Framework for Qualification Standards in Higher Education

CHE
COUNCIL ON HIGHER EDUCATION

2013

Contents

Abbreviations

CESM	Classification of Educational of Subject Matter
CHE	Council on Higher Education
DHET	Department of Higher Education and Training
HEQC	Higher Education Quality Committee
HEQF	Higher Education Qualifications Framework
HEQSF	Higher Education Qualifications Sub-Framework
NQF	National Qualifications Framework
PQM	Programme and Qualification Mix
QC	Quality Council
QCTO	Quality Council for Trades and Occupations
SAQA	South African Qualification Authority
SGB	Standards Generating Body
WIL	Work-IntegratedLearning

1. Introduction

1.1 Legislative background

In terms of the Higher Education Act (no. 101 of 1997) and the Higher Education Amendment Act (no. 39 of 2008), the Council on Higher Education (CHE) is responsible for quality assurance for higher education, and for implementation of the Higher Education Qualifications Sub-Framework (HEQSF).

The HEQSF, in turn, assigns to the CHE the responsibility for developing standards for all higher education qualifications.

> *The development of standards is an important element in contributing to the successful implementation of the HEQF, as standards provide benchmarks to guide the development, implementation and quality assurance of programmes leading to qualifications. Standards registered for higher education qualifications must have legitimacy, credibility and a common, well-understood meaning.*
>
> (HEQSF, as revised, January 2013)

This approach emphasises the notion that standards are envisaged as developmental guides for programme design and delivery, rather than as rigid instruments for regulating compliance. It takes into account the characteristics that ought to influence the process as it unfolds, if it is to be regarded by all interested parties as being beneficial to the higher education sector. It is within this context that the CHE proceeds with its mandate.

As the Quality Council (QC) for higher education, the CHE is required – taking into account the functions of the South African Qualifications Authority (SAQA) – to produce and implement policy and criteria for the development, registration and publication of qualifications, and to recommend to SAQA qualifications for registration (National Qualifications Framework (NQF) Act, no. 67 of 2008). Qualification standards comprise a core aspect of this process. While, in terms of the NQF Act, SAQA will register higher education qualifications only on recommendation of the relevant QC (the CHE), the actual relationship between the development of standards for qualification types and the SAQA registration of specific qualifications awarded by institutions, requires further unpacking.

The CHE role in the development of standards needs clarification. The CHE itself has neither the intention nor the capacity to develop standards on its own. The actual development will be done by expert peer groups drawn from institutions and fields of study or professions, coordinated by the CHE on the basis of a framework approved by the Council. Expert peer groups will comprise communities of practice that will be authorised by the CHE to perform these tasks.

1.2 Standards development in the context of quality assurance

The role of the CHE as the QC for higher education means that its responsibility for standards should proceed alongside its other statutory responsibilities in the areas of quality assurance, including the accreditation and re-accreditation of programmes, institutional reviews, and national reviews of fields of study. The coexistence of all these responsibilities in the same body puts the CHE in a privileged position to advance the objectives of the NQF within the higher education system. The model for standards presented here takes cognisance of some of the complexities and difficulties experienced in the implementation of the HEQSF in relation, for example, to the programme accreditation aspect of the quality assurance function. In themselves, standards do not constitute an additional mechanism of quality control. Their role is to provide benchmarks, agreed on by academic experts, to inform and guide the design, approval and, where required, the improvement of programmes leading to the award of qualifications.

The NQF distinguishes very clearly between the various quality assurance and standards-setting roles of the three QCs: the CHE, the Quality Council for Trades and Occupations (QCTO), and Umalusi (QC for the General and Further Education and Training (GET and FET) bands), which will each perform their duties within the parameters of their sub-qualification frameworks. The NQF Act proposes that there should be articulation between these Sub-Frameworks. In other words, there has to be coherence between the standards established at corresponding levels of the Sub-Frameworks. At the same time, there is a likelihood that each QC will need to adopt an approach to standards that fits well with its particular area of jurisdiction and its particular needs.

The approaches may not be identical in all respects. There will be differences in the methods of generating standards. For example, whereas prescribing qualification specifications and verifying the quality of external examinations are significant ways of establishing standards for the GET and FET, in higher education these aspects of quality assurance are much more appropriately left to the institutions themselves.

The approach of the CHE to standards development is regarded as appropriate for higher education, and for its Sub-Framework in the NQF. Standards development is a necessary aspect of implementation of the HEQSF. One of its aims is to enhance public perceptions of consistency between similar qualifications offered by different institutions and in different fields of study. The aim of a standard is to state an agreed purpose underlying a qualification type and the student achievements that are evidence of the purpose being attained. The standard states what a programme leading to the qualification type intends to achieve and how we can establish that it has been achieved. This would assure a nationally agreed and internationally comparable fitness for purpose.

Standards aim to provide institutions with benchmarks for qualifications that may be used for internal quality assurance as well as external comparison. For HEQC quality assurance, standards will be part of the criteria used in the process. For example, a standard provides

the specific qualification-type context in which accreditation Criterion 1 will be applied to institutional programmes.

Planning by the CHE for higher education standards goes back a number of years, at least to the publication in July 2004 by the erstwhile Department of Education of a draft HEQF for public comment. Over the last few years, there has been limited progress in giving effect to the role of standards development, due largely to a need for confirmation of the allocation of dedicated funding and to clarification of the organisational structure and core functions of a Standards Directorate to ensure alignment with the Council's mandate, as provided for by the NQF and the HEQF. The issues of funding, structure and functions have since been addressed, and the CHE is ready to proceed with its standards development mandate.

2. Standards in higher education

The notion of standards for higher education qualifications is nothing new. Institutions have always applied their own internal means of maintaining standards. The means are varied; they range from requirements for admission into a qualification, to the maintenance of staff-student ratios that are appropriate for effective teaching and assessment, to valorising a hierarchy for the measure of student success (for example, first, second, third class passes). Probably the most relied-on means of assuring parity of standards is the system of external examination, in which peers from other institutions validate the assessment instruments and the grading of student achievement in their disciplines (although rarely across qualifications as a whole).

These means, when diligently practised, have considerable value in establishing and maintaining standards for higher education. However, their main limitation is that they are institutionally controlled and localised. Their efficacy across the entire sector, and for all comparable qualifications offered by the sector, assumes absolute parity between all institutions in the ways in which quality criteria are applied, and the levels at which they are applied. The main aim of a national set of standards, as mandated to the CHE, is not to displace existing, internal means of quality control over qualifications, but to provide for an agreed matrix of benchmarks against which institutional assessment criteria and awards can be evaluated.

Historically, higher education standards have been the prerogative of disciplinary expert groups. The CHE approach to standards does not intend to minimise the influence of disciplinary expertise. However, such groups have exerted their influence on the content, assessment criteria and outcomes of qualifications in their fields without necessarily comparing them with similar aspects of equivalent qualifications awarded in other fields. This has resulted, at least partially, in a disciplinary atomisation of qualification standards. There is little if any evidence to demonstrate that the standards that are applied, for example, to a master's degree in medicine, are comparable to the standards required for a master's degree in business administration, or that the standards for a diploma in somatology are

comparable to those for a diploma in electronic engineering, despite the fact that they aspire to the same generic outcomes described by the NQF level descriptors.

While acknowledging responsibility for reaching clearly-defined standards envisaged by the CHE mandate, this Framework emphasises the developmental aspect of the process, taking into account the many conceptual and contextual issues that are associated with the formulation of nationally agreed and applied higher education qualification standards. The Framework proposes that the development of standards is an on-going process addressing a multiplicity of complex principles and involving a variety of interested parties. It is a process fundamentally different from the notion of a singular once-off 'setting' which, while it may be appropriate to the stabilisation of concrete in physical structures, is arguably less appropriate for higher education standards. The CHE task is, furthermore, distinguished from the role that has been played by standards generating bodies (SGBs) under the auspices of SAQA.

For these reasons, the term 'development' is used in preference to either 'setting' or 'generation'. The development of standards needs to take into account a number of fundamental issues, including the following: what 'standards' mean in the public imagination, the extent to which 'standards' for higher education qualifications are similar to, or depart from, notions of 'standards' as they are applied in other domains, and the capacity of higher education 'standards' to play a meaningful role not only in establishing benchmarks for ***assuring*** quality, but also in ***developing*** quality in the sector, while recognising the fundamental importance of higher education institutions to promote their own internal processes of quality assurance.

2.1 Qualification standards

There a clear distinctions between **qualification** standards (which the CHE aims to develop) and other fundamentally different kinds of standards sometimes employed by higher education, for example, content standards, teaching and learning standards, standards for the assessment of student achievement, and standards for institutional performance. A qualification standard is largely determined by the purpose and characteristics of a qualification type. It is a generic statement of the learning domains, the level of achievement and the graduate attributes that characterise and are required for the award of the qualification.

As generic statements of achievement, qualification standards apply to all programmes leading to the award of the qualification type. Given the range and diversity of knowledge fields, disciplines and professions that comprise higher education, and their distinctive blends of learning domains and required achievements, it will be necessary for generic qualification-type standards to be interpreted, articulated and applied according to the particular character of the field, discipline or profession. The Council will, in consultation with relevant academics and, where relevant, professional experts, develop these specific applications. In principle, they will be organised in line with the Classification of Education Subject Matter (CESM) categories (Department of Education, 2008). Selection of fields

and disciplines for the development of field- and discipline-specific standards is at the discretion of the CHE, after consultation with the higher education sector.
An explanation of the main terms used in the Framework, relating to qualification standards, is included as **Annexure B**.

