

Uptake and utility of VET qualifications

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About the research

Uptake and utility of VET qualifications

Patrick Korbel and Josie Misko, National Centre for Vocational Education Research

Training packages and accredited courses are the core training products of the nationally accredited vocational education and training (VET) system in Australia. Developed in consultation with industry, they define the units of competency, the qualifications and the guidelines against which competency performance can be assessed.

Review and reform of national training products has been actively pursued by training ministers through the Council of Australian Governments (COAG) Industry and Skills Council (CISC). There has also been the implementation of reforms to VET governance arrangements, including the updating of training packages and their associated qualifications, and the 2015 Standards for RTO registrations. These initiatives have been designed to support the ability of these products to keep pace with changing industry needs.

At the request of the National Training Product Reform Working Group, the National Centre for Vocational Education Research (NCVER) recently convened a symposium on training products reform. This symposium (held in September 2016) gathered a range of expert voices from across the sector to reflect on and provide suggestions for how the system could be improved. This research report complements the symposium discussions.

The research findings build on the picture of the Australian VET sector provided by the recent NCVER reports, *Making sense of total VET activity: an initial market analysis* (Anlezark & Foley 2016) and *VET provider market structures: history, growth and change* (Korbel & Misko 2016). Together, these three reports provide analysis of the national VET system, the diversity and growth of training providers, and the uptake and use of qualifications.

Key messages

- Analysis of *Total VET students and courses 2015* shows 20 training packages supported 90% of the enrolments and the remaining 57 training packages had 10% of all enrolments. Two training packages accounted for around 30% of enrolments.
- Analysis also shows that enrolments in training package qualifications are heavily concentrated in relatively few qualifications. In 2015, 200 qualifications (12%) accounted for 85% of the enrolments, while the remaining group of 1444 qualifications (88%) had some 15% of enrolments. Some 14 qualifications accounted for 25% of all enrolments.
- There were 283 qualifications that recorded no enrolments over a two-year period (2014–15), with these spread across 49 training packages.
- The results show that enrolments in training packages and their related qualifications exhibit very wide extremes in their uptake (based on training provider submissions to the National VET Provider Collection). This dispersion is a reflection of student choice, training provider offerings and also the complexity of present arrangements in establishing and managing training package qualifications, which imposes significant administrative burden across the VET sector.
- Other nations have implemented policy regarding more rigorously reviewing and rationalising their equivalent training products and qualifications. Such policies help to reinforce qualifications that are valued and contemporary, as well as limiting their number. Policies are also directed at improving overall design, such that related occupations have meaningful commonality and utility in qualifications, the aim being to provide students greater flexibility in preparing for an uncertain labour market.

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Executive summary

Total VET activity data allow a comprehensive view of enrolments across the sector.

Nationally recognised vocational education and training (VET) in Australia is mainly constituted by enrolments in qualifications or skill sets, as defined in the various training products. Qualifications and skill sets themselves are comprised of units of competency, which are nationally agreed statements of the skills and knowledge required for effective performance in a particular job or function. Qualifications are aligned to the Australian Qualifications Framework (AQF) and are developed through nation-wide industry consultations.

The responsibility for ensuring that training products meet the skills needs of industry rests with the Australian Industry and Skills Committee (AISC), supported by advice from industry reference committees (IRCs) and development services provided by skills service organisations (SSOs).

The Council of Australian Governments (COAG) Industry and Skills Council (CISC) commissioned a review of training packages and accredited courses in October 2014. At the November 2015 meeting of the Industry and Skills Council, Ministers agreed to a suite of reforms to the system. These reforms focus on areas such as:

- improving information available about qualifications as well as removing those that may be obsolete or superfluous
- easing transitions between related occupations
- creating units of training that are shared between industries
- improving recognition of skill sets
- making better use of accredited courses.

This report contributes data and analyses in regard to these ongoing reforms. In the past, analyses of the uptake of qualifications could only use data on government-funded training activity, which did not provide a holistic view of the training occurring in the sector, especially the use of qualifications.

