a social movement. Its concern with equity and redress, identity and citizenship, made it nobler and more ambitious than its counterparts elsewhere in the world, which were mainly concerned with the technical rationalising and streamlining of systems. But South Africa's high ambition has added to the tensions and challenges to be expected in implementing an NQF. "The NQF can be seen as an instrument well placed to facilitate this process of transformational learning by providing links and pathways between different learning experiences and contexts without imposing uniformity on them. The uneven, unstable and unpredictable nature of the education, training and employment environment in South Africa makes this all the more challenging and important" (p. 5). This observation is supported by a quotation from Beach: "Consequential transition is the conscious reflective struggle to propagate knowledge linked with identity in ways that are consequential to the individual

¹⁴Paper commissioned by SAQA.

becoming someone or something new, and in ways that contribute to sociogenesis: the creation and metamorphosis of social activity and ultimately, society."

In relation to the rich mission of the NQF, Professor Granville pointed out that the NQF Impact Study was "more than a technical evaluation of an instrument of Vocational Education and Training (VET) and employment policies. It is centrally concerned with the shifting relationships between the individual and society and the symbiotic relationship between them. It addresses fundamental issues relating to the meaning of active citizenship and it should facilitate an informed and ongoing discussion of the role of education, training and employment practices in relation to participatory democracy" (p. 6). These broad intentions were then narrowed down in a discussion of the origin of the NQF Impact Study, and the options facing its designers. The lecture was in essence a report on Cycle 1 of the Impact Study, a stage concerned with the establishment of the broad research design and the criteria against which to measure success in the later cycles. The Study was a uniquely valuable initiative in the international movement to create qualifications frameworks. The approach decided on after extended investigation was to use sets of Impact Indicators linked to the more specific intentions of the NQF and the nexus of factors and concerns surrounding these. The Study was to avoid dealing with matters such as the actual procedures and regulations of the NQF. The 17 Indicators were grouped into four sets relating to the delivery of relevant qualifications and learning programmes, the positive impact of quality assurance and the wider social, economic and political impact of the NQF in building a lifelong learning culture.

In the process of testing these indicators, a set of eight "indicative findings" had been made. These were interesting, but should be seen as tentative. Very broadly, views of the processes of the NQF in the eight findings were positive, balanced by some scepticism about the capacity of qualifications to promote redress and a note on the "sleeping giant" of Recognition of Prior Learning (RPL). The "product" of the NQF (learner achievements, actual practices in place) was too scanty to report on, although many learners were now at last registered in NQF-linked learning programmes.

Complexities and dilemmas in the concept and execution of impact studies were then laid out at some length. The use of impact indicators is particularly problematic. Here and elsewhere, the paper insists that the study is intended to throw light on the working of the NQF, to inform decisions rather than to provide directions, to be democratic, not authoritarian, and to avoid instrumentalism and the undermining of professional discretion.

In closing, the paper returns to the big picture. It emphasises that the design of the study provides "a means of mapping the multi-layered and deeply textured experience of learning within (the) system" (p. 16). Underlying the study are four key questions:

- Who is learning?
- What are they learning?
- Why do they learn?
- How do they learn?

Five finely nuanced principles for the Study are set out. Summarised, they are:

- The NQF system is the ultimate focus of the study.
- Multiple voices must be heard.
- The historical context must be appreciated.
- Contradictions must be anticipated and treated wherever possible as potential strengths.
- The study must be alert to structural and cultural transformations, though these are more likely to be seen in the longer term.

After comparing the NQF to aspects of the League of Nations, Professor Granville ends with the statement that the NQF could "inspire wonder" by becoming "a vehicle for liberating the creativity of teachers and trainers, of workers and employers" (p. 19).

The first response to the main lecture

Mr Botshabelo Maja, speaking particularly from the point of view of labour (both the Department of Labour and the trade union movement), outlined his perspectives on "the key debates that ultimately shaped the design of a National Qualifications Framework", touching at the same time on a concern that we may have "begun to lose touch with some of the key and very essential rationales of why a National Qualifications Framework was necessary in the first place". He stressed the concerns of the labour movement ten or twelve years ago, most of which were still relevant today. These concerns were poor pay and lack of career opportunities for workers - hence the interest in RPL - the creation of a coherent and nationally integrated education and training system, in which vocational and academic qualifications were fully integrated, nationally recognised, portable and linked to career pathing.