3. Principles and characteristics of standards in higher education

Qualification standards should be influenced by a number of principles (CHE, 2006).

- They foster and provide a central role for communities of practice, in that the preferred origins of standards are expert groups of peers representing knowledge fields and disciplines. While the standards authority, the CHE, must assure the embodiment of constitutional values and mediate between diverse influences and expectations emanating variously from the higher education sector, the state, the marketplace and civil society, grounding standards in communities of practice would be the most beneficial way of developing well-focused, informed results that enhance the status, validity and reliability of standards while, at the same time, recognising the need among HEIs for self-regulation and acknowledgement of inter-dependence.
- They move essential features of higher education qualifications from conventions (with associated questions of whose conventions are being applied, whether they remain in touch with intellectual and disciplinary developments, and whether they are conducive to contextual diversity) to (publicly known, quality-assurable) compacts.
- They are generative, rather than prescriptive, and allow for innovation and creativity as principles, rather than bureaucratic or administrative processes for superficial compliance. Within a dynamic relationship between institutional autonomy and nationally-generated standards, higher education institutions are able to design programmes that are fit for purpose, in the sense of being linked to the missions and contexts of the institutions themselves, and their capacity to be continually responsive to changes in knowledge fields and society at large.
- While allowing for on-going disciplinary and inter-disciplinary development, standards have a reasonable durability, to enable medium- and long-term programme and qualification planning on the part of institutions.

These principles should form the basis for development of standards for higher education qualifications. They recognise the dynamic and diverse contexts in which higher education programmes are offered. This implies that the establishment of standards is much more a process of keeping abreast of academic developments, nationally and internationally, than it is an end-product.

Taking into account the principles stated above, the CHE proposes the following fundamental characteristics on which standards for higher education qualifications should be based:

- Recognising the need to avoid a 'one-size-fits-all' approach, given the many contextual differences existing between higher education institutions in South Africa. While qualification standards must be based on an agreed and equitably applied threshold of purpose-informed achievement, contextual factors may allow for variations in the ways in which achievement is manifested;
- Accommodating long-held practices of institutional autonomy while allowing for a strengthening of institutional accountability;
- Matching standards development to the development of flexible approaches to programme accreditation, so that higher education institutions which meet certain requirements can themselves exercise aspects of this function in terms of the national standards developed for higher education qualifications;
- Avoiding all forms of over-regulation, and making the development and application of standards as simple and transparent as possible, including the development of clear criteria against which judgements can be made;
- Acknowledging that qualification standards, while they necessarily address the purpose and the outcomes of programmes, are – while they ought to inform and guide them – not the same as standards which focus on their delivery, for example, standards of pedagogy or student achievement;
- Distinguishing clearly between the separate roles and responsibilities in this field of the Department of Higher Education and Training (DHET), SAQA and the CHE. DHET is responsible for registering private higher education providers and for approving new qualifications and programmes in terms of a public higher education provider's Programme and Qualification Mix (PQM). SAQA is responsible, in consultation with the CHE, for the development of NQF level descriptors for higher education levels and for the registration of higher education qualifications in terms of the criteria for the designation of qualifications set by the CHE and the standards for qualifications developed by the CHE. The CHE through its Higher Education Quality Committee (HEQC) is responsible for the accreditation of higher education programmes leading to qualifications in terms of the standards developed by the CHE. Because standards do not address specific institutionally-designed programmes, they do not determine, for example, PQM approval or SAQA registration, although they will facilitate a better understanding of what underpins those processes;
- Recognising the fundamentally important role of expert peer groups of different knowledge, professional and vocational fields, as well as professional bodies and associations, in the development and revision of standards for higher education qualifications. Since standards for qualifications relate to the role and emphasis of a variety of knowledge contexts, it stands to reason that appropriate expert and peer groups would be best equipped to develop standards for qualifications in their fields of expertise and experience. The learning benefits of such peer group activities have

already been observed as one of the positive outcomes of the HEQC national reviews of selected programmes;

- Acknowledging that, while the CHE is given authority to establish standards for all higher education qualifications, it should do so in close consultation with professional bodies, which perform a separate function of setting requirements for *professional* designation/registration. There should be no serious disjuncture between these processes and the standards that emerge from them;
- Avoiding interpretations of terminology which give rise to notions of hierarchies, rankings or classifications across institutions. This aspect is of particular importance so that standards development can take place in an environment of equity and collaboration. It is essential that standards take their cue from the different purposes of qualifications and the different contexts in which they are offered, and do not translate into signals of the ranking of qualifications offered by different kinds of higher education institutions. This does not mean, however, that standards should not serve the purpose of enabling the enhancement of quality and efficiency of programmes, whether existing or new ones, when it originates within institutions. In any case, rankings can never be a proxy for effective quality assurance, which focuses on intrinsic (for-purpose) rather than relativistic criteria.

4. What can, and cannot, be expected of standards

Qualification standards encapsulate student achievement and graduate attributes at the exit level. They do not deal with matters such as how a programme leading to the award of a qualification is constructed, or how it is delivered, or how the achievement is assessed. Those aspects are the responsibility of the awarding institution. When the CHE involves itself in such aspects, it does so by means of other approaches, such as monitoring and evaluation of the sector, national reviews of fields and professions, or accreditation of programmes leading to the qualifications. Standards development is distinct from, but goes in parallel with, and will inform other quality assurance processes. Standards will also assist in ensuring that all higher education qualifications meet the criteria for registration by SAQA.

In this context, the main purposes of standards development are to:

- provide a framework for the consistent and coherent development and design of qualifications and their curricula across the higher education system;
- clarify the meaning, purpose and distinctiveness of qualification types and variants;
- guide the accreditation and recognition of learning programmes by contextualising, in

terms of qualification types, the requirements established by the HEQC;

- contribute to the quality assurance of learning programmes, within and between institutions;
- provide broad guidelines for the achievements expected for the award of a higher education qualification;
- in terms of a global context, establish benchmarks for international comparability of qualifications; and
- strengthen public confidence in the value and credibility of higher education qualifications.

Institutions will wish to use the standards as benchmarks to guide the design of new programmes, and review of existing ones. They will find them to be of benefit in internal comparative evaluation of programmes offered in different fields, disciplines and professions leading to the same qualification type. Standards should assist institutions in their relations with professional bodies, employers and the public at large. They may be of value when making judgements about articulation of their programmes with programmes offered by other institutions, as well as decisions about student access and the recognition of prior learning. Standards should also guide institutions when evaluating the national and international comparability of their own qualifications. They need to be published in a form that is accessible to students who may wish to assess the level of achievement that is expected by each qualification type, and whether that level is represented in a particular programme.

While the potential benefits of qualification standards in higher education are proposed, it is important to identify limits on what standards can be expected to achieve.

They should **NOT**:

- × be expected to provide a resolution to all issues surrounding the academic quality of learning programmes and associated qualifications;
- × enforce the adoption of a particular educational philosophy, pedagogical model or assessment regime;
- × dictate to institutions the design of their programmes, other than the need to ensure specified student achievements at the appropriate level of the qualification, and in line with its purpose;
- × guarantee the recognition of learning credits for students moving from one qualification to another or one educational provider to another; nor
- × provide a platform for addressing institutional issues that fall outside of the purposes of standards development as described above.

These matters fall beyond the ambit of qualification standards.

Crucially, standards should not form the basis for any kind of ranking, differentiation or distinction (tacit or otherwise) between higher education institutions. The only ranking relevant to qualification standards is the 'ranking' of the NQF levels. A key aspect of institutional differentiation is the selection of qualifications that each institution offers. Because the standards address qualification types, any ranking of institutions based on the programmes they offer, leading to those qualifications, would be beyond the scope or control of the standards themselves.

The standards will focus on qualification types, but will not attempt to influence the design and development of programmes that lead to the qualification. The institution's mission, goals, context and priorities will largely influence the range of qualification types that it will offer. If the qualification type has an agreed standard, and the institution's programme meets that standard, it could be approved as part of its range of offerings. Differentiation on the basis of qualification-type combinations would be clear, but this would not be determined by the standards themselves. Qualification standards may indeed have the positive effect of ensuring that criteria for any 'marketplace' ranking of institutions are based on nationally-established benchmarks for the qualifications that institutions award.

Addressing the standards, once developed, will be the responsibility of the institution itself, as part of its internal quality assurance, often in liaison with a professional body. In this respect, qualification standards should be of particular benefit in cases where the institution finds that a programme is in need of improvement. The role of the CHE will be to ensure that any programme recommended to SAQA for registration as a qualification, meets the standards of the qualification type. Qualification standards will inform accreditation and re-accreditation of programmes, as well as national reviews of fields of study.

5. Standards in the context of related higher education frameworks

It is important that qualification standards add value to the already existing context in which higher education qualifications are regulated. Standards should not duplicate the roles played by other frameworks, nor should they be perceived as an imposed technicist or bureaucratic device which will add another hurdle that programmes and qualifications must cross in order to get approved. To prevent such undesirable consequences, standards must guide and oversee aspects of qualifications that are distinct from those aspects governed by other frameworks.

5.1 NQF level descriptors

The NQF Act assigns to SAQA the task of developing the content of level descriptors for each level on the NQF, but it does so by reaching agreement on the content with the relevant QC. The QC – in the case of higher education, the CHE – has in turn the responsibility for considering and agreeing to the level descriptors contemplated by SAQA, and ensuring that they remain current and appropriate.