This research report focuses on the uptake and utility of enrolments in training package qualifications, as reported in *Total VET students and courses 2015* (NCVER 2016). Access to total VET activity allows us to conduct a more comprehensive analysis, including government-funded and fee-for-service training activity.

Among the 4.5 million VET students enrolled in training with an Australian training provider in 2015 were 3.5 million program enrolments (that is, enrolments in recognised programs such as skill sets or qualifications) and 29.4 million subject enrolments (for example, enrolments in units of competency). There were 2.7 million program enrolments in training package qualifications (77% of program enrolments) and 23.0 million subject enrolments in training package qualifications (78% of subject enrolments).

There is a very strong concentration of enrolments in relatively few qualifications with 85% of enrolments concentrated in 200 qualifications.

From training.gov.au¹ we obtained a list of qualifications and information on how these map to each other. We then combined these data with VET enrolment data held by the National Centre for Vocational Education Research (NCVER). To obtain a more accurate picture of the distribution of enrolments across qualifications, recently superseded qualifications had to be identified and their enrolments assigned to the current qualifications to which they now related. Superseded qualifications with no recorded enrolments were then eliminated. This consolidation enabled us to produce a list of around 1600 'in use' qualifications.

We used this consolidated list to analyse the distribution of enrolments across qualifications and training packages, this process revealing a very strong concentration of enrolments in relatively few qualifications. Two hundred qualifications attracted some 85% of all enrolments, with the remaining 15% of enrolments spread around 1400 qualifications; 14 qualifications account for around 25% of all enrolments, while, at the other end of the scale, there were 110 enrolments in this 25% of qualifications. This pattern is also evident among enrolments in training packages, whereby 20 training packages accounted for 90% of all enrolments and 26 training packages had fewer than 1000 enrolments.

This concentration of enrolments in relatively few qualifications and training packages reinforces the need for one of the agreed reforms arising from the Industry and Skills Council review; that is, to identify and remove obsolete and superfluous qualifications, with the aim of simplifying engagement with the training system.

However, it is important to note that low enrolments in qualifications and packages do not automatically imply obsolescence, although questions do arise:

- If these qualifications are genuinely obsolete or superfluous, can they be removed or consolidated into other qualifications?
- Are training needs in such areas being met by other means (for example, by non-accredited training or by nationally and locally recognised courses)?
- Are they important qualifications valued for low-demand occupations, which nevertheless require specific and specialised training?

In New Zealand, Scotland and the United Kingdom, qualifications are flagged for review and potential removal if they attract no enrolments over a period of two years. This test, if applied to the Australian data, reveals there were 283 qualifications that had no recorded enrolments over a two-year period (2014–15) – around 17% of the current or 'in use' qualifications. Furthermore, there were 336 qualifications with no enrolments in 2015, about a third of which were released in 2015 and a third of which were released in 2012. The qualifications with zero enrolments in 2015 were spread across a range of qualification levels, fields of education and training packages.

Recently, research has also been published on the concept of broader qualifications, those with the potential to form streams or routes into related occupational areas, the argument being that such design allows extra flexibility and transitions between occupations and training. This has been examined in Australia by Wheelahan, Buchanan and Yu (2015) and has been flagged for implementation in the United Kingdom's Post-16 Skills Plan (UK Department for Business, Innovation & Skills & Department for Education 2016). The idea is

¹ Training.gov.au is the National Register on vocational education and training in Australia.

also reflected in the reforms agreed to by Ministers to ease transitions between occupations and to improve the efficiency of the training system by creating units that can be shared across industry sectors.

**Many qualifications
can be linked to one
occupation.**

To see how these concepts for creating broader qualification streams might apply in practice in the current Australian context, we consolidated qualifications according to their intended occupation and used this as a framework. Because most qualifications are assigned an ANZSCO (Australian and New Zealand Standard Classification of Occupations) occupation, we used the hierarchical groupings in ANZSCO to create groups of related occupations. For example, our grouping of qualifications by occupation (with only one qualification assigned to each occupation) identified how different streams could be formed. The approach, which reduced the number of qualifications by around two-thirds (to 500 qualifications), is a potential tool for guiding the consolidation of qualifications (similar to flagging qualifications with zero enrolments).

