

MODULE 1

UNDERSTANDING QUALIFICATIONS FRAMEWORKS

1. WHAT ARE NATIONAL QUALIFICATIONS FRAMEWORKS?	4
2. MAIN PURPOSES FOR RECENT QUALIFICATIONS REFORMS	5
3. TYPES OF QUALIFICATIONS FRAMEWORKS	6
4. CONVERGENCE AND NATIONAL ADJUSTMENTS	9
5. Skype session: : THE DEVELOPMENT OF QUALIFICATIONS - ARJEN DEIJ (ETF)*	11

* The European Training Foundation is an agency of the European union that helps transition and developing countries to harness the potential of their human capital through the reform of education, training and labour market systems in the context of the EU's external relations policy.

It is easy to forget that the current standard-based model of qualifications is a relatively recent invention. Full credit to New Zealand for setting up the first national qualification authority and developing the first fully functioning national qualification frameworks in 1990/1. The emergence of broadly similar national qualification developments in many different countries during the 1990s reflected the extent to which experience was being shared through exchange of information and expertise in publications. Since then many more countries developed or are developing national qualification frameworks- and many have established national qualifications authorities for their frameworks. International collaboration continues to these days and has been formalised, in a number of regions, in the more recent development of transnational qualification frameworks reflecting the growing importance of learners and labour mobility but also, perhaps, as a means by which to encourage cross-border policy convergence.

1 What are National Qualifications Frameworks?

The main features of NQFs are as follow:

- Qualifications are described in terms of a single set of criteria or a single definition of what is to count as a qualification.
- Qualifications are ranked on a single hierarchy expressed as a single set of levels – each with its distinct level descriptors
- Qualifications are classified (in the case of vocational qualifications) in terms of comprehensive set of occupational fields.
- Qualifications are described in terms of learning outcomes that are independent of the site, the form of provision and the type of pedagogy and curriculum through which they may be achieved.
- A national framework of qualifications provides a set of benchmarks against which any learning can be assessed in terms of its potential contribution to a qualification.
- All qualifications are defined in terms of elements (sometimes referred to as units expressed as quantifiable credit. A learner has to achieve a given number of credit to gain a qualification.

It is these features that, in principle, allow qualifications to be the basis of the goals they claim for them. For ex-

ample, in principle, qualifications as part of an NQF are designed:

- to be achieved by accumulation over time;
- to be transportable – units of one qualification can be used for other qualifications;
- to be transparent – learners know precisely what learning outcomes they are required to demonstrate to achieve a qualification.

Qualifications Frameworks are flourishing all over the world. Many authors are wondering why so many policy makers are finding them such a good idea everywhere. The first frameworks (1984) came as an idea that things could not continue as before, and therefore had a transformational edge, like in New Zealand, Australia, South Africa and England. This is understandable since the competence-based approach of training was also growing fast at the time and the productive sector could rightfully claim they had to share the driving seat of TVET systems. International experts criss-crossing the world with this new talisman in hand might be partly responsible for this wave of optimism.

Before 2000, only a handful of countries had NQFs. These first frameworks were developed to address specific challenges for linking, regulating or developing qualifications. A second generation of frameworks developed in the early 2000s has been able to draw upon the different national experiences, but it is really over the very recent years that we have seen a huge surge in developments of QFs which aim to link qualifications within and between countries.

The majority of countries developing national qualification frameworks today are also involved in 'regional' (that is a cluster of neighbouring countries) or transnational frameworks. However, as most countries are at an early stage of conceptualisation and design, their relation to a regional framework vary considerably.

NQFs can take many forms across the many countries where they are developing. What they have in common is that they are an instrument for the classification of qualifications according to a set of criteria for specific levels of learning achieved. Qualifications frameworks aim to bring coherence and clarity to qualifications systems. When qualifications are placed in a classification system, they can be more easily compared by individuals, employers and institutions. But NQFs go beyond other classification systems by bringing together qualifications issued by different bodies and on the basis of levels of learning outcomes.

When different countries' NQF are linked to each other, directly or via a common reference, qualification from different countries can be compared, which supports individuals' mobility across borders. But the purpose of establishing an NQF – and the implications of doing so – are much wider than classification and comparison.

Contrarily to qualification systems, national qualifications frameworks are social constructs. This means that the framework is the result of a consensus between concerned stakeholders. In Europe, the word qualification has been agreed to mean a formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards. This definition has been adopted in India through the Notification of the National Skills Qualification Framework (23rd December, 2013).

NQF are part of wider qualification systems. Qualification systems include all aspects of a country's activity related to the recognition of learning and other mechanisms that link education and training to the labour market and civil society. This includes the development and implementation of institutional arrangements and processes relating to quality assurance, assessment and the award of qualifications.

The levels of a framework indicate different degrees of complexity of the learning outcomes. The lowest level often define the basic generic or vocational skills for people who can work effectively under supervision, the central levels typically define the expected requirements for professionals who can act independently, whilst the highest levels emphasize the capacity to analyse and innovate, create new knowledge and may include the ability to lead and manage people and processes. In some QFs the highest levels are reserved for holders of higher education degrees, but this is increasingly challenged by lifelong learning frameworks with a strong labour market dimension, so that increasingly the highest levels are being opened up to vocational qualifications too.

