

Occupational Qualifications Framework

**Proposals for a revised approach to the
development and management of
occupational qualifications on the NQF**

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Abstract

The Department of Labour in South Africa is proposing an occupational qualifications framework (OQF) as an integral component of the national framework. The purpose of this OQF is to provide recognition for the achievement of occupational competence and meaningful skills sets.

This paper positions the OQF within an occupational learning system, and describes its systemic links to the labour market, the National Qualifications Framework, curricula, learning interventions and assessments.

The paper also details a revised model for the design for occupational qualifications. The revised model is intended to facilitate and promote fit-for-purpose learning which results in occupational competence, simplifying implementation while at the same time providing greater clarity to providers and learners on the actual learning requirements required.

The new model is based on the acquisition of three clearly identified learning components which make up occupational competence. These learning components necessitate a revised approach to the development and selection of unit standards, learning programme design and assessment.

The paper also discusses how this model can be used to ensure that the numbers of occupational qualifications are controlled and rationalised.

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1. Introduction

The South African Department of Labour is proposing the establishment of an Occupational Qualifications Framework (OQF) within the National Qualifications Framework (NQF). The OQF proposal is the result of a revised implementation of the South African NQF and changes in the institutional landscape, as announced in the Joint Policy Statement by the Ministers of Education and Labour (Department of Labour, 2007).

This paper describes the key features of the proposed OQF and its relationship to various other aspects of the National Qualifications Framework and related systems.

It must be emphasised at this point that these are just proposals at this stage and, when they do become policy, the Department of Labour is proposing to implement the OQF and associated processes in a gradual fashion. It must also be emphasised that these proposals may change and shift in terms of fine detail before any formal consultation process begins. This paper is presented in order to share information and the QCTO task team's current thinking.

The Department of Labour also intends to build on and integrate current initiatives to resolve problems and enhance the skills development system. Much effort and expenditure has gone into the development of current qualifications and associated learning materials. If current qualifications are meeting their design needs then they will continue until a revision is required. Current pilot projects are also testing proposals for developing curricula from the implied curriculum in the existing unit standards-based qualifications

However, where there are blockages in the current system, where there are scarce skills and where there is a lack of uptake, the Department of Labour is proposing to pilot processes in conjunction with SAQA and other role players to implement the new system.

2. Outline of the proposals

This section provides a brief summary of the proposals and each proposal will be discussed in greater detail later in the paper.

The Department of Labour is proposing an Occupational Qualifications Framework, which will be based on two basic types of occupational qualification:

- an occupational award, which certifies the achievement of an occupational title
- a skills certificate, which certifies a distinct but occupationally relevant skill set.

For such qualifications to be registered, they will have to reflect three modes or forms of learning:

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- the acquisition of knowledge and theory
- the acquisition of practical skills
- the scope, nature and duration of work experience.

It is important to note that the order of listing does not necessarily reflect the order of learning.

The acquisition of the qualification will be based on a final integrated summative assessment.

These qualifications can be registered at all levels of the proposed 10 level NQF (Department of Labour, 2007). In many cases these occupational qualifications will link to other qualifications and learning units (courses, modules, and learning programmes) within the further and higher education qualification frameworks. Unit standards will be revised to reflect the three learning components (knowledge, practical skills and work experience) and allow the accumulation and transfer of credits.

In addition to the three modes or forms of learning listed above, the proposed occupational qualifications will reflect revised rules of combination. Knowledge, skills and work experience will be defined as common/ core and specialised. The common/ core learning will in most cases be similar for a group of occupations, while the specialised learning will relate to the occupation itself or to a specialisation related to that occupation, as illustrated in the figure below:




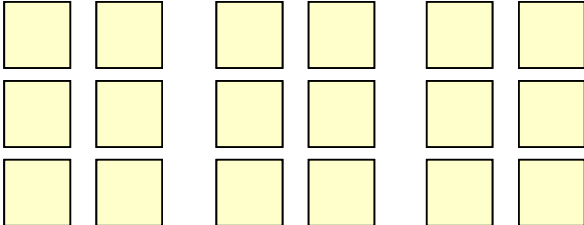
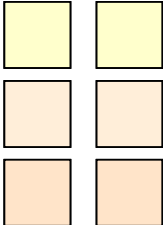
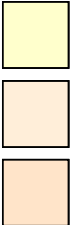
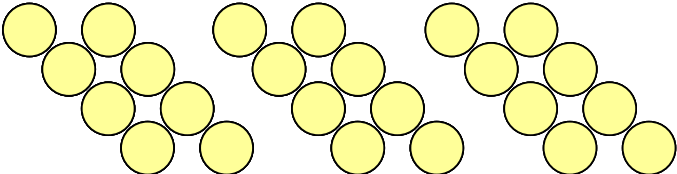
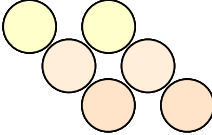
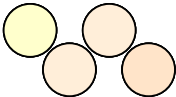
Common / Core	Specialisation	Further specialisation
		
		
		

Figure 1: Graphical illustration of occupational awards

Occupational awards will be linked to an occupational classification system, the *Organising Framework of Occupations (OFO)* and the qualification will reflect the occupational title, sometimes referred to as the trade, occupational or professional designation.

