

Why the South African NQF Failed: lessons for countries wanting to introduce national qualifications frameworks

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Introduction: the significance of the South African NQF as a case study

The South African National Qualifications Framework (NQF) is an important case study of qualifications frameworks. The NQF was introduced as a key mechanism for overhauling the racially divided and unequal apartheid education system. It was introduced through the first piece of educational legislation passed after the advent of democracy in South Africa (Republic of South Africa Act No. 58 of 1995). The South African Qualifications Authority (SAQA), the body established to implement the NQF, explains that it was intended 'to *completely transform* the disparate education and training system' (SAQA, 2005c, p. 24, my emphasis). The NQF had very broad support across the political spectrum and was strongly associated with the transition to democracy, being symbolic of the development of a single education system for all South Africans (Departments of Education and Labour, 2002). Perhaps because of a desire to unite the fragmented apartheid education system and because of the wide support for the idea of a qualifications framework as a solution, the South African NQF was designed as a highly comprehensive framework, covering the entire education system at all levels and in all sectors. It was also designed to forefront the role of learning outcomes, based on the idea that specified learning outcomes should drive all aspects of the education system — education programmes were to be designed, taught, assessed, and evaluated against outcomes which had been nationally specified. Because of this key design feature, I refer to it as an outcomes-led qualifications framework, to distinguish it from other types of qualifications frameworks (Allais, 2007). The South African NQF is a particularly interesting case study because it provides a very clear (possibly extreme) instantiation of a comprehensive outcomes-led qualifications framework.

Notwithstanding the strong support for this policy across the political spectrum in South Africa and the high hopes pinned on it, the NQF has spectacularly failed to live up to the claims made about it and has been the subject of protracted policy review since shortly after its introduction into the education system (Departments of Education and Labour, 2002, 2003; Allais, 2007).

The article starts by discussing why the outcomes-led model in South Africa was so popularly seen as an alternative to the notorious apartheid education system. This analysis provides insight into why this type of education

policy is so popular, particularly in poorer countries with less developed education systems. It then discusses the problems which emerged with the South African NQF and explains why outcomes-led qualifications frameworks are unlikely to succeed and why the model is a particularly bad one for poor countries. Finally, it explains that qualifications frameworks are not a homogeneous phenomenon (Young, 2003b; Allais, 2007). The South African NQF provides an instantiation of *one* way of creating a framework and my analysis suggests that it provides lessons about how *not* to create a framework. These insights may be of particular interest for Eastern European countries, which, as poorer countries that have also undergone transitions to democracy, may in some ways have more in common with South Africa than Western Europe, and may be more seduced by the claims made about outcomes-based qualifications frameworks.

The South African NQF as an Exemplification of an Outcomes-Led Qualifications Framework

The essence of the outcomes-led qualifications framework model is that educational standards must be nationally 'set' by defining learning outcomes and associated assessment criteria. A 'standard' is seen as a clear and fixed statement of competence that a learner must achieve, and the basis from which programmes can be designed and content ('inputs') selected (SAQA, 2000a, 2000d). SAQA explains that 'Outcomes are the qualities . . . that are expected at the end of a process of learning. The meaning of outcomes is similar to the concept of competence' (SAQA 2004, p. 6).

Key to the model is the principle that qualifications and unit standards must be composed of learning outcomes defined by stakeholder-based structures separately from any particular institution or learning programme. The idea is that those who are not specialists in educational institutions can have knowledge which is at least as relevant and important as those who are, and can therefore be involved in specifying outcomes. The learning outcomes do not involve reference to specific inputs (such as knowledge areas) and are defined independently of the route that learners take to become qualified. Any educational institution should be able to develop learning programmes against these national qualifications and unit standards. All levels of education, from primary to doctoral studies, and all types of education, from general academic programmes to highly specific focused workplace training programmes were to be accounted for in terms of these outcomes-based qualifications and unit standards.

A complex array of processes and stakeholder-based structures was created to generate, evaluate, and 'register' outcomes-based qualifications and part qualifications (unit standards) separately from educational institutions. 'Registering' a qualification or unit standard meant the SAQA board formally ratifying it and officially placing it on one of the eight levels of the framework. A complicated format and set of specifications were developed for the qualifications and unit standards to be registered. Another group of structures was created to evaluate provision of education against the learning outcomes in the qualifications and unit standards — in other words, to conduct quality assurance of educational programmes against the nationally specified learning outcomes.

By August 2007, 11,489 unit standards and approximately 818 outcomes-based qualifications had been developed and registered on the eight levels of the NQF.¹ Examples of new outcomes-based qualifications registered on the NQF are shown in Box 1 below.²

Box 1: Examples of new outcomes-based qualifications on the South African NQF

General Education and Training Certificate: Housing Consumer Education (level 1)
 National Certificate: Retail Shop Floor Practices (level 2)
 National Certificate in Quality Checking of Tyres and Tyre Components (level 3)
 Further Education and Training Certificate: Community Facilitation in Society and Environment Interactions (level 4)
 National Certificate: Maintenance of High-speed Production Processes (Fast-moving Consumer Goods) (level 5)

Level 1 on the NQF is the equivalent to the end of junior secondary school, level 4 to the end of senior primary school, and level 5 is the first year of higher education.

As discussed above, all the new qualifications which have been developed through the structures of SAQA are comprised of lists of learning outcomes, as well as various other specifications. In most of them, the learning outcomes are arranged into unit standards. Examples of unit standards are provided in Box 2. Note that a ‘credit’ is supposed to be roughly equivalent to ten hours of learning.

The unit standards in Box 2 consist of learning outcomes and other specifications. They were all created separately from educational institutions or programmes through a series of stakeholder-based structures set up by SAQA. Unit standards are long documents — a single unit standard can run to 25 pages of specifications — in order to conform to all the specified requirements. The qualifications in Box 1 are all composed of unit standards. A qualification can be composed of 20 such unit standards, and as such is a very lengthy document.

