

NATIONAL VOCATIONAL EDUCATION
AND TRAINING RESEARCH PROGRAM

RESEARCH REPORT

Developing, approving and maintaining qualifications: selected international approaches

Josie Misko

NATIONAL CENTRE FOR VOCATIONAL
EDUCATION RESEARCH



Australian Government



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Publisher's note

This report has been prepared by the National Centre for Vocational Education Research (NCVER) on behalf of the Skills Senior Officials, under the National Vocational Education and Training Research (NVETR) Program. Funds are set aside to support the provision of research and policy advice to assist with the Australian governments' education and skills reform.

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This document should be attributed as Misko, J 2015, *Developing, approving and maintaining qualifications: selected international approaches*, NCVER, Adelaide.

ISBN 978 1 925173 13 0

TD/TNC 118.17

Published by NCVER, ABN 87 007 967 311

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About the research

Developing, approving and maintaining qualifications: selected international approaches

Josie Misko, NCVET

There are lessons for Australia in the key approaches to the development, approval, maintenance and quality assurance of qualifications adopted in countries overseas. This research takes into account a range of approaches used in selected European Union (EU) member states (Germany, Finland and Sweden), the United Kingdom (England, Northern Ireland and Wales, Scotland, and Ireland) and the nations of New Zealand, Singapore and South Korea. The processes used in Ontario, Canada, and selected accreditation agencies in the United States were also investigated.

This work serves to inform the vocational education and training (VET) sector in Australia about practices used overseas. It provides a useful reference document for agencies charged with developing and reviewing qualifications and showcases the different approaches used to ensure that qualifications remain current for the industries they serve.

Key messages

The report highlights some important issues for Australia, including:

- The introduction of qualifications frameworks, implementation of competency-based or learning outcomes approaches to learning and assessment, recognition of prior learning, and effective regulation and quality assurance processes are all being debated overseas, with varying solutions to the perceived issues being applied.
- The development of hierarchical national qualifications frameworks comprising progressively higher qualification levels is relatively widespread, and increasing. In the main, countries start with existing systems and review these to adapt to new concepts and practices. The use of credit accumulation or credit point systems based on the number of hours typically required for qualification completion is also prevalent.
- The referencing of national qualifications to regional framework models, especially in the European Union but increasingly discussed in our own region, is favoured for improving the transparency, portability, comparability and mutual recognition of qualifications. The main aims are to ensure that qualifications coming from overseas are of the same quality as those attained in the home country and to facilitate labour and student mobility.
- Collaboration between governments (or their delegated agencies) and industry stakeholders is key to developing and/or approving competency standards, educational standards and content that align with labour market needs. Stakeholders almost always involve representatives from industry; in some systems representation is also sought from education and training practitioners and experts, academics, professionals and community groups.
- Removing or retiring qualifications is an issue for systems where there has been a proliferation of qualifications. New Zealand and the United Kingdom have implemented systematic review processes which target for removal those qualifications that have experienced zero or very low uptake over a specified period of time (usually two years).

- Regulatory frameworks reflect their cultural and economic environments. The focus is increasingly moving away from top-down regulation (except for serious transgressions) to a system of collaboration between regulator and provider. Regulators provide advice on what is required to meet specific standards, and providers make internal arrangements to implement and monitor their progress against these standards. Self-appraisal is combined with regular or predetermined external evaluations by the appropriate government agency.
- Countries are keen to ensure that qualifications and skills gained are valued in the labour market by employers and students. This is done by aligning national qualifications and training needs with comprehensive labour market analyses, and applying outcomes-based quality assurance and/or inspection frameworks (including for equity groups). Rates of participation, qualification completion, employment, unemployment, movement into higher qualifications and progression through employment are some key indicators.
- There is a concern about the quality of teachers and teaching, in particular in the European Union states and the United Kingdom, with some countries increasing the level of qualification required for teaching in a VET institution or program.

Dr Craig Fowler
Managing Director, NCVET

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Executive summary

This paper investigates some approaches to the development, approval, maintenance and quality assurance of qualifications of selected international comparators, including the European Union (EU) member nations of Germany, Finland, Sweden, England, Northern Ireland and Wales, Scotland and Ireland, and the nations of New Zealand, Singapore and South Korea. The processes used in Ontario, Canada, and selected accreditation agencies in the United States have also been investigated.

Qualifications and frameworks

Across jurisdictions, the design of basic and advanced vocational education and training (VET) qualifications is focused on the skills and knowledge required for the current and future world of work. This comprises developing specific occupational knowledge, skills and competences, as well as more generic skills that can be transferred to different contexts, such as, increasingly, communication, technological, team-working and problem-solving skills. The portability of qualifications across national and international jurisdictions to facilitate the mobility of workers and students is especially important in Europe. Seamless vertical and horizontal pathways between qualifications (known as permeability of qualifications in Europe) are supported by national qualifications frameworks (NQFs) in European member states and the referencing of these frameworks to the European Qualifications Framework (EQF).

The learning outcomes approach is currently being adopted in the VET systems of many European countries. Like competency-based training the learning outcomes approaches is focused on demonstrated performance (outcomes) to denote the acquisition of skills and knowledge primarily related to the world of work.

In some countries, such as England, Scotland, Wales and Northern Ireland, VET qualifications are based on national occupational or industry competency standards. In others, for example, Germany, the training regulations and ordinances spell out what is required for qualifications in the dual system of apprenticeships. Occupational standards are based on functional analyses of jobs undertaken in certain occupations or workplace roles. Among these the major functions are divided into units of competency, made up of a set of elements, which describe the accomplishment of certain activities. Performance criteria identify benchmarks for assessment. These units of competency can be grouped together to create a broad qualification, as in the case of Germany, or stand-alone qualifications, such as the national vocational qualifications (NVQs) in the United Kingdom. In other countries, education or program standards are used to identify the content of qualifications. These standards are commonly developed through close collaboration between governments, the relevant industry stakeholders, professional experts and training providers.

To ensure that the qualifications developed continue to be relevant to the needs of industry and society, and to identify emerging industries or occupations, governments and industry bodies also usually undertake comprehensive labour market analyses. In some countries the results of these analyses must be attached to any submissions for the development or delivery of new qualifications.

Another approach to ensuring qualification relevance is to reduce the number of available qualifications. It has not been easy to identify the specific processes used to reduce the number of qualifications sustained by specific countries, although there is reference to this as a task entrusted to the committees that develop qualifications. We have however been able to identify the specific

approaches used by the Scottish Qualifications Authority (SQA), the New Zealand Qualifications Authority (NZQA) and the systems used by the Skills Funding Agency in the United Kingdom. The approach is based on identifying for removal qualifications that, for two years, have had zero or very low uptake. The United Kingdom Vocational Qualifications Reform Programme has also used this approach to identify qualifications for removal, but it has combined this with agreement from the relevant sector skills councils (SSCs). Selecting zero- or low-uptake qualifications for removal may not always be the right solution, especially for those occupations which historically have relied on only small numbers of qualified individuals in their industry (for example, funeral directors, mortuary theatre practitioners, grave diggers). This is why consulting with industry stakeholders about the continued need for particular qualifications is important.

There is continuing debate about the quality of qualifications based on the principle of unitisation. In the main this debate is concerned with the undermining of the broad qualifications traditionally perceived to be required for the holistic development of tradespersons. In Germany, the use of the learning outcomes approach is especially criticised in relation to entry-level dual system qualifications. Although learning outcomes have been generally accepted for prevocational training and continuing education, they have been criticised for subverting the concept of 'beruf' or vocation in the German dual system. There is a fear in some places that unitisation resulting from the learning outcomes approach will open the way to partial qualifications. This fear of partial qualifications seems not to be important in the United Kingdom, where units can be accumulated over time.

Stakeholder involvement

Broad stakeholder consultation and involvement in the development of qualifications and qualifications frameworks is observed in many systems, especially those undergoing qualification-related reform and those hoping to open up access to and movement through different education sectors and qualification types. Such consultations and activities are generally driven by government ministries and involve a range of regulatory agencies, industry peak bodies, trade unions (including students), professional associations, public and private VET providers, school and higher education sectors (including practitioners), experts in the field, and research agencies. The sector skills councils in the United Kingdom and the chambers of commerce and chambers of crafts in Germany formalise the participation of industry in the training system. In Finland and Sweden industry and community stakeholders are involved in the development of qualifications in the national and sectoral committees charged with this function. They are also involved in the assessments of skills demonstrations, which generally take place in workplaces.

Quality assurance

The current move to outcomes-oriented learning, based on learning outcomes, competency standards, or learning objectives, places the focus on assessment activities rather than on delivery or learning techniques. When learners obtain qualifications for the knowledge, skills and competencies acquired in a range of formal, non-formal and informal situations, uncertainty may arise about the quality of the qualifications obtained. This uncertainty can reduce trust and confidence in the value of the qualification and its acceptance by employers and the individuals themselves.

In traditional education systems the general approach has involved a system of inspection. In reformed or systems undergoing reform the inspectorial approach has either been superseded by or been combined with a quality assurance approach. The inspectorial approach continues to have currency in

many EU member states. The quality assurance approach has generally been adopted in South Africa, New Zealand, Ontario in Canada, and with accrediting agencies in the United States. Concepts of quality assurance have been combined with concepts of inspections in Scotland and other parts of the United Kingdom. In Germany quality assurance has been largely focused on continuing education.

On the whole, quality assurance and regulatory frameworks have specific requirements that need to be addressed by those seeking initial or continuing accreditation. These are generally specified in quality standards, objectives or criteria. Standards-based systems, as well as those based on objectives and criteria, require regulators to have a clear idea about the intentions of the standards and objectives to be applied or pursued; regulators also need to ensure that these are clearly communicated and are understood by those implementing them. In many jurisdictions the issues covered by quality assurance and those relating to accreditation standards converge.

Regulators and free providers are increasingly concerned about the bureaucracy associated with regulation. The use of risk-based assessment to reduce bureaucratic burden and to provide responsive regulation is also being implemented across systems.

Conclusions

Many of the issues being faced overseas in the construction of qualifications frameworks, the development of the qualifications themselves and quality assurance frameworks have already been debated in the early development and recent revisions of first-generation frameworks. Of interest, however, are the practices used in some jurisdictions to prepare providers for accreditation and the use of risk-based approaches to identify and apply regulatory action. There is a need to build on earlier reforms; for example, there has been a range of national initiatives aiming to improve the quality of assessments. Findings from these initiatives should be published more widely and considered when developing guidance and resources for training providers. The following are the major issues for consideration:

- The types of risk-based quality assurance mechanisms that are based on decreasing regulation for high-performing institutions and increasing investigations for those considered to be of higher risk should be more closely investigated. Risk-based approaches involve the identification of triggers for evaluation. Different systems have identified a range of these triggers. The triggers identified by the Florida Education Department, Ofqual (Office of Qualifications and Examinations Regulation) in the United Kingdom, and the New Zealand Qualifications Authority are useful approaches.
- Involving stakeholders in the design and assessment of qualifications is a feature of many systems at the national level, where it is sometimes legislated. However, it is important to note that stakeholder involvement may be constrained by the ability and availability of stakeholders to meaningfully participate in the process. Identifying the type and extent of involvement that can be reasonably expected from industry, the community or student stakeholders may be an important step to ensuring their valued input into the design of qualifications, especially where these stakeholders do not have a formal legal role in the education and training system. This approach can also help to identify the role of stakeholders in external assessments in improving the validity and reliability of assessments. The practices used for the verification of assessments in the United Kingdom or skills demonstrations in Finland may be useful points for further investigation.

- The integrity of qualifications is not only dependent on the capacity of teachers, trainers, assessors and verifiers to make valid and reliable judgments about the learning that has occurred, but also involves ensuring the availability of up-to-date facilities and equipment for learning and/or assessment. All groups need initial and continuing training in their sector-specific knowledge and skills and in teaching and/or assessment pedagogies. Initial training and continuing professional development of quality auditors and inspectors is also required.
- Qualifications systems and regulatory approaches reflect the traditions of the cultural contexts in which they are located; however, the need to ensure that qualifications have integrity and currency holds true for all nations in this study.

Limitations

This paper has provided information on what selected country comparators do to develop, approve, maintain and quality-assure their qualifications. This has been achieved through a desk-top analysis of readily available information on public websites and publications. Although obtaining information in this way for some areas, for example, qualifications frameworks, qualification approval processes and quality assurance mechanisms, has been relatively straightforward, it has been more difficult to obtain information on how different jurisdictions remove qualifications that are either no longer useful or where few or no individuals enrol. Furthermore, we can never be sure that the descriptions of processes and policies we have sourced from public websites at the time of writing are the most accurate, comprehensive, up to date and complete. When we rely on descriptions of overseas systems and processes that use English terms that are not easy to interpret, there is a danger that the processes may be misunderstood or misrepresented. Despite these limitations, we consider the information we have accessed will provide a useful and relevant comparative context.

Qualifications systems and frameworks

Qualifications systems reflect the social, economic and cultural traditions of the national or regional situations in which they are located. Qualifications frameworks represent a classification of the qualifications available in a qualifications system.

Definitions

In 2008 the European Parliament and Council described a qualifications system as:

including all aspects of a country's activity that result in the recognition of learning. These systems include the means of developing and operationalising national or regional policy on qualifications, institutional arrangements, quality assurance processes, assessment and awarding processes, skills recognition and other mechanisms that link education and training to the labour market and civil society. (European Parliament and Council, cited by CEDEFOP 2010, p.182)

When we talk about qualifications we are generally referring to formal certifications that confirm that an individual has achieved a set of competencies or learning outcomes in a specific domain to the required standards. Nationally accredited or regulated qualifications are those awarded by a formally registered or approved educational institution or awarding agency with the power to confer the qualification. Qualifications awarded by institutions outside these formally approved and recognised bodies may also have value in the labour market because they confer specific types of learning and skills (for example, music qualifications, actuarial qualifications, specific ICT [information communication technologies] qualifications and accreditations and so on).

Qualifications frameworks represent a hierarchy of qualification types and the relationships between them. Increasingly in some overseas countries, there has been a move to reorganise qualifications systems (especially in EU member states, but also in some countries in the Asia Pacific, including Malaysia, Korea and Singapore) by applying the framework concept to classify qualifications.

Similar parameters

The definitions of qualifications and frameworks used in Australia and overseas have similar parameters. The Organisation for Economic Co-operation and Development (OECD) defines formal qualifications as:

the formal outcome (certificate, diploma or title) of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards and/or possesses the necessary competence to do a job in a specific area of work. A qualification confers official recognition of the value of learning outcomes in the labour market and in education and training. A qualification can be a legal entitlement to practise a trade.

(OECD 2007, pp.21–2)

The International Standard Classification of Education (ISCED; 2011) defines a qualification as the 'official confirmation, usually in the form of a certified document, of the successful completion of an educational programme or of a stage of a program (intermediate qualifications)' (cited in European Training Foundation 2012, p.8). The European Qualifications Framework (EQF) 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' (European Training Foundation 2012, p.9). This definition does not cover the use of the term 'qualification' to refer to being competent and able to do a job without a formal credential (CEDEFOP 2010).