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The development of occupational qualifications will be managed through a framework, tentatively called the National Occupational Pathways Framework¹. This framework clusters similar occupations, both in terms of occupational progression and in terms of horizontal articulation. The development of occupational qualifications will be informed by the simultaneous development of a curriculum which will simplify and strengthen implementation processes.

The design and development of occupational qualifications, curricula and assessment guidelines will be driven by experts drawn from communities of expert practice (CEP). These working groups, unlike the Standards Generating Bodies (SGB), will be convened for a particular purpose to perform the various tasks required for the development and implementation of occupational qualifications. Each task will involve varying kinds of expertise, and so will comprise different individuals. In many cases the members of such working groups will come from the ranks of the relevant professional body or occupational association. Since many occupations cut across economic sectors, these working groups, designated as the CEP for the sake of simplicity, will also be structured to represent sectoral interests. This will ensure that sector-specific knowledge and skills are included as specialised learning, where relevant and appropriate.

The award of occupational qualifications will be based on a simplified assessment process. Occupational qualifications will be awarded on the basis of a final integrated summative assessment of occupational competence, similar to trade tests or 'Board exams'. This assessment will be specified as part of the qualification. The final integrated summative assessment will take into account summative assessments for each form or mode of learning. The latter will also be used for purposes of credit accumulation and transfer. The curriculum will provide guidelines for these assessments.

These proposals are discussed in more detail below.

3. Background

In 2003 the Ministers of Education and Labour proposed in their Consultative Document (Departments of Education and Labour, 2003) that there would be greater recognition for various forms of learning. They proposed that there would be three Qualifications and Quality Assurance Councils: one for Higher Education, one for General and Further Education, and one for Trades, Occupations and Professions (TOPQC). Each of these bodies would both develop the qualifications and assure the quality of the education and training processes related to the qualifications.

Since the publication of the Draft Higher Education Qualifications Framework (Ministry of Education, 2004) the Department of Labour has been looking at the development of a framework for trade, occupational and professional qualifications. While in 2004 many believed that the NQF was still flexible enough to deal with the variety of demands placed on it, it has become clear during the intervening years that the current structure of the NQF and its implementation has created significant difficulties in addressing issues such as scarce and critical skills. These difficulties include the following:

Design issues:

¹ Previously referred to as the National Career Path Framework.

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- Confusion locally and abroad because of the structure and naming conventions used for occupational qualifications as well as the concept of building up an occupation out of a series of qualifications reflecting progression across levels of the NQF
- Duplication, overlaps and difficulties caused by the ad hoc generation of a large number of occupational qualifications and their various specialisations based on sectoral needs
- Inflating occupational qualifications to ensure that the minimum of 120 credits is met
- The difficulties in expressing the work experience requirements.

Implementation issues:

- Lack of uptake or qualifications not being awarded because of the stringent and excessive requirements of fundamental learning (communication, including second language, and mathematics)
- The resource-hungry nature of the assessment process, especially the frequency of assessment and the requirement to develop portfolios of evidence
- Difficulties in developing coherent and flexible learning programmes based on unit standards which integrate a variety of learning requirements.

Credibility issues:

- The lack of a systemic link between the labour market and the design, development and implementation of occupational qualifications
- The considerable variation in the approach and standards of assessors
- The marginalisation of skilled practitioners and professionals

The sum total of these difficulties has created a disconnect between the labour market and the NQF (see Vorwerk, 2005, for a detailed discussion). While education and formal training are critical to the development of skills, the implementation of the current system has given them greater value and prominence, and they now overshadow the role of the informal learning that is acquired on-the-job and is critical to the development of occupational competence.

Notwithstanding these difficulties, the development of occupational qualifications based on unit standards did initiate a much needed review of occupational qualifications and education and training processes and materials. The NQF approach ensured that the impact of changing work practices and the impact of technology were reflected in the new knowledge and skills requirements. The NQF also allowed for the recognition of newly emerging occupations and for new approaches to occupational development. The Standards Generating Body approach also allowed people who had previously not had the opportunity, to participate and influence the new qualifications.

The OQF is intended to build on these positive aspects of the 12 years of NQF implementation, while resolving many of the difficulties which have arisen by putting in place a development and implementation framework which is driven by the needs and the logic of the labour market.

It is also worth noting that in 2003 there was considerable opposition to the inclusion of professions in the remit of the TOPQC. This opposition resulted in a change of name. Since then however, a number of professional bodies have indicated their interest in working within this proposed new qualifications framework. The term occupations therefore should be understood to include also professions. The Department of Labour, in making these proposals, is emphasising the opt-in nature of the framework as well as the key role played by practitioners in determining the nature and form of their occupations. Linked to the concept of professions is the notion of

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certified occupations or certified occupational tasks. Increasingly public interest and global trading pressures also require that products and services are provided by suitably qualified individuals. An essential aspect of this proposed occupational qualifications framework is to enable the development and certification of such individuals.