The example of the Certificate III in Individual Support was examined in particular because it demonstrates how three related occupations (providing aged care, disability and home or community support) can be packaged into one qualification with separate specialisations. Using our system, we identified 10 qualifications with 129 466 enrolments between them, in areas related to that certificate III over two training packages. Using the occupational classification as a guide, this concept could be applied to other areas and other qualifications.

The approaches discussed in this report to rationalise qualifications, by either removal or design incorporating greater cross-relationship by occupation groups, are models. Any application of these approaches would require widespread consultation with relevant stakeholders.

Introduction

This report investigates the current uptake and utility of VET qualifications in Australia, and specifically the use of the training packages and qualifications contained within them. It is the third in a series of reports which aim to inform the VET sector about the quantum and nature of the nationally recognised VET qualifications contained in the National VET Provider Collection and reported under *Total VET students and courses*, the most recent publication being that for 2015 training activity (NCVER 2016).

The first of these publications, *Making sense of total VET activity: an initial market analysis* (Anlezark & Foley 2016), used information from the first transitional collection of data on total VET activity (TVA), with results for 2014 published in 2015 (NCVER 2015, and for ease of reference referred to as TVA 2014). The publication presented a first account of the overall national VET market, training providers, enrolments and qualifications in the sector and included, for the first time, information about private fee-for-service, as well as government-funded VET activity.

The second publication, *VET provider market structures: history, growth and change* (Korbel & Misko 2016), tracked the development of the VET market over the last 20 years, in particular the number, growth and great diversity of training providers in Australia. This research also used data drawn from TVA 2014 (NCVER 2015) to compare providers by number of students. Comparisons with the higher education sector and VET sectors overseas were also presented. The analysis noted the challenge of regulating such a large and diverse number of providers.

The purpose of this third report is to specifically focus on the training products of the national VET system, in particular the training package qualifications as reported in TVA 2015 (2015 data published in 2016) compared with the register of qualifications on training.gov.au. The report examines the extent to which these qualifications are used by training providers when enrolling students. Its purpose is to explore the much-used qualifications and, conversely, those rarely used or not at all.

This analysis should help to inform national policy deliberations in ongoing training product reforms and enable some comparisons with international practices in regard to nationally endorsed training products, particularly training product establishment and their use and life cycle (Misko 2015).

Context

VET training products have been subject of recent reviews, including *VET products for the 21st century*, undertaken in 2009 (National Quality Council & Council of Australian Governments Joint Steering Committee 2009). More recently, in October 2014, the Council of Australian Governments' Industry and Skills Council commenced a review of training packages and accredited courses – the two primary sources of Australian accredited VET qualifications (Department of Industry 2014).

The outcomes of the review, published in 2015, found strong support for the existing system of training packages (Department of Education and Training 2015a). However, it also noted that there was a proliferation of qualifications, some of which were not being delivered by

training providers. Feedback from stakeholders suggested that training packages were also seen as being too complex, lacking clarity of language, and requiring more advice on assessment requirements. The review supported a stronger role for industry, including small and medium enterprises, in the development of training packages and the potential renaming of training packages (at some later date) to better reflect their purpose and use.

At the November 2015 meeting of the Industry Skills Council, training Ministers subsequently agreed to a set of reforms (COAG Industry and Skills Council 2015) aimed at:

- removing obsolete and superfluous qualifications from the training system to make it easier for consumers to find the training relevant to their needs
- making more information available about industry's expectations of training delivery to training providers to improve their delivery and to consumers to enable them to make more informed course choices
- ensuring the training system better supports individuals to move easily from one related occupation to another
- improving the efficiency of the training system by creating units that can be owned and used by multiple industry sectors and housing these units in a 'work and participation bank'
- fostering greater recognition of skill sets
- ensuring that accredited courses 'fill the gap' in training packages and provide for training courses to be developed as quickly as industry needs them and to support niche skill needs.