The question to ask was "How far have we come?" Mr Maja pointed to the shift from integration to a system of alignment and articulation - an approach rejected

by the original architects of the NQF. Quoting from a number of statements by S. M. Allais he noted the complexity of the systems, the proliferation of jargon, burgeoning bureaucracy and structures and time-consuming and costly processes in the NQF. This had happened in the ten years of policy formulation and the start to implementation. Policy impact would now require attention. Explaining the demands of this, Mr Maja argued: "Policy formulation in South Africa faced two key challenges - a low and skewed information systems base; and limited and skewed human resource capacity in various key areas. These challenges have continued to haunt implementation processes that flowed from policy. Nonetheless, whilst the period of policy formulation and implementation presented its own challenges, the period of policy impact will bring out a new set of challenges. It will attempt to not only understand the relations between policy formulation and implementation, but also seek to understand the impact the two processes have on the country's development imperatives".

Maja argued that the idea which the NQF was constructed to carry out has continued "to feature as a contested debate in this country", and agreed with Granville that what distinguishes South Africa's NQF is its "location in the political and social transformation of South Africa". However, he took issue with Granville's handling of RPL, asking the question: "How are we to ensure career pathing of South Africa's workforce if we continually fail, in both policy and practice (impact), to recognise prior learning?"

Maja closed with a request that the NQF be mindful of the Millennium Development Goals to combat hunger and poverty and improve education, health, the status of women, and the environment by 2015.

The second response to the main lecture

Professor Jonathan Jansen opened with warm salutations and praise for the leadership of SAQA, making special mention of their integrity, humanity, and their commitment - particularly to giving meaning to the idea of "participation" and to the risks of treating their mission as "a social construct". Above all, in the present context, it was the commitment to openness and intellectual scrutiny that was most impressive - a commitment sustained over time and now reflected in the NQF Impact Study. He went on to praise the quality and interest of Professor Granville's paper, seeing it as a stimulus to further reflection and debate on educational reform.

Professor Jansen then moved immediately to the question: "How did such a good idea (the NQF) fall on such hard times?" Adding: "It does not help us as South Africans to avoid addressing this question in an honest, open and responsible way", rather than with knee-jerk defensiveness. He offered four

reasons for what he termed the minimal impact of the NQF in the South African education and training system:

- The NQF promised what it could never deliver in practice; there was too much idealism, too much belief in "the redemptive power of policy".
 There was also an underestimation of the deeper issues facing the recognition of knowledge gained in different contexts.
- The NQF was compromised from the very beginning by the separation of education and labour departments, which defeated hopes of integration, and by the failure of the government to pay for cornerstones of reform - the NQF and the FET system.
- 3. The NQF lacked a credible theory of action. For example, it was conceivable that RPL could be made workable in universities. It was not working, however, because of the lack "of hard thinking through the political strategies and intellectual arguments" that were needed to underpin effective action.
- 4. The NQF, suffered from what Professor Jansen called the South African capacity "to make the simple so complex that it is inaccessible to practitioners". This was reflected in the overpowering bureaucratic and administrative apparatus of the NQF.

In spite of these shortcomings, the NQF should not be abolished. It had established a discourse of educational change among ordinary citizens, generated hope and optimism among the marginalised, bequeathed a profound philosophy of education and training, brought together thousands to build this "social construct", and not succumbed to cynicism about the struggle for education. Instead of abandoning the mission, the NQF should return to its first principles.

The design of the NQF Impact Study was highly professional. Professor Jansen suggested an approach that would focus on the practices adopted by institutions in response to the NQF, rather than valorising policy. The Study should recognise the innovative ways in which institutions seek to attain the goals of the framework. More respect should be shown to the reasons that make sense to practitioners, even if these reasons lead them to reject changes. Change took time, but this observation should not be used as a posture to defend the slowness of change, non-action or failures of resource-inputs and political will.

Professor Jansen closed by listing ten questions to empower "those who work on the receiving end of policy reform to judge the credibility and adequacy of change proposals": They are encouraged to look critically at what has been put in place to support the change proposals: the resources, plans, timeframes, contexts, support and key personnel. And they should ask how persuasively evidence has been examined regarding the obstacles and impediments to the required change, the likely concrete benefits of the change, the consequences of non-implementation, and the likelihood of the changes making a positive difference in practice.