Why we need qualifications and frameworks

At home and internationally there is common agreement about the need for qualifications, not only for individual holders of qualifications but also for other stakeholders. Increasingly, there is focus on qualification reforms to improve national economic competitiveness. The reform of qualifications systems and structures and the formalisation of classification systems and frameworks are also focused on improving the comparability and transparency of qualifications to aid international or cross-jurisdictional mobility and to enable all types of learning (formal and informal) to contribute to recognised qualifications.

According to CEDEFOP (2010):

Qualifications ... [are used] ... to signal [an individual's] personal, social and professional status. Employers and recruiters generally use qualifications as proxies for knowledge, skills and wider competence and particularly value initial qualifications with labour market currency awarded at the outset of a person's career. To an extent the labour market interacts with education and training through the medium of qualifications. Providers of education and training use qualifications as a measure of output and as a measure of the quality of institutional performance. Increasingly, policymakers are viewing qualifications and qualifications systems as tools for wider reforms. (CEDEFOP 2010, p.181)

The general concern is to improve the regulation of qualifications so that countries have trust in what specific qualifications represent when making international benchmarks and comparisons. In countries with two or three decades of qualifications reform (for example, United Kingdom and New Zealand) there is increased concern for ensuring the rigour and validity of assessments and rationalising the use of qualifications that seem not to be providing individuals or nations with worthwhile outcomes. Countries with long-standing and effective approaches to the entry-level preparation of young people for occupations (for example, Germany, Austria, Switzerland) may be more circumspect, especially with regard to qualifications reform for those parts of vocational education (particularly apprenticeship systems) with long histories of success.

A qualifications framework can be considered as a formal classification of qualifications for a national or regional education system. In the last two decades the concept of frameworks has increasingly been applied to education and qualifications systems overseas. Frameworks commonly classify all qualification levels and types in a system according to what an individual is expected to learn, know and do on completion of the qualification. Frameworks also identify the relationship between qualification types. They increasingly include indications of the hours typically required to complete a qualification. These hours are translated into credit points according to the typical number of hours required for completion. Frameworks can be comprehensive, in that they encompass all qualifications, or they can be education sector-specific and apply only to certain sectors, for example, post-compulsory vocational education and training.

The concept of qualifications frameworks has gained increased traction in OECD and developing countries. Increasingly, qualifications frameworks are being established to enable transparency, comparability, and national and international portability and mobility. Since 2008, with the launching

of the European Qualifications Framework, European member states have been developing national qualifications frameworks and referencing these to this overarching framework. There have also been moves to introduce an Asia-Pacific qualifications framework (APEC 2009).

National and international frameworks

Scotland, New Zealand, South Africa and countries in the United Kingdom have been classified as having first-generation qualifications frameworks, not only because they were early adopters of the framework concept, but because their frameworks were developed from 'national perceptions, mainly determined by internal drivers, and often using experimental approaches' (presumably, experimental approaches refer to the concept of piloting a specific program or approach). Other frameworks that precede the development of the 2008 European Qualifications Framework but came after the first-generation frameworks have been classified as second-generation and third-generation frameworks. 'Second generation frameworks have tried to learn from the first generation frameworks in terms of design and processes ... [but] ... the influence of external drivers is low'. In 'third generation frameworks internal drivers remain important but external drivers have a significant impact on the technical design of the frameworks and the quality assurance arrangements' (Tuck 2007 cited by European Training Foundation 2012, p.11).

The learning outcomes approach and the concept of levels have been widely adopted in those countries that have or are developing these frameworks. The following is a summary of these countries.

European Union

The European Qualifications Framework for life-long learning was endorsed on 23 April 2008 by the European Parliament and Council. The aim was to enable a comparison of the qualifications and levels of different countries to facilitate the international mobility of labour and students and lifelong learning. Comprising eight levels, the framework covers all general education and vocational and higher education qualifications, as well as those acquired through continuing education. Each level has a descriptor which identifies the learning outcomes (knowledge, skills and competences) for that level. From 2008 onwards EU member states were asked to develop their own national qualifications frameworks and to reference these to the European Qualifications Framework. By 2013 many EU member states were in this process but at various stages of acceptance, development and implementation. Countries with frameworks already in place (including England, Northern Ireland, Wales and Scotland) had revised their approaches.

Finland

The Finnish national qualifications framework (NQF) is also an eight-level framework, referenced to the European Qualifications Framework.¹ It comprises general, VET and higher education qualifications. It also includes qualifications awarded by prisons, the police force, rescue operations and the military. Its key aims are to connect education and training to the labour market and society, improve transparency and enable the comparability of qualifications (Finnish Ministry of Education 2009; CEDEFOP 2012h). Its focus is on identifying the level of knowledge, skills and 'competences' required for each qualification, as well as 'extensive competence modules' (presumably this refers to comprehensive treatment of the broad range of generic and professional skills, knowledge and attributes required for an occupation) that are acquired in the continuing education programs

¹ <http://www.oph.fi/download/121526_NQF-muistio_EN_02_10.pdf>.

undertaken by graduates of universities and polytechnics. Recognition of prior learning (incorporated into EU concepts about the validation of non-formal and informal learning) is also a key feature. During its development the framework adopted an inclusive approach to consultation, involving relevant government ministries and peak bodies for employers, unions (including university and secondary students), professions, adult education, vocational adult education centres, principals, vocational education providers, universities of applied sciences, and traditional universities.

The concept of competency adopted in Finland covers knowledge, skills and competence. In the Finnish approach the concept of competence also includes aspects such as entrepreneurship, responsibility, management and languages. A principle of 'best fit' has been applied to locate qualifications at different levels. For example, basic vocational qualifications are placed at level 4 but there is also an opportunity for them to be placed at a higher level if the skills and knowledge are more complex.

The Finnish NQF has adopted a learning outcomes approach, with level descriptors identifying the complexity of the skills and knowledge to be acquired. This approach makes it possible to implement systems for the assessment and recognition of formal and informal learning. Qualifications are divided into units. Initial VET qualifications prepare students for a variety of 'professions' or occupations. The national core curriculum is determined by the Finnish National Board of Education (FNBE). In this the board seeks the cooperation of employer organisations, trade unions and student unions. The board also decides on the national core curriculum for each vocational qualification, including the structure of programs and objectives, the core contents and the assessment criteria. National qualification requirements are established in cooperation with employers' organisations, trade unions, the Trade Union of Education and student unions. The Finnish National Board of Education prepares the national qualification requirements for upper secondary vocational qualifications, further vocational qualifications and specialist vocational qualifications. Education providers and schools draw up their own local curricula based on the national curricula.

Germany

The German Qualifications Framework (DKR) is a comprehensive eight-level framework that includes qualifications in general education, higher education and vocational education and training. Like other NQFs in Europe the key objectives of the German framework are concerned with enhancing the transparency, comparability and portability of qualifications and improving the employability and mobility of workers and learners in Germany and in other European countries. The framework is based on learning outcomes, which enables German qualifications to be more aptly classified according to the 'real value of what somebody knows, understands and can do'. The framework enables vertical and horizontal pathways between qualifications to aid 'permeability'² (CEDEFOP 2012h, p.113). The comprehensive German Qualifications Framework is felt to enable a better comparison of qualifications from different sectors. The framework is the result of broad-ranging consultations between federal and state governments and representatives of the social partners, higher education institutions and other experts, including researchers and practitioners. The German Qualifications Framework Working Group has an advisory function. A secretariat has been set up to provide technical and administrative support.

² Permeability refers to the smooth and flexible movement between education pathways, in the main between VET and higher education.

The German framework has been referenced to the European Qualifications Framework. Qualifications are aligned to the same level on the basis of their equivalence. This enables the operation of different pathways to the same qualification. Qualification level descriptors refer to two major forms of competences: professional and personal competences. Professional competence refers to knowledge and skills; personal competence refers to social competence (team or leadership skills, involvement and communication) and autonomy competence (including independence, responsibility, reflectiveness and learning competence).

The introduction of learning outcomes approaches has led to some debate among VET educators, mainly about the fragmentation of broad vocational or occupational qualifications. Some of these debates are also observed in Australia (mainly concerned with the suitability of skill sets as entry-level qualifications). Nevertheless, the concept of 'Handlungskompetenz' (the ability to take action), along with the identification of location, duration and learning content are key elements of qualifications (CEDEFOP 2012h). Curricula which aim to bridge the gap between what students learn at school and what they can expect to do at work have been developed for different vocational streams. This has meant a move away from discipline-oriented curricula towards a work-oriented 'learning fields' approach, where the content of learning is concerned with developing students' knowledge and skill in work-related processes. Competence-based approaches are being introduced into the reforms of general education and into national education standards. Training regulations are also competence-based.

Sweden

The Swedish National Qualification Framework (SNQF) is a comprehensive or inclusive national framework covering all sectors of public education, and it aims to include qualifications by other public entities (including police and custom services) and, gradually, those outside the public system, especially those from adult/popular education and the labour market itself. (Sweden has a long history of adult education.) Vocational education is provided by enterprises and industry sectors. Ministerial responsibility for the development of the framework is undertaken by the Ministry of Education and Research, with the National Agency for Higher Vocational Education taking carriage of the development of the framework. A broad range of stakeholders has participated in the development of the framework either in an advisory or consultative capacity, reflecting the aim of the government to open up the framework to qualifications provided outside the public sector. They include representatives from general education and higher education agencies, the employers' federation, regional authorities, key trade union associations and public employment services. Other stakeholders representing public education are from public education organisations and agencies and include the Swedish University Association, the Swedish Student Association and the Swedish Association for popular education. A series of public consultations and national conferences and events have also fed into the development of the framework. In common with other national frameworks, the Swedish NQF aims to improve the transparency and comparability of qualifications (CEDEFOP 2012h).

There has also been a move to include academic and non-academic qualifications in the framework, the aim being to recognise that there are qualifications at the higher education levels (6–8) offered in non-university institutions. This has led to tension within the higher educational fraternity, driven by the fear that expanding the type of institution to award level 6–8 qualifications may lead to a diminishing status for Swedish higher education qualifications. A separate framework for higher education qualifications with opportunities for self-certification has also been developed.

Where the EQF identifies knowledge as theory or facts, the Swedish NQF identifies knowledge as theory or experience. Skills are defined as the ability to carry out tasks and to solve problems. Competence is the ability to take responsibility, display independence in taking action and making decisions, and work in cooperation with others. The introduction of learning outcomes approaches has also led to questioning traditional ways of higher education provision and the need for quality assurance.

England, Northern Ireland and Wales

The qualifications frameworks for England, Northern Ireland and Wales, comprise: the Qualifications and Credit Framework (QCF) in England and Northern Ireland, the Credit and Qualifications Framework for Wales (CQFW) in Wales, and the Framework for Higher Education Qualifications (FHEQ).

- The Qualifications and Credit Framework includes regulated vocational qualifications, whereby individuals can accrue units and qualifications at their own pace.³ It is a regulatory framework for vocational education in England, Wales and Northern Ireland. The framework leads to qualifications ranging from entry level to level 8 and aims to provide information on what an individual has learnt and can do. The qualifications are classified according to their complexity or level of difficulty, size (that is, number of credits) and their content. The size of a qualification refers to its credit value, where one credit is classified as ten hours of 'guided learning'. The size comprises the length of learning time expected for completing a qualification. An 'award' has one to 12 credits, a certificate has 13 to 36 credits and a diploma has 37 credits or more.
- The Credit and Qualifications Framework for Wales is an all-inclusive voluntary framework that recognises full qualifications, partial achievement of qualifications, and awards achieved in other areas.⁴ The framework comprises eight levels plus entry or access levels and is supported by a CQFW Common Accord, which sets out agreed terminology, principles, and quality assurance arrangements. The accord has been developed by regulatory authorities working in conjunction with awarding organisations, national and regional credit bodies, and organisations with knowledge about how credit systems work. The key principles used to classify qualifications are learning outcomes, levels of difficulty, and volume of learning (that is, credit). The Welsh framework includes all recognised credit-based learning in higher education, regulated general and vocational qualifications, and quality-assured lifelong learning. This means that it applies to all learners over the ages of 14 years and to learning in the workplace, community, school, college and university.
- The Framework for Higher Education Qualifications is a voluntary framework that sets out some benchmarks for higher education qualifications at FHEQ levels 4 to 8, including certificates of higher education, diplomas of higher education, bachelor's degrees, master's degrees and doctorates. Bachelor degrees represent first-cycle qualifications, master's degree are second-cycle qualifications and doctorates represent third-cycle qualifications. The Quality Assurance Agency (QAA) is responsible for the Framework for Higher Education Qualifications.⁵

Scotland

The Scottish Qualifications and Credit Framework (SQCF) contains qualifications whose aim is to help individuals of 'all ages and circumstances access appropriate education and training so they can meet

³ QCF qualifications: <<https://www.gov.uk/what-different-qualification-levels-mean>>.

⁴ Credit and Qualifications Framework for Wales: <<http://wales.gov.uk/topics/educationand-skills/qualificationsinwales/>>.

⁵ FHEQ qualifications: <<https://www.gov.uk/what-different-qualification-levels-mean>>.

their full potential'.⁶ Similar to other frameworks, it aims to promote transparency about the available qualifications and how they relate to each other and to other learning. The Scottish framework is a 12-level framework incorporating higher education qualifications, Scottish vocational qualifications (SVQs) and national and higher national qualifications. It also incorporates access or entry-level qualifications (levels 1 to 3). The framework uses levels and credit points to differentiate between qualifications. Levels refer to level of difficulty, while credit refers to the length of time required to complete the qualification. A credit point is equal to ten hours of learning. The level 1 qualification is the least complex, and level 12 the most complex. Level descriptors for each qualification level use a learning outcomes approach, including the use of recognition of prior learning. The framework is not a regulatory framework and is maintained by the Scottish Credit and Qualifications Partnership, a company limited by guarantee and a Scottish charity. The partnership comprises the Quality Assurance Agency for Higher Education, Colleges Scotland, the Scottish Qualifications Authority, and Universities Scotland.

New Zealand

The New Zealand Qualifications Framework (NZQF) is comprised of ten levels, with certificates having the lowest level of complexity (levels 1 to 3 refer to certificates from secondary education) and doctoral degrees the highest level of complexity.⁷ Each qualification type has an agreed set of criteria, including its level and the number of credits required at each level. One credit refers to ten notional hours of learning, which are based on estimations of direct contact time, time spent on self-directed learning (studying or doing assignments) or on practical tasks, and time in undertaking assessments. A full-time equivalent year is 120 credits (mainly used for government funding requirements).