Outcomes-based qualifications and unit standards such as those listed above were intended to provide the ‘standard’ against which educational ‘providers’ were then supposed to provide education. SAQA calls designing learning programmes from learning outcomes ‘designing down’ (SAQA 2000a, 2005b). As SAQA explains:

It is important to note that the learner achieves outcomes which build up to the *purpose of the unit standard*, and achieves *unit standards which build towards the purpose of the qualification*. This is why it is important to *design down* from the purpose of the qualification or the unit standard, so that it is always foregrounded when we plan learning and assessment for the outcomes.

(SAQA 2005b, p. 5, emphasis in original)

Box 2: Examples of unit standards on the South African NQF

Level 1 unit standards

Apply basic fire fighting techniques (3 credits)

Sweep floors (4 credits)

Show, explain, discuss and analyse the relationship between society and natural environment [sic] (4 credits)

Level 2 unit standards

Demonstrate an understanding of climate and weather in the context of renewable energy (6 credits)

Drive a tractor (10 credits)

Switch a high voltage inline switch on and off (2 credits)

Pack customer purchases at point of sales (3 credits)

Level 3 unit standards

Demonstrate a basic understanding of the causes of falls of ground (2 credits)

Describe ideologies in community contexts (10 credits)

Respond to hazardous conditions or emergencies (10 credits)

Level 4 unit standards

Install an ATM (Automated Teller Machine) (5 credits)

Demonstrate a fundamental understanding of history, geography, politics and economics as relevant to the South African intelligence context (4 credits)

Use knowledge of self to make a life decision in the creative world (5 credits)

Level 5 unit standards

Capture quality sound with a boom microphone (5 credits)

Prepare, cook and serve food in the restaurant (6 credits)

Establish order in the arts and culture learning environment (5 credits)

Level 6 unit standards

Explain and apply the principles of conceptual thinking (10 credits)

Arrange dance productions (15 credits)

Design a computer application for a single-user personal computer for programming with a 4GL (12 credits)

Level 7 unit standards

Analyse global economic structures (10 credits)

Draft amendments to banking legislation (37 credits)

Assess marketability of scripts (10 credits)

‘Designing down’ means that the content and methodology of an education programme can (and must) be derived from stipulated outcomes. ‘Content’, or a knowledge domain, or discipline, should not be the starting point for the design of a programme; instead, knowledge areas should be selected on the basis that they can lead to the competence in question or that they ‘underpin’ it (Allais, 2007).

The task of 'providers' is to find a way of ensuring that learners achieve the outcomes. Content and methodology should be selected according to what is required to achieve the outcome; and they have value insofar as they enable learners to achieve outcomes.

Any providers can offer education against the specified learning outcomes. As Ensor (2003, p. 331) explains: '[i]nstitutions such as universities and technikons line up with other potential providers (including employers) with no privileged claim to either set standards or develop curricula', or, as Muller (2000, p. 98) puts it, 'the specialized status of schools, colleges and universities . . . will be dissolved . . . Learning sites and settings are despecialized and decentralized, whereas standard setting, monitoring and accreditation are recentralized'.

It is also supposed to be possible for any given stipulated outcome to be obtained through formal, informal, or non-formal learning. If individuals meet the requirements, they can be said to have mastered the same competences. In this sense, outcomes-based qualification frameworks are really assessment frameworks, because the emphasis is on the statements against which learners can be assessed.

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

'Level descriptors' which describe each level of the qualifications framework were created to capture this cognitive functioning outside of specific knowledge area or practices. The idea was that, as long as any particular programme was 'designed down' from outcome statements and the outcome statements met the requirements of the level descriptors, the programme would in an important sense be at the same cognitive level as another programme 'designed down' in the same way. Both would be testing the same 'level' of 'competence' in different areas, and both would be testing the same 'generic competences', such as problem solving.

The driving idea behind the outcomes-led framework model is that, somehow, the *essence* of a learning programme can be mapped in a qualification consisting of a configuration of clear and transparent learning outcomes. It is assumed that level descriptors and outcome statements can disclose their meaning to anyone: as SAQA (2001b, p. 33) says: 'They [the level descriptors] must provide a *clear understanding* of the *meaning of learning attainment* corresponding to each level on the NQF' (the emphasis is mine). Learning outcomes are seen as *transparent* to everyone, regardless of their area of knowledge or training in the relevant area. The underlying assumption is that outcomes can disclose meaning to everyone regardless of their level of training in the relevant area, and thus enable the essence of a programme to be understood *similarly enough* by different stakeholders (Shalem, Allais & Steinberg, 2004).

The claims made in favour of this type of approach all rest on this idea of transparency. 'Standards' describing competences are supposed to enable learners to know what it is that they are trying to learn; to enable providers to know what it is that learners need to be able to do; to enable quality assurers to judge whether or not providers are succeeding; and to enable employers and society to know what the learners are learning (SAQA, 2000d). They are supposed to enable everyone

(whether they are a teacher, parent, learner, prospective employer, or admissions officer) to see or understand the specific competences required for successful performance; because they indicate the competences required in a practice, it is believed that they generate 'access' to the practice (Shalem & Slonimsky, 1999). This seems to make education and training more transparent and democratic by removing the privileged position of educational institutions as the creators and transmitters of knowledge and recognising that knowledge is transmitted in a variety of contexts. It appears to provide a basis for recognising learning that has happened outside formal institutions, as well as a basis for increasing access to education by recognising learners' competences, increasing the provision of education by enabling new providers to offer programmes against the learning outcomes, and to improve quality by making it clear what the desired standards are. Clearly, this seems desirable. The following section briefly explains why this model was particularly appealing to South African educationalists and reformers.