4. The purpose of the OQF

In the early phases of developing the OQF the key question was: “Who holds the standard?” For occupations, the answer is unequivocally the practitioners and the context of the practice. While education and training providers may be involved in the setting and the implementation of such standards, ultimately it is the community of practice, formal or informal, which holds the standards. The OQF must therefore be part of an overall system; it should not be seen in isolation.

The OQF is thus part of a package of proposals which are designed to address skills development in a systemic and systematic fashion². The OQF is a key component within a proposed occupational learning system which has skills development as its key focus. The occupational learning system consists of a number of interlocking elements. This includes mechanisms and processes for:

- Capturing labour market needs across economic sectors using a common language
- Clustering and structuring occupations in order to rationalise the development of curricula and qualifications based on the generic and common elements, as well as occupational progression and articulation with other occupations
- Aligning qualifications and learning with the actual skills needs in the labour market
- Simplifying and streamlining the implementation of learning processes
- Evaluating and assessing the impact of skills development interventions.

One of the key purposes of the Occupational Qualifications Framework is to achieve clear articulation of labour market needs. “Labour market” refers not only to formal employment, but also to needs in the informal and social development contexts. The needs include not only the numbers required but also the skills needs for each occupation. The impact of globalisation and information technology has had a significant impact on the nature of the skills and the knowledge required to perform productively.

Another key purpose of the OQF is to ensure that there is a clear articulation with qualifications in the General and Further Education and Training Qualifications Framework and the Higher Education Qualifications Framework. It is hoped that the proposals contained within the OQF will facilitate the development of a credit accumulation and transfer system. Furthermore, the OQF is designed to allow learning programmes to address groups of occupations, and so ensure an economic use of resources.

4.1 What is an occupational qualification?

An occupational qualification represents the outcomes of a learning process, which result in occupational competence. By occupational competence is meant the ability to practise that occupation in a real-time, real-life setting. In other words it represents a certification that the

² Other papers at this conference will discuss in greater details some of these aspects

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person is “qualified to” practice or is a qualified practitioner³. The term "occupation" also includes all practitioners including trades (ie artisans and crafts people) and professions, as well as meaningful skill sets (often specialised tasks) associated with occupations.

A study of the education and training processes for a variety of occupations reveals that there are three components required to ensure occupational competence. These are:

- a knowledge component
- a practical component
- a work experience component.

While this may seem patently obvious, there exist a number of current views and practices where these requirements do not seem to be taken into account. Some of these are:

- Semi-skilled workers who can perform certain tasks related to an occupation but do not qualify as skilled workers, as such
- The notion or expectation that one can train artisans in education and training colleges
- Trainers making provision for work experience if the learner is on a learnership but not making the same provision for learners on a skills programme, yet awarding both types of learner the credits against the same set of unit standards
- Graduates with occupationally-directed qualifications expecting the same treatment and remuneration as seasoned practitioners
- The notion that higher education and skills are antithetical.

The acquisition of skills does require the acquisition of relevant knowledge. The knowledge component includes theory relevant to the occupation and by theory is meant disciplinary knowledge recontextualised for occupational purposes and framed in terms of appropriate delivery mechanisms and modalities (see Barnett, 2005). The disciplinary knowledge and theory component is what connects the Occupational Qualifications Framework to the other qualification frameworks. But the knowledge component, in addition, also includes the knowledge and theory related to an occupational specialisation and to the specific context (sectors, industries, individual companies, specific products and services) in which the occupation is practiced. This type of knowledge component is often embedded within the context and it is usually not taught, but learned.

The practical component represents not only the occupationally relevant skills, but also:

- general skills related to the disciplinary knowledge and theory
- general behaviour or skill such as represented by the critical cross-field outcomes in the National Qualifications Framework.

While the knowledge component prepares learners in an educational sense, the practical component prepares learners for the ‘doing’.

While the workplace experience component has been implicit in apprenticeships, learnerships and professional development, it has not always been well described. As a consequence it is difficult to assure the quality of such learning processes. The quality assurance of workplace

³ By “qualified” we mean that the person is accepted into the ranks of the community of practice – this means that they are competent to begin practicing the occupation but they have not yet reached the level of proficiency that comes with several years of experience. cf Dreyfus, 1996

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experience depends on this component being described in much fuller and more exact terms than previously, and includes the structure, duration, range and scope of such work experience. It means being in the company of seasoned practitioners and becoming part of the occupational community of practice. Work experience may also include the completion of projects which can demonstrate the learner's ability to integrate all aspects of the learning process and the ability to deliver occupationally relevant products or services.

A review of currently registered unit standards suggests that many of these were compiled in order to reflect workplace practices. The lessons of developing such unit standards will be used in developing suitable specifications for work experience.

In designing the OQF, the following factors are important and the OQF will need to be:

- sufficiently flexible to accommodate innovative learning and teaching strategies to address skills needs
- compatible with international occupations in order to ensure international recognition and comparability of standards
- responsive in order to accommodate the development of new occupations and specialisations, while ensuring that overlaps and duplication is minimised
- simple, clear, easy to understand and user-friendly for labour market role players and education and training providers, and use the language of labour market actors.

In relation to the last point, labour market actors have made very positive comments during preliminary work which is testing out the principles which underpin the OQF.