Level descriptors have always been inherent in our qualifications frameworks. They seek to identify predictable levels of complexity and knowledge for programmes (whether whole qualifications or not) developed at each level, while also providing for the aims of portability and articulation. Standards in higher education seek an alignment of the level descriptors with the qualifications permitted by the HEQSF. This alignment calls for an approach to level description that assumes an undifferentiated base of knowledge with generic outcomes common to all offerings at a particular level. This would avoid an approach that has, as its starting point, the principles that qualification types and descriptors, on the same NQF level, will have distinctive and differentiated knowledge bases grounded in specific purposes and characteristics, and that the results of learning are consequences of, rather than precedents for knowledge as it reveals itself in contextually appropriate design of programmes.

In some literature, level descriptors and standards are regarded as more or less synonymous in the sense that they can be regarded as criterion-referenced, hierarchical indicators. However, while it is the case those NQF level descriptors serve as the outer and most 'generic' level of specification in the 'nested' approach of the HEQSF, it is also true that they are designed to cover all offerings at a level on the NQF, including qualifications, part-qualifications and short courses offered in every field and discipline of study. For that reason, they attempt no specific reference to the essential knowledge domains, skills and applied competence that ought to characterise each whole qualification type. Level descriptor outcomes do not attempt to address the specific purpose of a qualification, nor are they able to distinguish between different qualifications on the same NQF level. Standards do not replace level descriptors, but level descriptors are considered to play a role different from a qualification specification.

The HEQSF establishes qualification type descriptors, which are nested within an outer layer of level descriptors on the NQF. Although qualification standards are informed by the NQF level descriptors, they differ in important ways. While level descriptors apply to all offerings with outcomes set at the same level (qualification as well as non-qualification programmes and short courses), qualification standards aim to represent the features that are distinctive to a particular qualification type. For example: although a Bachelor Honours degree has the same exit level on the NQF as a Postgraduate Diploma, the distinctive features of each qualification type will result in distinctive standards for each type.

Not every category of level descriptor may be equally relevant to and appropriate for each qualification type. It is the particular purpose, characteristics, knowledge and skills domains,

and student achievement expected of a qualification type that determine its relationship to the level descriptors, and the relative emphasis to be placed on each descriptor.

5.2 The HEQSF

Annexure C includes a summary of the principal characteristics of the HEQSF, and how the HEQSF relates to qualification standards. This Framework for Standards Development takes the recent amendments into account. There are significant implications in the revision for standards development, at a number of NQF levels, such as the proposals for new variants of qualification types.

One can find a brief statement of the purpose of each qualification type in the HEQSF. However, the brief and generalised purpose contained in the HEQSF is not adequate enough to represent appropriately the broad diversity of qualification fields and specialisations that are contained within each qualification type. If the purpose of a qualification is regarded as fundamental to its value, then one of the aims of standards is to expand and particularise the broad (and, in some respects, vague) purpose statements of the HEQSF to reflect the characteristics of the qualifications that the standards govern.

There is also limited synergy between the purpose statements of the HEQSF and the 'categories' of outcome included in the draft NQF level descriptors. There are ten such categories:

- Scope of knowledge
- Knowledge literacy
- Method and procedure
- Problem solving
- Ethics and professional practice
- Accessing, processing and managing information
- Producing and communicating information
- Context and systems
- Management of learning
- Accountability

In some cases, for example 'Scope of knowledge', there is a reasonable similarity between the NQF level descriptor and the HEQSF purpose statement. In respect of other categories, for example, 'Ethics and professional practice' and 'Accountability', the HEQSF is completely silent, while in the case, for example, of 'Management of learning', level descriptor outcomes are so indistinct from one level to the next that applying them to qualification types would have little real benefit. What this suggests is that neither NQF level descriptors nor the HEQSF are intended to address, or indeed capable of addressing, fully the relationship between

qualification purpose and qualification characteristics, a relationship that is fundamental to the fitness for and fitness of purpose that ought to determine the qualification. Bridging this gap is one of the tasks of standards development.

5.3 HEQC accreditation of programmes

Criteria for accreditation by the HEQC of a programme leading to a qualification include the requirement to demonstrate the programme's fitness, intellectual credibility, coherence and capacity for articulation (*Criteria for Programme Accreditation*, CHE, 2004, Criterion 1). There is little doubt that these qualities are central to any notion of standards in higher education. Would criteria for programme accreditation not then cover much of the ground that standards might embrace?

There are some important differences. Requirements for accreditation are very generally stipulated and do not give any explicit guide to potential providers or to the judges of proposed new programmes. In applications, responses to Criterion 1 are adjudicated by knowledgeable peers, but in the absence of more explicit benchmarks, these cover a wide range of possibilities and disputes become tricky to arbitrate. Far from being simply adjuncts to existing criteria for accreditation, standards aim to establish the core credentials of qualifications; as such they are intended to make the process of programme accreditation – as well as review, whether internal or external to institutions – better benchmarked, and thus more transparent and even-handed. However, the development of standards and the application of criteria for accreditation are not mutually exclusive matters. They inform and relate to one other.

5.4 Professional body approval/registration

Legislated professional bodies (councils and associations) have their own criteria for approval of programmes leading to the registration of graduates. In the case of such qualifications, standards developed by the CHE and professional body criteria should be informed by one another and are, ideally, aligned. In many cases, however, professional body criteria go beyond HEQSF purpose statements and the HEQC requirements for accreditation, and may differ from higher education standards insofar as they may include requirements specific to the occupational contexts for which they are intended, relating to content, values and attitudes, on-going professional development, ethical issues, awareness of client needs and environment, and knowledge of the relevant regulatory framework (and, in doing so, they come closer to addressing the range of outcome 'categories' of the NQF level descriptors).

Professional registration usually affirms proven competence to perform in a specific work context. In some cases, work-place competence is demonstrated within the qualification; in other cases, beyond the qualification. The relationship between qualification outcomes and demonstration of professional competence is not uniform.

At the same time, a distinction needs to be drawn between standards for higher education *qualifications* on the one hand and; on the other, criteria determined by a recognised professional body for conferring on an individual a professional *designation*.

Alignment between the award of a qualification by an institution and the extent to which it meets a professional body's requirements for designation is a matter that needs to be resolved between the awarding institution (or the sector as a whole) and the relevant professional body. However, the development of qualification standards in consultation with communities of practice implies that representation from professional bodies will be essential in all cases where the application of generic qualification types to specific fields of study needs to be informed by particular professional requirements. This should help to ensure compatibility between the institution's qualification and the requirements of the professional body.

In the process of development of qualification standards, the CHE intends to ensure, through its establishment of communities of practice where they affect professional fields, an appropriate representation of institutional and professional interests. The structure of these groups is likely to differ from case to case. In the case of qualifications leading to a recognised professional designation, participation by professional bodies is essential. In cases of professional or para-professional fields of study that do not have legislated bodies, the consultation process will need to be determined by the CHE on a case-by-case basis. In all cases, the principle of a peer group of academic experts ought to be paramount.

Registration by SAQA of a professional designation must be done separately from registration of a qualification on the recommendation of the CHE. There is a distinction. Qualification standards recognise the autonomy of higher education institutions to design, deliver and assess the programmes that lead to the institutional award, provided that they meet the standards for the qualification type. Criteria for designation/registration as a professional are the prerogative of the relevant professional body.

6. Mapping qualification standards

Education at NQF levels 5-10 encompasses a broad spectrum of programmes leading to qualifications. While there are a number of criteria that can be used to locate programmes in this spectrum, a widely accepted benchmark is the amount of learning that occurs in the context of a specific workplace (and is influenced by workplace interests) in proportion to the amount of learning that happens in the institution of learning.

At one end of the spectrum are qualifications that focus on specific trades or occupations in which procedural and situational knowledge and work-based skills are paramount, and work-integrated learning – mainly in the workplace itself – is at the core of the qualification design. These qualifications are often referred to as vocational qualifications, in that they are related largely, if not totally, to a specific skills-set, or vocation. In many countries, they are

offered in a 'dual education system', with industry-based apprenticeship being combined (and often simultaneous) with institutionally-based training.

At the other end of the qualification spectrum are what are often described as 'formative' or 'general' programmes in which curriculum and outcomes emphasise conceptual and strategic knowledge, and relatively limited reference is made to workplace competence beyond the academy. Along the spectrum are gradations in the relative emphasis on procedural and declarative knowledge. Between highly contextualised and highly conceptualised programmes there are many that – although assuming limited *new* knowledge being acquired in the workplace – require some extent of skilled application of acquired knowledge in a relevant, sometimes simulated, context.