The Story of the South African NQF

A Nation in Search of a Miracle Policy Mechanism

The apartheid education system was characterised by extreme inequality, astonishing inefficiency, a lack of legitimacy in the eyes of both communities and industry, and highly authoritarian and ideologically loaded syllabuses (Allais, 2007). It was 'complex and collapsed', with 'high levels of adult and matriculation illiteracy, dysfunctional schools and universities, discredited curricula and illegitimate structures of governance' (Chisholm, 2003, p. 269). Education had been used to reinforce lack of democracy, both by denying access to it, by providing poor quality education to Black people, and by controlling the content of syllabuses to reflect the interests of the apartheid state. The ANC government also inherited an economy that was isolated, inefficient, and probably bankrupt, and a state apparatus that was widely seen as corrupt, authoritarian, and untransparent (Bond, 2000; Marais, 2001). The ANC-led liberation movement, as it started to prepare itself to become a government, needed a way of overhauling the fragmented and unequal apartheid education system and a way of ensuring that education played a role in overhauling the economy and reducing social inequalities, but was increasingly aware of a lack of state resources to implement such a project. In addition, South Africa achieved democracy and re-entered the global economy in a period of a strong neo-liberal consensus against the welfare state (Desaubin, 2002). What was needed was an education policy which could achieve the goals described above without increasing the size of the state, in a participatory and democratic manner, and without spending too much money: the miracle transition needed a miracle education policy. The NQF seemed to be that policy.

The idea of an NQF emerged in negotiations between trade unions and business about industrial training in the early 1990s, shortly prior to the transition to democracy. Its origins lie in the unions' concerns about the poor education provided to Black people, the difficulties faced by Black people in accessing education, the racist job reservation system which denied jobs to competent Black people, and concerns from both industry and the apartheid state about low levels of skills in the workforce and labour market (Cooper, 1998; Allais, 2003; Ensor, 2003; Badroodien & McGrath, 2005; Mukora, 2006). Representatives of labour

and business, negotiating in a structure called the National Training Board and borrowing ideas about competence-based education from Australia and about qualifications frameworks from New Zealand, reached the conclusion that a national framework of learning outcomes, compiled into qualifications and part qualifications, would address both sets of concerns (Spreen, 2001; Lugg, 2007).

From the sides of industry, labour, and the apartheid state, the proposals were rooted in ideas about post-Fordist industrial organisation, which all groups were exploring as a solution to South Africa's economic problems (Kraak, 1994; Desaubin, 2002; Lugg, 2007). Of course, post-Fordism is a highly complex and contested set of ideas, but some of the ideas associated with it seemed to offer alternatives both to command economies and neo-liberalism. All groups agreed that the low levels of education and skills of the workforce in South Africa were hampering the development of the economy and preventing individuals from rising to higher levels in the workforce. Post-Fordist ideas seemed to provide an alternative because it seemed that they would 'bring the benefits of more jobs and a greater spread of wealth, increased worker power, and higher wages and increased skills' (Von Holdt, 1991, p. 24). This broad policy orientation emphasised the role of education in the economy, but with an emphasis on a particular type of education — education *relevant* to the needs of the economy. Ideas about competence-based and outcomes-based education entered South Africa in this context, and seemed to be a route to ensuring relevance and promoting flexible specialisation, which was seen as the route to a highly skilled, mobile workforce, and therefore international competitiveness (Allais, 2007).

Outcomes to the Rescue

While a broad consensus in favour of a national qualifications framework was emerging, a small group of individuals, including the representatives of labour and business who had initiated the idea of the NQF, developed detailed proposals of what it would look like (Badroodien & McGrath, 2005; Lugg, 2007). The model that they developed became the blueprint for the NQF that was to be created. Its key feature was the role of learning outcomes in qualifications — learning outcomes were posited as the central mechanism, which, it was claimed, would enable the realisation of the generally desired policy goals.

The idea of using learning outcomes to drive curriculum reform seemed useful in terms of reforming the authoritarian apartheid curriculum. The question of what to teach — what the curriculum should look like — was particularly problematic in South Africa, where education during apartheid had been so clearly used as part of a brutal social engineering project. Because apartheid education was firmly located in a strongly authoritarian tradition, the curriculum was designed to instill a sense of final authority, and downplayed the importance of interpretation and debate. Educational institutions were seen as undemocratic and implicated in apartheid. Ideas stemming from a social constructionist tradition, which emphasised the relativity of knowledge, and questioned the authoritative position of educational institutions in defining and transmitting knowledge, became popular in this context. Outcomes *seemed* to be a mechanism for a curriculum which ensured that the knowledge of elite groups in educational institutions would not be able to take precedence over the knowledge of the socially disadvantaged. Instead of educational institutions choosing disciplines to be studied, it was thought that important socially

agreed 'outcomes' could be prescribed. The prescription of outcomes was thought not to replicate power structures, but in fact to contest them, because the outcomes would be prescribed by stakeholder groupings. In other words, everyone would have a say in the outcomes of educational process, instead of only the experts in a particular field. Different educational institutions could choose their own 'content' or 'knowledge', as long as it enabled learners to 'acquire' the outcomes specified. This seemed like an alternative to the highly authoritarian and prescriptive curriculum approach of the apartheid government.

Outcomes also seemed to enable 'integration' — an idea which had a powerful appeal in the context of apartheid divisions, although it was used in very different ways in different contexts (Motala, 2001). For example, the fragmentation of the education and training system along racial and ethnic lines needed to be overcome to ensure social integration. Divisions between the natural and social sciences in the curriculum were also challenged, as was the way in which pure and applied research were separated in research institutions, the dichotomy between academic and everyday knowledge, the divide between general academic and vocational education, and the distinctions between mental and manual training and between theory and practice (Motala, 2001). Outcomes were seen as a mechanism for these different types of integration.

Outcomes developed separately from educational institutions appeared to enable the democratisation of education, because different stakeholders would all input into the creation of the outcome statements that qualifications were composed of. Knowledge could therefore be democratised and made transparent and would no longer be the preserve of experts, maintaining control over what is worth knowing and who knows it adequately (SAQA, 2000c). Outcomes were also argued to be a mechanism which would enable academic freedom because they would allow academics and teachers to 'interpret the meaning of specified learning outcomes in their classrooms in contextually sensitive ways' (Higher Education Quality Council 2003, p. 18). The idea of wresting the power of defining knowledge and skills away from formal institutions seemed to provide a way for industry to play a much larger role in defining 'standards' for vocational courses, therefore, according to advocates, ensuring that education was more 'relevant'. Thus, it was thought that the relevance of education to individuals' lives as well as to the needs of society and the economy would be ensured by involving all stakeholders in the design of the outcomes-based qualifications.