The Ministers acknowledged the need to avoid imposing extra regulatory burden on the VET sector and to support a risk-based regulatory approach proportionate to industry need.

The analysis in this report provides information potentially useful to the implementation of a number of these reforms, including approaches to the identification of qualifications that may be obsolete and/or superfluous. Such information might also prove useful for the development of a framework model that groups qualifications, thus assisting in the identification of potentially transferable skills in related occupations.

A number of other reviews and reforms in the area of training products have been conducted concurrently. In 2015, the Australian Government announced a new model for the development of training products, including the establishment of the Australian Industry and Skills Committee, to be supported by industry reference committees and skills service organisations (Department of Education and Training 2015b).

The Australian Industry and Skills Committee agreed to a schedule for the review and development of training packages. Currently underway, the review has a focus on work identified as urgent by the industry reference committees in April 2016 (Australian Industry and Skills Committee 2016). The aim of this review work and the associated activities is to take account of advancements in technology, new jobs in the economy and emerging skill needs, as well as to ensure that training packages remain responsive to other changes in the economy, including industry restructuring and new ways of working. The review and development work must include the transition of units of competency to the 2012 Standards for Training Packages. As part of this ongoing review and updating of training products, the

Australian Industry and Skills Committee has referred almost 100 qualifications across nine training packages associated with enterprises to the relevant industry reference committees for advice on their removal from the national register (Australian Industry and Skills Committee 2015).



Uptake of qualifications

This first section of the report examines the uptake of qualifications; that is, the number of program enrolments in training package qualifications and how they are spread across all qualifications and training packages.

Overview of VET enrolments

The focus of this report is on training package qualifications, noting these are just one component of the VET training system (see table 1). In TVA 2015, there were 7306 unique programs in which enrolments were recorded.

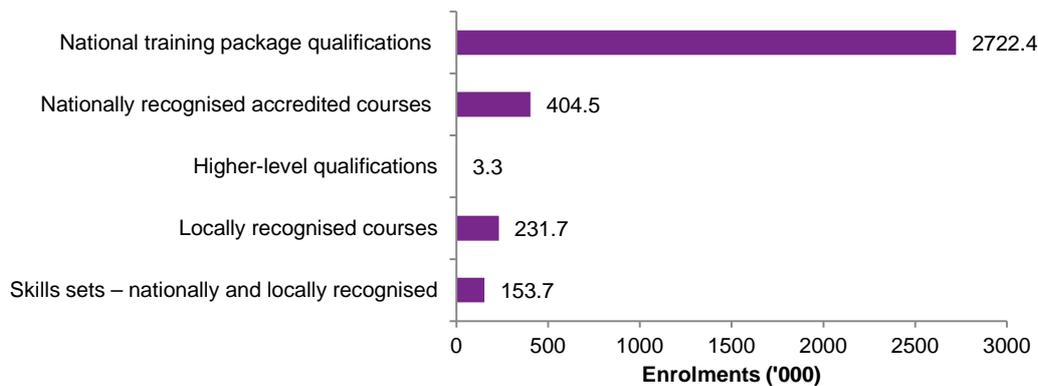
Table 1 VET programs, 2015

Program type	Number of programs
National training package qualifications	2 050
Nationally recognised accredited courses	943
Higher-level qualifications	81
Locally recognised courses	2 338
Skill sets – nationally and locally recognised	1 894
Total	7 306

Source: NCVET (2016).

As shown in figure 1, program enrolments in training package qualifications (2 722 400) constitute the majority (some 77 %) of all program enrolments (3 515 500).

Figure 1 Program enrolments by type of accreditation, 2015



Source: NCVET (2016).

While this report focuses on training package qualifications, table 1 and figure 1 show that nationally and locally accredited courses are important components of the training system and could be examined in subsequent work.

It is also important to note that not all students are enrolled in full programs. The number of students in TVA 2015 (4.5 million) exceeds the number of program enrolments

There are still enrolments in qualifications that have been superseded multiple times.