Qualifications can include credits that have been obtained at levels above and below the level in which the qualification is listed. The framework comprises the knowledge, skills and application required for qualifications. Knowledge and skills are concerned with what an individual is expected to 'know, do and be'. Application is concerned with responsibility, ways of behaving, attitudes, attributes and competence. New Zealand qualifications also have an outcomes statement, which describes the knowledge, skills and attributes of the graduate. The graduate profile lists the learning outcomes and education pathways (that is, the qualifications in which the holder can be enrolled as a result of this qualification). Stand-alone qualifications, which do not lead to further qualifications, must be described as such. The outcomes statement also identifies the areas in which the individual is qualified to work or to contribute to the community. Qualifications listed on the New Zealand framework are described either as being current, expiring, or discontinued. Current qualifications can be offered for study; expiring qualifications are those being replaced by a new qualification, or those closed to new student enrolments. Discontinued qualifications are those that have been closed. Closed and expiring qualifications obtain that status generally as the result of a mandatory and periodic review.

Singapore

The Singapore Workforce Skills Qualifications (WSQ) Framework comprises frameworks of qualifications for different industry sectors. Each framework comprises WSQ certificates, WSQ higher certificates, WSQ advanced certificates, WSQ diplomas, WSQ specialist diploma, WSQ graduate

⁶ Scottish Qualifications and Credit Framework: <<http://scqf.org.uk/the-framework/>>.

⁷ New Zealand Qualifications Authority, viewed April 2014, <<http://www.nzqa.govt.nz/studying-in-new-zealand/nzqf/understand-nz-quals/>>; New Zealand Qualifications Authority Listing qualifications on the NZQF, viewed April 2014, <<http://www.nzqa.govt.nz/studying-in-new-zealand/nzqf/listing-qualifications-on-the-nzqf/>>.

diploma/graduate certificate. Each qualifications framework is based on national standards developed by the Workforce Development Agency in consultation with industry sectors. The WSQ is an occupational and competency-based system aimed at all professionals and workers (Singapore Workforce Development Agency).^{8,9} The WSQ makes single modules or groups of modules available for use as stand-alone modules or for the construction of full qualifications. Recognition of prior learning (including work experience) and prior credentials can also be used. Assessment is based on demonstrated performance of competencies to industry agreed standards.

The framework comprises foundation competencies and industry and occupational competencies. Foundation competencies are those that can be transferred to different occupations and industry sectors, including the skills, knowledge and attributes that help workers to adapt to new challenges in the workplace in their progression through employment. Industry and occupational competencies identify the different industry capabilities and skills required to undertake specific jobs. Thirty-three WSQ frameworks for qualifications have been developed by government, in conjunction with the Industry Skills and Training Council (comprising employers, industry associations, training organisations and unions). Employability skills identified for the WSQ comprise higher-order thinking skills for professionals, managers and executives (PMEs), and critical workplace skills, including workplace English and mathematics for ordinary workers. Other employability skills include Chinese business language skills.

Recently there has been an attempt to use the structures of other qualifications frameworks to develop some level descriptors for the WSQ qualifications: certificates, higher certificates, advanced certificates, professional diplomas, specialist diplomas, and graduate certificates and diplomas.¹⁰ Certificates have been placed at level 1; graduate certificates and diplomas at level 6. Learning outcomes and level descriptors have also been drafted to describe what an individual needs to be able to know and do, with level 1 representing the lowest complexity and level 6 the highest complexity. The WSQ learning outcomes are: application of skills/nature of work, knowledge, work activities and accountability, supervision, and problem-solving.

Ontario, Canada

The Ontario Qualifications Framework (OQF), developed by the government, has 13 levels covering all post-secondary qualifications and apprenticeship certificates.¹¹ The framework includes the qualifications for private career colleges, those awarded by publicly assisted colleges of applied arts and technologies (CAATs) and degrees offered by publicly assisted universities and other authorised providers. The Ontario framework describes the main purposes and characteristics of each credential, including the knowledge and skills expected of qualification holders, and the relationship between the qualifications. Qualification levels in the framework comprise increasingly more complex cognitive knowledge and skills than the levels preceding. Qualifications are described in terms of overall program design and outcome emphasis, preparation for employment and further study, typical duration, admission requirements, provider, and qualification awarded. The framework also identifies

⁸ Singapore Government, Singapore Workforce Development Agency, Learning for Life Advancing With Skills, <<http://www.wda.gov.sg/content/wdawebwebsite/>>.

⁹ Singapore Government, <http://www.wda.gov.sg/content/dam/wda/pdf/L325B/Competency_Standards_for_Training_and_Assessment.pdf>

¹⁰ <http://www.tda.edu.au/resources/Part-2-Annex-A_WSQ-Level-Descriptors_final.pdf>.

¹¹ The qualifications comprise: certificate I, certificate II, certificate of apprenticeship, certificate of qualification, certificate III, diploma I, diploma II, advanced diploma, post-diploma certificate, baccalaureate/bachelor's degree, honours, master's degree, doctoral degree. Ontario Ministry of Training Colleges and Universities, Ontario Qualifications Framework, viewed April 2014, <<http://www.tcu.gov.on.ca/eng/general/postsec/oqf.pdf>>.

the skill and knowledge requirements for trades or occupations (as described in national or provincial training or occupational standards), conceptual and methodological awareness, communication skills, and application of knowledge. It also describes the requirements for professional capacity/autonomy, and awareness of limits of knowledge. The qualification standards also refer to the generic competencies, including the depth and breadth of knowledge defined in the provincial standards.

The Ministry of Training, Colleges and Universities awards the Certificate of Apprenticeship and Certificate of Qualification as a part of the *Trades Qualification and Apprenticeship Act 1990* and the *Apprenticeship and Certification Act 1998*. Approved training delivery providers are authorised to deliver apprenticeship programs.

Lessons learned

The formal frameworks developed or being developed overseas and in Australia have similar characteristics. In the main they have adopted learning outcomes and descriptors for different qualification types and levels and have identified the relationships between different qualifications. Having frameworks in place enables jurisdictions to reflect on the currency of their qualifications, and in some regions such as the European Union they reference their systems to an overarching framework.

The role of level descriptors is to signal what a graduate of a qualification should know and be able to accomplish. Nevertheless, high-level descriptors, although providing some important signposts, cannot fully describe what can be expected from an individual who has gained the qualification.

Furthermore, it is not possible for the descriptors to provide enough information for training practitioners in the classroom or workplace. This is because more detailed specifications are required to completely signal what is encapsulated by a qualification. In some countries these specifications are found in occupational and industry standards; in others they are based on educational standards or embedded in national core curricula. In the majority of cases the involvement of industry stakeholder groups in the development of standards is required.

Developing, approving and rationalising qualifications

The development and approval of qualifications refers to how qualifications are created and endorsed by governments or bodies that have been delegated this responsibility. The rationalising of qualifications refers to the process of combining similar qualifications and the removal of qualifications no longer required. Although we are mainly interested in accredited qualifications, it is important to note that increasingly there is a move in some European member states (for example, Finland and France) to expand the scope of recognised qualifications so that the qualifications and learning gained in non-regulated sectors can also form part of accredited qualifications systems and frameworks, mainly through the recognition (the term ‘validation’ is also used) of non-formal and informal prior learning and experience.

For most jurisdictions the first step in the creation of a formal qualification to be presented for accreditation will be to establish the need for the qualification. Jurisdictions wishing to ensure they are well prepared to deal with changing skill needs commonly gather labour market data to identify skill shortages and work requirements. Dialogue with industry and other stakeholders is another means for establishing a need. These activities are used to gather labour market intelligence to justify the need for new qualifications or the continuation of old ones.

It is also common to base qualifications on industry or occupational competency standards and to involve industry in the development of these standards. There are also wide differences in the range of qualifications developed, with some countries preferring to have a range of highly specialised qualifications (for example, United Kingdom) and others a small number of general and broad qualifications (for example, Sweden and Finland), the latter being considered to be a more flexible approach. Another approach is to leave decisions about qualification building to the industry sectors, by establishing banks of units that can be accessed to create specific qualifications for different needs.

EU member states

The CEDEFOP reviews of qualifications systems of EU member states (including CEDEFOP 2009a, 2010, 2012a–f, 2012h, 2014) have all identified the increased use of outcomes-oriented or learning outcomes approaches in the design of qualifications and frameworks. These outcomes are increasingly being aligned to standards (including occupational standards or industry standards) indicating what the learner should know and be able to do on the completion of a qualification. Despite the debates in some systems (for example, in Australian systems) about the differences between learning outcomes and competency standards, these debates have not been major overseas. Learning outcomes and competencies are used to identify the results of training that aims to prepare individuals with the knowledge and skills that will enable them to successfully enter and progress through employment. While occupational standards define what should be encompassed by a certain role, educational standards are focused on inputs; for example, the teaching and qualifications specifications relating to the content of the training, the delivery of the training and the assessment of the training.

The use of occupational standards to inform the development of qualifications and educational standards is relatively widespread. According to CEDEFOP (2010h) occupational standards ‘exist in one way or another in all European countries, but each nation has its own style of derivation and

presentation of the standards' (CEDEFOP 2010h, p.147). Occupational standards are generally based on a functional analysis of the required roles and the associated responsibilities. Occupational and educational standards combine to form what CEDEFOP (2010h) calls qualification standards, which are the 'the result of interaction between the world of work (embodied by social partners) and the world of education (education professionals, including teachers)'.

Across many systems in the EU the setting of occupational standards and educational standards for VET involves the formal participation of the social partners (including relevant industry/professional bodies, trade unions, government representatives and in some countries community groups and students). Close partnerships with stakeholders enable a better understanding of labour market needs and inform the development of the knowledge, skills and competences of qualifications and is a key approach recommended by the European ministers for vocational education and training, the European social partners and the European Commission, via the Bruges Communiqué of 2010 (European Commission 2010).¹² The stakeholders included in these partnerships are broader than just industry stakeholders and comprise training providers, enterprises, social partners, employment services, public authorities and research organisations. The employers and social partners are also asked to specifically define the competences and qualifications required across sectors for now and into the future (European Commission 2010). The communiqué also supports the need for EU member states to invest in VET and to promote these partnerships.

United Kingdom

Qualifications, their 'broad content, unit and credit structure, learning outcomes and assessment standards', are developed in the United Kingdom (England, Northern Ireland, Wales and Scotland) by awarding bodies (AOs) regulated by 'competent authorities' (CEDEFOP 2012g, p.28). Sector skills councils (SSCs), working with other standard-setting bodies and employers, are responsible for developing and maintaining occupational standards to inform the development of qualifications. The National Occupational Standards comprise units based on learning outcomes (that is, what a learner does, knows and understands to perform specific jobs). The national vocational qualifications and the Scottish vocational qualifications and other vocational qualifications are based on these occupational standards, or the learning outcomes in these standards.

Sector skills councils also develop sector qualification strategies (SQS), which group qualifications into low- and high-scrutiny categories, and sector qualification priority lists, based on relevant employment information and identified skill shortages. All vocational qualifications are approved by the relevant sector skills council, who must do this generally within ten days or sometimes 20 days of awarding body requests for approval. Awarding bodies must show evidence of sector skills council support for all Qualifications and Credit Framework qualifications, especially those defined as high-scrutiny qualifications (generally around 20% of all qualifications). A sector skills council approval process has been developed to provide guidance, with this guidance related to the type of dialogue that must occur between awarding bodies and sector skills councils. During the early dialogue phase agreement is sought on which qualifications will be low-scrutiny qualifications. Low-scrutiny qualifications are those which it is agreed have high employment demand and where the proposal meets the requirements of the national occupational standards—sector qualification strategies action plan. High-scrutiny qualifications include 'licence to practice' qualifications, defined in legislation, or those where there

¹² The Bruges Communiqué sets out the vision for enhanced European cooperation for 2010–20. It was signed in Bruges at the meeting of European ministers for vocational education and training, European social partners and European Commission in 2010.

has been insufficient dialogue between the awarding bodies and the sector skills councils. The regulator undertakes an inspection of a random sample of these approvals to ensure that the procedures have been followed and that the qualifications contain the agreed features. If there is a discrepancy the regulator seeks reasons for this and will not accredit the qualification until the approval has been confirmed. When regulators notice submissions that regularly attract regulator requests for further clarification, scrutiny is increased. In some cases the awarding body can submit applications directly to the regulator if it is believed there is sufficient evidence justifying the qualification. The sector skills council approval process applies only to vocational qualifications. Approvals for non-vocational qualifications will also require evidence from other relevant organisations.

Scotland

In Scotland qualifications are developed by awarding bodies and are accredited by the Scottish Qualifications Authority (SQA) through its Accreditation Committee.¹³ Assessment strategies comprise the requirements and recommendations relating to assessment and the external quality controls developed by sector skills councils. Assessment strategies are mandatory for Scottish vocational qualifications but can also be used for other qualifications. The Scottish Qualifications Authority is sponsored by the Scottish Government to accredit vocational qualifications offered across Scotland, including Scottish vocational qualifications, and to approve the awarding bodies wishing to award them. The authority claims that it is keen to reduce bureaucracy and accelerate accreditation processes so that qualifications can become available to students more quickly. For this reason the Scottish Qualifications Authority wants those awarding bodies submitting qualifications for accreditation to refrain from duplicating any material provided to the authority beforehand (only quoting the reference numbers of documents that reside in the SQA data repositories).

A maximum of five years is allowed for accreditation periods, with the SQA identifying the period in which this duration is to commence (generally the date of the meeting of the Accreditation Coordination Group, where decisions about accreditation approval are made). There are six key criteria used for accrediting qualifications. Awarding bodies must 'demonstrate that their systems and processes are robust and meet the demands of the Criteria¹⁴ for Accredited Qualifications'. The bodies need to have in place measures that will enable them to meet the accreditation criteria. The criteria are concerned with processes for: identifying the need/demand for a qualification; designing and developing qualifications; maintaining and reviewing qualifications; designing assessment methods; and designing quality assurance systems to ensure the quality and consistency of assessment. They must also implement and quality-assure the assessment methods and delivery. (Detailed information on what is required to meet the different criteria appears in appendix A.)

South Korea

VET in South Korea comes under the responsibility of the Ministry of Employment and Labour. Qualifications are established under the *National Technical Qualification Act* (NTQC Act). When professional organisations or related organisations want to develop new qualifications a request is made to the ministry. The normal process is for the ministry to ask the Korea Research Institute for Vocational Education and Training (KRIVET) to review the need for such a qualification by surveying or

¹³ Scottish Qualifications Authority website: How we accredit qualifications and associated pages, <www.sqa.org.uk/>; Scottish Qualifications Authority (SQA) Criteria for Accredited Qualifications and Guidance for Accreditation Submissions, <www.sqa.org.uk/>, viewed May 2014.

¹⁴ Criteria include requirements applying to vocational qualifications (SVQs/SVQ units), regulatory qualifications and other qualifications).

consulting with relevant industry sectors for their views. The results of these reviews are provided to the ministry. The ministry will consult with other ministries that may be affected by the introduction of the qualification. The NTQ Policy Deliberation Committee will make the final decision on whether or not to approve the qualification.¹⁵

Finland

The Finnish National Board of Education, which reports to the Ministry of Education and Culture, is responsible for identifying short- and long-term demand for labour and qualifications (CEDEFOP 2012d). During this process substantial cooperation with different ministries, research institutes, regional authorities and employer and trade union organisations occurs. The Finnish National Board of Education, higher education institutes and education providers are responsible for investigating how changes in work practices impact on curricula and qualifications. Government-appointed tripartite national education and training committees are given an advisory role in ensuring effective cooperation between industry and the VET sector nationally and are also involved in identifying skill needs.