Outcomes were also seen as a way of equating learning through formal and non-formal education. Because they would be developed separately from specific institutions or specific learning programmes, it was thought that they could be the benchmarks against which all learning was measured. Outcomes seemed to provide a way of validating the knowledge acquired by people who had been deprived of formal education but had gained important skills and knowledge in the course of life, work, and the struggle against apartheid. This was of particular concern to trade unions, who were concerned that Black workers' lack of formal qualifications was used to justify the lower pay that they were given in many workplaces, even when they had the equivalent skills (Bird, 1992).

Because any 'provider' would be able to offer learning programmes against the outcome statements, provision of education would be increased (SAQA, 2000a). Outcomes also seemed to be a mechanism for improving quality — because they would specify standards for all educational provision, and all edu-

cational institutions would have to meet the standards, thus ensuring that all learners were given education of an equal quality. The outcomes-based qualifications would improve the quality of education as they would indicate to institutions the standard expected of them, and regulatory bodies would be able to check up on what institutions were offering against the prescribed outcomes (SAQA, 2000b). Increased supply of education would lead to competition, also improving quality.

And because all providers would be offering programmes leading to the same outcomes, the NQF would 'remove the obsession with institutional learning as the measure of a person's worth, because national qualifications will be blind as to where the learning takes place' (HSRC, 1995, p. 15). Because the competences that someone had achieved would be transparently specified and available for general scrutiny, it would be straightforward to decide which competences were applicable in other courses or programmes that a learner wanted to undertake, and there would be minimal duplication, and maximum economic efficiency within the education system (SAQA, 2000d). Access to education would be improved because provision would increase: new 'providers' of education would be able to emerge, designing programmes against the specified outcomes.

Breaking up qualifications into smaller parts (unit standards) appeared to be a way of ensuring that individuals would not have to waste their time learning irrelevant things — they could acquire the knowledge or the skill that they needed in the short term and gradually obtain others if so desired. Conversely, industry would be able to ensure that workers would attain just the specified competences.

Outcomes-based qualifications were seen as a solution to the educational and economic problems of apartheid. A national qualifications framework that over-arched all education and training seemed to be a mechanism that would ensure that learning was 'relevant' and of high quality, produce learners who were competent in the workplace and provide access to those previously excluded, recognise the learning that they had achieved informally, ensure that all qualifications were of equal status and that assessment was transparent and fair (Allais, 2006). Organising all qualifications and parts of qualifications on a hierarchy of levels would force society to value types of learning programmes which had historically been of low status, which would increase efficiency and encourage learners to acquire 'useful' skills. Society would change its views about vocational qualifications that had low status because they would be placed on the same levels of the NQF as academic qualifications (Allais, 2007).

Thus, while across groupings and sectors of the divided country a broad consensus emerged around the idea of a national qualifications framework, the idea of outcomes-based qualifications started to become central to the policy mechanisms which were being developed. Outcomes *seemed* to be a mechanism to achieve policy goals that appealed to people from a range of different sectors. When the South African Qualifications Authority Act (Republic of South Africa Act No. 58 of 1995) was introduced in 1995 it had the backing of all major groupings in South Africa.

Problems Become Evident Very Quickly

Despite this broad consensus, and the noble aims associated with the NQF in South Africa, the policy has been a manifest failure. The NQF was brought

legally into existence in 1995 (Republic of South Africa Act No. 58 of 1995). Implementation got going in late 1997 after senior staff appointments had been made (SAQA, 1997, 1998). A review was tabled by government in 2001 after a very short time period indeed, signaling government awareness that the approach seemed not to be working (Republic of South Africa 2001). In 2002 and 2003, two different government teams tabled proposals to make substantial changes to the national qualifications framework (Departments of Education and Labour, 2002, 2003). Neither set of proposals had been accepted as policy at the time of writing in early 2007, causing a hiatus in the whole system of the qualifications framework.

Twelve years after its introduction, the framework is deadlocked in unresolved policy reviews, and educational inequalities in South Africa remain stark (Chisholm, 2004). The amount of educational provision that has been delivered against the new outcomes-based qualifications and unit standards is very low. In 2007, 12 years after legislation brought the NQF into existence, the vast majority of education and training in South Africa, formal and non-formal, does not happen against the *new* qualifications and unit standards that have been developed through SAQA and registered on the NQF. At the same time, most of the new outcomes-based qualifications and unit standards that were developed and registered by SAQA have never been offered by any educational institution or obtained by any learner. By 2006, only 81 of the 818 new qualifications had been awarded to a total of 18, 786 learners (information from Yvonne Shapiro, personal communication, 6th November 2006). These numbers are very low compared to the well over half a million qualifications issued *every year* to learners in existing secondary schools and colleges (Umalusi, 2006), as well as around 50,000 qualifications issued annually by higher education institutions (SAQA, 2001c). In other words, the qualifications framework is a castle in cyberspace — a list of qualifications and unit standards with very little relationship with the real world of educational provision.

In addition, the quality assurance of this provision which state agencies are supposed to be able to conduct has not been viable (Allais *et al.*, 2007). The NQF has not delivered on other claims made about it, such as improving access, provision, or learner mobility (Allais, 2007).

The following section explains why the design of the NQF led inevitably to the problems which have been experienced and what happens in practice when a framework driven by learning outcomes is created.

Spirals of Specification

Down the Rabbit Hole

All the ideas described above about the roles of outcomes in overhauling and reforming education and training rested on the idea that outcomes should be specified outside educational institutions and that they would be sufficiently *transparent*; that they would be interpreted in the *same* way by *different* people and hence hold the 'standard'. Outcomes need to be transparent and unambiguous, so that assessors will assess in the same way, and state regulators will evaluate in the same way, against the same specified outcomes. Those who do not have the relevant expertise (learners, parents, and others outside of institutions and professions) must be able to understand the point of a learning programme (what the compe-

tence is that will be acquired) as well as how competently assessment has been conducted against it. But learning outcomes are never sufficiently transparent that they can represent a clear competence that will mean the same thing to different people. They always require additional specifications, but these specifications themselves are also not clear, and, in turn, require additional specifications. As Wolf explains:

The more serious and rigorous the attempts to specify the domain being assessed, the narrower and narrower the domain itself becomes, without, in fact, becoming fully transparent. The attempt to map out free-standing content and standards leads, again and again, to a never-ending spiral of specification.