Along the spectrum the nature of the proficiency ranges from proficiency in a *particular* or a *broad-ranging vocation* (podiatry or hospitality work, for instance), proficiency in a *profession* (law, engineering or teaching, for example, with specialisations at more advanced levels), or proficiency in a *specialised knowledge area*, be it disciplinary or inter-disciplinary. The more task-specific the proficiency, the more *contextually* relevant and coherent the curriculum must be; the more knowledge-specialised, the more *conceptually* relevant and coherent. Different points of emphasis in the relationship between contextual and conceptual relevance suggest grounds for approaching the development of higher education standards on the basis of a matrix of qualification '**pathways**' that reflect the contextual-conceptual spectrum of relevance and coherence referred to above. In this Framework the pathways are termed:

- vocational pathway
- professional pathway
- general (sometimes referred to as 'academic') pathway

The aim of establishing any model of qualification pathways is not to suggest that they are categorically absolute, but rather to develop a framework that would enable the implicit intentions of the HEQF to be made clear by means of generative standards that articulate the purpose and characteristics of higher education programmes in a way that aligns their distinctive aspects with their overall purpose as qualifications. Standards will guide (but not specify) ratios of knowledge mix on the basis of the purpose and characteristics of the qualification type, as described in the HEQSF and expanded on in standards statements. It would be counter-productive to try to write rules for contextual-conceptual mixes that are supposed to apply to the pathways.

There is no suggestion that different qualifications falling within a single pathway are alike or homogeneous. For example, engineers have a quite different knowledge and skills base to social workers or doctors. What these professional qualifications have in common is that they all have to have a specialised mix of theory and the application of relevant skills in practice. The mix will be quite specific for each, and debates can be observed amongst experts in each field as to the appropriate nature of the mix: how much problem-based

learning should doctors have, for example? Or how much school-based training should trainee teachers have? In each case the debate will revolve around what is appropriate for the trainee to become a competent professional in that field.

This is quite different from concerns relating to qualifications in the general pathway where debates are far more likely to focus on the necessary proportion of research methodology, in a field like social anthropology, for example, as compared to coverage and disciplinary breadth. In this case the question is: what does it take to be a disciplinary or inter-disciplinary adept? The issue will be the kinds and levels of proficiency aimed for in different qualifications. Equally important is that a qualification should not be pre-emptively type-cast into a pathway, but that classification should be the outcome of an analysis of its standards-related characteristics. In a nutshell, applying the concept of qualification pathways must avoid any and every notion of the strait-jacketing of either qualifications or the institutions that offer them.

The spectrum of pathways referred to above, based on proportional emphasis on contextual and conceptual knowledge, is a useful way of mapping the range of qualifications offered on NQF levels 5-10. It is in the nature of higher education that qualifications in its realm are based on the premise that a conceptual base of knowledge (provided within the awarding institution) lays the groundwork for, and precedes the application of such knowledge to the skills and applied competence that would be required of a graduate in the workplace. Such qualifications can be distinguished from other qualifications (or part-qualifications and short courses) for which workplace-based needs, skills and applied competence provide the rationale and experiential basis for the institutionally-grounded knowledge that serves to conceptualise, justify and enhance such skills and applied competence.

This implies two different approaches to the award of a qualification: one, from a conceptually-grounded (institutional) identification of a knowledge base necessary for contextual application and, two, from a contextually-grounded (workplace) identification of a skills and applied competence base that, through the qualification, is bolstered by a conceptual underpinning. The ambit of the CHE as QC lies largely in the former approach. Using the 'pathway' spectrum as a guide, this in turn implies that qualifications that exhibit the characteristics of the general (academic) and professional pathways, and those qualifications that exhibit the characteristics of the vocational pathway and are second or more advanced qualifications, especially in the band of NQF levels 7-10, would normally be located within the jurisdiction of the CHE.

Pathways are intended to inform differentiation between qualification types but not between institutions, the latter being determined by institutional PQMs. Qualification standards make no distinction between institutions that offer those qualifications, whether they be public or private. There will be correlation, however, between institutional mission and goals, and the pathway(s) that characterise the programme offerings.

Likewise, standards inform qualification types, irrespective of the institutional type where they are awarded. References to qualification pathways and knowledge mixes are intended to assist institutions in matching their qualification offerings with their mission, goals,

priorities and contexts. They do not in themselves place limitations on the qualifications that an institution may offer, as long as it is able to meet the standards for those qualifications. It is not the function of qualification standards to determine the PQM of an institution, or how it may vary from time to time. An expert community of practice will determine the particular conceptual-contextual blend that a qualification type should have, and institutions should decide (subject to PQM approval) what qualification types they are best able to offer, and in what fields of study.

7. What do qualification standards address?

To represent the conceptual-contextual spectrum of competence, the Framework envisages a taxonomy of **learning domains** that, without being excessively complex, is capable of reflecting the distinctive characteristics of the vocational, professional and general pathways respectively. A survey of international practice shows that, while there are differences in the number of domains (for example, autonomy, independence, accountability, breadth of practice, making informed judgements, ethical and moral development are variously identified as distinctive domains), what is common is that the domains include, at least, a knowledge-base, a skills-base, and the application thereof in a relevant context.

This taxonomy characterises many national frameworks and standards, although actual terms may differ. In this Framework the domains are referred to as 'knowledge', 'skills' and 'applied competence'. Different knowledge-skill-applied competence blends are better suited to some qualification types than to others. It should be emphasised, however, that the use of 'pathways' and 'learning domains' aims to represent a spectrum of contextual-conceptual prominence, not water-tight compartments into which qualifications must be force-fitted.

The current SAQA (2000) registration procedures require the stipulation of *exit outcomes* and *assessment criteria*. The assessment criteria come closest to what are conventionally regarded as standards, as distinct from outcomes. There are two principal problems with the assessment criteria as presently registered. The first is that they are very largely provider-supplied, which means that the same qualification (e.g. BCom) can have very different assessment criteria registered by different providers on the same NQF level. (There are noteworthy exceptions, like the BSc Engineering, which is regulated, in terms of professional approval and graduate registration, by a legislated professional council. Note, however, the point made above about the distinction between qualification standards and criteria for professional designation.) When provider-based qualifications are effectively converted into national qualifications, this is done without any national standards being stipulated. The second problem is that the assessment criteria, as registered, present a simple list of subject and skill procedures to be covered. While this is a start, and while these

lists of assessment criteria may prove helpful in the fleshing out of standards, they do not address the issue of the *purpose* of the qualification directly, and therefore make no further distinction, in important areas, between programmes leading to the same qualification.

One way of seeking to identify the distinctiveness of a qualification, and of programmes leading to its award, is to compare the extent to which the blend of learning domains (knowledge, skill, applied competence) reflect the purpose of the qualification, and the extent to which the blend is reflected in the attributes of a graduate or recipient.

Although outcomes and graduate attributes should not be construed as mutually exclusive, outcomes refer to knowledge, skills and competences that have been demonstrated through formal assessment. Graduate attributes speak to such outcomes, but also encompass values, attitudes, critical thinking, ethical and professional behaviour, and the capacity of a graduate to take what has been learnt beyond the site of learning. The significance of graduate attributes relative to demonstrated outcomes will vary from field to field. They will have particular importance for, and relevance to, qualifications that lead to professional or vocational practice.

The Framework proposes to incorporate the concept 'graduate attributes' in preference to the more restricted (and limiting) term 'outcomes'. The notion of outcomes does not apply equally well to all qualification types and to all knowledge domains. Outcomes can arguably be better articulated and measured within knowledge domains that are essentially hierarchical and cumulative (for example, the 'hard' sciences) than they can be in, for example, the arts. The concept 'graduate attributes', however, incorporates and expands on the notion of outcomes.

Articulating graduate attributes *in a meaningful way* will not be easy, especially in cases where such attributes are reflected more in attitudes than in the concrete demonstration of specific knowledge or skills. However, there is considerable international research on high-impact educational practices that lend themselves to the manifestation of broadly-framed graduate attributes. What is required emerges from statements of what a graduate is able to do or show. An example from a professional field: 'analyse given situations for ethical issues and propose approaches to addressing the issues detected'.

Graduate attributes have, of course, a number of points of reference. Some are shared by the higher education sector as a whole (such as attributes relating to academic authenticity); some will emanate from the specific mission and ethos of the awarding institution; others are shaped by the disciplinary context and knowledge in which they are conceptualised and taught (Jones, 2009). It is the last-mentioned type of attribute that qualification standards ought to identify, taking into account the fact that they will often find common ground with attributes of a more generic kind. To this end, standards should address such questions as the following:

- What is the **purpose** of the qualification? What blend of conceptual and contextual knowledge, skill and applied competence is appropriate to the purpose of the qualification, at the specified level on the NQF?
    - What is the appropriate ratio of focus on conceptual knowledge?
        - Concepts, principles, theories, perspectives
        - Facts, formulae, axioms
    - What is the appropriate ratio of focus on contextual knowledge?
        - On-the-job or on-site
        - Service learning
        - By formal instruction (work-directed theoretical, problem-based, project-based learning, etc.)
    - What therefore is the appropriate pathway of the qualification?
- How does the exit-level blend of learning domains (knowledge, skill, applied competence), shown by the **graduate attributes** expected for the award, represent the purpose of the qualification?
- In what contexts and under what conditions are the exit-level learning domains demonstrated through **assessment**? and,
- How do standards for a qualification relate to the outcomes set out in **NQF level descriptors**? Alternatively, how do the level descriptors represent the standards developed for qualifications on each NQF level? Certain level descriptors are, arguably, more appropriate for some qualification pathways than they are for others. For example, a level descriptor relating to 'ethics and professional practice' would be relatively more significant for a professional pathway qualification than for one on the general pathway. While all categories of descriptor would have some relevance at all NQF levels, their relative weighting would vary from one level to another. Developing a set of level descriptors that meets the needs of all qualification types and fields of study is likely to prove futile. An alternative is for qualification standards to be aligned with an appropriate selection of descriptors of the SAQA variety.