In order to understand a qualification as the outcome of an assessment, it is useful to understand learning outcomes. Learning outcomes say what a learner is expected to know, understand and be able to do at the end of a course of learning. Outcomes tell us what is inside a qualification –so creating readability. At the same time, by defining a qualification by what the learner needs to achieve rather than by the traditional inputs such as duration of programme, learning outcomes facilitate diverse

learning routes –formal or informal- which recognise and encourage lifelong learning.

But outcomes do not stop with the frameworks of qualifications –they are also being applied to curricula, teaching and learning, assessment and standards. Countries adopting NQFs are seeking to move to outcomes-based curricula in their schools and colleges. Outcomes can be used to identify appropriate assessment criteria. Most of the times, learning outcomes are based on occupational standards which specify the required work-related competences for an occupation.

While NQFs are tentatively outcomes-based or outcomes-oriented, we should not picture the move to outcome as a radical switch but rather as a gradual tilting of the balance. Indeed, we see countries take a more pragmatic approach, taking account of inputs such as institutional provision and structure and duration of a programme.

2 Main Purposes for Recent Qualification Reforms

It is not always clear whether the development of a NQF is evidence-based or the result of an intuitive approach from the belief that quick results are possible. Although, NQFs are usually seen as tools for reforms, they are not neutral tools. It seems likely that one reason why governments have become so enthusiastic about qualifications in recent decades is that not only are they assumed to motivate learners and potential learners, but they can serve other roles that are just as important, but frequently less explicit aspects of governments' policy. Among the most frequent objectives are

- To establish national standards for the outcomes of learning and improve the social and/or economic value of qualifications
- To improve the quality of qualifications and assessment, increase trust in qualifications and gain national / international recognition for workers' skills
- To relate qualifications to each other and improve access, progression routes and the possibilities of transferring learning (sometimes summarised as “improving learners' journeys”)
- To provide a basis for co-operation between stakeholders in education and training in pursuit of some aspect(s) of national policy on social or economic development

- Make education more responsive to demand (incl. from labour market)
- Enhance quality of learning
- Recognise existing skills (incl. in-/non-formal learning)
- Promote international mobility of workers and learners
- Reference qualifications to trans-national framework
- Promote parity of esteem for vocational learning
- Make education system more transparent
- Provide instrument of accountability and control
- Promote access, transfer and progression
- Increase coherence/coordination of education system

Such purposes are over ambitious if they do not come with a range of actions, including appropriate laws and policies, institutions, budget allocation, infrastructure development, personal development for teachers and trainers and provision of learning resources materials. The goals above cannot be achieved by the NQF alone. Policy breadth is required, which is defined as the extent to which the establishment of the framework is directly and explicitly linked with other measures to influence how the framework is used, such as the availability of assessment systems, the adequate retraining of trainers, the existence of well developed sectoral organisations and the new partnership without which, a NQF can never be more than a 'map'. Among less explicit aspects of government policy, a greater emphasis on qualifications enables central government to:

- Increase their control of education in areas where it is relatively weak.
- Provide simple measurable criteria for allocating funds to institutions.
- Make local and regional education and training organisations more accountable.
- Provide quantitative measures of the success of public policies.

3 Types of Qualifications Frameworks

While NQFs are a global trend and appear to share common characteristics, in practice the development, and especially the implementation, of frameworks vary markedly by country. There is a tension between the need to comply with internationally admitted practices and prac-

Box 1: The Case of India

Objectives of the NSQF

- Accommodate the diversity of the Indian education and training systems
- Allow the development of a lot of qualifications for each level, based on outcomes which are accepted across the nation
- Provide structure for development and maintenance of progression pathways which provide access to qualifications and assist people to move easily and readily between different education and training sectors and between those sectors and the labour market.
- Give individuals an option to progress through education and training and gain recognition for their prior learning and experiences.
- Underpins national regulatory and quality assurance arrangements for education and training;
- Support and enhances the national and international mobility of persons with NSQF-compliant qualifications through increased recognition of the value and comparability of Indian qualifications.

(NSQF Notification, December 23rd, 2013)

tices applied in other countries, and the need to take full account of national history and a culture. This tension has produced different results in countries depending on how predominantly context-bound or predominantly context-free the frameworks set out to be. David Raffe refers to this difference the NQF having an institutional logic in the first case and an intrinsic logic in the second.

Hence the NQF differ according to their

Scope: sector or comprehensive

Aims: communication, reform or transformation

Governance: regulatory or voluntary

Design: tight or loose

Associated functions, such as progression pathways.

Type: national or regional.

Scope | Sector NQF (usually TVET) are envisaged in countries which developed the first generation of frameworks (New Zealand, Australia, England) as the world of work was the first to alarm the institutions to the growing mismatch between the outcome of traditional sys-

tems and the skill needs. There is a trend now for the new generation of framework to be comprehensive, that is inclusive of various needs for learning at all and for corresponding recognition and validation. This trend follows the shift to lifelong learning which requires inclusive frameworks in terms of target groups but also in terms of modes of learning.

Design – Tight or loose | comprehensive NQFs need to embrace the full range of concepts, values and traditions in the different parts of education and training covered by the framework. This leaves two options:

- Try to reform the system according to the one-fit-all principles of the framework (in line with outcome-driven model), or
- Introduce a “looser” framework accepting and respecting existing diversity but insisting on a common core of principles to be introduced and shared.