(Wolf, 1995, p. 55)

Hall and Woodhouse (1999, p. 208) make a similar point, arguing that:

[t]he effort and cost needed in making clear an educational standard in writing quickly reaches a point where the law of diminishing returns takes over — additional effort is not matched by educational benefits.

This spiral of specification makes the unit standards longer and therefore less usable and, ironically, less transparent, because they are so cumbersome. Consider some of the features of unit standards on the South African NQF.³

Firstly, unit standards have a *title*, which is supposed to be ‘a coherent and meaningful outcome (milestone/end point) of learning or training that is formally recognized’ (SAQA, 2001a, p. 22). The title represents the outcome or learning achievement that is registered on the NQF and against which learners obtain credit; the title *is* the learning outcome. Box 2 above contained examples of unit standard titles, and a cursory consideration of these shows that on their own they do not contain a clear and transparent learning outcome that anyone would understand. It is by no means clear what outcomes such as the two listed below actually mean:

Describe ideologies in community contexts

Respond to hazardous conditions or emergencies

Even more concrete outcomes such as ‘Sweep floors’ or ‘Pack customer purchases at point of sales’ could be interpreted very differently by different people and in different contexts.

Thus, a *purpose statement* is introduced to provide further clarity. It ‘succinctly captures what the learner will *know* and *be able to do* on the achievement of the unit standard’ (SAQA, 2000e, p. 8, emphasis as in original). Consider, for example, for the unit standard:

Pack customer purchases at point of sales.

A purpose statement further clarifies that:

Persons credited with this unit standard will be able to pack customer purchases so that damage is minimised and the customer's image of the organisation is enhanced.

Consider the following unit standards which represent a broader and more complex learning outcome:

Demonstrate an understanding of agriculture as a challenging and applied system.

The unit standard has the following purpose statement:

A learner credited with this competence will be capable of: discovering the nature of agriculture; differentiating between the various agricultural disciplines; and observing and analysing the geographical distribution and economic impact of agriculture.

But what is the 'nature' of agriculture, and how does one discover it? How many different types of agriculture must be observed and analysed, and over what geographical area should the geographic distribution be? How detailed should it be? What does it mean that damage is minimised? How will we know that the customer's image of the organisation has been enhanced by the manner of grocery packing? The purpose statement does not enable transparency.

Thus, another layer of specification is added: specific outcomes and assessment criteria are added, which 'together reflect and capture the purpose of the unit standard in ways that are *measurable* and *verifiable*' (SAQA, 2000e, p. 9, my emphasis). Specific outcomes are 'smaller, more manageable outcomes' (SAQA, 2001a, p. 22). The specific outcomes, though, must represent the essence of the title outcome: '[t]he specific outcomes of each unit logically make up the title without going beyond the title or falling short of the title'.

Consider the unit standard:

Demonstrate an understanding of sociological issues (level 5, 12 credits)

The four specific outcomes which elaborate on this competence are provided in Box 3 below.

Box 3: Specific outcomes for unit standard "Demonstrate an understanding of sociological issues"

Identify and interpret key sociological features in area of operation
 Describe the impact of the sociological features on the environment
 Describe the impact of the environment on social features of the community within area of operation
 Demonstrate understanding of integrated sociological principles within area of operation

But it is still not clear from these specific outcomes what ‘key sociological features’ are, to say nothing of what their impact might be. It may be admirable that conservation programmes contain some focus on social factors associated with environmental degradation, and it is possible for educators designing such a programme, perhaps incorporating experts from a range of different disciplines, to specify what should be learnt, how it could be applied, etc. But outside such a context, the specified outcomes above do not mean much.

Assessment criteria are the next layer of specification introduced. SAQA argues that ‘if different standards are applied across the system, the credibility and integrity of the whole system is placed in jeopardy’, and that assessment criteria are the mechanism to ensure that this does not happen (SAQA, 2001a, p. 21). Thus, for each specific outcome, there are assessment criteria, which are statements that ‘describe the standard to which learners must perform the actions, roles, knowledge, understanding, skills, values and attitudes stated in the outcomes. They are a *clear and transparent* expression of requirements against which successful (or unsuccessful) performance is assessed’ (SAQA, 2001a, p. 21, emphasis is mine). Assessment criteria, SAQA (2000e, p. 10) further explains, ‘must be *sufficiently transparent* to ensure ease of understanding across a range of learning providers, learning services [sic] and learners’ (emphasis is mine). Box 4 below shows assessment criteria for one of the specific outcomes of the unit standard ‘Facilitate the optimal functioning of the client with a psychiatric disorder’.

Box 4: Assessment criteria for specific outcome “Describe the meaning, possible causes and effects of psychiatric disorders”

Psychiatric disorders are described in terms of the effect on normal functioning.
 The psychiatric disorders are explained in terms of signs and symptoms.
 The probable causes of are explained in terms of the precipitating factors [sic].
 The effects of psychiatric disorders on the client, family and the community are explained in terms of personal and financial factors.
 The effect of cultural factors is explained in terms of diagnosis, treatment and prognosis.

From the assessment criteria in Box 4, we still do not know which psychiatric disorders are involved and what needs to be explained about their signs and symptoms. Explaining their effects on the client, family, and community is also wide open to different interpretations. Similarly, it is improbable that different assessors, in totally different contexts, will make the same judgements about what is an appropriate explanation of the effect of cultural factors on the diagnosis, treatment and prognosis of psychiatric disorders.

Assessment criteria *cannot* fulfil their necessary role of making the specified competences in the specific outcomes clear. An additional layer of specification, *range statements*, are introduced to define the ‘contexts in which the individual is expected to perform’ (SAQA, 2001a, p. 22). For example, the unit standard ‘Apply

knowledge of self and own situation to manage risks resulting from change in the workplace, level 3, 3 credits'⁴ has the following assessment criterion for one of its specific outcomes:

Personal issues arising from retrenchment, redeployment, retirement and accepting a voluntary package are discussed from the point of view of employees who leave and those who remain behind.