Using the elements above, as well as the discourse of the labour market, the OQF will also provide greater consistency and coherence to the development and implementation of learning programmes linked to occupations and occupational qualifications. The new framework is intended to be the basis of all further policy development on qualifications, curricula and assessment for programmes regulated by the Skills Development Act such as learnerships, apprenticeships and skills programmes. The OQF (through the OFO) will provide a more direct mechanism to link learnerships, skills programmes, apprenticeships and, where appropriate, internships, to occupations.

The Skills Development Act introduced learnerships and skills programmes to address the historical and structural barriers to the acquisition of relevant occupational skills. The acquisition of occupational competence has in the past been largely restricted to trades (via apprenticeships) and professions (via internships, articles of clerkship, cadetships, pupillage and other forms of occupational or professional experience). There is an increasing need to extend this to other occupations and occupational skills sets.

This new framework will be finalised in discussion with representatives from SAQA and from the other proposed Qualifications and Quality Assurance Councils for General and Further Education and Training and for Higher Education.

Ultimately the function of the OQF is to provide a basis for Objective 2 of the NQF: *“facilitate access to, and mobility and progression within education, training and career paths”* (RSA, 1995) with particular emphasis on career paths. It is thus not a new framework competing with the NQF, but the development of an appropriate and responsive system to address that aspect of the NQF.

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4.2 The relationship of the OQF framework to other frameworks within the NQF

The Joint Policy Statement provides for the establishment of three Quality Assurance Councils (QC), where standards setting and quality assurance will now reside under one roof. Each of the QCs will develop their own qualification frameworks. In order to maintain the NQF as a single framework with different facets, the OQF will have to articulate with the other frameworks.

The OQF is intended to straddle all NQF levels. The following diagram illustrates the relationship between the occupational qualifications framework and the NQF levels, and the other qualification frameworks.

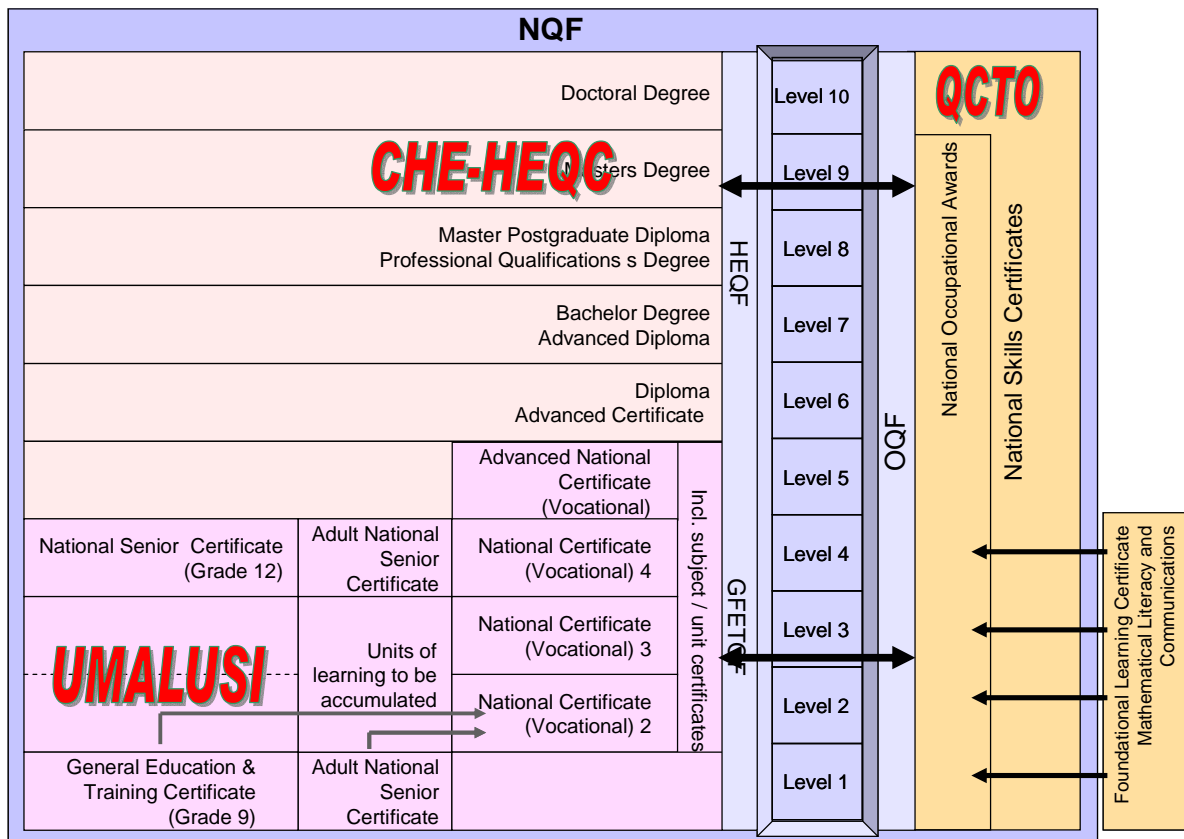


Figure 2: The relationship between the OQF and the other Qualification Frameworks within the NQF

The NQF level of each occupational qualification will be determined by the following:

- The NQF level descriptors (as determined by SAQA)
- The skill level of the occupation in the Organising Framework for Occupations (OFO), see Annexure A
- International practice.