Since the 1990s education providers have been required to understand and respond to the skill demands of industry and to regional development. The results of skills demand analyses and consultations on the impact of skills demands on the curricula and qualifications are used to develop national core curricula (in certain areas) and in curriculum planning and the development of the content of education and training. The Finnish National Board of Education takes a lead role in the development of qualification requirements and carries out this role in conjunction with representatives of employers, employees and the education sector. Where self-employment is common in an industry sector or occupation, independent self-employed persons are involved.

Vocational education is based on modules. The qualification requirements are used to decide the modules in a qualification or in any specialisations. The requirements also spell out the composition of the qualification, the vocational skills required for each module, guidelines for assessment, including targets and criteria, and the ways for demonstrating vocational skills. The requirements and the competences specified are used to identify how vocational skills can be demonstrated and assessed. The qualification requirements must be adhered to by VET providers and competence test organisers or qualification committees appointed by the Finnish National Board of Education. These field-specific committees have representation from employers, employees, teachers and professionals. The committees monitor competence testing and award certificates.

Germany

The development of VET qualifications in Germany is based on standards for state-recognised training occupations or vocational education (CEDEFOP 2010). These standards are developed through collaboration between the government and the social partners, with employers coming together to determine the employment requirements for the standard. The training standards set out the specifications and assessment requirements and the time to be spent in training. These are incorporated into vocational training regulations and approved by the Federal-Länder Coordination Committee for Vocational Training Regulations/Framework Curricula. The Länder adopt the framework curricula for incorporation into the curriculum of part-time vocational schools. Industry associations, trade unions, peak employer bodies and the Federal Institute for Vocational Education and Training (BIBB) may initiate moves for the development of new training occupations or

¹⁵ Information provided by a research fellow from the Korea Research Institute for Vocational Education and Training (KRIVET).

modifications to existing ones. The federal ministry, in conjunction with Länder governments, will decide whether or not to go ahead with the changes. BIBB will act in an advisory role and will also undertake research to justify claims for the changes prior to governments making final decisions.

Sweden

Secondary VET diploma qualifications (including for apprenticeships) – government-regulated upper-VET qualifications – are those undertaken in upper secondary schools or via municipal adult education. Accredited higher advanced vocational qualifications can be undertaken in institutions for advanced higher vocational education. They are regulated through relevant acts and ordinances. These qualifications are based on a modularised approach to enable students to build up credit for qualifications. An upper secondary diploma requires around 2500 credits; one from municipal adult education requires around 2400 credits; diplomas and advanced diplomas of higher VET require 200 credits and 400 credits respectively (CEDEFOP 2014h). Work-based learning is included as a component of all vocational qualifications and for the upper secondary qualification requires around 15 weeks over three years. The higher VET diplomas and advanced diplomas require around a quarter of the time to be spent in workplace learning.

Responsibility for identifying and developing goals and syllabi for different subjects leading to the upper secondary vocational qualification (the diploma) is the responsibility of the government, through the National Agency for Education (CEDEFOP 2012e). The identification and development of these aims, core contents and knowledge requirements is done via in-person and online consultation with relevant stakeholder groups (including teachers, researchers, industry representatives and the labour market partners). There is also an opportunity for schools to request approval for a variation of content to suit local need.

The development of goals, syllabi and education plans in higher vocational education is the responsibility of the training providers themselves and the Swedish National Agency for Vocational Higher Education. This agency also makes information on labour market needs for different fields and regions available to providers. Providers must develop education plans to describe the learning outcomes (that is, knowledge, skills and competence) and provide information on courses and assessment for students and a list of the organisations that have been involved in the development of these plans. Applications for approval to run the programs are to be accompanied by the labour market information provided by National Agency for Vocational Higher Education. The agency also specifies the knowledge, skills and competence requirements for those programs and these need to be nationally consistent.

Close collaboration between the government and the social partners (including six to ten representatives from industry, employers and employee organisations and authorities) is reflected in the establishment of 12 national program councils with advisory responsibilities for upper secondary qualifications, including the contents of syllabi and courses, in-service training for teachers, educational contracts (apprenticeships), vocational education for adults, and labour market trends. Stakeholder collaboration in making decisions about the content and direction of higher vocational education is also observed in the composition of the Labour Market Council, attached to the Swedish Agency for Vocational Higher Education. The council, with representation from public employment services and the social partners, analyses industry trends to identify emerging industries or occupations, demands for new qualifications, and qualifications to be phased out.

Ontario, Canada

Ontario has a multi-layered approach to the development and approval of qualifications. Government and stakeholder groups (representatives from industry, professional associations, graduates of programs working in the field, universities, secondary schools, and students, faculty and administrators at the colleges) work together to agree on program standards for different vocational qualifications. These standards must contain vocational skills, essential employability skills, and general education.¹⁶ They are written in terms of the learning outcomes required to ensure the relevant skills and knowledge required for graduates to enter employment. These program standards are legislated and must be applied in the programs of instruction developed by training providers. Before training providers can submit these programs for government approval (in order to deliver them) they must have them externally validated, either by appropriately qualified and experienced external assessors in the case of private providers (private career colleges), or the Credential Validation Service (Ontario College Quality Assurance Services)¹⁷ for publically assisted colleges. This validation is used to assess the feasibility of delivery, their alignment with program standards and the soundness of the pedagogical approaches.

The programs of instruction (for specific qualifications in specific fields) identify the minimum requirements for credentials to be awarded, the scope of the curriculum outcomes and the breadth and depth of knowledge required (according to qualification level). The programs of instruction must provide information on the: complexity of knowledge and vocational outcomes, including the essential employability skills and general education requirements; typical duration for completion; admission requirements; and the name of the credential to be applied. Features for not-for-credit qualifications are locally determined; however, any qualifications awarded in these not-for-credit programs must not bear the name of approved qualifications. All other programs must meet all the learning outcomes specified in the program standards.

Rationalising and removing qualifications

The issue of the appropriate number of qualifications is concerning many EU states (CEDEFOP 2010), with similar numbers arguing for more qualifications as arguing for fewer. One of the aims of this paper is to investigate how unused qualifications are removed. The concern is that having too many qualifications or qualifications that duplicate those already available clogs up systems and makes pathways less easy to interpret.

Although recent reviews of European member state qualifications systems and frameworks by CEDEFOP (2010, 2012, 2014) do not specifically describe the processes of how qualifications that are no longer current or needed are dealt with, a number point to the use of reviews at around the four- or five-year mark. Such reviews are informed by consultations with key stakeholders (including the social partners, educational institutions, professional associations, industry groups and, in some cases, students). In Sweden the Labour Market Council, which is attached to the National Agency for Higher Vocational Education, analyses labour market trends to identify which qualifications are required and which are no longer in demand (CEDEFOP 2012e).

¹⁶ Ontario Government: What does a program standard contain, <<http://www.tcu.gov.on.ca/pepg/audiences/colleges/progstan/contain.html>>; Culinary Program Standard, Chef Training, Culinary Management, <<http://www.tcu.gov.on.ca/pepg/audiences/colleges/progstan/hospitour/culinary.html>>.

¹⁷ Ontario College Quality assurance Service: <http://www.ocqas.org.org/en/?page_id=4179>.

Some systems use beginning dates to refer to when qualifications are created or become available, and end dates to refer to the date at which a qualification can no longer be used, or when they expire. The end and expiry dates in this case do not mean that the qualification is no longer useful but merely that accreditation has run out. For example, an Ofqual-regulated qualification takes five years to reach its end date. It has been difficult to find specific reasons for why the term of five years has been adopted.

From the available sources it has been difficult to find much information on the removal of qualifications. The Scottish Qualifications Authority and the New Zealand Qualifications Authority have some clear directions about when and how qualifications are reviewed and removed. For example, the Scottish Qualifications Authority has a 'zero uptake' policy.¹⁸ This states that 'the Accreditation Committee [the body that oversees the accreditation function] will remove the accreditation of any qualifications that have no uptake where there is no clear justifiable evidence from the awarding body of candidate demand for the qualification for a period of two years'. In New Zealand, qualifications are identified for formal review, which may result in their being removed from the NZQF database.¹⁹ The UK Vocational Qualifications Reform Programme (UKVQRP) has also introduced processes to ensure that the qualifications being offered are still required by industry; the UK Skills Funding Agency has begun a process of rationalising qualifications for funding purposes by examining low- and zero-uptake qualifications.

Scotland

Each quarter, the Scottish Qualifications Authority's Accreditation Committee reviews registration and certifications and identifies those accredited qualifications with no candidate uptake for a period of two consecutive years.²⁰ These qualifications are identified for review. The awarding body will then be informed that SQA Accreditation will be reviewing the qualification; it will also be asked to justify why the qualification should remain. The Accreditation Committee will investigate further by examining the information originally provided for the accreditation of the qualification and look for evidence of uptake at the unit level rather than at the full qualification level. A report which takes all this information into account will be provided to the Accreditation Coordination Group (the group that approves awarding bodies and accredits qualifications on behalf of the Accreditation Committee). This group will make a decision about continuation, further review down the track or removal of accreditation. If the intention is to withdraw the qualification, the awarding body is given three months warning of the Accreditation Coordination Group's intention to do so. If it is decided to continue the qualification, the group may impose some sanctions within certain timelines. If these obligations are not met, then the Accreditation Coordination Group may automatically withdraw the accreditation. Awarding bodies have the right to appeal against such decisions.

New Zealand

The New Zealand Qualifications Authority requires all level 1 to 6 qualifications to be listed on the New Zealand Qualifications Framework database, a change that has facilitated easy access to information on qualifications. The New Zealand authority has also created rules for describing the status of qualifications. Current qualifications are those that are accredited and listed on the NZQF

¹⁸ Scottish Qualifications Authority: <http://www.sqa.org.uk/sqa/files_ccc/Zero%20Uptake%20Policy%20v%202.pdf>.

¹⁹ New Zealand Qualifications Authority, Review of qualifications: <<http://www.nzqa.govt.nz/studying-in-new-zealand/nzqf/reviews-of-qualifications/>>.

²⁰ Scottish Qualifications Authority zero uptake policy: <http://www.sqa.org.uk/sqa/files_ccc/Zero%20Uptake%20Policy%20v%202.pdf>.

and can be offered to candidates. Expiring qualifications are those to be replaced by a new qualification or be discontinued. Discontinued qualifications are those that are no longer available. The status of qualifications is based on the results of a periodic and mandatory review process. The aim of this review is to ensure that qualifications remain fit for purpose. These arrangements have helped to prevent the 'duplication and proliferation' of qualifications. The NZQA maintains that it has actually reduced the number of available qualifications to around 1000.²¹

The mandatory review can be thought of as 'part of the life cycle of the qualification'. Factors which trigger the mandatory review include: the review date of an individual qualification; groups of qualifications that have been identified as duplicating or proliferating; and groups of qualifications with a direct relationship to each other. A review can also be triggered if there is a request by a qualification developer or accredited user who seeks a review because of major workforce, social, technological, legislative or policy change. Another trigger for review is a lack of enrolment activity in the qualification after two years.

The purpose of the mandatory review is to ensure that the qualifications remain 'useful, relevant and fit for purpose' for the learners, industry and stakeholders for which they were first developed. The NZQA publishes an annual review schedule for qualifications to be reviewed, grouping similar qualifications together. For example, the qualifications scheduled for review in 2014 include qualifications in agrichemical application, architectural design, casino operations, communication and media, complementary medicine, creative writing, early childhood education, foundation and bridging, health care, interior landscape design, languages, librarianship, maritime engineering and marine studies, plastics, real estate, security, teacher education and miscellaneous (representing a mixture of different qualifications).

The NZQA provides a training workshop to explain review requirements and advisory support services to help qualification developers conduct the review. Qualification developers, jointly with stakeholders, must meet the costs of the review, with costs for any new qualification that results from a review being met by the qualification developer.

The qualification developer²² must first submit a plan for each review to the NZQA (for information), taking care to ensure that the review is conducted in a cost-effective way, such that an adequate number of appropriate stakeholders participates in the review. The qualification developer must consult with relevant mandatory stakeholders or their delegates (defined as qualification developers, relevant standard-setting bodies and/or regulatory bodies, and the education providers that provide the programs leading to the qualification). Should they not be able to get the cooperation of mandatory stakeholders or their delegates, they must report this to the NZQA. The qualification developer must also consult with industry/community sectors to identify the sector leaders required to support the review.

²¹ New Zealand Qualifications Authority, Review of qualifications, viewed April 2014, <<http://www.nzqa.govt.nz/studying-in-new-zealand/nzqf/reviews-of-qualifications/>>; New Zealand Qualifications Authority Targetted review of qualifications, viewed April 2014, <<http://www.nzqa.govt.nz/studying-in-new-zealand/nzqf/targetted-review-of-qualifications/>>; New Zealand Qualifications Authority Qualifications review schedules, viewed April 2014, <<http://www.nzqa.govt.nz/studying-in-new-zealand/nzqf/reviews-of-qualifications/schedule/>>.

²² Qualification developers that are automatically approved are industry training organisations, institutes of technology and polytechnics, private training establishments, wananga (a publicly owned tertiary institution that provides education in a Maori cultural context), government training enterprises, universities, current course owners. Other organisations are also eligible to become qualification developers if approved by the NZQA.

An important part of the review is mapping existing qualifications to current and future workforce needs and roles. The map identifies the current roles in the sector and any typical progression routes from entry-level to advanced positions. Existing qualifications are mapped to the roles or skill sets. The qualification developer must also identify any roles that are no longer current or which are being 'phased out', new roles which do not currently have a qualification, and qualifications that are not matched to a role or skill set. Whether the map covers the current and future roles in the sector needs to be confirmed in consultations with relevant stakeholders. This information is then used to develop and 'scope' the suite of qualifications required. At this stage the scoping of the qualification only requires information on the qualification title, level, and type, a strategic purpose statement, and an outcome statement. These qualifications are also confirmed with stakeholders. Decisions are also made about whether qualifications should be identified as 'expiring' or 'discontinued'.

Once the review has been completed, a report on the results of the review, including any changes required, will be forwarded to the NZQA. The NZQA will also require evidence of the final workforce map and the new qualifications map, a completed form for changing the status of the current qualifications included in the review, and a completed application for approval to develop a qualification for each new qualification, with evidence of the need for the qualification and confirmation of this need from stakeholders.

As the NZQA is responsible for qualifications listed on the NZQF it is the final decision-maker on the outcome of the review process. When recommendations for changes are approved by the NZQA the qualification developer must implement the approved recommendations and agree to accept the results of the review, including the need to change the status of their qualifications, if this is required.