A range statement for this assessment criterion clarifies that 'issues' includes emotional, financial and behavioural issues.

Range statements are supposed to 'define the limits, parameters and areas for inclusion and areas for exclusion of the Unit Standard' (SAQA, 2005a, p. 17). SAQA goes on to explain that they should describe the 'situations and circumstances in which competence must be demonstrated'. In other words, they are supposed to increase the transparency of the standard by making clear the context in which the 'competence' exists. Range statements can be added to unit standard titles, specific outcomes, and assessment criteria.

This apparent madness of specification is not the result of bureaucratic incompetence or of peculiar individuals. It is the logical outcome of a system in which learning outcomes are disembedded from the context of a discipline, a knowledge area, a practice, or a learning programme, but at the same time learning outcomes are required to transparently state to all role players and stakeholders what the required competences and standards are. One of the particular ironies of this situation is that the specifications make the documents longer and longer, thus making them more and more opaque in the quest for greater transparency. It is particularly implausible to imagine that learners reading these long lists of specifications will understand what it is that they will be learning, that parents will find out what it is that their children have learnt, or employers will find out what job applicants are competent to do.

And the list of layers of specifications is not yet complete. Unit standards must also contain specifications of learning assumed to be in place, assessment and moderation options, critical cross-field outcomes, and notes. These are added because, despite all the layers of specification already described, it is clear that people can still interpret unit standards differently. The process of specification also tends to lead to outcomes becoming narrower and narrower, as developers try to achieve transparency and specificity. This results in long documentation with various kinds of specification for very narrow and low level tasks, such as packing groceries or washing hands. As Wolf argued in relation to the National Vocational Qualifications in the UK (Wolf, 1995), the domain of standards becomes narrower and narrower, without becoming fully transparent — a never ending spiral of specification. And despite these lengthy specifications and narrowly specified outcomes, recent empirical research which I conducted at Umalusi suggests that educational providers still interpret the unit standards very differently from each other (Allais *et al.*, 2007).

In addition, it is significant that the *notes* category, a non-compulsory section of unit standards, very low down on the list of design features, is the only place in a unit standard where knowledge can be specified. Unit standards, SAQA insists, are not about knowledge:

If the identified knowledge is that which we need to develop in order to *achieve* identified results or outcomes . . . then it *belongs in learning programs*, which are about inputs. We should not say anything about this in unit standards, which are about outcomes. Let us trust teachers, trainers and instructional designers to *do their job*, and identify what must be learnt in order for people to be able to achieve the outcomes!

(SAQA, 2000e, p. 27, emphasis in original)

Wolf (1995, p. 26) explains that 'A common concern of all competence-based reforms is to counteract what is seen as a 'knowledge bias' within testing procedures'. It has also been assumed, she goes on to explain, that 'knowledge requirements are legitimate only when clearly required in, and for, performance'. SAQA elaborates on this, explaining:

[w]here there is an *embedded knowledge* section it comprises a statement of the knowledge base required for competent performance and achievement of the unit standard, representing what the learner has to understand and be able to explain in the area (sub-field) at the particular level.

(SAQA, 2000e, p. 10, emphasis in original)

Knowledge in this context seems to mean little bits of information. In other words, the complex spiral of specification does not relate to knowledge areas. Forcing knowledge to be 'designed down' from outcome statements, or to be accountable to outcome statements, trivialises it and reduces it to pieces of unrelated information.

In addition to the downward layers of specifications, layers of regulations are added above the unit standards, to govern who can make judgements against them and who can judge whether judgements were made correctly against them. Assessors are checked up on by moderators, who are checked up on by verifiers. But in order to be an assessor or a moderator or a verifier, an individual must be found competent against an assessment unit standard, moderated by a moderator who has been found competent against an assessment and a moderation unit standard, and verified by an individual who has been found competent against assessment, moderation, and verification unit standards. Thus, the system is not only incredibly cumbersome and complicated, but it is ultimately circular. There is a spiral of specification and regulation both upward and downward, creating a potentially indefinite and definitely unwieldy system of specification.

The complicated structures and processes established under the NQF as well as the layers of specifications and regulations about the outcomes-based qualifications and unit standards are a *direct consequence* both of the lack of transparency of outcome statements and the assumption that they are transparent and can be understood outside of educational or professional contexts.

It is also important to note that, ultimately, the unit standards still require judgement by a relevantly skilled person. SAQA does not argue that people who have no experience at all in an area should be involved in standards setting or assessment. There are criteria for creating the bodies which generate standards, and requirements for the registration of assessors, both of which require some kind of expertise in the area in question. However, there is no obvious way, within SAQA's systems, of deciding who is a sufficiently skilled person in an area,

outside of educational institutions and professional bodies or guilds. Thus, the elaborate system — unworkable because of the lengthy documentation generated by the layers of specification, which undermine the possibility of the transmission of meaningful and necessary knowledge areas — ends up in the place it was trying to get away from: reliance on the judgement of specialists. Measuring performance in a particular area still comes down to specialists in that area making the judgement. Outcomes are an unnecessary addition to the judgement of the specialists: in fact, specialists are unable to use outcomes, firstly because they are so long and cumbersome, and secondly because they are not located within the specialist's area of expertise.

But outcomes are worse than just an unnecessary addition. Specifying outcomes outside of a knowledge context undermines and marginalises educational knowledge. Even if those who are creating the unit standards are specialists, the unit standards are doomed to this spiral of specification because they are disembedded from knowledge areas or practices. In other words, carpentry experts may be called in to design the carpentry unit standards, but this will not avoid the spiral of specification, because the task that they are called to do — specify learning outcomes outside of a knowledge area or educational context — is impossible. Outcome statements are therefore a dangerous mechanism because they force specialists out of their role as specialists and into the role of bureaucrats, where they find themselves setting outcome statements and judging courses on the basis of requirements which are in no way internal to the tradition of their discipline, knowledge area, or practice.