It is important to note that in principle occupational qualifications are not designed to compete with qualifications on the other frameworks. There is no intention, nor need, to develop qualifications which compete with traditional education qualifications such as bachelors, masters and doctorates. Instead, the occupational qualifications will be designed to articulate with and to such qualifications where such qualifications are regarded as useful or as prerequisites for occupational or professional development. The other qualifications can act as a preparation for

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occupational qualifications or provide progression options for practitioners currently in the labour market. This is illustrated in the following figure:

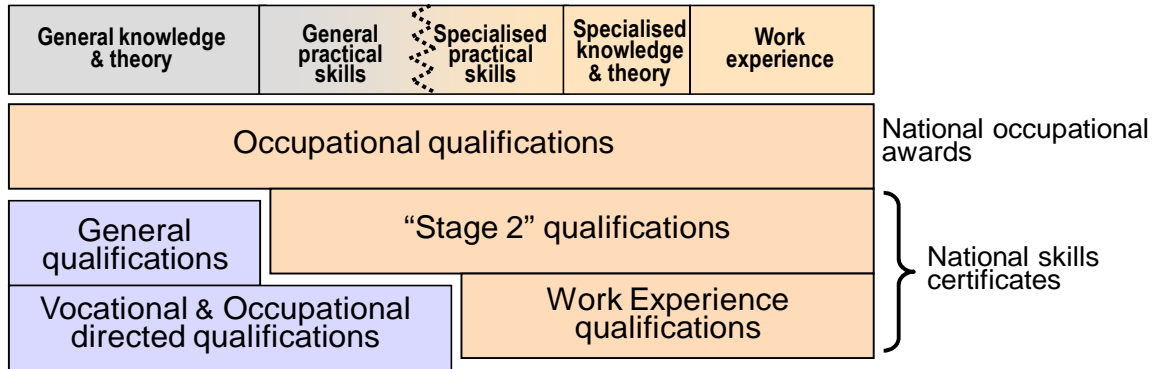


Figure 3: Scope of the occupational qualifications

Complete occupational qualifications refer to occupations where all the learning components would be offered by providers and workplaces, which are operating within the scope of the QCTO: typically these would be apprenticeships and learnerships. In general, these qualifications would be at lower levels of the NQF or be highly specialised occupations where small numbers are required. This would mean that there is no economic justification for large public or private institutions to get involved.

The combination of general qualification (referred to as Stage1 by the engineering profession) and a second, separate qualification is a situation generally found amongst the professions. The profession requires the completion of a general academic degree such as a Bachelor of Commerce, Science or Engineering. The "Stage 2" qualification consists of general and specialised modules, work experience (articles, internships, etc) and a final assessment in order to be recognised as "qualified" by the relevant professional body.

Vocational and occupationally directed qualifications are typically those that are offered by Further Education and Training Colleges and Universities of Technology. These may involve the acquisition of some practical skills and some exposure to the work situation. This may be sufficient for graduates to enter into the labour market but often, however, an additional work experience component is required in order to be recognized as qualified to practise the occupation.

The current intention of the Department of Labour is to use the occupational qualifications framework in a flexible manner. Thus qualifications which form part of other qualifications frameworks would be excluded. These include:

- Qualifications which include work-integrated learning and are registered on one of the other qualification frameworks
- Qualifications which lead to professional designations and are subject to specific legislation.

Where, however, users of such qualifications wish to register learnerships, apprenticeships, skills programmes or internships in terms of the revised Skills Development Act against such qualifications, the work experience component will have to conform to the Department's and the QCTO's criteria.

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The Department of Labour, however, envisages that the OQF and the QCTO will act as a broad framework within which actors and role players can operate. As such its objective is to create a buy-in model so that stakeholders and role players can elect to operate under the auspices of the QCTO and within the OQF. The framework is also intended to formalise the role of professional bodies and occupational associations which have, to a sometimes significant effect, been frozen out of the NQF and its implementation. From a labour market perspective it is the practitioners and the contexts in which they operate which set the standards, not the education and training system. For the Ministry of Labour to carry out its skills development mandate, a strong systemic link between the world of practice and the world of education and training is required. The OQF forms a link in this chain.

5. The Design of Occupational Qualifications

The development of occupational qualifications will be managed and controlled by a classification system for occupations. The one chosen by the Department of Labour is called the Organising Framework for Occupations (OFO). The reasons for the choice of this framework, as opposed to other classification systems, is beyond the scope of this paper and will be discussed in a paper dedicated to it at this conference. For the purposes of this paper the two following points must be made in order to clarify this section:

- The OFO is far more up-to-date in terms of occupations and related specialisations and includes far more alternative titles for occupations than its previous incarnations.
- Secondly, and more importantly, every group of occupations in the OFO contains a descriptor and a list of tasks.

In order to develop an occupational qualification, representatives from the labour market will interrogate the group descriptor and tasks and develop a descriptor and a list of tasks for each of the individual occupations that comprise the group. The descriptor will form the basis of the qualification's purpose, while the list of tasks will form the basis of the exit level outcomes of the qualification.