Most importantly, in addressing such questions, what is the appropriate line of distinction between what is specified in national standards on the one hand, and on the other, institutionally-determined and contextually-relevant application of a set of national standards for the qualification type?

8. How are qualification standards expressed?

The starting point for a standard is the qualification descriptor in the HEQSF, which defines:

- the qualification type;
- variants of the qualification type (for example, 360-credit and 480-credit Bachelor's degrees, or 240-credit and 360-credit Diplomas); and
- the purpose of the qualification, and its distinctive characteristics.

As and when necessary, the purpose and characteristics of the qualification type in the HEQSF are elaborated or expanded on. The next step is to recommend the knowledge blend appropriate to the purpose of the qualification type. This proposes a blend of conceptual knowledge (procedural, declarative) and contextually-relevant knowledge, skill and applied competence. Guided by the purpose of the qualification and its appropriate knowledge blend, the standard is represented as a series of statements describing the achievements and attributes expected for an award of the qualification.

The manner in which student achievement is manifested will vary. Some aspects represent knowledge and skills that should be demonstrated through formal assessment in the programme leading to the qualification. These would be of primary importance to institutions when considering the design, content mix and assessment of a programme.

Others represent more general attributes that might be evaluated in various combinations of formal and non-formal ways, and which are no less important to the award. They may include such attributes as appropriate application of knowledge and skills in situations beyond the institution, such as in a workplace or other relevant context; the ability to communicate information, arguments, analyses, problems and solutions to specialists or to non-specialists; capacity to transfer knowledge and skills necessary for employment or further studies; recognition of the limits of knowledge and skills and how to address the limits; capacity to engage productively in relevant projects, either or both individually or collaboratively; awareness and appreciation of the social and ethical norms and values that characterise a particular field or discipline; and ability to adapt knowledge and skills to diverse cultural contexts.

Attributes of this type are often less immediately amenable to evidence-based assessment. Fields and disciplines will find diverse combinations of means for ensuring that all such attributes relevant to the qualification type are appropriately evaluated.

Taking this spectrum of achievements and attributes into account, the standards statements are arranged in terms of: aspects that the student ***'has demonstrated'*** through formal assessment, and aspects in which the student ***'is able to'*** show competence through

means that will reflect the particular purpose and nature of the qualification. This format is illustrated in the accompanying exemplar (**Annexure A**).The standards statements in the exemplar take into account the categories of NQF level descriptors referred to in section 6.2.

The standard is expressed as a ***threshold*** standard. It is intended as a qualitative standard; quantitative aspects such as credit allocations are regulated by the HEQSF. The qualification may be awarded when the standard has been met or exceeded.

However, qualification standards are not intended to be mere instruments for compliance. One of the aims of standards is to encourage and enable *development* where it is sought in the quality and the equivalence of programmes leading to the qualification. To this end, each qualification standard should be complemented with some form of illustration of approaches that may be used to guide the development of above-threshold graduate achievement and attributes. Institutions would, as and where appropriate in terms of their own programme evaluation, have the incentive of standards to strive to move from threshold to advanced graduate output. This could be done, for example, through a gap analysis, identifying gaps between the actual and an institutionally determined target. Such complement should, however, be represented in a form that is not construed as prescriptive, or that may constrain initiative and innovation. Approaches to above-threshold achievement may take the form of illustrative examples agreed on by an expert community of practice. However, generic illustration would have to be interpreted according to the specific characteristics of fields of study, disciplines and professions.

8.1 Learning contexts and tuition modes

Standards must recognise the logic and value of particular *learning contexts*. They do not seek to link a qualification type with a particular learning context or range of contexts. Approaches to teaching, learning and assessment methods remain the responsibility of the institution. The match between purpose and the learning context would be evaluated via other quality assurance means, both internal and external. Furthermore, standards do not distinguish between modes of tuition. Whatever the mode of tuition, there needs to be comparability between what the qualifications achieve. The institution selects the mode of tuition (or combination of modes), and accounts for its compatibility with the qualification.

8.2 Work-integrated learning

Taking the knowledge blend together with the achievements and attributes that are required to demonstrate competence, the standard also recommends an appropriate combination of *contexts and conditions* in which assessment takes place. Standards assume that different qualification types, and the pathways and fields of study for which they are awarded, have different approaches to the integration of work-based learning. The starting point for a standard of a qualification is its purpose and how graduate achievements reflect that purpose. Where work-integrated learning (WIL) is fundamental to the purpose and

achievements, this will be addressed in the standard, but the standard will not prescribe the actual ratio of institution-based/work-based learning or the methods by which WIL is to be assessed.

8.3 Articulation

The CHE recognises its responsibility to ensure that its standards-development mandate takes into account the imperatives of access, articulation, progression, portability and public accountability. While acknowledging these needs, the CHE suggests that it is not the role of qualification standards themselves to determine criteria for transferring credits, and for progression across qualification pathways with different qualification purposes.

Qualification standards will *guide* articulation between qualification pathways and programme orientations. However, higher education qualification standards (unlike standards for Sub-Frameworks dealing with national qualifications) do not engage directly with the curriculum and content of programmes. Because matters relating to articulation and transfer are determined largely at the level of curriculum content and sequence in programmes, and because they are issues to be handled by and between institutions on the basis of their respective programmes, the influence of qualification standards on these matters will be accordingly limited. While they will have value in establishing benchmarks for progression from one qualification to a higher qualification, they will have less influence on specific credit accumulation and transfer between qualifications or between institutions. Higher education standards are not designed to interfere with institutional rights and responsibilities in these matters.

8.4 Duration

Qualification standards are not envisaged as static, permanent entities. Their *duration* will need to be evaluated in terms of their continuing validity. The 'shelf-life' should extend for as long as the standard for the qualification type is deemed to remain current. Depending on disciplinary, inter-disciplinary and field developments, the 'life' may vary from one qualification type to another. In general, a 'shelf-life' of 5 to 8 years may be considered as a benchmark.

An approach to addressing the distinctive characteristics of fields of study, professions and disciplines, and their representation in qualification designators and qualifiers, is addressed in the following section.

9. How many layers should standards address?

9.1 Layers

Qualification-type standards are generic statements encompassing all qualifications of that type, in all fields of study and disciplines. Different fields of study will find it necessary to interpret these generic standards according to the specific identity, characteristics and outcomes of the field. In principle, standards can be generated for a number of layers specified in the HEQF 'nested approach':

- NQF levels
- Qualification types (the HEQSF specifies nine types)
- Qualification types and variants (for example, doctorates and professional doctorates)
- A combination of some or all of: qualification types, variants, designators, and specialised qualifiers

The Framework proposes a gradation from qualification type (for example, a Bachelor's degree) to a qualification in a particular field of study (for example, a Bachelor's degree in Engineering). The award of the qualification will need to meet the general standards of that type, irrespective of the field of study. This implies that the CHE will be responsible for ensuring that all awards of a qualification type, irrespective of the field of study, meet the qualification-type standards.

A decision on the number of layers to be addressed should be based on both qualitative and quantitative criteria. On the qualitative side, the question is to what extent standards for a qualification should be primarily characterised by common ground covered within the qualification type or descriptor itself, or whether the primary characteristics are features of a particular knowledge field or discipline. For example, are a Bachelor's degree in social science and a Bachelor's degree in commerce characterised more by what they have in common as bachelor's degrees, or by the distinctive characteristics of different disciplines? Likewise, would the distinctively characteristic features of a BCom in Accountancy and a BCom in Taxation outweigh their common features? How would the features of a BCom in Taxation differ from the features of a Diploma in Taxation? Answers to these questions have a very significant effect on a model developed for standards generation.

There is also a quantitative issue. Ideally, the development of standards ought to maintain a balance between intellectual feasibility, based on the principles of credibility, legitimacy, comprehensibility and integrity, and the dangers of administrative and bureaucratic inundation. To illustrate the point: restricting standards to qualification types and variants would mean a manageable number of qualification standards to be generated. If that scope was to be extended to a separate set of standards for qualification designators,

then (applying the twelve designators cited in the HEQSF as examples for a bachelor's degree) the number of separate standards required would rise to well over a hundred. Even on this scale, dangers are apparent: the sheer quantity of standards to be developed could overwhelm the capacity of the higher education sector to ensure that the exercise is designed for an efficient and beneficial result.

The scale of the potential exercise does not end there. The HEQSF is silent on the role of an organising basis for the development of standards, such as the system of occupationally-related organising fields used by SAQA. If a system, such as the DHET system of Classification of Educational Subject Matter (CESM) categories were used, then the number of separate standards (by type, descriptor and organising category, even if restricted to first-order CESMs) would increase to a probably unmanageable level. And this number would not account for distinctions between specialisation areas within first-order CESMs.

There are potential pitfalls at both poles of the 'nested' approach. On the one hand, developing standards only for the broadest layer of qualification specification (by qualification type) could result in standards that are deemed to be too generic, and possibly too nebulous, to be of any real value for design and quality assurance of a multiplicity of programmes of that type. Against that, the use of expert disciplinary and specialisation groups would be the key to an application of broad standards to their particular areas of expertise. On the other hand, generating standards for the most specific layer (separate standards for each descriptor and qualifier), while it would be of certain benefit for quality assurance *within* each knowledge field, it would have, arguably, limited value for quality assurance *across and between* knowledge fields and, thus, for qualifications *per se*. A balance needs to be sought between the contrasting dangers of the qualification-type homogenisation of standards and their per-discipline atomisation.