None of the claims made in support of outcomes-based qualifications can be sustained, given the demonstration that outcomes are not transparent. Learning outcomes as 'standards' cannot express the consensus which is implied in the notion of 'standard'. The 'over specification' which follows is counterproductive and still cannot create consensus. Consequently, all the claims made about this approach collapse. If the outcome statements, specific outcomes, and assessment criteria are not transparent, and if curricula cannot be designed from them, then the claim that outcome statements provide the basis for fair and transparent assessment collapses. The idea that educational quality can be judged against an outcome statement developed out of the context of educational programmes or institutions similarly does not work.

Understanding the Collapse

Bird and Gamble (1996) argue that:

individuals, organisations and governments cannot function without the *idea or concept* of 'standard' at a general level, but they can and do function without a clear and precise expression of the standard in words and figures.

(Bird & Gamble, 1996, p. 101, emphasis in original)

This non-specificity, they argue, derives from the fact that standard setting is the work of society and specialist groups; it does not occur at specific times or places, but rather happens 'over time and across different places, between and within different cultural groups of people and for different purposes' (p. 101). Individuals are apprenticed into understanding commonly held notions of

standards through rewarding and sanctioning particular practices. Because standards are thus embedded, they argue, we often have a *sense* of standards without being able to articulate them clearly. Conversely, articulating standards does not make them clear to people who are not already part of a knowledge area or practice.

Shalem and Slonimsky (1999) explain that the specification of a criterion — such as, that a good teacher can ‘use the language of instruction appropriately to explain, describe and discuss key concepts in the particular learning area — does not *disclose* what good practice is; teachers who do not know what the key concepts are will not know whether or not they are explaining them appropriately. Criteria rely on prior understandings of practices, which ‘providing’ or ‘telling’ the criteria of the practice do not disclose and cannot create. Criteria cannot be ‘provided’ or ‘legislated’. As Morrow (2001, p. 91) explains:

I cannot in non-aesthetic language describe what it is I am trying to achieve in teaching someone how to read literature or appreciate music, and nor can I in non-mathematical language describe what I am trying to teach in teaching someone mathematics. From outside these practices it is not possible to understand what these practices are, or even what their value might be. By definition the learner is outside of the practice, or at best is a novice in respect to the practice, thus, it is not possible for the learner to understand in advance what it is she will learn when she learns to become a participant in the practice.

Despite the severity of the problem of over-specification, it is not necessarily specific to education. The attempt to capture any kinds of performances might lead to similar spirals of specification. What makes it particularly problematic in education is that education is about the acquisition of knowledge, and it is in relation to the specification of knowledge that the system really breaks down. Various analysts have described what happens when governments attempt to set educational standards through learning outcomes. Knight (2001, p. 373) argues that learning goals are not easily definable and unproblematic, and learning is not reducible to precise statements: ‘Clarification leads to complication which is why lists of outcomes grow like mould and become unwieldy’. Young (1996, p. 28) argues that ‘[a]ll the experience of NVQs [national vocational qualifications] in England and other outcomes-based systems indicates that attempts to increase the precision of outcomes can only lead to them becoming trivialized’.

Educational standards need to be embedded within knowledge areas. But knowledge areas or disciplines are structured (Bernstein, 2000). They can be hierarchically organised as in the sciences, or organised as a series of specialised languages with ‘specialized modes of interrogation and specialized criteria for the production and circulation of texts as in the social sciences’ (Moore, 2004, p.144). They can also be tacit but systematised practices and skills. There is a significant difference between knowledge that is organised into disciplines and knowledge available to people through everyday life experiences. The former has greater power of explanation and prediction through its ability to abstract from everyday situations.

Because of how knowledge areas, such as disciplines develop (socially, over long periods of time) this type of knowledge is different to everyday knowledge, and the

conditions for its acquisition are different. Necessarily, disciplinary knowledge is often not directly practically useful, or easy to learn (Young, 2003a). The purpose of education programmes is to provide learners with access to these kinds of knowledge, precisely because they do not acquire them in their everyday life. While it is theoretically possible for someone to assimilate disciplinary knowledge (or, to use Bernstein's terminology, 'vertical discourses') through informal processes, it is extremely unlikely that this will happen in the course of everyday life; the nature of disciplinary knowledge is such that learners need to be introduced to it in a sustained way, gradually acquiring greater levels of conceptual depth and breadth. Mastery of extensive specifically chosen facts, concepts and principles is needed before progress can be made. Uninterrupted, extended, well-planned and structured education programmes need to be in place in order to enable such learning. Disciplinary knowledge cannot be disaggregated easily, as learning needs to be sustained, sequenced, and systematic.⁵

Although craft knowledge is different from disciplinary knowledge and is mainly tacit, in the sense that it is not written or spoken, it similarly requires sustained and systematic study, and is also not easily disaggregated (Gamble, 2004a, 2004b). Such knowledge can be seen as *less* suited to outcome statements than disciplinary knowledge, because it is tacit, and outcome statements of necessity attempt to verbalise what is entailed in any particular area of competence. Even practical knowledge or workplace knowledge which is not a traditional craft *per se* (such as knowledge of managing a restaurant) cannot be reduced to transparent task specifications. Making judgements against performance statements is notoriously tricky in workplaces, even for manufactured products. The higher the level of professional competence of the workplace, the more difficult it is for someone outside the particular area to be able to make a judgement. As Morrow (2001, p. 105) explains:

Practices are sustained or corrupted to a considerable degree by the ways in which participants and significant others interpret, think about, and discuss, them. But those interpretations, thoughts and discussions do not float freely above the 'reality' of the practice, they are part of that reality.

This is important because qualifications frameworks are often associated with vocational education, where it is claimed that outcome statements are a basis for ensuring that vocational programmes are relevant and prepare competent learners for the workplace — because the outcomes specify exactly the outcomes required (Young, 1996). In fact, the tight specification of narrow tasks discussed above is likely to contribute to trapping learners in low-end jobs. Because knowledge becomes lists of information or task specifications, learners are unlikely to be able to master enough knowledge to progress to higher levels of learning. As Beck and Young argue (2005, p. 189), relying on 'task specifications' and 'standards of performance' smacks of knowledge authoritarianism, as denying trainees 'access to the forms of knowledge which permit alternative possibilities to be thought' and thus will inevitably 'negate the possibilities of understanding and criticism'.