Tight frameworks are normally regulatory frameworks and define uniform specifications for qualifications to be applied across sectors. They seek to improve the relevance and quality of qualifications and the coherence of the qualifications system. They are typically found in either the newer Member States of the EU, for example, or in transition and developing countries. Tight frameworks, as exemplified by the early South African and New Zealand frameworks, generated resistance and undermined support for the initiatives. These experiences have led to general reassessment of the role of frameworks, pointing to the need to protect diversity.

Loose frameworks introduce a set of comprehensive level descriptors to be applied across sub-systems, but allow substantial variation across sub-frameworks.

Whether a framework is tight or loose depends on the stringency of conditions a qualification must meet to be included in the framework. A possible example is the difference between the English and Scottish frameworks. The SCQF makes simple demands on qualifications to be admitted to its hierarchy, the requirement for a minimum size, quality assurance and a learning outcomes format are seen as minimum requirements to support the integrity of the SCQF. This might be contrasted with the English QCF which makes demands in terms of structure, for example, qualification titles, size, unit format, form of assessment criteria, classification of units as mandatory or optional, and rules of combination of units to form a qualification. The effect of the framework on qualifications therefore differs markedly.

European frameworks can mostly be described as loose as the inclusion of qualifications is based on sector legislation, not on uniform rules covering the entire framework. Most countries operate with different principles for the inclusion of qualification from general, vocational and academic sectors. This approach is well illustrated by the proposed Polish framework where generic, national descriptors are supplemented by more detailed descriptors for the sub-sectors of general, vocational and higher education. While not so explicitly addressed by other frameworks, the basic principle applies across the European continent.

Governance | In the case of comprehensive frameworks, four set of functions must be carried out as part of the governance.

- Management of the framework
- Standards and qualification development
- Quality assurance of education and training providers
- Assessment and certification.

Clear consistent roles of different ministries and public authorities need to be distinguished from the role of the “Qualification Authority” and from other players such as the private sector and NGOs. NQFs are voluntary or regulatory according to the obligation made to the training providers to comply to national standards of delivery as a condition of access to public funding. There are no clear cut difference between the two. The table 1 summarizes some countries’ arrangements in terms of scope and governance.

Aims of frameworks – Communication frameworks

| aim to coordinate different subsectors of a national education and training system, and make the national qualifications system more transparent. They are predominant when the national system is long settled and sustained by a national consensus. The changes to the national system tend to be adjustments rather than major overhaul. These frameworks essentially add value to the system.

Reforming frameworks are more ambitious: they seek to actively improve the national education and training system in terms of relevance, coherence and quality of qualifications. They are typically found either in the newer member States of the EU or in transition and developing countries. They are therefore much more influenced by external factors and tend to resemble each others in structure (e.g. numbers of levels) and scope. Tight reforming frameworks, as exemplified by the early south African and New Zealand frameworks, generated resis-

Table 1: Countries arrangements in scope and governance (Source ETF)

Country	Scope	Governance
Australia	All sectors	Ministry
Denmark	All sectors	Co-ordinating Committee (4 ministries)
England and Northern Ireland	Vocational (separate HE framework)	Government sponsored agency
France	VET	Government sponsored agency
Germany	All sectors	National and regional ministries
Ireland	All sectors	Government sponsored agency + separate schools authority.
Kosovo	All sectors	National qualification authority + separate school VET and HE authorities
Malaysia	VET and HE	National qualification authority
Morocco	All sectors	Possibly a commission of representative of most important ministries and social partners
New Zealand	All sectors	National qualification authorities + separate HE authority.
Scotland	All sectors	Independent Partnership Organisation (Ministry, National qualification authority, VET and HE bodies)
South Africa	All sectors	National qualification authority + schools & colleges, VET and HE authorities
UAE	All sectors	National qualification authority + VET and HE authorities
Wales	All sectors	Ministry

tance and undermined support for the initiatives. These experiences have led to general reassessment of the role of frameworks, pointing to the need to protect diversity.

The further implementation of NQFs in the coming years will show the extent to which countries move from the relatively modest ambition of communication frameworks towards the more challenging role of reforming frameworks. In particular areas, for example related to the introduction of recognition of non-formal and informal learning, NQF take the role of reference point for reforms in this field. This is exemplified by the German and Polish qualification frameworks which see the development of recognition as an integrated and important of framework developments. A third example is the French-speaking region of Belgium where the development of validation and framework goes hand in hand, and where significant progress has been made in the last few years. Given the adoption of the European Council recommendation on validation of non-formal and informal learning in December 2012, the link between framework and recognition will receive increased attention. This is already the case in India, where the Official Notification of the National Skills Qualification Framework (NSQF) foresees a close co-development of the NSQF and the recognition of prior learning. NQFs have therefore a role to play

as reference point for national validation systems potentially open to all.

Associated functions | Some of the established frameworks have invested much effort in creating better conditions for progression. Scotland for instance has made significant progress in defining progression routes for learners in selected areas. Universities are obliged to reserve some of their places to those coming through non-traditional routes, e.g. without a school leaving certificate from general education. While this strategy goes beyond the remit and role of the framework, the Scottish Credit Qualifications Framework levels are used to position people (and their prior learning) and to map possible learning pathways. A key challenge faced by countries wanting to go beyond strictly regulated formal education and training is to ensure that the new qualifications included in the framework can be trusted and that appropriate quality assurance criteria and procedures are put in place.