The following tables illustrate the OFO and its potential role in occupational qualifications development.

The example is of an occupational group descriptor and a partial list of tasks for the group of occupations called 'Human Resource Professionals'.

2231 Human Resource Professionals

HUMAN RESOURCE PROFESSIONALS plan, develop, implement and evaluate staff recruitment, assist in resolving disputes by advising on workplace matters, and represent industrial, commercial, union, employer and other parties in negotiations on issues such as enterprise bargaining, rates of pay and conditions of employment.

Tasks or Skills:

Arranging for advertising of job vacancies, interviewing and testing of applicants, and selection of staff

Arranging the induction of staff and providing information on conditions of service, salaries and promotional opportunities

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Maintaining personnel records and associated human resource information systems

Overseeing the formation and conduct of workplace consultative committees and employee participation initiatives

Providing information on occupational needs in the organisation...

Occupations in this group include the following:

- 223101 Human Resource Advisor
- 223102 Recruitment Consultant / Officer
Workplace / Industrial Relations
- 223103 Advisor
- 223104 Skills Development Facilitator

While specialisations or alternate titles of the occupation Recruitment Consultant/ Officer include the following:

- 223102 Casting Agent
- 223102 Employment Advisor
- 223102 Employment Agency Consultant
- 223102 Employment Consultant
- 223102 Employment Placement Officer
- 223102 Labour Broker
- 223102 Literary Agent
- 223102 Occupational Guidance Officer
- 223102 Recruitment Coordinator
- 223102 Recruitment Officer
- 223102 Recruitment Resourcer

Table 1: Extracts from the Organising Framework for Occupations Version 6

The current proposals are that occupational qualifications will be developed (or revised since there are currently already registered qualifications for many occupations) for the whole group simultaneously. This will ensure that the common elements and the specialised tasks are identified. Part of the practitioners' work will be to validate the details relating to the occupations contained in the OFO, so ensuring that it is kept current and reflects the needs of the occupation and the labour market.

Practitioners active in the labour market will define the knowledge, skills and work experience required for each of the tasks. They (or others) together with curriculum experts will then refine the knowledge, skills and work experience into a curriculum (the inputs) and a qualification and standards (the outcomes and summative assessment requirements).

6. Proposed Occupational Qualifications

The OQF will describe two types of occupational qualification. The first type represents the requirements for the practice of an occupation. The second describes requirements for meaningful skill sets, related to one or more occupations.

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6.1 National Occupational Award⁴

The National Occupational Award certifies the achievement of occupational competence. The National Occupational Award designator will be the occupational title and the specialisation or context in which the qualification was obtained as laid out in the following examples:

National Occupational Award: Ship's Master (Harbour Pilot) Level 6

National Occupational Award: Metal Fabricator (Boilermaker - Mining and Extraction)
Level 3

National Occupational Award: Environmental Health Officer (Health Inspector) Level 5

Credit values for occupational qualifications are determined by the range, content, duration, inclusivity of work experience, and the complexity of the learning processes. The exit outcomes of the occupational qualifications must address all aspects of the occupational descriptor in the OFO. Currently the proposals governing credits are that each form or mode of learning must constitute a minimum of 20% of the total credits. The balance of 40% of the credits can be allocated on the basis of the learning requirements for the occupation: for instance, high skill occupations (eg crafts) may require a proportionately longer period of work experience.

Occupational awards will in most cases straddle learning across a number of NQF levels. There will no longer be the need to construct a series of qualifications which eventually culminate in the equivalent of an occupational award, as illustrated below:

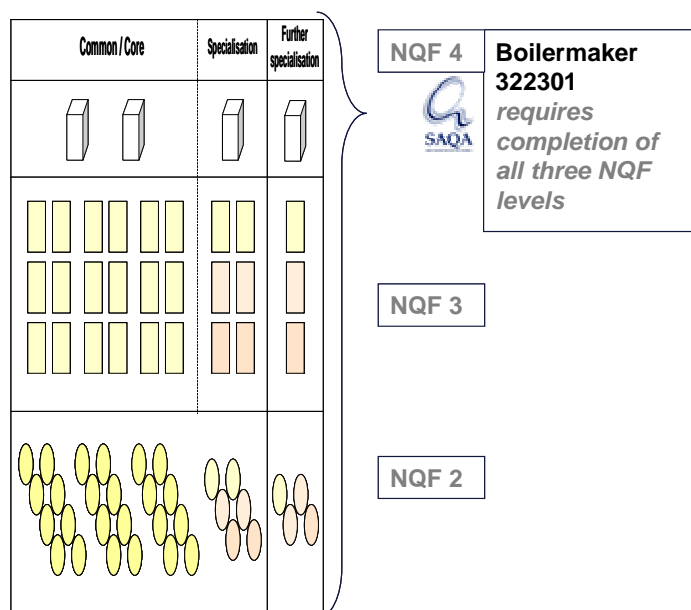


Figure 4: Illustration of a complete occupational qualification where the learning straddles NQF levels

To manage the learning process CEPs will, in all likelihood, specify phase tests or interim assessments at key stages in the development of the occupational competence. This will result in the award of credits and possibly skills certificates for specific occupational tasks⁵.