Because educational knowledge requires sustained, carefully sequenced study, educational institutions are necessary. Learners are socialised into a discipline, a field, a content area, or a way of operating. This process cannot be easily assessed, and is sometimes not formally assessed. Often, the criteria for assessment cannot

easily be articulated, except trivially. In Gamble's (2002, p. 79) words, 'evaluative criteria reside not only with the master, they reside *in* the master as the carrier of a collective knowledge tradition'; they cannot simply be written up into a standard or qualification. Transmission and development of knowledge cannot be easily disaggregated, as learning needs to be sustained and systematic. It is a highly specialist job, and good institutions take time and resources to build up. Education happens in institutions dedicated to this purpose, and cannot be disaggregated and purchased or provided simply on the basis of lists of performance statements.

Curriculum design is a complex matter, and it is even more complex in vocational or professional qualifications which do not only teach pure disciplines. There is no space here to explore these complexities. The point here is that knowledge organised in a curriculum cannot be derived from outcome statements, but has to be sourced and organised according to other principles, which are only available to experts within the knowledge domains.

When the two problems are taken together — the narrow, over-specified, cumbersome learning outcomes and the fact that educational knowledge has its own structure and value — it is clear that the outcomes-based qualification model cannot work. It results in a policy that has very little to do with education at all, and in fact undermines the work of educational institutions. Outcome-based qualifications and qualifications frameworks *seem* to emphasise 'delivery', but in the act of reducing knowledge and skills to things that can be delivered against performance statements, they undermine the possibility of education being 'delivered'.

Other Ways of Thinking about Qualifications Frameworks

The failures of the outcomes-led qualifications model do not mean that there is no role of qualifications frameworks within educational reform. Frameworks differ significantly in purpose, design, approach to implementation, scope, and in how rigidly their prescriptions about qualifications are applied (Raffe, 2003; Tuck, Hart, & Keevy, 2004; Raffe, 2005; Young, 2005; Allais, 2007).

My research (Allais, 2007) suggests two main ideal types of qualifications frameworks, which I have named *frameworks of communication* and *outcomes-led frameworks*. The latter type, of which the South African NQF is an example, is generally introduced to transform or entirely overhaul an education system and is introduced from the top down, often with the intention of creating a 'break with the past'. It is based on an implicit assumption that knowledge is undifferentiated and does not have inherent value — outcomes are seen to be able to drive education, because educational knowledge does not need to be the starting point. A different way of conceiving a qualifications framework can be seen in what I call a framework of communications. This type of approach, which is far less ambitious, starts with educational institutions and relies on them leading the way in finding relationships amongst different qualifications. The Scottish qualifications framework, for example, can be understood in relation to this type of model (Raffe, 2003). While institutions could use the language of learning outcomes in this process, learning outcomes are not seen as elements that can be prescribed externally to education institutions. Qualifications frameworks thought about in this way must inevitably be built and developed incrementally, and are likely to be

less prescriptive. Figure 1 below shows two possible ideal types of qualifications frameworks, with different clusters of characteristics.

Of course, reality does not correspond neatly to the ideal types shown in Figure 1, and even the South African NQF differs from the outcomes-led framework model in some important respects (Allais, 2007). What this typology suggests, however, is that countries wishing to introduce qualifications frameworks must think carefully through what the track record is for this type of policy, the inherent limitations in terms of what frameworks can achieve, and the different ways of designing and implementing them.

My research suggests that introducing an outcomes-led framework as the driver of educational reform can in fact make an education system worse, particularly in the context of developing countries with a weak or uneven system to start with. In weak states that do not have a strong base of educational provision, education

Characteristics	Framework of communication	Outcomes-led framework
Purpose	Rationalization of qualifications	Reform, transformation or overhaul of the education system
Assumptions about knowledge	Knowledge as 'given'. (Some attempt to create transparency)	Implicit social constructionist; outcomes are primary
Role of institutions	Institutions lead the process of comparing qualifications, making judgements about programmes, and so on.	Outcomes are defined separately from institutions, which then design learning programmes against the outcomes.
Speed of development and approach of implementation	Incremental, bottom-up	Break with the past — fast, top-down
Definition of levels	Qualification defined	Level descriptors
Prescriptiveness	Loose	Tight

(adapted from (Allais, 2007, p. 151)

FIGURE 1. Ideal types of qualifications frameworks

could be damaged by this model, as it leads to a de-emphasis on the role of the state in building educational institutions, and implicitly relies on a market of provision arising against specified learning outcomes (Allais, 2007). In richer countries, education systems are more likely to be robust, and are likely to be able to survive in spite of such reforms. It is interesting and alarming to note that it is mainly poor countries that are adopting qualifications frameworks (Keevy, 2006).

While the NQF looks as if it will drive an increase in educational delivery, it cannot actually do so, because it does not provide a basis for the building and strengthening of educational institutions, and provision does not emerge against the prescribed learning outcomes. This is demonstrated by the total lack of 'provision' of programmes against the over 11,000 unit standards that have been developed on the South African qualifications framework, and is a tragic waste of scarce resources in a country in which the provision of education urgently needs to be improved. Countries wishing to develop qualifications frameworks should consider the South African experience and attempt to avoid falling into the same traps.

NOTES

1. Information about unit standards was obtained from the SAQA website www.saq.org.za. This is the total number of unit standards that have been designed; by 25 August 2007, 2301 had already expired. Information about qualifications cannot be obtained in the same way from the website, and my information used here is slightly older than that in relation to unit standards and was obtained from Yvonne Shapiro, a SAQA official, in a personal communication, 6th November 2006. A few more qualifications could have been added by the time of writing this article.
2. The source for all qualifications and unit standards listed below is www.saq.org.za.
3. The examples discussed are drawn from research (Allais, 2007) which examines a large number and a wide range of unit standards, including ten standards supplied by SAQA as particularly good examples (personal communication with SAQA official Eddie Brown, 7th November 2006). My argument is not based on a collection of poor examples of unit standards.
4. This is one of the unit standards recommended to me by SAQA as a good example of a unit standard.
5. Given the emphasis on redress in the rhetoric surrounding the NQF, it is important to note that offering education in little bits is likely to be least viable for disadvantaged learners.

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