(3.5 million). Some students are enrolled in subjects only, a topic not considered in the scope of this report.²

Focusing on the 2 722 400 enrolments in training package qualifications, these were associated with 56 of the 77 training packages listed on training.gov.au. The remaining group of training packages comprised some that had been superseded by other versions, those that were enterprise training packages with confidentiality status, and a number that had just been released (which would not be expected to have enrolments in 2015).

Analysis of training package qualifications

We begin the analysis by matching the list of training package qualifications on www.training.gov.au to the enrolments reported in TVA 2015 to determine a list of qualifications released prior to 1 January 2016. The qualifications recording zero enrolments and marked as superseded prior to this date were subsequently removed from this list. This leaves a list of 2573 qualifications, of which 1571 were current (as of 31 December 2015) and 1002 qualifications that, although superseded, were still in use.

This list overemphasises the number of superseded qualifications in use because many of the current and superseded qualifications are directly related to each other. For example, a group of related certificate III qualifications were released in 2009, 2011, 2012, 2013 and 2015 and all five of these qualifications recorded enrolments in 2015, even though the qualification released in 2015 supersedes the previous qualifications.

A variety of reasons are possible for enrolments being recorded against the superseded qualifications, including being 'taught out'³, lack of version control by the provider, or data errors in reporting enrolments against the appropriate qualification.

As table 2 shows, 274 qualifications (with 58 405 enrolments between them) with recorded enrolments in 2015 had been superseded *at least twice*. While this represents a relatively small percentage of the total number of qualifications (11%) and enrolments (2%), this finding is worthy of further investigation: firstly, to determine why such superseded qualifications are still being used; and, secondly, to determine whether in fact they represent competencies that are still required. These are not examined further in this report.

Table 2 Superseded qualifications with enrolments, 2015

Number of times superseded	Total number of qualifications	Total number of enrolments
Four	3	19
Three	39	2 274
Two	232	56 112
One	686	1 099 989

Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVER collections.

2 See <http://www.ncver.edu.au/__data/assets/pdf_file/0030/58089/Program_enrolments.pdf> for more information.

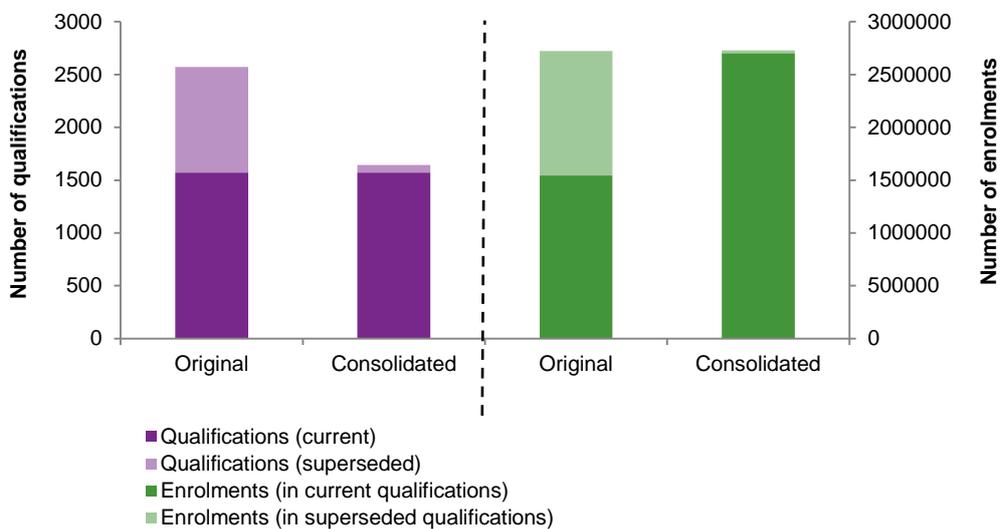
3 According to the *Standards for registered training organisations (RTOs) 2015* in the Commonwealth of Australia's National Vocational Education and Training Regulator Act 2011, when a qualification is superseded, providers have a period of one year to complete learners' training and assessment and issue the relevant AQF certification or transfer learners into the replacement qualification.