United Kingdom Vocational Qualification Reform Programme

The United Kingdom Department of Business, Innovation and Skills (2014) notes that the current (adult) vocational qualifications system (the Qualifications and Credit Framework) has over 15 800 qualifications, with 11 000 of these eligible for public funding. It reports that many of the qualifications eligible for public funding offers had not been used, and that recently the Skills Funding Agency had removed 3000 qualifications from the publicly funded offers list. The rule for the removal of qualifications was a low or zero uptake for a period of two years. The intention is to remove a further 5000 qualifications over the 2014–15 period from funding offer lists. The aim is also to review and rationalise those areas which have traditionally been developed as qualifications for accreditation in order to access funding (for example, activities like work experience, resume writing, or developing interview skills).

The experience of Strand 4 of the UKVQRP

The UKVQR Programme comprises five strands, with Strand 4 (led by the Federation of Awarding Bodies and the Joint Council for Qualifications) being responsible for investigating the rationalisation of existing qualifications in preparation for the introduction of national reforms to qualifications frameworks and qualifications.²³ The aim of Strand 4 was to investigate the qualifications counted on the Qualifications and Curriculum Authority's National Database of Approved Qualifications (NDAQ) and to suggest areas where these could be removed. The idea was to help to identify and to make suggestions to sector skills councils about which low-uptake or zero-uptake qualifications could be

²³ United Kingdom Department for Education and Skills 2007, UKVQRP e-news, Issue 1, viewed May 2014, <<http://www.britishhallmarkingcouncil.gov.uk/assets/biscore/corporate/migratedd/publications/u/ukvqrpenewslett erapril07.pdf>>; Scottish Qualifications Authority (SQA), Vocational Qualifications Reform Program, viewed May 2014, <<http://www.sqa.org.uk/sqa/14205.html>>.

removed. The first list of suggestions comprised 1412 qualifications; this list was reduced to 554 qualifications because of issues with the certification data. After consultation with sector skills councils the list of 554 was further reduced to 304, with the sector skills councils making a case to retain many qualifications identified by Strand 4 for withdrawal. Of 104 NVO qualifications put to skills councils just seven were recommended for removal. The key reasons given by sector skills councils for retaining qualifications were that qualifications were required to meet labour market demands and being necessary for progression to other qualifications.

The inability to identify which sector skills councils owned the identified qualifications and the administrative complexity of accessing comprehensive information on certification to enable the sector skills councils to make informed decisions also meant that the whole process became cumbersome. For awarding bodies it seemed to be easier and less costly to let the qualification reach its expiry date than to make arrangements to obtain different types of regulatory permissions. Protecting the rights of providers and existing candidates was also a consideration.

South Korea

The Korean Ministry for Employment and Labour commissions organisations such as the Korean Research Institute for Vocational Education and Training to evaluate the performance of the national training qualifications. If the evidence suggests that qualifications are no longer serving their specific purposes, the ministry also has the power to order the amalgamation or rationalisation of similar qualifications and the cancellation of obsolete qualifications. These decisions are made by the NTQ Deliberation Committee after review of relevant evidence about a qualification's performance.²⁴

Finland

The Finnish National Board of Education is responsible for reviewing qualification requirements, which can be revised as required and at least every five or ten years (CEDEFOP 2012d). These reforms are driven by legislative changes, qualifications structures and occupational and industry shifts. The board sets up a qualification project that includes expert representatives of employers, employees and teachers in the specific qualification field. The National Education and Training Committee may also appoint an expert. When the new requirements have been determined and drafted by the qualification project, the draft requirements are sent out for consultation to representatives of unions, organisations, industry and VET providers, before the board endorses and adopts them as legal regulations. These requirements then supersede the previous qualifications, with provision made to allow students to complete the qualifications in which they were originally enrolled. These qualifications however must be completed within ten years for upper secondary vocational qualifications and within two years for further and specialist qualifications. These periods are also subject to other regulations. The Finnish National Board of Education also conducts follow-up surveys on the implementation of new qualification requirements. The aim of these follow-up activities is to determine whether changes to the requirements are necessary in the future.

Lessons learned

Across jurisdictions there is a clear desire to develop and approve qualifications that are relevant and credible for individuals, for workplaces and for society in general. In the main, substantial labour

²⁴ Information provided by a research fellow from Korea Research Institute for Vocational Education and Training (KRIVET).

market intelligence-gathering precedes the development of new qualifications or evaluations of the ongoing importance of old qualifications. This is often driven by governments who require information on the types of jobs, occupations and skills in demand, which in turn identifies the need for qualifications.

Qualification development is rarely undertaken solely by government bureaucracies in charge of employment and education and training. Increasingly, the government takes into account the views of other relevant stakeholders and experts. Some countries prefer to use tripartite approaches involving governments, unions, and employers and other social partners; others use the sector-specific industry bodies entrusted to undertake these roles. Although the rhetoric of industry leadership is more important in some countries than in others, it is clear that government policy plays a major role for jurisdictions wanting to ensure the credibility of national qualifications, and especially VET qualifications.

Information on the specific processes used for the removal of qualifications from a sector's qualifications profile has not been easy to come by. However, where it has been available it points to some clear rules for removal, generally concerning a history of low or zero uptake. The two-year low- or zero-uptake criteria have been identified for New Zealand, Scotland and the Skills Funding Agency of the Department of Business, Innovation and Skills in the United Kingdom. Such a rule could be used in other systems; however, it is important to understand that there may be 'niche' occupations that do not require a high uptake of qualifications. Any mechanism would have to take this into account.

Implementing quality assurance systems and practices

When learners acquire qualifications for knowledge, skills and competencies gained in a range of formal, non-formal and informal situations (including school, the community, the workplace, institutions of vocational education and further and higher education, and other non-formal and informal events) there are implications for the integrity of the qualifications awarded. Questions over integrity can lead to uncertainty and reduce the trust and confidence of employers and students in the value of such qualifications.

Traditionally the general approach to quality has been to use a system of inspection, whereby government inspectors visit institutions to inspect the provision of training and the organisation's administrative services. Such inspections provide evaluations on the extent to which training institutions implement the defined curriculum and fulfil their administrative obligations. Student results in formal external assessments are also taken into account. This inspectorial approach is gradually being superseded or combined with a quality assurance approach, which includes regulation and accreditation of the providers of training and of the bodies responsible for awarding qualifications. Nevertheless, many countries in the EU continue to use inspection as part of their quality assurance processes (EU Commission 2014).

The focus of VET quality assurance and regulatory processes in many countries is mostly directed at the training providers that deliver and/or award qualifications or the awarding bodies who award qualifications. The quality of qualifications is judged by the effectiveness and efficiency of those who deliver and/or award them. The premise is that if the training organisation or awarding body can meet predetermined standards or criteria for accreditation or registration, then the qualifications being delivered must also be of value. There are few places where the focus is on the design of the qualifications themselves. In fact the EU Commission (2014) reports that the European Quality Assurance Framework for Vocational Education and Training principles adopted in 2009 had not been applied to evaluate the quality of qualifications design, assessment and certification.

In many systems the value and relevance of qualifications is measured by the extent to which they address the skill needs of industry and provide successful pathways to employment or to further study. Our review of the literature has found that, although the details of the regulatory or quality assurance processes followed may differ across jurisdictions, many of the key issues confronted by and important to VET regulation overseas are similar.

There is a desire to ensure that the providers of training have appropriate and adequate business and financial processes, adequate and up-to-date physical facilities and equipment, and appropriately qualified and competent staff for the delivery of the necessary and relevant skills and knowledge for the qualifications. Common in many of the education systems that have adopted quality assurance approaches to regulation are standards for initial and continuing registration or accreditation (including provisional registration or equivalent). There is also a desire to ensure that these standards are not too complex, numerous or prescriptive. Connected to quality assurance frameworks and processes are qualifications frameworks that classify types of qualifications and levels and the relationships between them.

Increasingly, quality assurance systems comprise a combination of internal quality review mechanisms (for example, institutional self-assessments, self-studies or internal reviews) and external reviews (often accompanied by desk-top audits, on-site visits and third-party assessments).

For some accreditation agencies (for example, in the US where accreditation is voluntary but required for those institutions wanting to access government funding) there may be requirements for providers intending to apply for accreditation. These might include attendance at pre-accreditation workshops and participation in relatively intensive processes before full accreditation is awarded. Some countries require providers wanting to offer programs for accreditation to have these programs evaluated via external reviews prior to accreditation (for example, Ireland) to justify claims that they are indeed required and useful. Quality assurance mechanisms to regulate and quality-assure providers eligible for government funding are also commonly used.

The concept of user pays has also been applied to many quality assurance or regulatory systems. A variety of fees for services (including annual dues) is also a common practice. The amounts and details of these fees and charges may vary but they often cover similar types of services. They may include fees for the lodgement of applications for initial, provisional and renewal of or continuing registration and the assessment of supporting documentation. Fees may also be charged according to the volume of qualifications, courses or units to be accredited, or the locations of delivery sites. There may be charges for the costs associated with conducting on-site visits by evaluators or auditors on external review teams or panels (called 'visiting' teams in some systems). There may be fees for applications requesting a change in scope of registration or accreditation. In some systems warnings and other types of orders are issued, generally relating to those who are found to be non-complying or defaulting, and organisations that attract such warnings may be charged for those.

Frameworks and standards

Quality assurance and regulatory frameworks generally have specific requirements that need to be addressed by those seeking initial or continuing accreditation. These are normally set out in quality standards, objectives or criteria. Standards-based systems, as well as those based on objectives and criteria, require regulators to have a clear idea of the intentions of the standards and objectives they want to apply or pursue, and to ensure that these are clearly communicated and are understood by those who need to implement them.

The issues covered in quality assurance and in the accreditation standards of many jurisdictions converge. Bateman, Keating and Vickers undertook an international comparison study for the Australian Department of Education, Employment and Workplace Relations (Australian Government 2009). They note that the standards of the quality assurance frameworks for Australia, United Kingdom, Canada (Ontario), Singapore, New Zealand, and Germany had similar coverage and generally encompassed issues of: probity and financial accountability; health and duty of care; user protection; quality improvement and system effectiveness; social and economic objectives; quality of the qualification and the training outcomes; recognition of the quality of a VET provider or sector and its products; and recognition of the quality of a VET system and its products. The authors note that such frameworks are integral to the cultural contexts and the national governance cultures in which they are located, which can lead to variations in emphasis. For example, where some countries such as Australia might focus on the processes that are to be implemented to ensure quality teaching and assessment services and continuing improvement (for both private and public registered training organisations), the Ontario approach has a more prominent focus on consumer protection (especially for private providers). Where Australia, Singapore, and Ontario focus on the minimum qualifications

for teachers and trainers, the United Kingdom directs its attention more to the capabilities of assessors and verifiers. These are useful reference points for the creation or modification of regulatory or quality assurance frameworks.

European Union

In 2009 the European Quality Assurance Framework for Vocational Education and Training (EQAVET) was adopted by the EU Parliament and Council. It was intended that the framework would provide states with a reference framework to help them monitor and implement quality assurance processes for continuous improvement. The main aim was to increase the transparency and consistency of VET policy development and to promote mutual trust, student and labour mobility, and lifelong learning. In 2010 the Bruges Communiqué announced that 'transparency and a common approach to quality assurance are necessary to build up mutual trust which will facilitate mobility and recognition of skills and competences between those systems' (European Commission 2010, p.3). More than 20 countries had implemented quality assurance reforms by 2013 and had established quality standards for providers (European Commission 2014).

United States

There is no national system of VET accreditation in the United States, and there is no mandatory expectation for accreditation; however, if institutions want to access federal government funding for education and training (including for career and technical education [VET]) they have to be accredited by agencies that are listed with the federal department of education. The standards of the Accrediting Commission of Career Schools and Colleges²⁵ (ACCSC) in the United States cover a broad range of areas, basically covering similar areas as those already discussed. Each standard is preceded by a statement of purpose and is followed by detailed elements of the standard. The standards relate to: management and administrative operations program requirements; educational administration and faculty qualifications; student recruitment, advertising and disclosures; admissions, policies and practices; student services; student learning, assessment, progress and achievement; additional criteria for separate facilities; and distance education. (A more detailed treatment of the standards is provided in appendix B.)

The standards for accreditation and related criteria of the Council for Occupational Education (COE)²⁶ in the United States have a similar coverage and address: institutional mission; educational programs (admissions/recruiting, programs, instruction); program and institutional outcomes; strategic planning; learning resources (media services, instructional equipment, instructional supplies); physical resources; financial resources; human resources (general, faculty, administrative and supervisory personnel, instructional support staff, non-instructional support staff/services); organisational structure; student services and activities; and distance education.²⁷

²⁵ The ACCSC is the accrediting body for private degree-granting and non-degree-granting post-secondary institutions offering career-related programs in the United States <<http://www.accsc.org/> www.accsc.org/>.

²⁶ COE is a nationally recognised accrediting agency for post-secondary non-degree-granting and applied associate degree-granting institutions delivering occupational education, which also covers career and technical education (that is, VET) <<http://www.council.org/manuals/>>.

²⁷ Distance education requires separate regulatory requirements, including mission, programs, program outcomes, learning resources, technical and physical resources, financial resources, human resources, student services, student identity and privacy).

Ireland

Although not specifically set out as formal standards, the criteria used by the Further Education and Training Awards Council (FETAC) for judging the effectiveness of colleges in Ireland provide a similar coverage²⁸ (Quality and Qualifications Ireland 2013). These include: communications with staff, learners and other stakeholders; equality planning and delivery; staff recruitment, induction and development; program design, delivery and review; assessment arrangements (including security, internal coordination and consistency with national standards, feedback to learners and appeals); access, transfer and progression, including entry equality and arrangements for recognition of prior learning; protection for learners in the event of a program ceasing; and self-evaluation and review (including learner involvement and external evaluation).

Sweden

The Swedish Agency for Advanced Vocational Education uses an up-front standards-based approach to approve and accredit courses and provide funding for students and providers for continuing training. Before being approved for accreditation, providers must undertake an internal self-assessment process and provide the agency with evidence of program content²⁹ and governance structures and processes (including recruitment strategies) for addressing gender equity issues and the needs of disadvantaged groups. Providers are required to establish suitable governance structures, including an educational board with representation from students and external stakeholders. After 12 months the agency conducts an inspection of the provider, whereby it takes into account the findings of the self-assessment, feedback from students, and reports from the education board. Any complaints received by the agency about the provider are also considered. Once the course has been completed there is a follow-up survey of students to ascertain their destinations, their satisfaction with the course, and the usefulness of the skills acquired during the course. This information is taken into account when making funding decisions about whether the course will continue (CEDEFOP 2009a).