9.2 Qualification types and variants

Taking these factors into account, the CHE proposes, at least initially, to develop standards in the following manner. The aim is to find a balance between generic qualification-type standards, and the manifestation of those standards in terms of the distinctive characteristics of knowledge fields and disciplines. This proposal is based on the reviewed HEQF (now called the HEQSF). On account of the CHE observation that, in the long term, the Higher Certificate at level 5 and the Advanced Certificate at level 6 may not remain exclusively within the jurisdiction of the HEQSF, these qualifications are, for the present, held in abeyance insofar as higher education standards are concerned.

At the generic level, the starting point will be qualification-type variants and their applicability to qualification 'pathways'. This suggests that the matrix shown in the figure below will apply. It comprises a total of 18 variants. The Framework proposes that, at least provisionally, standards development by the CHE should focus on the qualifications included in the shaded blocks, namely 14 (possibly 15) variants.

Figure: qualification types and variants

NQF level	Vocational pathway	Professional pathway	General pathway
10		Professional Doctoral degree	Doctoral degree
9		Professional Master's degree	Master's degree
8	Postgraduate Diploma	Postgraduate Diploma Bachelor's degree	Honours degree Bachelor's degree
7	Advanced Diploma	Bachelor's degree Advanced Diploma	Bachelor's degree
6	Diploma (240cr)	Diploma (360cr) (Possible) Diploma (240cr)	
6	Advanced Certificate (120cr)		
5	Higher Certificate (120cr)		

9.3 Designators and fields

If, however, generic standards based on these variants are to be academically credible and meaningful, they will need to be tested against and applied to specific fields and perhaps even disciplines within those fields. For this to happen in a way that allows for an appropriate balance between generic stability and disciplinary application, the two processes, namely the development of qualification-type standards and the assimilation of those standards with the particular features and characteristics of programmes leading to qualifications of a specialised nature, will ideally run simultaneously. The CHE proposes that, in the initial stages of standards development at least, the scope should be highly selective, and should be based – during a first phase – on the following considerations.

Qualification types should be selected according to a particular need to distinguish between proposed variants (for example, general and professional types at doctoral or/ and master's levels; or the four proposed variants of the bachelor's degree; or the proposed offering of both a 360-credit and a 240-credit diploma).

For those identified qualification types, CESM-related fields should be selected in line with one or more of the following contingencies:

1. request from the Minister;
2. selection of a field for HEQC national review;

3. selection of a field which has recently modified, or is in the process of modifying its professional or vocational requirements;
4. request from a representative and authoritative party in higher education (for example, a forum or association of deputy vice-chancellors or faculty deans);
5. selection by the CHE on any other relevant ground (for example, matters arising from the processes of institutional review or programme accreditation).

9.4 Standards for sub-fields (qualifiers within the same designators)

Taking this proposal into account, the question arises whether it will be necessary to develop separate standards for sub-fields or disciplines within a field, or whether field standards will suffice. For example, would there be a need in the engineering field to have separate standards for the electrical, electronic, chemical, civil and aeronautical sub-fields? Or would there be a need in the field of psychology for separate standards for the clinical, occupational, counselling and industrial sub-fields?

The CHE proposes that, in principle, that should not be necessary, on the grounds that the distinctions would manifest themselves in programme content, curriculum organisation or other aspects of the programme (or the specific requirements of a professional body) that are not envisaged as being within the scope of qualification standards, as they have been defined above. There may well, however, be exceptions that arise when field standards are tested against specific sub-fields or disciplines. There may also be a need to adopt a modified approach in the case of non-degree qualifications, where designators do not apply.

The approach implies that, at least in an initial stage, a manageable number of standards will be developed. Once the first phase of the process has been completed, the CHE will evaluate the outcome and proceed accordingly, taking into account the extent to which this approach addresses the aims and principles of qualification standards that were outlined above.

The initial task for the CHE is to establish the fundamental principles on which the development of standards for higher education qualifications is to be based, bearing in mind the need for intellectual – and, indeed, practical – modesty. The process will require, as a first step, extensive discussion with all interested parties, comprising the higher education sector in its institutional, governmental and professional aspects.

10. How will this approach affect higher education institutions?

This approach to qualification standards will influence the development of programmes by HEIs in the following ways:

- The mission, goals and resource allocation of a HEI are linked to one or more qualification pathway(s), and to some or all qualification levels and types provided for by the HEQSF. This should be an enabling process internal to the institution, not an external type-casting. The HEI will, from time to time, review the relationship between institutional and programme profiles.
- A proposed programme is linked to a qualification pathway, and to a qualification that is appropriate to that pathway.
- The conceptualisation and design of the proposed programme are expected to meet the standard developed for the qualification.
- The programme must, minimally, meet the 'threshold' standard for the qualification. 'Threshold' standards will inform and influence the minimum standards for programme accreditation as contained in the HEQC Programme Accreditation Framework and the registration of qualifications.
- As part of its internal quality assurance processes, the HEI assesses its capacity to enhance, where relevant, 'threshold' standards by adopting above-threshold practices.
- HEQC institutional and programme reviews evaluate the need and the capacity of the HEI to enhance a programme in relation to the qualification standard, and progress in doing so.
- Standards (at one or more levels) will be used to assess the international comparability of qualifications. Comparison between programmes (for example, between programmes of the same qualification type, or programmes on the same NQF level of different qualification types) would be a matter controlled between or within institutions.

11. The way forward

Once a qualification has been selected for standards development, in terms of the process outlined in Section 9.3 above, the CHE informs the relevant academic community, if possible via the relevant association or body, should one be in place. After consultation with and nominations received from the academic community, the CHE selects a standards development reference group, comprising academics with expertise in the particular field of study and with appropriate experience at the relevant NQF level. The reference group, convened by the CHE, drafts a standards statement.

Once endorsed by the group, the draft statement is disseminated to institutions and to other interested parties, including, in the case of professional and vocational qualifications, the body or bodies representing practitioners in the field. All comments and recommendation are considered by the reference group and amendments to the draft are made if and as necessary.

The draft statement is thereafter presented to the HEQC for comment and advice, before being submitted to the Council for approval. It is then published.

Annexure A

Exemplar

STANDARD FOR A HIGHER EDUCATION QUALIFICATION

(Note: the exemplar is illustrative and may be adjusted according to the distinctive features of a particular qualification type, NQF level and field of study.)

Introduction

The CHE provides a summary of the national policy and legislative context in which the standard is developed, and an outline of the process followed.

Qualification title

Title from the HEQSF
(E.g., Bachelor's degree)

Qualification type: general characteristics

This is extracted from the HEQSF. It is augmented, if and as required, by addressing the questions outlined in Section 7 of the Framework.

Preamble

This provides a brief statement outlining the discipline-based context in which the standard has been developed.

Purpose statement

The generic purpose of a qualification type (or type variant) is interpreted in the light of the distinctive characteristics and expected graduate attributes of the field or discipline.

When standards are developed for a qualification type that has more than one variant (e.g., general and professional master's degrees, 360-credit and 240-credit diplomas), it may be necessary to elaborate on the purpose statement above, to identify the particular aspects of purpose that underlies each variant.

HEQSF specification

The exit level of the qualification on the NQF is stated, together with the minimum total number of credits and the minimum number of credits at the exit level.

(Note: the standard does not prescribe the duration of study. It may, however, state a normal duration.)

Standard for the award of the qualification

(Note: when a qualification type may be awarded on more than one NQF level, e.g., a bachelor's degree and a diploma, it will be necessary to develop an appropriate standard for each NQF level.)

The ***purpose*** and ***level*** of the qualification will have been achieved when the student **has demonstrated**:

(a statement relating to the depth and breadth of **knowledge** required in a field of study, whether comprising one or more disciplines, and the extent of understanding of fundamental principles, concepts, theories, rules and practices underlying the field, the extent of attention given to the forefront of developments in the field/discipline, and awareness of the evolving nature of knowledge in that field);

(a statement of **skills and techniques** developed, and the range of relevant methods of inquiry, such as the gathering from multiple sources, processing and validation of data and other kinds of information);

(a statement addressing the capacity to **review, consolidate, analyse and synthesise** information, with sound reasoning, in order to investigate complex problems and to propose feasible solutions);

(a statement identifying the ability critically to **evaluate** principles, concepts, theories, practices, and interpretations from diverse perspectives in the field, to sustain arguments and reach judgements grounded in reflective, creative thinking);

(a statement relating to the capacity to **represent**, showing some intellectual independence, ideas, arguments, findings and/or works in appropriately precise and coherent form, using discourse, methods, materials and techniques appropriate to the field);

and is able to:

(a statement referring to the ability to **apply** acquired knowledge, understanding, skills and techniques, whether in familiar and/or unfamiliar contexts, and the extent required in the forms of initiative, rigour and responsibility);

(a statement of the ability to **work productively** on projects, whether such work is required independently and/or under supervision, and whether individual and/or collaborative);

(a statement relating to the capacity to **communicate** concepts, arguments, information and solutions to problems, and to what range of recipients, specialist and/or non-specialist, in what forms characteristic of the field or discipline);

(a statement of ability to recognise and appreciate the **limits**, in depth as well as breadth, of acquired knowledge and skills, and to address such limits appropriately);

(a statement of capacity to apply knowledge and skills in a manner that is consistent with the social and ethical **norms** of the field, and is sensitive to the cultural **contexts** in which they are applied);

(a statement referring to relevant ability to **transfer** acquired knowledge, skills and attributes to situations of employment, professional practice or/and further studies).