⁴ The term “award” has been chosen to differentiate these qualifications from others on the NQF. This choice is, however, still subject to debate within the Department of Labour.

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6.2 National Skills Certificate

The National Skills Certificate certifies a distinct but occupationally relevant skills set. The designator describes either the:

1. Occupational skills in the form of a competence linked to the specialisation or context in which the skill set has been acquired (if required), eg
 - National Skills Certificate: Manage Loan Portfolios Level 4
 - National Skills Certificate: Design complex machined products using CAD/CAM software Level 5
- or the:
2. Specialised occupational role - which is the outcome of the learning and assessment process, eg
 - National Skills Certificate: Safety Representative (Chemical) Level 3
 - National Skills Certificate: Six Sigma Black Belt, Level 6.

The Skills Certificate must also reflect the three learning components. Current proposals are that skills certificates must consist of at least 18 – 20 credits (some 4 – 5 weeks of learning).

While a number of educationalists and academic commentators are highly critical of unit standards as they are currently conceptualised, unit standards do in most cases describe the learning requirements for skills required by the labour market. This is an illustration of how the education and labour market discourse has become disconnected. In the view of the education and training fraternity/sorority, unit standards represent dislocated pieces of curriculum which don't relate to anything. For the labour market, unit standards represent skills sets within occupational settings and often within particular contexts⁶.

The skills certificate thus represents the need for a more flexible way of thinking about skills development. The skill certificates can also be used for those occupational competences which are certified by industry bodies, or regulators, or where products are destined for markets which have specific requirements, eg for the export of agricultural products to the European Union. The assessment for the skills certificate can also be used for establishing current competency levels in cases where such competency has to be demonstrated on a periodic basis.

Another use of skill certificates is to recognise particular specialisations in an occupation. In some occupations a particular piece of equipment or a particular procedure may be required in a specific context but is not relevant to the occupation as a whole, e.g. balancing of helicopter blades for the Reinforced Plastics and Composite Trades Worker (OFO: 399906). The skills in

⁵ In some contexts there is a need to free up artisans from routine tasks so that they can focus on trouble shooting. Less complex artisanal tasks can then be performed by semi-skilled workers who have been certified to perform such tasks.

⁶ In my view one of the greatest failures of the NQF in its first implementation has been the inability of the system and the structures to adequately balance context specific needs while recognising the generic nature of many occupational skills. While skills may be described generically, the knowledge required to operate in a context is highly specific.

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this qualification can be used to make a variety of products: boats, sports and leisure equipment, chemical vessels and aeronautical components including helicopter blades. Only the latter will require this specialisation and this means that such a specific skill set does not have to be included in the occupational qualification. But for those artisans who manufacture helicopter blades, a highly specialised and economically important task, this skill needs to be developed and certified.

As another example, one of the problems currently experienced in qualification design has been to find effective ways of dealing with team leader and supervisor competencies. One of the current proposals, based on the OFO and the notion of skills certificates, is to treat team leading as a specialisation within the occupation. Thus, the occupational award for the occupation can be extended with a skills certificate to represent that particular skill set. The practitioner still is actively involved in the occupational tasks but also has to direct the activities of the team. A single skills certificate could then be used for any number of occupations at a similar level. This contrasts with the current approach taken by the South Africans Qualifications Authority. Their solution is to develop generic supervisor or team leader qualifications and then add specific specialisations (confusingly called learning programmes) required by each sector or specific occupation.

As indicated in one of the examples above (six sigma quality auditor) skill certificates can be used for the award of credits against internationally recognised certifications. This brings such skill sets within the ambit of the NQF - something which has been quite difficult to deal with within the current qualifications model.

6.3 Fundamental learning in occupational qualifications

Fundamental learning in the South African context refers, by and large, to communication and mathematical literacy. This learning has formed between 30 and 47% of the credits required for occupational qualifications between NQF level 1 and 4. This requirement has significantly reduced the uptake or completion of NQF qualifications and has created great difficulties in the implementation of learning programmes. The focus of the OQF is on skills development, and the fundamental learning needs to be fit for purpose.

The design of occupational qualifications at NQF levels 1 – 4 will, therefore, be based on the assumption that learners have a foundational competence in communication and mathematical literacy and can cope with occupationally-related learning. CEP members will determine what additional communication and mathematics learning will be required for the specific tasks within the occupation. Such additional fundamental learning will be incorporated into the common/ core learning requirements of the qualification. The fundamental category, therefore, will disappear from occupational qualifications but the appropriate communication and mathematical knowledge and skills will be embedded in the common/ core component of the qualification.

What is clear however, is that the foundational learning aspect of the implementation process needs considerable attention. SETAs and companies report that the implementation of learnerships has been negatively impacted by assumptions that school leavers, and in some cases graduates, have such a foundational competence. It is sad to report that in many cases people entering the labour market have neither the literacy skills nor the cognitive depth required to engage with occupational learning materials.