National or Regional | Regional frameworks cover qualifications in a number of countries in a particular geographical region. Table 2 lists the most prominent. The difference between national and regional frameworks is summarized in the following table (source Mike Coles).

Table 2: Comparison of national and regional frameworks

Areas of comparison	Types of qualification frameworks	
	National	Regional
Main functions	To act as a benchmark for the level of learning recognised in the NQS	To act as a translation device to enable comparison of levels of qualifications across member countries
Developed by	National governments in many cases through national agencies set up for this purpose	Countries in a region acting jointly, mostly facilitated by a regional body or a regional association.
Sensitive to	Local national priorities, e.g. level of literacy of LM needs	Collective priorities across member countries (e.g. enabling mobility of learners and workers across borders).
Currency/value depends on...	The extent of regulatory compliance required, the level of buy in from the key role players (such as industry, learning institutions and professional association), the perceived or real value to the broad population.	The level of trust between member countries: the transparency of the national quality assurance systems, mutually agreed national priorities.
Quality is guaranteed by	Adherence to nationally agreed quality assurance systems, exemplified in the practices of national bodies and learning institutions.	The common application of referencing criteria and guidelines as well as the robustness and transparency of the national referencing process, and the national QA systems.
The levels are defined by reference to...	National benchmarks which may be embedded in different learning contexts, e.g. school education, work or higher education.	General progression of learning across all contexts that is applicable to all countries.

4 Convergence and National Adjustment

In Europe, NQFs have mostly been designed as comprehensive frameworks, covering all levels and types of qualification; most countries have introduced eight-level frameworks where learning outcomes are described according to the knowledge, skills and competence (KSC) categories; convergence in structure underlines the countries giving priority to international comparability; NQFs are frequently seen as a part of national lifelong learning strategies, in many cases acknowledging qualifications awarded outside the formal, public system as well as promoting validation of non-formal and informal learning.

New concepts appear as part of the need to quality assure Lifelong Learning, in a context where the supply of qualification shift from a monopolistic offer (public systems aiming one category of beneficiaries) to a competitive offer targeting all types of beneficiaries. The training providers bear the load of delivering training programmes leading to real qualification and of getting people to employment. More importance is given to assessment and certification and to pathways. Many countries see dialogue and cooperation across education and training subsystems and with stakeholders outside education as a first step.

The countries that have tried to make a radical break with their previous qualifications systems have had the most acute difficulties. A radical break gives neither practitioners nor those involved in design any benchmarks to test the new ideas against their experience. Incremental approaches minimize the likelihood that ideologies will intervene, and as a result are more likely to avoid polarized positions. The problem with an incrementalist approach is that it is unlikely to appeal to governments who feel the situation of their country is one of great urgency, as in the case of South Africa. The point to remember, however, is that even if a more radical break is attempted, the structural constraints on implementation may well extend the implementation period anyway.

Consensus or agreement is the bedrock of trust and all qualifications depend on trust. Qualifications inevitably claim to represent more than they can demonstrate and therefore can only work on the basis of trust. Genuine consultation processes such as those that have been a feature of the Irish NQF are crucial and principled compromises such as that reached over the relations between the schools and universities and the NQF in New Zealand are important. The alternative which is typified by the rigid assertions followed by forced compromises over NVQs in England has meant that the whole idea of an NQF has tended to lose public and professional credibility.

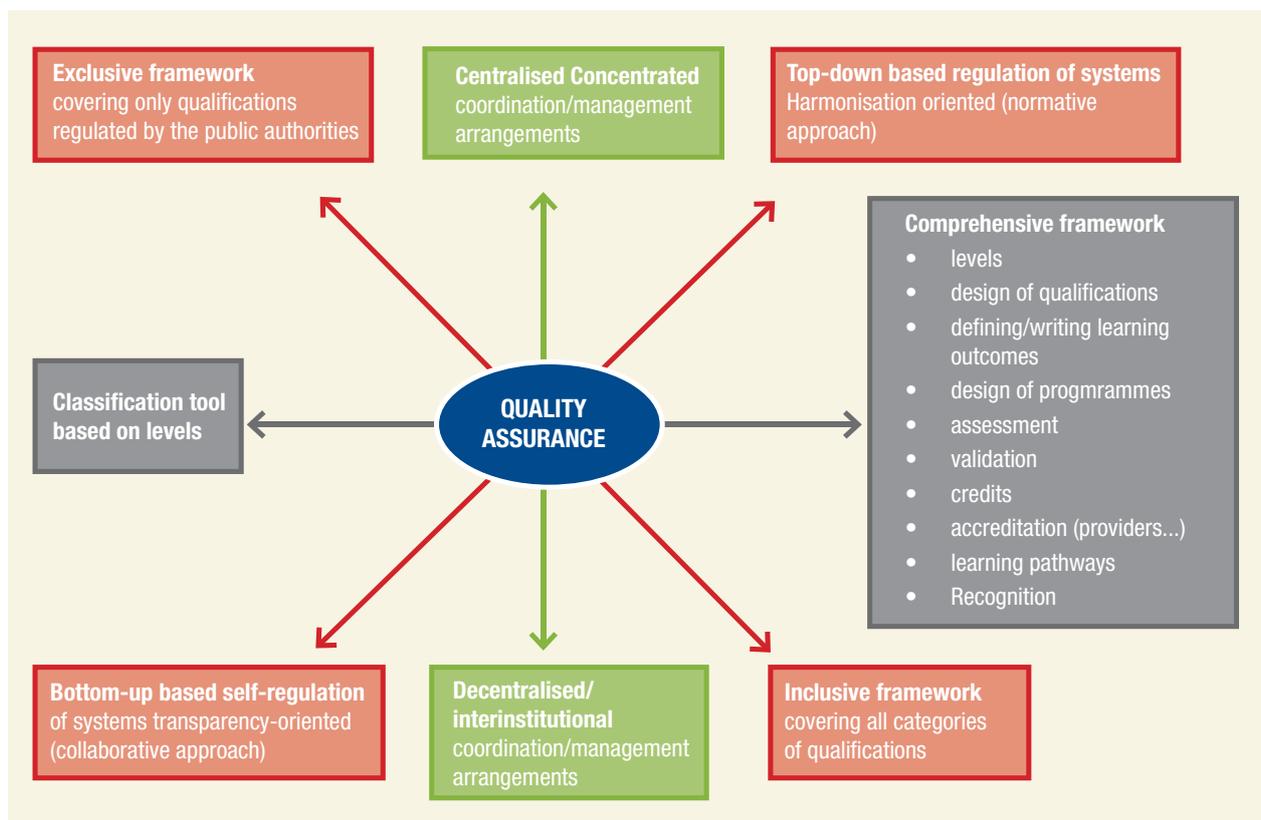
Scotland demonstrates very well the importance of partial frameworks as building blocks for an NQF. Only when a range of partial frameworks – Higher Still, SCOTCAT, Higher National Diplomas and NVQs was in place, was the comprehensive Scottish Credit and Qualifications Framework introduced. It was the existence of the building blocks that established both the confidence in, and the practicality of, a broader more comprehensive qualifications framework (the SCQF). Here the term building block refers to specific levels (upper secondary or higher education) and sectors (vocational or academic or an industrial sector like engineering). It does not refer to the elements of a framework such as modules, units, standards, levels, and credits, although these may well form elements of partial frameworks.