(Note: as indicated in the Framework, these attributes are normally arranged in the learning domains referred to as knowledge, skills, and applied competence.)

Contexts and conditions for assessment

The focus of this section is on the purpose of the qualification and how assessment of the graduate attributes reflects that purpose. These attributes indicate the appropriate blend of conceptual and contextual competence (knowledge, skills and applied competence) required for the qualification to be awarded in a particular field of study or discipline. Where, for example, work-based learning (WIL) is fundamental to the purpose and achievements, this is addressed in the standard, but the standard does not prescribe the actual ratio or sequence of institution-based and work-based learning. Nor does it prescribe the methods by which either form of learning is to be assessed.

Award of the qualification

The qualification may be awarded when the qualification standard has been **met or exceeded**.

Progression

As stipulated in the HEQSF.

Guidelines

Guidelines accompanying a standards statement may include some or all of the following:

- recommendation for the appropriate pathway(s) on which the qualification type will normally be offered, with commentary on the relationship of the recommended pathway(s) and the appropriate blend of conceptual and contextual knowledge, and the consequent mix of knowledge, skill and applied competence, together with the recommended ratio of institution-based and workplace experience;
- elaboration and explanation of any terms used that are distinctive of the standards statement of a particular qualification type or field/discipline;
- guidelines for above-threshold policy, approach and practice relating specifically to the award of the qualification type.

Annexure B

Explanation of core terms

Conceptual / contextual relevance

Reference to 'conceptual relevance' and 'contextual relevance' indicates distinguishable but often over-lapping bands of relative importance on a spectrum of qualification purposes, rather than two wholly distinctive categories of purpose. 'Conceptual relevance' refers to knowledge grounded in principles, concepts and theories that characterise a specialised discipline or field of study, which can be relevant to a diverse and changeable range of contexts, and claims coherence independent of any specific context. 'Contextual relevance', on the other hand, refers to the relationship between knowledge and its application to a particular context, which is the primary arbiter of the coherence of knowledge with its application. In most cases, contextual relevance is assessed through work-integrated learning, in either simulated or, more usually, actual workplace situations. All higher qualifications need to demonstrate coherence both conceptually and contextually, although in different proportions depending on the purpose and intended outcomes of the qualification. Critical issues are the appropriate ratio between conceptual and contextual relevance, the particular requirements of each, and how they are inter-related.

Graduate attributes

The term 'graduate attributes' refers to the extent to which the blend of learning domains (knowledge, skill and applied competence) reflect the purpose of the qualification type, and the extent to which the blend is reflected in the competence of the graduate. It is used in preference to the terms 'outcomes' and 'assessment criteria' because those are normally provider-based and can vary from one to another qualification of the same qualification type; moreover, they comprise a set of subject and skill procedures, but do not always directly address the purpose of the qualification.

Globally, an increased public investment in higher education has resulted in greater demands on universities as public institutions to demonstrate that they are efficiently and effectively producing what is deemed to be a 'relevant and worthwhile graduate' (Woodhouse, 1999), or a graduate for the 'public good' (Walker, 2010). In South Africa the critical need for graduates who are able to participate in developing the national economy was emphasised in the 2001 National Plan for Higher Education and Training [DoE , 2001] and more recently, in the Higher Education Amendment Act, no. 39 of 2008 (DoE, 2008). Graduate qualities have internationally been widely debated using a variety of terms such as key competences, core skills, transferable skills and the like. Of late, the term 'graduate attributes' has been widely used to describe these qualities (Holmes, 2000; James, Lefoe and Haid, 2004; Barrie, 2007 and 2009). A base-line study of South African graduates from the perspective of employers (Griesel and Parker, 2009) also embraces the term. Graduate attributes have, of course, a number of points of reference. Some are shared by the higher education sector as a whole (such as attributes relating to academic authenticity); some will emanate from the specific mission and ethos of the awarding institution; others are shaped by the disciplinary context and knowledge in which they are conceptualised and

taught (Jones, 2009). It is the last-mentioned type of attribute that qualification standards ought to identify, taking into account the fact that they will often find common ground with attributes of a more generic kind.

Learning domain

A survey of international practice shows that, while there are differences in the number of domains (for example, autonomy, independence, accountability, breadth of practice, making informed judgements, ethical and moral development are variously identified as distinctive domains), what is common is that the domains include at least a knowledge-base, a skills-base, and the application thereof in a relevant context. This taxonomy characterises many national frameworks and standards, although actual terms may differ. By way of illustration, the Australian Qualifications Framework (AQF) applies a simple triad of 'dimensions of competence': knowledge (what a graduate knows and understands), skills (what a graduate can do), and application of knowledge and skills (AQF, 2011). The AQF defines 'application' as 'how a graduate applies knowledge and skills in context and in terms of autonomy, responsibility and accountability'. By way of comparison, in the Framework for Qualifications of the European Higher Education Area (FQEHEA, 2005, 40-41), three strands are defined: 'knowing and understanding' (theoretical knowledge of an academic field); 'knowing how to act' (practical and operational application of knowledge to certain situations); 'knowing how to be' (values as an integral element of perceiving and living with others and in a social context). In the model proposed here, the domains are referred to as 'knowledge' (the theoretical grounding for comprehension and understanding), 'skills' (what the graduate can do) and 'applied competence' (capacity to apply knowledge and skills in authentic contexts, including appreciation of relevant social, cultural and ethical issues).

Level descriptor

The HEQSF describes level descriptors as follows:

> Each NQF level has a level descriptor. Level descriptors provide guidelines for differentiating the varying levels of complexity of qualifications on the framework. The level descriptors are the outermost layer of qualification specification. At each level they describe the generic nature of learning achievements and their complexity. Level descriptors are thus broad qualitative statements against which more specific learning outcomes can be compared and located. The positioning of two or more qualifications on the same NQF level only indicates that the qualifications are broadly comparable in terms of the general level of learning achievements. It does not indicate that they have the same purpose, content or outcomes (except at the generic level of critical cross-field outcomes), nor does it necessarily demonstrate equivalence of qualifications or credits.
>
> (HEQSF, p. 14)

Pathway

Qualification pathways are not absolute categories. They represent trends in the relevance of, and relationship between, conceptual and contextual knowledge that are appropriate

for the purpose and intended student achievements of a qualification. Boundaries between pathways, whether explicit or implicit, are necessarily porous. The major criteria for linking a qualification type (or a particular qualification of that type) to a pathway are its purpose and the way in which the required student achievements reflect that purpose. In some cases, a qualification type may be appropriate for more than one pathway. For example, depending on the field of study, a postgraduate diploma may reflect the purpose and characteristics of either the vocational or professional pathway; it is less likely to reflect the features of the general pathway. It is not a pre-determined pathway that defines the purpose and characteristics of a qualification type, or of a programme leading to the award of a qualification of that type. On the contrary, the purpose and characteristics of a qualification type, as set out in the HEQF and expanded in the qualification standard, and the range of required student achievements emerging from the purpose, give direction towards the appropriate pathway, or in certain cases, pathways that may be deemed most appropriate for the qualification type.

In higher education standards, there is reference to three qualification pathways, namely: the **general**, the **professional** and the **vocational** pathways:

General pathway

The main feature of a qualification type appropriate to the general pathway (sometimes referred to as the 'academic' pathway) is a major emphasis on conceptual knowledge relevant to a discipline, combination of disciplines, or inter-disciplinary studies. Qualification types appropriate to the general pathway have strong emphasis on conceptual knowledge with focus on a discipline or a limited number of cognate disciplines. As with all qualification pathways, contextual relevance must be demonstrated but, in the case of the general pathway, contextual relevance may be indicated through competence to enter employment in a number of related areas, directly or indirectly related to the field of study, or to pursue advanced studies in the discipline(s). For example, a bachelor honours degree may focus on competence to perform in diverse related workplace contexts, but its major purpose would be to equip students with the knowledge and skills to pursue research-related activities, whether in a workplace environment or at the next higher level of institutional qualification (in this case, at the level of a master's degree).

Professional pathway

A qualification on the professional pathway normally leads to designation as a professional practitioner, or formal recognition of competence to practise as a para-professional. In some cases (such as teaching), a work-based learning component is integrated with institution-based studies. In other cases work-based experience is required after completion of the qualification during a period of internship (such as in engineering, clinical psychology, medical studies and law), or a post-graduation external assessment is required (such as in accountancy), or institution-based experience occurs in simulated contexts. A qualification type appropriate for the professional pathway is normally one that is formally recognised by a professional body for the purpose of designation, or relevance to practice.

Vocational pathway

Most qualifications on the vocational pathway put significant emphasis on the application of knowledge and skills in an authentic work-based context, relevant to a specified area of competence or occupational identity. Completion of the qualification normally assumes competence to apply knowledge and skills from the outset, under or without direct supervision. Progression from a vocational qualification type is usually in the same or a closely-related area of study.

Programme

The HEQSF defines a programme as

> a purposeful and structured set of learning experiences that leads to a qualification. Programmes may be discipline-based, professional, career-focused, trans-, inter- or multi-disciplinary in nature ... The credit allocation for core, fundamental and elective learning will depend on the purpose of the programme or qualification. The internal organisation of programmes is otherwise not prescribed by this document ...
>
> (HEQSF, p. 7)

The Framework emphasises the point that standards are developed for qualifications, and not for institutional programmes leading to a qualification.