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Currently there is a proposal that learners wishing to enter occupational learning programmes will first have to be assessed for this foundational competence. This proposal is being explored by a dedicated task team since it has significant implications. The proposal came after several years of trying to incorporate Adult Basic Education and Training (ABET) learning programmes into SETA scorecards. Whether this proposed assessment forms a “qualification” or is simply an access mechanism, whether it should carry credits and/ or be part of an occupational learning programme, are questions that still have to be answered. Aligned to this notion of access are also proposals which turn such access requirements into curriculum components and learning programmes. The ultimate purpose of these proposals is to ensure that learners can cope with and benefit from programmes that develop occupational skills and related knowledge.

It illustrates, however, how using an occupational “lens” creates its own logic and, therefore, its own solutions.

7. The role of curriculum in the OQF

The development of occupational qualifications and related unit standards and curricula will be done simultaneously and iteratively. The curriculum will structure knowledge, skills and work experience components into a meaningful process of developing occupational competence. This will be achieved by organising, grouping and clustering related knowledge and activities.

The purpose of the curriculum will be to simplify, streamline and strengthen the development and implementation processes for occupational qualifications. The curriculum will provide guidance to the various role players on:

- Access requirements
- Articulation with other learning pathways such as vocational qualifications obtained in education institutions
- The content (scope and depth), the learning activities and the assessment guidelines
- Physical and human resources required for implementation
- Learning required for specialised occupational tasks
- Risk factors associated with the occupational practices (health, safety and the environment).

Current proposals based on the curriculum model indicate that the assessment of learning outcomes related to the three components of learning will require re-configured unit standards.

Since related occupational qualifications will be clustered for the purposes of qualification and curriculum development processes, the common elements in these qualifications will be identified and developed for all qualifications. This would assist the provider system to develop more generic programmes to address a range of occupations.

As part of preparing for the transitional process, a process for developing curricula implied by the requirements specified in the outcomes of unit standards-based qualifications has been developed and is in the process of being tested. This would simplify implementation in its own right but the process has also shown up some of the gaps, overlaps and duplications within the currently registered qualifications.

It is too early to report on the impact of this process, but some early experiences indicate that the process creates a positive and significant dialogue between practitioners and industry representatives, and education and training providers. In particular, defining the work experience

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component of the curriculum clarifies what learning outcomes are required and results in shifted paradigms in terms of the nature and content of educational and training provision.

8. The Curriculum and Qualifications Framework for Occupations

The Department of Labour is proposing the QCTO will use the National Occupational Pathway Framework (NOPF) as a management tool for the development of curricula and qualifications. The NOPF clusters occupations on the OFO to minimise duplication and to ensure that occupational qualifications are designed or revised in line with labour market needs. The clustering of occupations not only ensures articulation between similar occupations but also will ensure progression from one level of occupation to the next for related occupations.

The NOPF will also be used for the development of meaningful skill sets within an occupation and for specialised tasks related to a number of occupations. It is also envisaged that this approach will facilitate recognition of prior learning (RPL) and the fast-tracking of skills development initiatives.

The occupational clusters act as a filtering mechanism between the OFO and SAQA's 12 learning fields. All occupations on the OFO have been integrated into one of the occupational clusters. In most cases it is not the individual occupation but occupational groups that represent the occupation. This already significantly simplifies the management and control of qualifications and curriculum development processes.

The occupational clusters are as follows:

1. Accommodation, Cleaning and Food Preparation related occupations
2. Arts and Design related occupations
3. Business Administration, Management, Information and Human Resources related occupations
4. Electrotechnology and Telecommunications related occupations
5. Extraction, Construction, Demolition and Civil Engineering related occupations
6. Farming, Horticulture, Nature Conservation, Environment and related Science occupations
7. Financial and Insurance related occupations
8. Installation, Maintenance and Repair related occupations
9. Medical, Social, Welfare and Sports related occupations
10. Production related occupations
11. Sales and Marketing related occupations
12. Security and Law related occupations
13. Teaching and Training related occupations
14. Transportation and Materials Moving related occupations

Within the occupational clusters occupational groups have been structured to form occupational families. Each occupational family is envisaged to bring together the practitioners who form the community of practice for that set of occupations. The design and development process for

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occupational qualifications, curricula and assessment guidelines will be driven by practitioners and experts who are active in the occupation or in the education and training processes related to that occupation.

The process of determining how the occupational clusters will operate is still on-going but it appears that there will be no need to make CEPs formal structures. In many cases there are already professional bodies and occupational associations which would form the core of these CEPs. The CEP concept then simply becomes an organising framework. So it is proposed that the QCTO will maintain a database of practitioners who are willing to contribute to the delivery of the outputs. In order to be captured in the database, practitioners will have to show that they are knowledgeable about the current practices of their respective occupations. This includes those who are knowledgeable about current education and training practices related to the occupation.

9. Conclusion

The development of occupational qualifications (including trades and professions) needs to happen in a systematic and yet responsive way. The Occupational Qualifications Framework acts as a systemic link in the chain between establishing occupational learning needs, through the development of curricula and qualifications and the quality assurance of learning provision to, finally, the impact assessment of the overall process.

By simplifying the qualifications design and by providing guidance for the implementation of occupational programmes, the Department of Labour envisages that all role players in the system (from providers to workplace mentors and coaches) will be able to engage more effectively and efficiently.

Ultimately this will enhance efforts to address the skills development needs in the labour market.

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