The combination of the various features of NQFs can be summarised in Figure 1. Quality assurance tends to take the central role and the way it is implemented determines the features of the framework.

Conclusion

In many countries, the NQF has still to become visible to ordinary citizens and be part of the language of learning. Experience shows that a NQF does not have to be perfect before entering a real world. It is preferable to be pragmatic, to test out, to build support of a wide variety of potential users – rather than to try to launch a framework which is perfect in every detail. Seeking perfection before going public is understandable but the time it takes to achieve this may well build frustration amongst users rather than demand. Demand is built by having learners, teachers and employers as advocates of the national qualification framework because they have experienced its benefits. Such advocates will be far more effective in pushing forward implementation than a roomful of beautifully written policy papers.

Figure 1: Features of qualifications frameworks



1. The difference between qualification frameworks and qualification systems

- Levels are implicit in NQS but explicit in NQFs.
- NQFs are based on learning inputs / NQFs are based on learning outcomes.
- NQFs are based on institutional logic / NQFs on intrinsic logic.
- an NQS is a real system / an NQF is a social construct.

2. The primary objectives of National Qualification Frameworks

- establish national standards for the outcomes of learning and improve the social and/or economic value of qualifications.
- improve the quality of qualifications and assessment, increase trust in qualifications and gain national / international recognition for workers' skills - relate qualifications to each other and improve access, progression routes and the possibilities of transferring learning (sometimes summarised as "improving learners' journeys").
- provide a basis for co-operation between stakeholders in education and training in pursuit of some aspect(s) of national policy on social or economic development.

3. The added value of qualification frameworks as policy tools

- Encouraging people to see qualifying as a process that starts in initial education and training and continues throughout their adult lives.
- Improving opportunities for people to move between different types of qualifications (especially general and vocational) and between vocational qualifications for different occupational sectors.
- Promoting informal learning and the links between informal and formal learning and improving opportunities for people to use their informal learning to gain recognized qualifications.

5. Skype Session

The Development of Qualifications: Theory and Practice (Arjen Deij)

(Arjen focuses on the 29 countries¹ which are in the mandate of the ETF as partners of the European union)

'Qualification' means different things in different countries, or even within them. There is no universal definition, or understanding, of 'qualification'. Linguistic differences apart, how qualifications are perceived and defined varies. The term 'vocational' is also open to interpretation, and in practice has quite different usage and meaning across countries. The International Standard Classification Of Education (ISCED) definition links qualifications to completion of a programme; By contrast, the EQF definition defines a qualification as 'the formal outcome of an Assessment and validation process, which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards'. In many parts of the world, governments, schools and em-

ployers now consider what a person has learned to be more important than what they have been taught. The EQF definition is now favoured in ETF partner countries. That said, many partner countries, while developing NQFs based on learning outcomes, have not yet redefined what 'qualification' means. Most use definitions which would not comply with the EQF one. In most cases, this is simply a practical matter. Reform is under way but not every part of the system will be reformed at the same time or systematically. Change is, in reality, piecemeal. Revising or introducing legislation is a cumbersome process, so we should not be surprised if practice is ahead of theory, especially where this is employer-led, as it is, for example, in Ukraine. Let us now look at some country examples.