New Zealand

The New Zealand tertiary sector covers tertiary education organisations, including private training establishments (PTEs), institutes of technology and polytechnics (ITPs), wananga, universities and workplace training. The New Zealand Qualifications Authority approves all qualifications and is the quality assurance body for all these institutions (but not universities).³⁰ Private training establishments who want to be registered with the New Zealand Qualifications Authority³¹ must demonstrate that they have policies and procedures for: institutional self-assessment under the external evaluation and review (EER) rules; decision-making; financial delegations and financial controls; personnel recruitment and management; information management, including systems for the collection, recording and transfer of student records; and financial, statistical and other information. In relation to the last, the PTE must supply to, or keep available for, government agencies information on: enrolment procedures; management of risks; and student complaints, student

²⁸ The function of FETAC is to negotiate with providers the approaches they will take to quality-assure their programs, validate programs, recognise awards, and monitor and review the effectiveness of implementation. Although providers are responsible for establishing the arrangements for quality assurance, they need to meet specific FETAC criteria.

²⁹ The main approach to continuing training is for employers and training providers to collaborate in the development of program content so that it is customised to local conditions and requirements.

³⁰ Public training providers have public reporting requirements and are deemed to be accredited.

³¹ The New Zealand Qualifications Authority: <<http://www.nzqa.govt.nz/>>.

discipline and appeals, to ensure the policies and procedures are fair and equitable; and compliance with the Student Fee Protection Rules 2013.

Private training establishments who want to maintain their registration need to meet the following requirements: transparency, currency and accuracy of the information provided to the public; and evidence of business management processes (including compliance with rules for submission of annual returns, sub-contracting to other organisations, financial reporting standards, financial controls, financial sustainability, and meeting the needs of stakeholders). They must also ensure that the information provided to students enables them to make relevant and timely informed choices. This means that students must have access to information about the results of institutional external evaluations; entry and selection criteria; institutional intentions to continue or otherwise with program provision; complaints and grievance procedures for the institution and the NZQA; and ready access to enrolment and academic information and relevant regulations.

Private training establishments must also protect student interests by ensuring: ready access to complaints processes; fairness, equity and cultural appropriateness in dealing with complaints, discipline, and appeals processes and procedures; educational and non-educational support and guidance to meet student needs; and currency and quality of educational resources and equipment. Teaching staff need to be competent, up to date and appropriately experienced and qualified to teach in their areas. Management and administrative staff also need to be competent and the organisation chart needs to be current. PTEs must have in place a quality management system that is up to date and systematically implemented. Effective assessment and moderation processes need to be implemented across all accredited education and training programs. The institution must participate in self-assessment and external evaluation and review quality assurance mechanisms. It must also address external evaluation and review requirements, and plan for and implement the improvement actions that have been recommended as a result.

Germany

VET providers who want to access the public funds available for continuing training must be certified by an accredited certification agency (CEDEFOP 2009b). To be certified they need to prove their financial status and capacity to provide training. They must show that they can meet the requirements for integrating students into employment and that they meet the requirements for staff qualifications including their professional experience and engagement in further training. They must also have in place an efficient system for quality assurance and quality development. This includes customer orientation, continuous evaluation of training courses using indicators and measures, and processes for continuous improvement. They must also provide evidence of cooperation with external experts in efforts to improve their quality systems. Providers have to show they have taken into account the existing skills, knowledge and experience of target groups, and their training and employment aspirations.

Ontario: public colleges of applied arts and technology

These public VET post-secondary colleges and their boards are responsible for the quality assurance of their programs. They currently apply the Program Quality Assurance Process Audits (PQAPA)³² standards to guide their processes for quality assurance and continuous improvement. These standards are also used in external audits, which are conducted 'cyclically' every five years. The audits identify

³² <<http://www.ocqas.org/en/wp-content/uploads/2013/10/Orientation-Manual1.pdf>>.

whether or not the quality assurance processes align with the criteria that have been defined for 'exemplary performance' and the 'recommendations for improvement' or 'enhanced compliance'. A report of these results is made publically available on line. Prior to the audit, colleges prepare a self-study report. The Ontario College Quality Assurance Service (OCOAS) is an independent agency established to provide colleges with advisory assistance, including tools and materials to help them to meet the required quality standards.

From September 2015 the colleges will be required to move from this system of audits to a system of accreditation. The Ontario College Quality Assurance Service will become an accrediting body. The standards for accreditation reflect the standards of the Program Quality Assurance Process Audits and provide a framework for assessing the extent to which colleges' quality assurance processes meet the required standards. There are six broad accreditation standards with a set of specific associated requirements.³³ The standards comprise: quality management system (six associated requirements); existence and communication of policies and practices (seven associated requirements); program design (eight associated requirements); program delivery and assessment (five associated requirements); conformity with government requirements (four associated requirements); and availability and allocation of college-wide resources (four associated requirements). It is the associated requirements which spell out the requirements for each broad standard and which must be met.

Colleges need to provide a good evidence base to justify their claims for the quality of their programs and student learning. If a college is judged as meeting all requirements for all six standards then it will be awarded full accreditation, while meeting four or five standards will attract a status of conditional accreditation. If a college is judged as meeting fewer than three of the standards and their requirements, it will receive a non-accreditation result. Colleges with full accreditation will be reviewed after five years; those with conditional accreditation will need to provide an 18-month follow-up report. This report will be used to determine whether the college moves from conditional to full accreditation status. Those with non-accreditation status will need to address specific plans of action to improve their status. Re-evaluation would take place between 18 months and 36 months. Private career colleges in Ontario (similar to our private providers) must be registered by law and have their programs approved by the Superintendent of Private Career Colleges. If they offer post-secondary courses without this approval they are in violation of the law.

Outcomes and outputs as indicators of quality

The adoption of objective measures on outcomes of performance for systems, providers and students as indicators of quality is also gaining traction. These indicators include student learning and competency outcomes, graduate destinations, and employer and student satisfaction with training. In some countries output measures (for example, the numbers of participating students, teachers and employers and hours of training delivery) continue to be used as quality indicators.

In Australia and abroad there is a move towards improving transparency across a range of industry sectors and education and training systems, including VET. Transparency is especially reliant on the generation and publication (often in online formats) of data about performance. The aim is to improve the provision of information to enable clients and consumers (including students and their parents, workers and employers) to make better choices about where to purchase services and what

³³ <<http://www.ocqas.org/en/?p=5014>>.

action to take if the services they purchase are not provided. Transparency of information relating to the outcomes delivered also enables governments to make suitable funding decisions.

European Union

European countries are moving towards outcomes-based standards to assure the quality of their VET systems and away from systems that merely define and monitor input, resources, procedures and processes (European Commission 2014). The European Quality Assurance Framework for Vocational Education and Training recommendations identified a number of key quality output and outcome indicators to be used in national systems for quality assurance systems. These were: investment in teacher and trainer development, participation, completion and placement rates; workplace utilisation of skills acquired; the unemployment rate; prevalence of vulnerable (at risk) groups; mechanisms to identify training needs; and schemes to promote access to VET. The report of the European Commission (2014) noted that more than 20 countries had implemented quality assurance reforms by 2013 and that most had in place quality standards for providers. In practice the indicators commonly adopted centred around participation in and completion of VET programs. This was mainly because it was difficult to obtain data on skills utilisation or employment destinations.

The use of targets and outcomes standards as important elements in quality assurance is increasing in VET systems in Italy, France, the United Kingdom, Germany, Ireland, Denmark and the Netherlands. Stated outcomes can be used to manage VET systems and act as crucial steps to assuring the quality of the system. At the national level targets play an important role in driving and monitoring the progress of the system. Keeping standards to a minimum, making sure that they identify clear and easy-to-measure outcomes and articulating their nature and intent to stakeholders and participants are also favoured. Some countries such as Italy, France and Germany make use of externally set curricula and examinations. Such an approach improves the comparability of learning outcomes at the national, regional or industry-sector level.

The Bruges Communiqué (European Commission 2010) also emphasised the need for the adoption of an outcomes-based curriculum, responsive to labour market needs, and increased cooperation between VET institutions and employers, the aim being to enable providers to understand the employability and employment rates of VET graduates. Work-based learning in enterprises and not-for-profit companies and apprenticeship-type training were to be expanded.

United Kingdom

In England the Office for Standards in Education, Children's Services and Skills (Ofsted) uses a common inspection framework to look at the experience of individual students and judge the effectiveness and efficiency of the college under review. The specific college will be given a rating based on the results of the inspection. These ratings will inform the frequency and timing of future audits. The body which evaluates and monitors the compliance of awarding bodies in England is Ofqual. It, too, uses a risk-based program examining outcomes to carry out its auditing activities.

Assuring the quality of teachers and assessment practice

The quality of instruction is commonly accepted as being a major key to understanding the performance of students in learning tasks. Across the board, standards commonly address the requirement for institutions to have competent and appropriately qualified teachers. The need to improve the quality of VET teachers has been a concern of governments and educators in EU member states, including the United Kingdom.

The Bruges Communiqué (European Commission 2010), which sets out a strategy for cooperation in Europe for the next decade, also refers to the need for participating countries to invest in the initial and continuing training of teachers, trainers, mentors and counsellors. It suggests flexible training provision and increased investment to attract the best and most talented to the occupation.

An inquiry in the UK into teacher training in vocational education (United Kingdom Skills Commission 2010) affirmed the key role that teachers play in student learning and made recommendations for expanding the status of existing teachers, head teachers and college principals to enable them to work across different education sectors and levels. It recommended the development of convergence courses (between general education and vocational education) to allow those with qualified teacher status (QTS) to acquire qualified teacher learning and skills status (QTLS). It also suggested that head teachers and college principals needed to acquire both school and college leader status. Increased flexibility in initial teacher training courses to meet the needs of different categories of teacher, especially work-based teachers, was also recommended. Suggestions were made to expand teacher recruitment campaigns and to pitch these to part-time lecturers and professionals (under the Teach Too, Teach Next, and Teach Later Schemes).

Debates about the quality of assessments are generally concerned with the lack of adequate mechanisms to ensure the consistency, comparability and quality of assessments across registered training organisations or training providers, assessors and industry sectors. The use of external verifiers is common for systems like those of the United Kingdom, in which the delivery of the qualification is undertaken by a training provider and the awarding of the qualification is undertaken by a body that has been approved to award the qualification. The assessment burden and cost are identified as key disadvantages for systems which rely heavily on external assessments.

An investigation into the various workplace assessment models being used in New Zealand and internationally (Vaughan 2010) notes inadequacies in assessor training and the unit of study used to accredit assessors. It looks at the practical implementation of moderation and verification procedures, including the need to reduce the pool of assessors, provide ongoing professional development to maintain competency levels, and develop assessor career pathways. These issues are not unlike issues in other VET systems, and the New Zealand approach could be used to inform the development of standards for the training and accreditation of practitioners responsible for conducting assessments. In Scotland there is a requirement for institutions and agencies seeking accreditation renewals to provide evidence that they have referred to the assessment strategies developed by sector skills councils in their conduct of assessments.

In Finland skills demonstrations (where the performance of students is assessed by teachers and students and representatives of enterprises) are used to confirm the validity and reliability of assessments in terms of the set objectives and levels of proficiency expected in industry. The results of these skill demonstrations for all students (not a sample of students) are used to indicate the quality of the learning outcomes achieved nationally and are published. External assessments conducted by the chambers of commerce and chambers of crafts (for traditional apprenticeships) in Germany help to provide external validation of the knowledge and skills of apprentices in the dual sector.

Involving industry and other stakeholders in decision-making

Consultation with industry stakeholders is considered to be a key element in the development and implementation of quality systems and associated quality standards and/or objectives at both regulator and provider levels. In some countries there is a formal role for industry, not only in the

setting of examinations, but also in the assessment of outcomes. Involving organisations to be regulated in the development or reviewing of standards is also being practised and/or promoted. The Bruges Communiqué (European Commission 2010) also supports substantial cooperation between national governments and stakeholders, including the social partners, VET providers, teachers, trainers, and learners. The European Commission (2014) reports that the majority of EU member states had mechanisms in place to identify training needs for initial VET, with some also having such mechanisms in place for continuing VET.

Germany

A good example of formal and strong involvement for industry in VET is provided by the German dual system for vocational education and training, whereby industry, government and unions (called the social partners) collaborate to ensure quality training and assessment. Industry also works collaboratively with the federal government to develop vocational training regulations and to specify trainee occupations and the period of training. Industry and state governments collaborate in the development of the curriculum, which describes the skills and knowledge to be developed as a result of the training. The Federal Institute for Vocational Education and Training performs an advisory role. The 'chambers' of commerce and craft cover occupations in the categories of industry and trades, craft trades, public service, liberal professions, domestic service, agriculture, and maritime and shipping. The role of the chambers is to provide advice to companies, to register trainees, to certify the technical aptitude of trainers and to hold examinations. When apprentices have completed their training, they undertake examinations set by these chambers or other 'competent bodies'. Such involvement enables industry to have a powerful influence on the curriculum. The chambers also monitor the performance of companies providing training in their districts or regions and review their ability to provide or continue to provide training. In addition, there are employee works councils, which may also participate in the planning and conduct of vocational training and the hiring of trainers. Where training companies (especially small companies) cannot provide all the training, special training workshops give trainees access to these skills: training workshops are established by the chambers and professional associations. Small companies can also collaborate to provide joint apprenticeships.

Reducing red tape and bureaucratic processes

There is a concern about too much red tape and bureaucratic processes across regulatory systems in Australia and internationally. In relation to this issue experts in regulatory behaviour (Braithwaite 2012, 2010; Sparrow 2000; Roche 2006; Cowan 2007) have recommended the application of responsive regulation and risk-based evaluations for regulating service provision.

Responsive regulation is mainly concerned with applying regulatory measures to fit the compliance behaviours of regulated populations or sectors. A light-touch approach is characterised by increasingly more favourable treatment for compliant behaviour and increasingly more severe sanctions for transgressions. A firm-touch approach is characterised by punitive measures, especially for unacceptable transgressions. The general light-touch practice involves addressing non-compliant behaviour (with the exception of unacceptable transgressions) when it first appears through efforts to understand why the behaviour is occurring and to provide support to return the behaviour to that required. Such an approach depends on clarity of purpose, transparency of expectations, trust between regulators and the communities they regulate, and clearly defined and consistently applied regulatory sanctions of increasing severity for transgressions. The application of these approaches is

promoted as helping to reduce both regulatory effort and the costs of compliance. Nevertheless, there are circumstances where the firm touch, that is punitive action, is applied for unacceptable transgressions. Cowan (2007) claims that a light-handed approach saves on the costs of more prescriptive regulation. He also makes the point that the threat of regulation may achieve what a regulator might want to achieve, without actually regulating for it. The downside to this light-touch regulation is that the regulated parties cannot be relied upon to abide by the rules to achieve efficient outcomes.

The adoption of risk-based approaches is commonly applied in domestic and overseas quality assurance systems and regulatory frameworks. This approach represents a practical solution to reducing regulatory burden; the streamlining of standards may be another. The first is dependent on regulators having sufficient information for identifying high and low risk; the second requires a clear and exhaustive picture of all of the other standards and regulatory requirements that might apply. It is also important to understand whether condensing standards in the pursuit of 'streamlining' may introduce more rather than less complexity.