However, the number of qualifications that had been superseded *just once* and had recorded enrolments was much higher however. This may be due to the fact that these qualifications were simply being 'taught out' under the existing rules allowing use of superseded versions.

Consolidating the qualifications

In order to address this complexity and enable subsequent analyses, we derived a consolidated list of qualifications, in which superseded qualifications (and associated enrolments) have been incorporated into the current qualification that supersedes them. This is, in essence, a list of the qualifications actually 'in use' and without duplicate qualifications. This consolidated list used the data on qualification mapping on training.gov.au to link the superseded and current qualifications.

Figure 2 Number of current and superseded qualifications and enrolments, original and consolidated lists, 2015



Note: The purple columns (qualifications) should be read against the left y-axis and the green columns (enrolments) should be read against the right y-axis.

Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVET collections.

The consolidation process significantly decreases the number of superseded qualifications, as shown in figure 2. In the original list there were 2573 qualifications, but this drops by 929 to 1644 qualifications after consolidation. The 929 qualifications that were removed from the list were superseded qualifications incorporated into current qualifications. This leaves 73 superseded qualifications (with recorded enrolments) that do not map to any current qualifications released before 1 January 2016.

It is important to note that some qualifications are superseded by more than one qualification. When the consolidated list is created, any enrolments in these superseded qualifications are incorporated into each superseding qualification. This means that the consolidated list counts some enrolments multiple times, reporting 2 728 506 enrolments, a figure which exceeds the 2 722 400 enrolments given in TVA 2015 (NCVER 2016).

According to the original list, 1 545 113 enrolments were in current qualifications, while 1 177 319 were in superseded qualifications. Once the list has been adjusted, however,

93% of enrolments are concentrated at the top end of the scale in 19% of the qualifications.

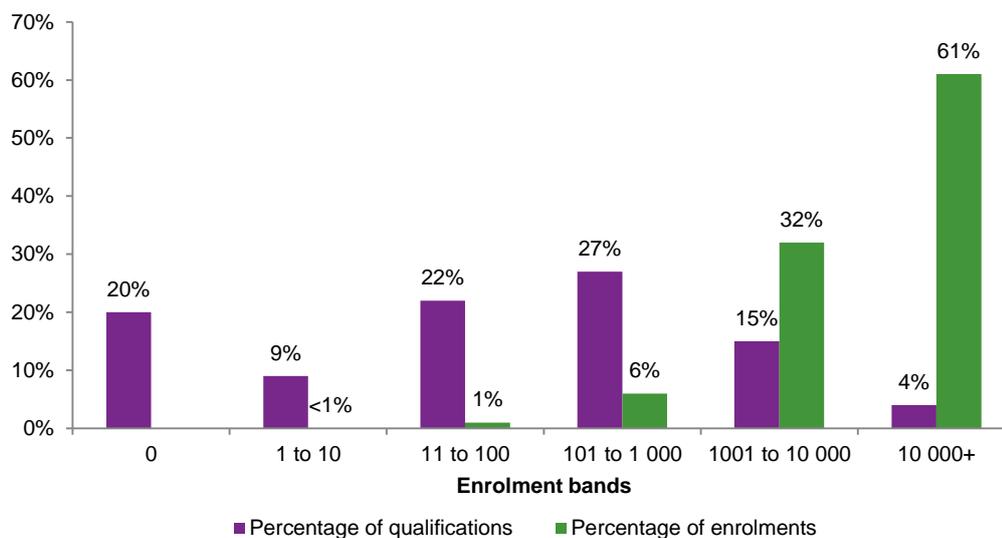
2 703 038 enrolments are in current qualifications and 25 468 enrolments are in superseded qualifications (figure 2). This indicates that most enrolments in training package qualifications are related to a current qualification.