EU instruments are central to shaping and channeling this policy and to driving substantial change. As well as the EQF, the European Credit System for Vocational Education and Training (ECVET), Europass, Education and Training 2020 (ET 2020), the Copenhagen Process and the Bruges Communiqué all exercise their influence on countries' discussions and decisions. Learning outcomes are the conceptual common denominator of all these tools and policies. What we have found, is that definitions are often out of date in their intention, and sometimes, where reform is more advanced, in their practice. Some countries are reordering the relationship

¹ Albania, Algeria, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Egypt, Former Yugoslav Republic of Macedonia, Georgia, Iceland, Israel, Jordan, Kazakhstan, Kosovo, Kyrgyzstan, Lebanon, Moldova, Montenegro, Morocco, Palestine, Russia, Serbia, Syria, Tajikistan, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan.

of curricula to qualifications, so that qualifications are designed by learning outcomes and curricula are developed to facilitate achievement of these.

Countries vary in the levels at which their VET qualifications are available. In some cases a ceiling is applied, so that such countries do not, or do not yet, offer VET qualifications beyond the equivalent of EQF levels 4 and 5. In other cases, such as Turkey, or in the sectoral frameworks in Russia, VET qualifications are available at the upper levels. In others, the new NQF upper levels are equally open to VET qualifications but no qualifications in VET beyond levels 4 or 5 have yet been developed.

New Types of Qualifications are Emerging

NQFs are behind another key trend in the conceptual development and implementation of new or revised qualifications. Traditionally, vocational qualifications and programmes in most partner countries were almost exclusively offered in initial or secondary school. Adults, whether in work and retraining or not in employment and seeking to re-enter the workforce, were not catered for. But a more complex economy requires a wider range of qualification types to meet learner needs. Types are clusters or categories of qualifications, which share characteristics such as the sub-system they belong to (for example higher education or VET), their objectives, purpose, and the learner group they cater to. We can also think of types, in everyday language, as a way of indicating how qualifications can be like each other and how they can be different from each other, in duration, profile, content and so on. When countries define types of qualifications, this is integrated into the NQF, so that qualifications inserted in the NQF are first defined by type.

A variety of types of qualification is therefore essential. Partner countries are paying more attention to this issue now, recognizing that clear definitions and categories aid the design of qualifications and establish the relationships and pathways between them.

Unit-Based and Qualifications Based Frameworks

NQFs vary in terms of how qualifications are registered in the framework. The starting assumption, shared by most initial proposals for NQFs, is that qualifications should be unit-based; in other words the learning outcomes assumed to be necessary for a particular qualification are divided up into their basic elements or units. This process of unitisation draws on a familiar analytical type

of methodology and derives from the functional analysis that was common to much occupational psychology in the United States (Callaghan, 1961). Step 1 involves breaking down the skill and knowledge demands associated with a qualification into its smallest parts (units). Each unit is then assigned to a level and given a credit rating in terms of the notional hours needed to acquire the necessary skills and knowledge. Step 2 involves specifying the minimum constraints on the ways in which the units can be combined together, as well as the number of units needed to gain a qualification. Step 3 then assumes that the user (employer and/or employee/trainee) chooses his or her set of units and accumulates enough credit to gain a qualification.

This approach to qualification design maximizes flexibility and choice for learners and employers to put together units in ways that suit their interests. In practice the unitisation model has created as many problems as it solves. Employers and employees (or students) invariably have different interests and the latter frequently lack the knowledge to make reliable choices. As a result the NQFs in both New Zealand and South Africa have moved away from registering units and the NQF is increasingly based on whole qualifications (like in France) with only limited opportunities for learners to choose individual units.

However, despite the trend to whole qualifications-based frameworks, the idea of unitisation remains extremely attractive to policy-makers.

The Lifelong learning paradigm has also encouraged a restructuring of qualifications, building on the new thinking about learning outcomes which has been influencing partner countries for six or seven years. More countries now look to build their qualifications on units. Of course, when qualifications were indistinguishable from curricula, there were no unit-based qualifications. Unitized qualifications can be offered to learners either in combinations or singly. We should not think of 'partial' qualifications, which implies something less than a full qualification. Instead, it is important to appreciate how units offer flexible options to learners. For example, comprehensive, unitized qualifications can be delivered via a regular, full programme in initial VET, while adult learners and those in retraining may prefer more readily manageable unit-by-unit learning, allowing for flexible and accessible assessment. In this way, units support a more adaptable workforce, and crucially are by their nature sympathetic to LLL. Countries usually specify criteria for qualifications design, including units, in their NQF requirements or guidance.

Occupational Standards – Ensuring Labour Market Relevance

Vocational qualifications should be developed from identified labour market needs. In ETF partner countries in Eastern Europe and the Balkans, this often means re-establishing links with labour markets that have been broken during the transition and upheaval of the past 25 years. Or, to be more accurate, it means building new links with today's greater diversity of enterprises and employers. In the past, VET systems in countries neighbouring the EU would often (to simplify) funnel graduates directly to assigned employers in a heavily regulated labour market; or, rather, demand and supply were so strictly regulated that there was not much of a labour market. Training was curricula driven and tended to be narrow and specialized, with little space for career planning or core skills. The transition to an open market ended many of these jobs and broke the VET–employer link. Curricula and qualifications have been slow to match these changes.