The assessment of risk and the application of sanctions and rewards (for example, autonomy for colleges to run their own affairs) are supported in the study conducted by Collinson (2009), which found that responding further education college principals in the United Kingdom believed that a college's compliance history should be taken into account to determine their level of future regulation and monitoring. Colleges found to meet or exceed regulatory standards should have autonomy to run their own affairs; colleges found not to meet the standards should receive help from peers (acting as critical friends) or be required to have professional intervention. Serious transgressions would require more serious action by regulators. Such examples have direct relevance for VET with their combination of self-regulation, backed up by collaboration with critical friends, and external accountability. Risk-based approaches such as these ensure that complying providers are not subject to unnecessary regulatory burden and that resources are concentrated where they are most needed. The identification of the key risk factors helps regulators to establish audit or review schedules and to focus reviews on specific issues.

The Florida Department of Education in the United States³⁴ explains how it applies a risk-based rating system to monitor the compliance of public providers of career and technical education (VET) and adult education with state and federal funding requirements. A risk rating is assigned to each provider, based on some predetermined risk factors, and this risk rating is used to identify appropriate monitoring strategies. The risk factors include volume of learning (higher funding equals higher risk), number of programs (higher number equals higher risk), complexity of grants (consortia of grantees equals higher risk), number of grants with 10% proportion of funds unspent (more such grants equals higher risk), results of prior reviews (negative findings equals higher risk), and number of uncorrected actions (history of repeated and uncorrected actions equals greater risk).

A risk-based approach to inspection is also employed by the province of Ontario in Canada to monitor the performance of its private career colleges. The risk factors included: newly registered private career colleges; colleges submitting problematic audited financial statements for the Ontario Student Assistance Program; colleges with a large international student population; colleges providing truck driving/heavy equipment training; colleges offering dental hygiene programs; colleges with a high volume of student complaints, and colleges with a history of non-compliance (Ontario case study in Australian Government 2009, p. 79).

³⁴ <<http://www.fl DOE.org/workforce/compliance.asp>>.

The embedding of minimum requirements (compliance with employment-related regulations and industry codes of practice) into government procurement contracts is another example of how regulatory burden can be reduced (Howe & Landau 2009). Contracts can be used to regulate other activities such as labour standards. As well as helping to reduce the burden of regulation, these regulatory mechanisms can also assist in decisions on who can or cannot gain government contracts.

In 2014 Ofqual, the United Kingdom's vocational education regulator, announced that it was re-assessing its regulations to ensure that the system awarded high-quality qualifications. Ofqual also noted its intention to remove organisations that did not comply. It stated:

We are strengthening the way we regulate to help improve the quality of qualifications. We will change the rules so that they promote good qualifications that we can all trust and value, and make it much harder for awarding organisations to get away with poor quality: we will consult on these changes in the spring. Where awarding organisations already offer good, valued qualifications, we will not force them to change for the sake of it. We also intend to make sure that all of the organisations we regulate take responsibility and properly focus on the quality of the qualifications; where they fail to do so we will take firm action. We will meet each of the awarding organisations to set out the detail of our plans and provide more guidance to enable them, where necessary, to improve the qualifications they offer. We expect the organisations we regulate to consider carefully whether all the qualifications they offer are truly valid and reliable. Where they do not have this confidence they should consider whether the qualification should continue to be offered or how the shortcomings can be addressed to improve the quality.

Self-assessments combined with external regulation

Reviews or audits of institutional performance at regular or targeted periods are common approaches for ensuring the quality of a training system and the products (including qualifications) it delivers. In some systems (used by accreditation agencies in the US) reviews may precede the awarding of initial accreditation status and occur again at requests for continuing accreditation. In some systems a combination of internal reviews (generally resulting in a self-study report) and external reviews (conducted by auditors from external accreditation agencies or government regulators) is used. Internal reviews generally precede external ones. Where required, the external review will make recommendations for improvement or for compliance with standards. There are also legislated requirements for self-assessments.

Combining self-assessment or self-review processes with external reviews by regulators and other third parties is also promoted as a way of reducing unnecessary burden. In other systems that make significant use of a self-review or self-study process (Ontario, New Zealand, United Kingdom, South Africa, accrediting agencies in the United States, EU member states) the training organisation must undergo self-review to identify the ways by which it believes it has complied with requirements. In preparing the self-review the institution may be asked to respond to a number of review or evaluation questions and criteria posed by an external reviewer panel. When the self-assessment has been completed and reported, the institution undergoing review will provide the self-review or self-assessment report to the external review panel.

The external review panel (which often includes auditors appointed by or from the regulating agency) undertakes a desk-top audit prior to a site visit. In the United Kingdom the college self-review can also be combined with a peer-review process before it is presented for external review. In this instance the organisation conducts a self-assessment and shares this with a group of peers (preferably

other organisations with which it is not in direct competition). These peers, acting as critical friends, give feedback on the review and suggest where improvements can be made. In some systems (including the quality assurance systems of some accrediting organisations in the United States) the provider must also prepare an annual report addressing key outcomes.

The consistent interpretation and implementation of standards is critical to quality assurance review processes and is facilitated by clearly articulated standards (or their equivalents) presented in accessible formats. This ensures that auditors and those to be audited are adequately prepared for their respective roles. In some international systems students become part of the review process. The use of peers is also being practised. Having teaching staff 'deeply engaged' in the process by giving them a greater role in the preparation of the documentation to be presented to auditors, especially in relation to addressing the key audit criteria, is also suggested. In other examples staff participate in the development of criteria and the conduct of the internal review processes preceding the external review visit.

European Union

The auditing or reviewing of institutional performance to assess the quality of provision is a key feature of quality assurance systems in the EU. The European Commission reports that in 2013 most EU member states had established statutory requirements for the external evaluation of providers, with 22 countries having requirements for institutions to establish and implement internal quality assurance systems and processes. A handful of countries made the establishment of such systems and processes voluntary. The most frequent of the external reviews were inspections, especially for initial VET. The use of other quality systems (for example, ISO 9001 or similar) was encouraged for continuing VET. EU member states, for example, Czech Republic, Denmark, Estonia, Hungary, Slovenia, Slovakia, Bulgaria and Croatia, had enacted legislation to require training providers to evaluate their activities, especially the effectiveness of their training. This included mandatory self-assessment and plans for quality improvement, which were then to be used to inform external evaluations. The use and encouragement of voluntary self-assessments is commonly reported for those jurisdictions in which they are not mandated. Self-assessments are promoted as mechanisms to enable providers to reflect upon and enhance their practice, applying measures that suit their local situations and needs (EU Commission 2014).

New Zealand

A system of internal and external reviews to assure the quality of provision has been adopted in New Zealand by the New Zealand Qualifications Authority.³⁵ The New Zealand authority uses a system of up-front accreditation of private training establishments,³⁶ courses and qualifications and self-assessment combined with external evaluation and review (New Zealand Qualifications Authority 2009a; 2009b). The NZQA defines the evaluation questions and key focus areas used to guide the evaluation. The external evaluation and review is conducted periodically to provide the NZQA with 'a statement of confidence (judgement) about an organisation's educational performance and capability in self-assessment' (outlined in the policy and guidelines for the conduct of external evaluation and review). Educational performance is concerned with whether the educational outcomes achieved by the organisation provide value for learners and other stakeholders (in terms of the quality of learning and

³⁵ The NZQA has primary responsibility for the quality assurance of tertiary education organisations (including polytechnics, wananga, government and private training establishments).

³⁶ Other tertiary education organisations are automatically accredited because they have mandatory public reporting responsibilities.

teaching and the achievement of learners). Capability in self-assessment refers to an organisation's ability to evaluate its practices and processes and use the results to identify and implement improvements.

The New Zealand Qualifications Authority also provides feedback and guidance to teachers on the consistency and accuracy of internal assessment of student work. It also makes public the information on the quality and relevance of a provider's educational performance and organisational capability. The external evaluation and review was originally meant to be a developmental exercise; however, with organisations given a rating on their performance across the six evaluation areas and key focus areas and the results published, a new dimension was added. An evaluation of the external evaluation and review process (New Zealand Qualifications Authority 2012) noted that providers were focused more on the ratings aspect of the external evaluation and review than on its developmental features.

United Kingdom

The Common Inspection Framework endorsed for use from September 2012 applies to training provision that is supported in part by the Skills Funding Agency or the Education Funding Agency (Ofsted 2014). This means that for VET purposes it applies to institutions providing training and further education to young adults and adults (that is learners, in the 16 to 18-year age group, 19+ age group, and learners aged 14–16 years). The aim of the Common Inspection Framework is to provide guidelines on the types of issues that inspectors will look for when making a judgment about a provider's effectiveness and efficiency of provision. We use information from the Common Inspection Framework Handbook to provide a very brief overview of the features of key inspection areas.

The first of these relates to learner outcomes. Providers must provide inspectors with evidence about success and progress rates, retention, development of personal, social and employability skills, and progression to further education or sustainable employment. Inspectors will also obtain information from students on the extent to which they have enjoyed their courses and whether the courses have met their needs.

The second relates to the quality of teaching, learning and assessment. Inspectors will expect to find evidence about the extent to which learners benefit from teachers having high expectations of learners, and their ability to engage students in learning. They will expect to find evidence of staff motivation, and learning environments in which students feel supported. Teachers will be expected to show that they have been able to identify learner starting points; plan teaching and learning activities to support learners and meet their needs; develop and apply processes to monitor student progress; and engage learners in tasks which challenge and broaden their learning. Inspectors will also want to know how learners have used teacher feedback on their assessments to improve their learning outcomes. They will expect this feedback to have been timely, specific and accurate. Inspectors will also want to see evidence of learners developing English and mathematics skills, which will help them achieve their learning goals and career aspirations, and of appropriate advice and guidance given to support their learning. The extent to which equality, diversity and safety for students are promoted will also be assessed.

The third key feature of inspection is the effectiveness of leadership and management. Here inspectors will expect to see that the leaders, managers, and governors (if applicable) have an 'ambitious' vision for their institution, and high expectations for learners. They will also want to see evidence of high standards in student achievement and a reduction in gaps in student achievement. In addition inspectors will seek to see evidence of the implementation of strong performance management systems able to deal with poor performance and to implement adequate professional development support and activities for teachers. Inspectors will also look

for the extent to which providers can successfully plan, develop and manage the curriculum to meet the needs and interests of learners, employers and the local and national community, and address issue of equality and diversity, and bullying and discrimination. The framework also requires providers to have strong internal processes for tracking and evaluating their own performance. They must listen to and take account of user requirements and implement measures for improvement. Although there is no mandatory requirement for providers to complete a formal self-assessment report they must show inspectors that they have implemented a self-assessment process. This self-assessment, whatever its format, will help inspectors to understand how a college's self assessment process has helped it to improve practices, processes and results. An electronic form of the self-assessment report, or its equivalent, is to be posted on the relevant Ofsted website to enable inspectors to read it and prepare for inspections. These can also help inspectors to choose those subjects to be included in the inspection. The self-assessment process undergone by the college will provide inspectors with information that enables them to assess the effectiveness of college leadership and management. Providers must also show that they have provided this information to their governing body, where applicable.

A code of conduct for inspectors and details on grievance procedures are also specified. The code requires inspectors to be objective and impartial in evaluations, in keeping with national frameworks and national standards and requirements. Inspectors must provide evidence-based analysis, fair, reliable and reasonable judgments, honest reporting, and have no conflict of interest (especially with regard to any previous connections to the provider being inspected).

The combination of self-assessment and external review, as favoured under the current Common Inspection Framework, was also utilised by the preceding framework. A study evaluating the process was undertaken by Collinson (2009), who consulted principals of further education colleges. These principals reported that, although they were in favour of self-regulation, supported by external regulation and other measures for accountability, they were wary of increased complexity and increased regulation. These UK principals wanted a set of baseline standards to be negotiated with the sector and a small set of key performance indicators to judge effective performance. They were also in favour of an approach based on outcomes. When colleges were shown to have met or exceeded the standards, they would be judged as able to run their own affairs. When they were found to be non-compliant, they would be offered peer support in the first instance and in severe cases professional intervention.

South Africa

An evaluative study of institutional audits conducted in South Africa in 2006 (Council on Higher Education Higher Education Quality Committee 2006) discusses how the Higher Education Quality Council in South Africa has attempted to encourage institutions to consider audit as a developmental rather than a judgmental tool and to promote self-reflection and improvement rather than mere compliance with policy and regulations. The council also advises on the importance of involving staff in addressing criteria and in auditing interviews and preparing staff and auditors for their roles in regulation. It also supports the notion that both auditors and auditees need to be adequately prepared to take part in audit interviews.

Finland

Prior to the 1990s quality assurance of VET was based on 'norms and inspections' (Finnish National Board of Education 2013, p.1).³⁷ With the decentralisation of the educational system in the 1990s there has been an attempt to use quality assurance processes to 'strengthen' quality assurance across the system. It is a legal requirement that providers undertake self-assessment and participate in external evaluations. The results of these evaluations are also published. External evaluations are conducted by an independent evaluation agency under the Ministry of Education and Culture. The focus is on providing information for the further development of providers. There is no ranking of institutions. A quality assurance strategy (2010–20) has been established with the aim of ensuring that 'all providers apply effective quality assurance systems and that their education personnel have the necessary competencies and commitment' (Finnish National Board of Education 2013, p.2). Peer learning and peer review are also key features of the Finnish quality assurance system. Providers, in conjunction with enterprises, are also required to meet the objectives set out in the qualification requirements.

Lessons learned

When learners can obtain qualifications for knowledge, skills and competencies acquired in a range of formal, non-formal and informal situations uncertainty about the quality of the qualifications obtained may arise. This uncertainty can reduce trust and confidence in the value of the qualification and limit its acceptance by employers and the individuals themselves. In traditional education systems the general approach has involved a system of inspection, whereby representatives from government regulatory bodies make a physical visit to the institution to investigate the extent to which certain policy directives have been implemented, the performance outcomes of students meet expectations and targets, and the quality of facilities and equipment is adequate. Today the inspectorial approach has either been superseded by or combined with a quality assurance approach.

The quality assurance approach is generally based on standards which identify what an institution must do to be accredited or registered and the use of auditors to check on the implementation of the standards. Transgressions lead to the identification of corrective actions, which must be addressed to retain accreditation or registration. In some systems accredited qualifications can only be delivered by accredited training providers; in others (like the jurisdictions in the US) accreditation is voluntary. In these voluntary systems, to acquire or retain accreditation status institutions are bound by the standards for accreditation of the agencies with which they want to be accredited.

The current move to outcomes-oriented learning based on learning outcomes, competency standards, or learning objectives places the focus of quality assurance more squarely on assessment activities (including for recognition of prior learning and experience) and appropriately qualified teachers and assessors than on training delivery or learning techniques. Nevertheless quality assurance systems continue to underscore the need for ethical financial and business management, comprehensive records, effective information systems, and adequate or up-to-date facilities and equipment.