Professor Jansen's final statement deserves quoting in full: "The key question that remains is whether there is sufficient maturity in the education and training system to deal with the outcome of such an impact assessment. For if the evidence tells us that our principal achievements have been at the symbolic and political level or in terms of the mechanical achievements of administrative goals, then we should have the courage to end the dance, and move on.

The NQF presents to South Africa what is arguably the most cogent and progressive set of ideas for transforming the education and training system. These core ideas have mobilised and inspired millions, and offered hope to those long excluded from this system. Those entrusted with the national project have taken the bold step of shining a bright and honest light on the achievements of the NQF.

More than anything else, it is this courage of introspection and integrity of leadership that might well secure for the NQF a continuing and central role in the transformation of education and training for many decades to come."

The debate

These summaries necessarily offer pale reflections of the richness, interest, humour and passion in the presentations. Yet in spite of the range of issues raised and the provocative challenges thrown down, the call for questions and discussion was met by silence. After a time, some questions of a procedural nature were asked, but these did not engage with the issues, and there was no debate.

How could this be? Several reasons suggest themselves. The Chairperson's lecture was also the formal opening session of a major international conference. Many guests were not privy to local issues. The venue was a ballroom furnished in a way best calculated to prevent debate and discussion. An attractive buffet was on display as delegates entered the lecture space, and was known to be waiting outside the doors to provide sustenance of another kind at the end of a long day.

But the presentations themselves did not invite participation. The main lecture reflected specialised knowledge and the consensus of a team that had been

working together on the design of the Study for an extended period. The lecture's very self-awareness, its magisterial grasp of all the issues, its understanding of ironies and limitations, anticipated voices of protest, of difference, even of eager support and assent. And in this way it silenced them. The sheer comprehensiveness, genial transparency, mutual appreciation and apparent openness of the presentations actually produced a form of closure. By the same token, the excellent and thoughtful responses gave us the voices of observers steeped in appreciation and critique of the system. They seemed to say what was needed so fully that it was possible to give either one's consent or dissent, but not to feel invited into contribution or disputation.

This is not necessarily a criticism. A formal annual lecture with prepared, reflective responses is probably more a performance than the basis for a seminar. However, lively discussion was expected. Given the absence of debate I will report on concerns raised after the event in various discussions. The discussions seem to range around two areas of concern, what I have called the impossible dream, and methodological questions.

The impossible dream

In Professor Granville's opening and closing and to a lesser extent in the two responses there is something that reminds one of the traditions of epic poetry where heroic action is celebrated most poignantly in its defeat. Or, to use another literary comparison, there is something like that branch of existentialism called "absurdism". Here actions, positions, beliefs are known to be futile, but they are carried out in admirable moral protest against the meaningless void, similar to climbing Everest "because it is there". Now all this might be very dramatic for the individual pitted against fate. It is deeply disconcerting when it is the dominant tone adopted about a very important investment in a society's future. There seems to be something close to resignation that says: The NQF is great, but unworkable, lacking credibility though noble, and deeply betrayed in some way or another, with no way of uncovering the reasons for this.

The impossibility and the betrayal are subject to repression. Even Professor Jansen, who is a forthright controversialist and calls for honesty about these things, only touches on them with veiled statements. There seems to be something lurking behind the warm bonhomie and mutual congratulation of the event. Why are the other reviews of the NQF, which seem to be so undermining, not mentioned? Why is there no analysis of the legislative confusion which appears to have diffused authority over the NQF among different agencies? Why is there no attempt to understand why the NQF is, by all accounts, a cherished transformative initiative of South Africa's national government and the cabinet, yet it is backed by little political will and virtually no fiscal support? Why

is the NQF, by some reports, scarcely cherished at all by the Ministry of Education, to which it reports, and the Department of Education? Why is it so scantily supported by the proceeds of the Skills Development Levy, given its central function in the National Skills Development Strategy? Are there perhaps good reasons for the apparently marginal official status of the institution? Why has it, nonetheless, been so handsomely supported by international donor organisations?

In the early days of the NQF, SAQA's Executive Officer liked to quote Machiavelli on the dangers and betrayals that proponents of change were likely to suffer. The question is: would a Machiavellian analysis of the management of the play of power and influence around the NQF not be revealing, and of great importance to an impact study? For example, if there is justice in Professor Jansen's point that the impact of the NQF has been limited because the NQF has become unnecessarily complicated, which (stakeholder) pressures, arguments and interests have pushed it in that direction?