Three out of four of ETF's partner countries now use occupational standards to develop vocational qualifications. Both DACUM (developing a curriculum) and functional analysis approaches are in use: for example, Moldova, Serbia and Jordan use DACUM, while Russia, Ukraine and Egypt use functional analysis. The principal value of standards is in seeking to incorporate labour market needs. A standard is a measurable indicator of achievement. An occupational standard is a document which specifies the performance requirements in an occupation, and so links qualifications to employment. Most partner countries have traditionally used education standards to define qualifications. Education standards measure the quality of the education process and the outputs of an education system.

Occupational standards in ETF partner countries are often developed by sector skills councils (SSCs), chambers of commerce or international donors. In Turkey, tripartite sector committees develop the standards, supporting the labour market relevance of the derived qualifications. Moldova has devised its occupational standards via its SSCs.

Non-EU countries use occupational standards in different ways, of course, just as EU countries do. Turkey's NVQs are derived directly from occupational standards, so one standard leads to one qualification while information from several standards can be used to develop broader-based qualifications more suited to prepare secondary VET learners for several related occupations. Or units from occupational standards can be used to develop units of vocational qualifications for specific skills, especially in retraining. While the spread of occupational standards is welcome, too often many remain outside national qualifications systems, so that standards created or led by donors remain unused by qualifications developers in the country. Indeed, some countries have scores of occupational standards but only a handful of approved qualifications, as bureaucratic bottlenecks prevent the validation of more standards. Countries might seek to harness standards to national qualifications more efficiently by streamlining the approved development processes.

Figures 2 to 4 show how frameworks usually build on the skill demand (occupational standards). Figure 2 shows how qualifications have their roots in the labour market. Figure 3 shows how occupational standards diversify into qualification types with specific qualification standards and figure 4 how educational standards develop out of qualification standards.

Process of development of qualifications

Figure 2: Qualifications take their roots in the labour market



Figure 3: Qualification types reflect the level of responsibility in the Labour Market (LM)