Across jurisdictions there is a desire to improve the transparency and clarity of standards and to reduce unnecessary red tape or bureaucratic detail. This call for simplicity and clarity is widespread, mainly because it means less demand on both regulators and the regulated, and thus helps to improve

³⁷ <http://www.oph.fi/download/148963_Quality_assurance_in_vocational_education_and_training_in_Finland.pdf>.

compliance. Simplicity in the standards also facilitates easier jurisdictional comparisons in systems where comparability is required for labour and student mobility purposes. The implementation of risk-based approaches to quality assurance is one of the main ways adopted by many jurisdictions to reduce red tape.

Conclusions and future directions

The aim in this paper was to investigate the ways by which different countries go about developing, approving and maintaining their qualifications.

A key finding is that there is a commonality of ideas and sometimes practice across those jurisdictions with similar drivers for change. Across jurisdictions, governments are keen to ensure the quality of their qualifications and to involve industry and other relevant stakeholders in the development of occupational and education standards, as well as in the development and approval and/or accreditation of qualifications frameworks and qualifications. The rationalisation and removal of qualifications once they are in formal registers of qualifications (or their equivalent) is more difficult and less easy to track. Quality assurance processes have been gradually introduced to replace traditional forms of inspection, or they work in combination with them. The use of credit points based on the hours typically required for the completion of qualifications is also widespread. A picture also emerges of governments relinquishing central control in countries with traditional qualifications systems and governments tightening control in countries where systems have been reformed, with the aim of making them more flexible and market-driven.

Qualifications frameworks and qualifications

The major aim of many qualifications frameworks is to provide a classification of the qualifications available in a system and the relationships between them. There is a common agreement on the importance of frameworks in helping to ensure national and international credibility, enhance the transparency and comparability of qualifications, and enable smooth transitions (or permeability) between and across qualification levels and between education and work. While there are differences between the numbers of levels used in different national qualifications frameworks, they generally range from eight to 12. The internationalisation of frameworks and qualification levels (for example, by referencing them to regional qualifications frameworks (like the European Qualifications Framework in the European Union) and the acceptance of concepts of mutual recognition mean that, increasingly, providers must trust the qualifications and the quality assurance processes of other systems.

There is also a common desire for qualifications to have relevance to the current and future labour markets in which they operate to help drive up productivity and competitiveness. The learning outcomes approach used across jurisdictions emphasises what an individual should know, do, and understand at different qualification levels. Such outcomes-oriented learning (whether outcomes are described as learning outcomes, competency standards, or learning objectives) places the focus on the reliability and validity of assessments. The recognition of prior learning is also becoming widespread as education systems attempt to raise their stock of qualifications and fulfil their ambition to become inclusive. In some countries a system of external assessments, set and conducted by government agencies or competent industry bodies, has been and continues to be used in the assessment of the skills acquired by students or to verify assessments conducted by training providers.

Processes for the removal of qualifications were more difficult to investigate. This is because few jurisdictions actually describe their processes on public websites. Those we have managed to access rely on patterns of uptake, with low or zero uptake for a period of two years a common trigger for qualification removal used in the United Kingdom (including Scotland) and New Zealand.

Increasingly, governments require the involvement of stakeholders (including representatives from industry, employers, unions, professional experts, training providers and sometimes students and communities). In some jurisdictions industry stakeholders have responsibility for developing or approving qualifications; in others they sit on national committees to both develop and review qualifications. Where the involvement of stakeholders is embedded in training regulations the social partners (unions and employers) have a legislative right to be part of the approving of qualifications.

Systems for assuring quality

The general approach to quality has traditionally involved representatives from government regulatory bodies visiting the institution to investigate the extent to which: certain policy directives have been implemented; the performance outcomes of students meet expectations and targets; and the facilities and equipment are adequate and suitable for training. The inspectorial approach still exists in many countries, especially European Union member states, but it has often been combined with a quality assurance approach. The quality assurance approach or accreditation approach (used in the United States) is often based on standards which identify what an institution must do to be accredited or registered in combination with on-site visits by external auditors or panels of auditors to check on the implementation of the standards. The quality assurance standards used for VET in these systems are broadly similar and include standards for ethical conduct; financial and business management; teacher and assessor competence; management information systems; access and equity; and consumer protection. In some systems recognised qualifications can only be delivered by accredited training providers; in others (like the US) accreditation is voluntary. In these voluntary systems, however, institutions are bound by the standards for accreditation of the agencies with whom they may seek or gain accreditation. Increasingly there is a focus on mechanisms to ensure that those who deliver and/or award recognised qualifications are accredited with national regulators or accreditation agencies recognised by government. In many cases this accreditation is required to access government funding.

As part of their quality assurance mechanisms a number of jurisdictions use a process whereby training providers formally self-assess to address the externally developed criteria set down by regulatory bodies or accreditation agencies. Self-assessment is considered to help providers to improve their performance, and regulators to regulate compliance. However, self-assessments are normally the precursors to systematic forms of external evaluations. In some countries self-assessments are intended to have a developmental purpose, but the publication of data on public websites can distort this aim, with providers found to be far more focused on the rating achieved than on strategies for self-improvement.

Regulatory practice

The governments in most countries have a clear legislative role in the implementation and/or funding of accredited VET provision, with providers being given more autonomy in some jurisdictions than in others. Those systems currently revisiting their regulatory frameworks are aiming to increase the simplicity and clarity of their quality standards and to reduce regulatory burden. Risk-based approaches are increasingly being applied to identify where regulatory action is required. Key to these forms of regulation is having good information on organisations' previous patterns and trends in their regulatory behaviour in order to assist in identifying priority problems and issues as well as organisations for further investigation.

Government regulatory frameworks are believed to preserve the integrity and credibility of nationally recognised qualifications. This is because well-recognised and trusted qualifications can provide clear indications to the labour market about the knowledge and skills that an individual has acquired. Regulatory frameworks also help employers and graduates to have confidence in the quality of the qualifications.

Way forward

In this paper we have used a desk-top analysis of information that is readily available on public websites and publications to provide information on how selected country comparators develop, approve and maintain their qualifications. Despite the limitations to this approach noted earlier, we have been able to access a range of useful information. We make the following final observations:

- Many of the issues being faced overseas in the development of qualifications frameworks, the qualifications themselves and quality assurance frameworks have already been debated in the early establishment and recent revisions of Australia's frameworks and systems. Nevertheless, practices used in other jurisdictions are likely to be of interest, especially in relation to the guidance provided to registered providers in preparing for external audits and the use of risk-based approaches to identify the regulatory action most appropriate. The practices used by overseas regulators to deal with unacceptable transgressions, which might invoke removal of accreditation or registration status, might also be useful to the Australian context.
- Risk-based quality assurance mechanisms based on decreasing regulation for high-performing institutions and increasing investigations for those considered to be of higher risk should be more closely investigated. Risk-based approaches involve the identification of triggers that prompt evaluation and regulatory behaviour. In the Florida Department of Education approach a rating system is used that is based on volume of activity, results of compliance reviews, and history of required corrective actions. The UK's Ofqual takes into account an awarding body's history in submitting applications in which issues for investigation are regularly raised. Ofqual's system for categorising qualifications according to low- and high-scrutiny attention also deserves consideration. The external evaluation and review process used in New Zealand uses risk ratings of a provider's capacity to undertake self-assessment as indicators for closer and further regulatory action.
- Involving stakeholders in the design and assessment of qualifications is a feature of many systems at the national level, where it is sometimes legislated. However, it is important to note that stakeholder involvement may be constrained by the ability and availability of stakeholders to meaningfully participate in these activities. Identifying the type and extent of involvement that can be reasonably expected from industry, community or student stakeholders may be an important step in ensuring they can provide valued input into the design of qualifications, especially in systems where these stakeholders have no formal legal role. Practices used for the verification of assessments in the United Kingdom or skills demonstrations in Finland may be useful points for further investigation.
- The implementation of zero-or limited-uptake policies (or the like) for the removal of qualifications makes good sense in systems where there has been a proliferation of qualifications, especially if this implies a drain on public funding. However, at certain points in time it will be important to protect essential qualifications with zero or limited uptake (for example, some specialised occupations in the funeral services industry).

- No matter how qualifications are designed, approved or maintained, their integrity depends on the capacity of teachers, trainers, assessors, verifiers and quality auditors to perform their specific roles to the desired and expected standards. The skills and knowledge of these players is critical to credible qualifications. Suitable initial teacher training and continuing professional development programs can help to ensure that teachers and trainers are aware of – and utilise – current teaching and assessment methodologies, technological innovations, up-to-date equipment and materials, and appropriate ways for dealing with students from different ethnic groups and demographics. Appropriate training for assessors and verifiers to facilitate their understanding of the key requirements of valid and reliable assessments as well as the processes for validation and moderation is also required. Training to produce quality auditors with the capacity to encourage cooperation from those to be audited, including in understanding the types of evidence that must be presented, would also help to monitor the quality of training and assessment.

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Appendix A: The criteria for SQA accreditation of qualifications³⁸

There are six criteria for accreditation that must be met when submissions for accreditation are lodged with the Scottish Qualifications Agency Accreditation Committee. These have been based on information from the guidance document provided to those who wish to submit qualifications for accreditation and re-accreditation.

Awarding bodies must have in place and show evidence of robust processes for:

1. identifying the need/demand for a qualification (required information: details of a business case; a summary of labour market intelligence, market research, potential uptake of the qualification (a market for the qualification). Re-accreditation requires a justification and evidence of continuing demand).
2. designing and developing qualifications
 - a. SVQ/SVQ units: (required information: details on whether provider has notified relevant SSC [for SVQs/SVQ unit] and if so evidence that the Sector Skills Council supports the accreditation or re-accreditation; and [if applicable] information on how awarding body has been involved in the development of the qualification)
 - b. Regulatory qualifications (required information: details on whether the relevant regulator has been notified; and evidence of regulator support; and if applicable information on awarding body involvement in the development of the qualification)
 - c. Other qualifications: (required information: details of design and development process followed or details of reference number of already provided documents about existing processes if they are to remain the same; and details of new processes, including documents outlining these).
3. maintaining and reviewing qualifications: (required information: details on how qualifications are maintained and reviewed, including timescales for review including periodic review of take-up; details on how feedback on content and delivery is collected and processes to address feedback, including feedback to the Sector Skills Councils for SVQs).
4. designing assessment methods: (required information: details of assessment methods or assessment tools, and information on how the awarding body ensures that the qualification is fit-for-purpose)
 - a. SVQ/SVQ unit: evidence of how assessment methods address assessment strategy (suggestion: evidence requirements or guidance provided to centres)
 - b. Regulatory Qualification: how will assessment address requirements.
5. designing quality assurance systems that ensure the quality and consistency of assessment: (required information: details of quality assurance process followed for qualification, or reference to already provided documents, details and copies of documents for new processes; details of how quality assurance processes are fit for purpose for qualification).

³⁸ Scottish Qualifications Authority (SQA) Criteria for Accredited Qualifications and Guidance for Accreditation Submissions, viewed May 2014, <www.sqa.org.uk/>.

- a. SVQ/SVQ unit (required information: details on how QA systems meet Assessment Strategy requirements, including,
 - i. how it is ensured that assessors, internal and external verifiers meet the requirements of the Assessment Strategy
 - ii. how will the external quality control of the Assessment Strategy be met, and any other Assessment Strategy requirements.
 - b. regulatory qualifications: (required information: details of how any relevant regulatory requirements will be addressed)
 - c. other qualifications: (required information: details of individuals undertaking delivery and quality assurance roles, and how any specific requirements will be met)
6. They must also implement the assessment methods and quality-assure delivery.

Appendix B: Standards for the ACCSC in the United States³⁹

The substantive standards describe what institutions must do to meet requirements. Here we list in note form the key elements and associated coverage.

1. **Management and administrative operations** (Management and administrative capacity, leadership/transformation, institutional assessment, improvement and planning, financial stability and responsibility, tuition policies, student loan repayment , physical facilities improvement)
2. **Programs requirements** (Program design and development, program organisation and length, program evaluation, instructional materials and equipment, program advisory committee, learning resource system, externships, consortium, partnership or contractual arrangements, independent study, transfer of credit, degrees and courses, secondary educational objectives)
3. **Educational administration and faculty qualifications** (Educational administration, faculty qualifications, graduate degree faculty requirements, faculty improvement planning)
4. **Student recruitment, advertising and disclosures** (Recruitment, advertising and promotion, enrolment agreement, graduate employment, accreditation and approval)
5. **Admissions, policies and practices** (General requirements, non-degree programs, degree programs [undergraduate], degree programs (graduate), ESL courses)
6. **Student services** (Advising and counselling, student records, graduate employment assistance and records, student complaints)
7. **Student learning, assessment, progress and achievement** (Student learning, assessment, and satisfactory progress, student achievement, student achievement monitoring and reporting)
8. **Additional criteria for separate facilities** (Classification: branch campus, satellite location), (Responsibility, ownership, name, relationship, and advertising, programs)
9. **Distance education** (Management and administration, objectives and student achievement, programs, curricula and resources, catalog and advertising, admissions requirements and enrolments, faculty, student services)
10. **Public information** (Transparency, currency and accuracy of information provided to the public)
11. **Business management** (Compliance with rules for submission of annual returns, sub-contracting to other organisations, financial reporting standards, financial controls, and financial sustainability, meeting the needs of stakeholders)
12. **Information to students to enable relevant and timely informed choices** (about the institution's results of external evaluations, entry and selection criteria, organisational intentions to continue or otherwise with program provision, complaints and grievance procedures for the institution and the NZQA, ready access to enrolment and academic information and relevant regulations)

³⁹ <[www.http://accsc.org/](http://accsc.org/) www.accsc.org/>.

13. **Student interests** (ready access to complaints processes, fairness and equity in dealing with complaints, discipline, and appeals processes and procedures, culturally appropriate to student well-being, students, educational and non-educational support and guidance to meet student needs, currency and quality and educational resources and equipment)
14. **Staff** (competent, and appropriately experienced and qualified teaching staff, with currency of knowledge, and competency of management and administration staff, currency of organisation chart)
15. **Quality management system** (currency and systematic implementation of QA system)
16. **Assessment and moderation** (operation of effective moderation and validation processes across all accredited education and training programs)
17. **Participation in self-assessment & EER quality assurance mechanisms** (respects EER requirements, planning for and implementation of any improvement actions required)

Funding information

This work has been produced by NCVER under the National Vocational Education and Training Research (NVETR) Program, which is coordinated and managed by NCVER on behalf of the Australian Government and state and territory governments. Funding is provided through the Department of Education and Training.

The NVETR Program aims to improve policy and practice in the VET sector. The research effort itself is collaborative and requires strong relationships with the research community in Australia's universities and beyond. NCVER may also involve various stakeholders, including state and territory governments, industry and practitioners, to inform the commissioned research and use a variety of mechanisms such as project roundtables and forums.

In addition to the commissioned research, each year a pool of NVETR funds is set aside to support the provision of research and policy advice to assist with the Australian governments' skills reform. This work has been produced as part of this initiative.

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