Purpose statement

A purpose statement sets out in some detail how the characteristics of a qualification are manifested in the pathway(s) on which it is offered, and the combination of learning domains and assessment contexts that are appropriate for the realisation of those characteristics.

Qualification

The HEQSF defines a qualification as the "formal recognition and certification of learning achievement awarded by an accredited institution" (HEQSF, p. 6).

Qualification type

A qualification type is 'the first name given to a qualification' (HEQSF, p. 15). Examples are: Advanced Certificate, Diploma, Bachelor's degree, Bachelor Honours degree. A qualification type differs from a study programme designed and delivered by a specific institution and, likewise, from a qualification awarded on completion of the programme by that institution and registered by SAQA in the name of the institution.

Qualification-type variant

In the Framework, qualification-type 'variants' are variants of the same qualification type. For example, a Master's degree and a Professional Master's degree are variants of the same qualification type. Likewise (and because the revised HEQF proposes 'key distinctions' between them), a 240-credit Diploma and a 360-credit Diploma may be considered as variants of the same qualification type. Type variants are not the same as designator variants of the degree type. Whereas type

variants are characterised by the distinctive purpose of each variant, the latter are determined by subject matter.

Standard

Qualification standard

A qualification standard is a statement that indicates how the purpose of the qualification, and the level on the NQF at which it is awarded, are represented in the learning domains, assessment contexts, and graduate attributes that are typical for the award of the qualification. Qualification standards are not the same, in either scope or effect, as other modalities used for the establishment of standards in higher education, for example, resource allocation standards, teaching and learning standards, or standards used for the grading of individual students.

Threshold standard

This is a standard that a programme must meet in full in order to merit the award of a specific qualification type. They represent the essential elements of good practice. Where appropriate, a qualification-type standards description includes guidelines for the achievement of above-threshold practice.

Subject matter

Classification of educational subject matter (CESM)

CESM is a standardised way, designed by the DHET, of classifying the subject matter in fields of study and courses offered by higher education institutions. It is used to organise subject matter data collected by the Higher Education Management Information System (HEMIS). Subject matter is organised into 20 broad subject areas, called 'first order' categories. To enable greater detail and disaggregation of data, these categories are further divided into descending hierarchies of 'second order' and 'third order' (and, in some cases, 'fourth order') categories.

Field of study

'Field of study', as used in the Framework, generally refers to a CESM 'first order' category.

Discipline

A discipline is a recognised knowledge- or skills-based subject. As used in the Framework, 'discipline' generally refers to a CESM 'second order' category. In some exceptional cases, it may refer to a 'third order' (or, rarely, to a 'fourth order') category.

Annexure C

C.1 Principal Characteristics of the HEQSF

The HEQSF is designed to be compatible with other national and international qualifications frameworks and to enable comparisons. It does not provide the basis for establishing equivalence but rather for comparing and benchmarking similar qualifications and thus enhancing portability. It is also intended to be simple, clear and comprehensible. It has expanded the range of *levels* on the NQF that are devoted to higher education qualifications from four to six, thereby expanding the total range of the NQF from eight levels to ten. At the same time it has radically reduced the range of HE *qualification types* to nine. The qualification types that it recognises are the following:

Figure 6: Qualification types on the HEQSF

Undergraduate qualifications	Postgraduate qualifications
Higher Certificate (exit level 5)	Postgraduate Diploma (exit level 8)
Advanced Certificate (exit level 6)	Bachelor Honours Degree (exit level 8)
Diploma (exit level 6)	Master's Degree (exit level 9)
Advanced Diploma (exit level 7)	Doctoral Degree (exit level 10)
Bachelor's Degree (exit level 7 or 8)	

An important point of departure for the generation of standards is the HEQSF statement that 'each qualification type has a unique descriptor stating its purpose and how it relates to other qualification types.' The descriptor is a 'point of reference', providing a basis for the design, approval and review of programmes. The aim is an appropriate degree of consistency between programmes of the same qualification type and, where relevant, the same designated variant, or in certain cases, a cognate cluster of variants. In standards development the primary *purpose* of a qualification is taken as the point of departure, particularly in respect of its emphasis on different types of knowledge and knowledge contexts. This approach is deemed appropriate for higher education institutions as knowledge-based institutions.

In this approach the NQF level descriptors are embedded in the standards developed for the various qualification types. However, whereas the level descriptors are common for all offerings at a particular NQF level, irrespective of their various purposes, standards take the purpose of each qualification type, and the way in which graduate attributes manifest that purpose, as their starting point. Thus, for example, while standards will be developed, on the one hand, for Qualification Type A on level 5, and another set of standards for Qualification Type B on level 6 (such as the Higher Certificate and Advanced Certificate), there will also be a need to distinguish between standards for Variant C on level 8 and standards for Variant D on the same NQF level 8 (such as the Bachelor Honours degree and Postgraduate Diploma).

C.2 Standards in relation to the HEQSF

If the aims set out in the Framework, and the limitations on what standards can be expected to achieve, are accepted as a sufficient basis for the development of standards for qualifications in higher education, a question to be addressed is whether the provisions of the HEQF, notwithstanding the difficulty mentioned above, are not sufficient for achieving these purposes. And if they are not sufficient, then how can standards supplement and enhance them?

The HEQSF forms an indispensable background to the development of standards in that it describes and specifies matters such as:

- Qualification types, permissible permutations of designators and qualifiers, and abbreviations;
- Rules, in terms of minimum credits, for the use of qualifiers in the titles of qualifications;
- The NQF exit level of each qualification type;
- Minimum total credits for learning programmes, minimum credits at exit level, and in some cases the maximum number of credits permitted on lower NQF levels;
- In the case of most postgraduate qualifications, the minimum number of credits required for the conducting and reporting of research;
- Minimum admission requirements;
- Broad purpose and characteristics of each qualification; and
- Possibilities of progression from one qualification to others in the HEQSF.

This specification and description provide a substantial framework for qualification design and assessment, but these details are largely structural and do not address, directly or sufficiently, the issue of standards *per se*.

Neither NQF level descriptors nor the HEQSF are designed fully to align qualification purpose with outcomes. There is also the matter of distinction between the purposes of various qualification types. While the HEQSF does provide very general statements about the purpose and characteristics of qualifications, what it does not do is provide any meaningful guidelines for distinguishing clearly between higher education qualifications with *different purposes* in respect of their primary knowledge orientation, such as the role of discipline-based knowledge, of professionally-derived knowledge and of workplace-derived knowledge. Given that qualifications at the same NQF level may have similar levels of cognitive or content demands, while having very different purposes and thus different balances between the conventional knowledge, skills and values/attitudes inherent in them, it would be problematic, if the HEQF were to be deemed a standards-setting or standards-management framework, that it provides no guidance in this regard. It is therefore clear that the HEQSF was not intended to perform this function. As a broad structural framework, it does not delve into the distinctions and nuances that come from differences of purpose and differences in knowledge areas/fields within common qualification types or NQF levels.

References

Australian Qualifications Framework (2011). Pathways, www.aqf.edu.au/AbouttheAQF/pathwaysandwww.aqf.edu.au/AQFGlossaryofTerminology.

Barrie, SC. 2007. A conceptual framework for teaching and learning of generic graduate attributes. Studies in Higher Education. 32(4): 439-458.

Barrie, SC., Hughes, C. & Smith, C. (2009). National Graduate Attribute Project (GAP) Final Report. http://www.itl.usyd.edu.au/projects/nationalgap/resources/presentations.htm

Department of Education (2001). National Plan for Higher Education in South Africa, Government Gazette, vol. 230, no. 22138, 9 March 2001.

Council on Higher Education (2004). Criteria for Programme Accreditation.

Department of Education (2008). Higher Education Amendment Act (Act No. 39 of 2008), Government Gazette, vol. 521, no. 31651, 27 November 2008.

Department of Education (2008). Classification of Educational Subject Matter (CESM). Pretoria, August 2008.

Department of Education (2009). National Qualifications Framework Act (Act No. 67 of 2008), Government Gazette, vol. 524, No. 31909, 17 February 2009.

Griesel, H. & Parker, B. (2009). Graduate attributes: a baseline study on South African graduates from the perspective of the employers. HESA and SAQA. http://www.saqa.org.za/docs/pubs/general/graduate_attributes.pdf.

Higher Education Quality Committee (2004). Criteria for programme accreditation. Pretoria: CHE.

Holmes, L. (2000). "Questioning the Skills agenda" in Fallows, S & Steven, C. (Eds.), Integrating Key Skills in Higher Education, pp. 201-214 (London: Kogan Page).

James, P., Lefoe, G. & Hadi, M. (2004). Working "through" graduate attributes: A bottom-up approach. Proceedings of the HERDSA 2004 International Conference. http://www.herdsa.org.au/conference2004/contributions/RPapers/P022-jt.pdf

Jones, A. (2009). Redisciplining generic attributes: the disciplinary context in focus. Students in Higher Education, 34(1), pp 85-100.

South African Qualifications Authority (2000). Criteria for the generation and evaluation of qualifications and standards within the National Qualifications Framework. Pretoria: SAQA.

South African Qualifications Authority (2010). Level descriptors for the South African National Qualifications Framework. Pretoria, 2010.

Walker, M. (2010). A human development and capabilities "Prospective analysis" of global higher education Policy. Journal of Education Policy, 25(4): 485-501.