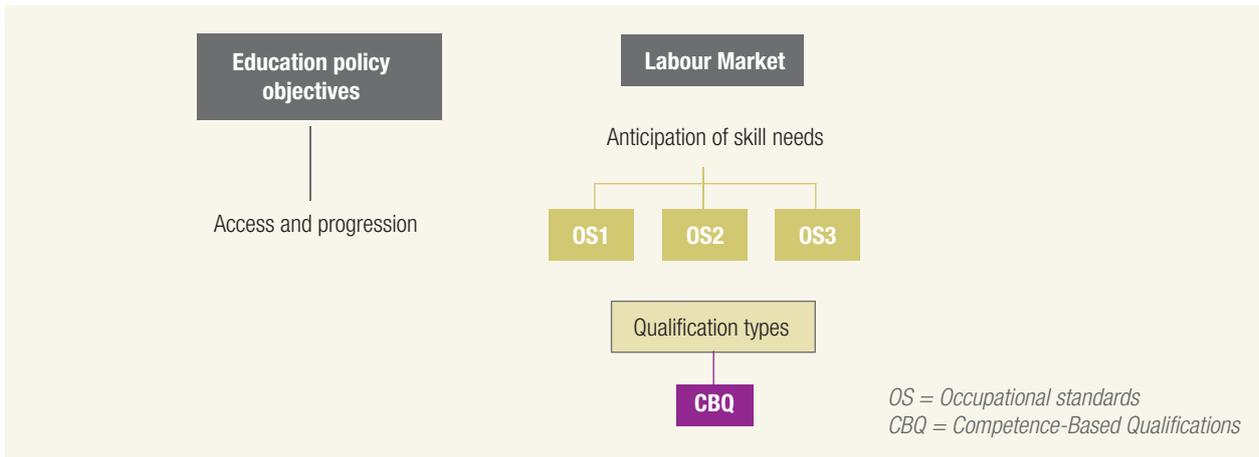


Figure 4: Professional standards are translated into educational standards

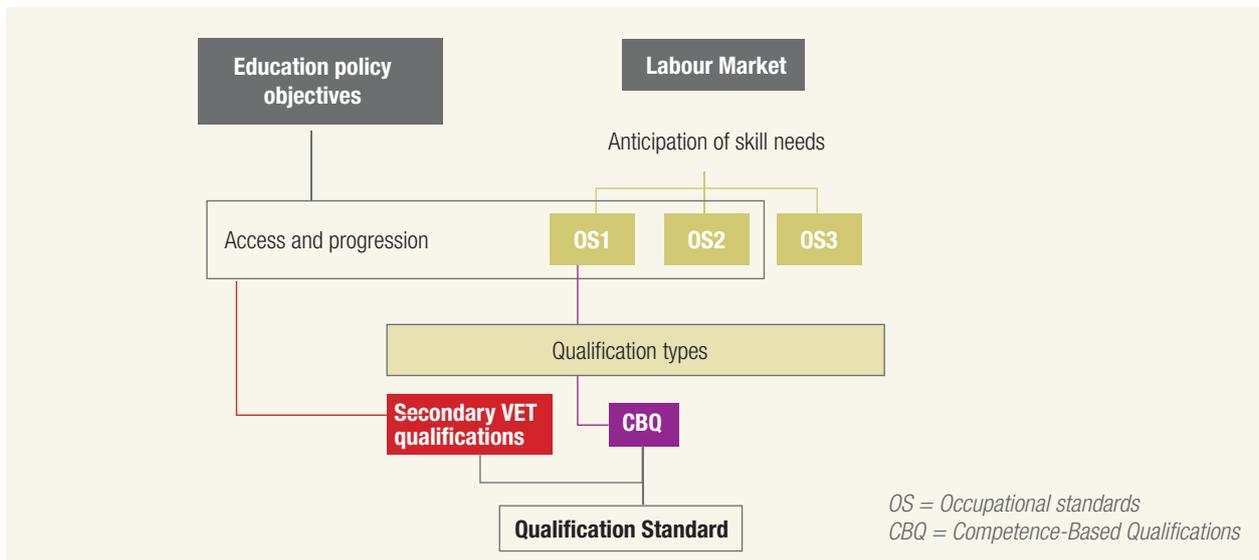
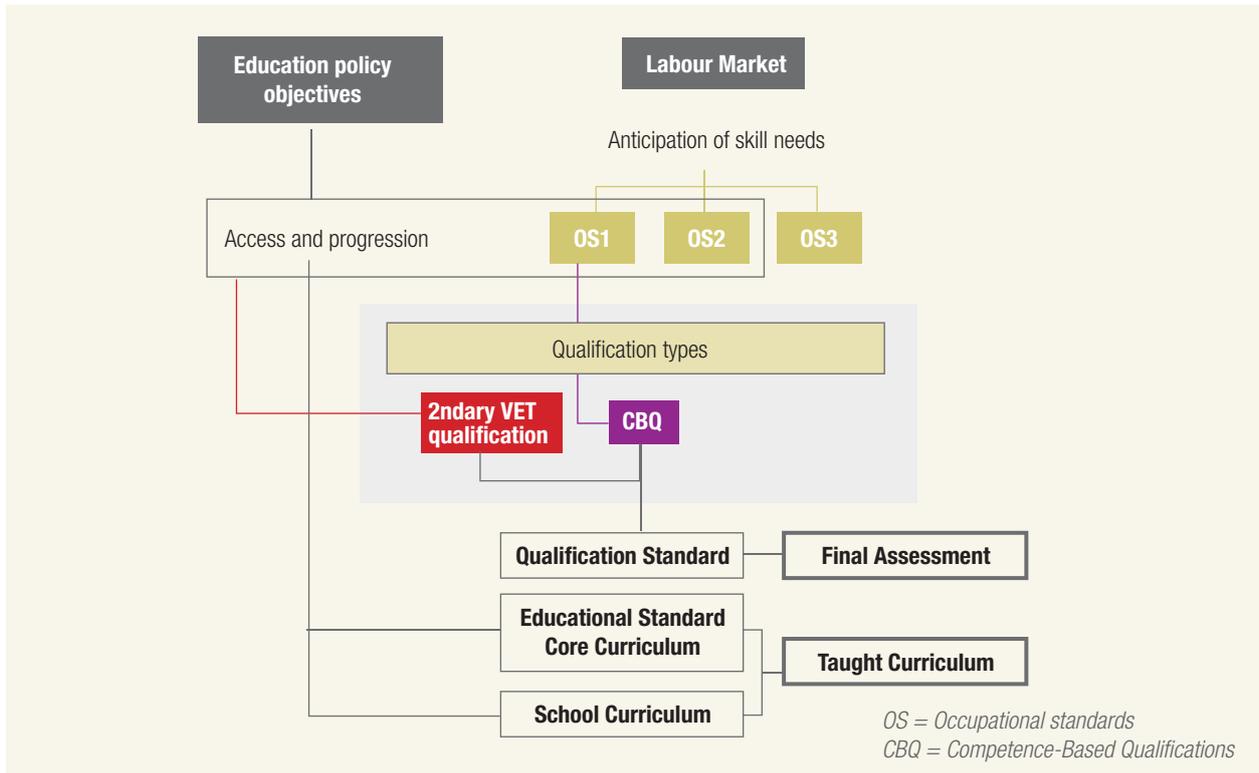


Figure 5: Educational standards are reflected in curricula



The figure above are indicative maps of how qualifications develop. On the ground, dialogue between stakeholders remains one of the most important factors in the implementation of frameworks. Where an active dialogue exists

involving representatives from the world of work and from providers, co-ownership of proposed reforms and shared vision can empower stakeholders to act for a successful implementation of the framework.

FURTHER READINGS

- Bjørnåvold, J., Coles, M., Cedefop and European Commission. 2010. Note 2, European Qualifications Framework series. Luxembourg, EC Publications Office. http://ec.europa.eu/education/lifelong-learning-policy/doc/eqf/note2_en.pdf (Accessed 26 November 2012.)
- Bohlinger, S. 2012. Qualifications frameworks and learning outcomes: challenges for Europe's lifelong learning area. *Journal of Education and Work*, Vol. 25, No. 3, pp. 279–97.
- Callaghan, R, *Education and the Cult of Efficiency*, 1961.
- Cedefop, 2009. *The Shift to Learning Outcomes: Policies and Practices in Europe*, Reference series 72. Luxembourg, EC Publications Office. www.cedefop.europa.eu/EN/publications/12900.aspx (Accessed 16 April 2015.)
- *Global inventory of Regional and National Qualifications frameworks*, vol 1 Thematic Chapters, UNESCO, IUL, ETF, CEDEFOP, 2015.
- Young, M, *National Qualifications : Their Feasibility for Effective Implementation in Developing Countries*, Working paper N° 22, ILO, Geneva, 2005.