To move to a related set of questions: As Professor Granville points out: it is not desirable to put the foundational principles and intentions of the NQF to the test in the NQF Impact Study. The key questions relate to the extent to which those principles and intentions are having an effect. But surely some consideration of the international and national contexts in which the NQF is playing out would be in order? For example, it could be argued that the "social movement" aspects of the NQF, its intended role in redress, its possible connections to the Millennium Development Goals and so on, have been seriously compromised by factors beyond the NQF. These factors could be summarised in terms of South Africa's inescapable submission to the Washington settlement, the abandonment of the Reconstruction and Development Programme (RDP), the hegemony of market and business values over human development and so on.

It might be argued that the impact of the NQF could and should be studied without reference to any of these possibly awkward questions. But that would be like studying the impact of an irrigation scheme on environment, economy and community over the long term and not attempting to take into account or understand factors ranging from global warming, drought and floods, deforestation, depopulation or new industrial developments in the region. Surely an impact study, to have the value of throwing light on development, must cultivate a context of understanding as well as measuring indicators?

This brings us to the methodological questions.

Methodological concerns

There was general admiration for the team's and Professor Granville's professionalism and thoughtfulness in their approach to the NQF Impact Study. However, although Professor Granville mentions many complexities, potential pitfalls, value orientations to be guarded against and so on, in the last resort he (and the team) could be said to opt for an approach that could be called technicist or managerialist (with reservations). Such approaches tend to aim to be apolitical and "value-free". Their main source of evidence would seem to be market opinion and self-report questionnaire surveys. What one misses is any weighing up of alternative approaches to the study. Professor Jansen (very politely hiding the fact that he is doing so) implicitly recommends some interesting alternatives. At the heart of his recommendation is the use of studies of how the NQF is being implemented, or evaded, in terms of the practices, institutional arrangements and individual responses. For example: How have curricula been changing, and to what extent is the change due to the NQF? How is assessment being managed? How have previously marginalised learners been taken up in education and training in ways that recognise and valorise new knowledge? In what ways are different forms of knowledge being allowed to flow together into qualifications? Such questions are implicit in the sets of indicators, but it may be that cumulative, persuasive, in-depth narratives of the multiple, varied real-life responses to the transformative challenge of the NQF, backed by national, regional and sectoral statistics, would be more telling than indicators? Why not move more directly to attempting to answer some of the questions posed towards the end of Professor Granville's paper? The "who, what, why and how" questions about learning listed above could surely be answered without the paraphernalia of indicators. Are indicators needed to answer the question whether the NQF is functioning in some ways as "a vehicle for liberating the creativity of teachers and trainers, of workers and employers"? Indeed, do the suggested indicators really help in answering questions like this?

Linked to these questions, there is the matter of time. Professor Jansen offers a stern warning about hiding behind the slowness of change. Is the slow unfolding of the NQF Impact Study not open to a similar warning? Could the warning not be mitigated if the process unfolded here were to co-exist with an immediate study? The "indicative findings" show us that sources of revealing insight are already available to us. Professor Granville also uses two telling quotations from the inquiry in ways that remain frustratingly unexamined. But they still show that it should be possible to create a vivid, systematic picture of how the NQF is impacting here and now in 2004 on practices, institutions, individual lives - for better or for worse - through a mix of qualitative and quantitative inquiry.

Apart from this specific question, one NQF enthusiast, and an admirer of the approach to the NQF Impact Study, posed the question of riding on the tiger. This draws on the famous limerick:

There was a young lady from Riga Who smiled as she rode on a tiger. They returned from the ride With the lady inside And the smile on the face of the tiger.

The NQF itself has very instrumentalist features, yet has developmental intentions that are in opposition to instrumentalism. It seems that the form of inquiry proposed by Professor Granville and the team suffers from the same problem. Both the NQF and the NQF Impact Study seem to be aiming at using the power of a dangerous tiger, but remaining the rider. As various people have pointed out, the feat of keeping alive the developmental intent of the NQF has been miraculously, sometimes shakily, sustained by the leadership of SAQA. Will it be possible in the same way to ensure that the Impact Study does not end up inside its own tiger?

References

Granville, G. (2004). The National Qualifications Framework and the shaping of a new South Africa: Indications of the impact of the NQF in practice. *SAQA Bulletin*, Vol. 6:1, pp. 3-19.