This raises issues that relate to the agreed reforms. While the effective number of 'in use' qualifications may only be around 1600, students, employers, providers and regulators are actually dealing with around 2600 qualifications when considering those qualifications that still have enrolments because they are being 'taught out'. Almost half of all enrolments were in superseded qualifications, but almost all of these related to a newly introduced qualification. If qualifications are going to be updated more regularly, this points to the need for systems for providers and students to smoothly adjust to such updates.

Analysis of the consolidated list

To arrive at an estimate of how training package qualification enrolments (2 728 506) are distributed across (1644) qualifications, all qualifications (in the consolidated list) were sorted into one of six enrolment bands, based on their number of recorded enrolments. There is one band for qualifications with no enrolments and five bands that range from qualifications with one to 10 enrolments, through to qualifications with more than 10 000 enrolments.

Figure 3 Percentage of qualifications and enrolments by enrolment bands, 2015



Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVET collections.

Figure 3 shows that 93% of enrolments are concentrated at the top end of the scale in 19% of the qualifications (that is, qualifications with more than 1000 enrolments). On the other end of the scale (qualifications with one to 100 enrolments), 31% of the qualifications have only around 1% of the enrolments. Twenty per cent of the qualifications had no recorded enrolments in 2015 (recalling that superseded qualifications with no enrolments in that year were excluded).

Figure 4 offers another way to analyse the consolidated list: all qualifications have been plotted along a line in descending order from most to least enrolments. The number of

enrolments is plotted on the vertical axis to show the concentration of enrolments in a small number of qualifications.

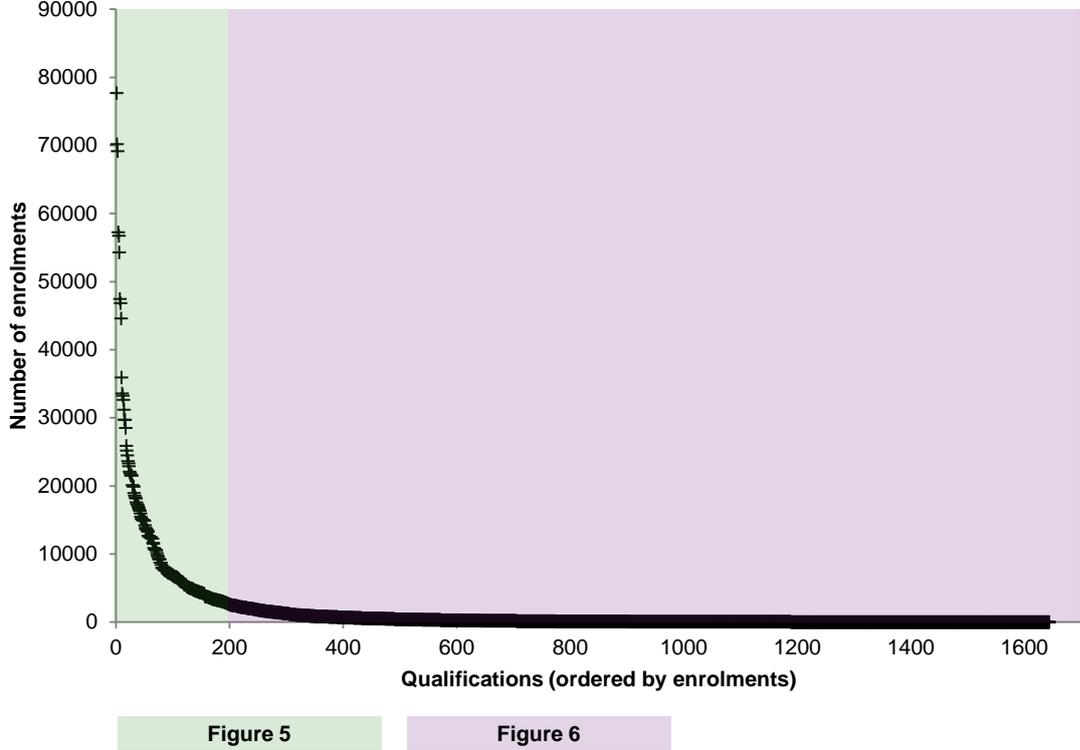
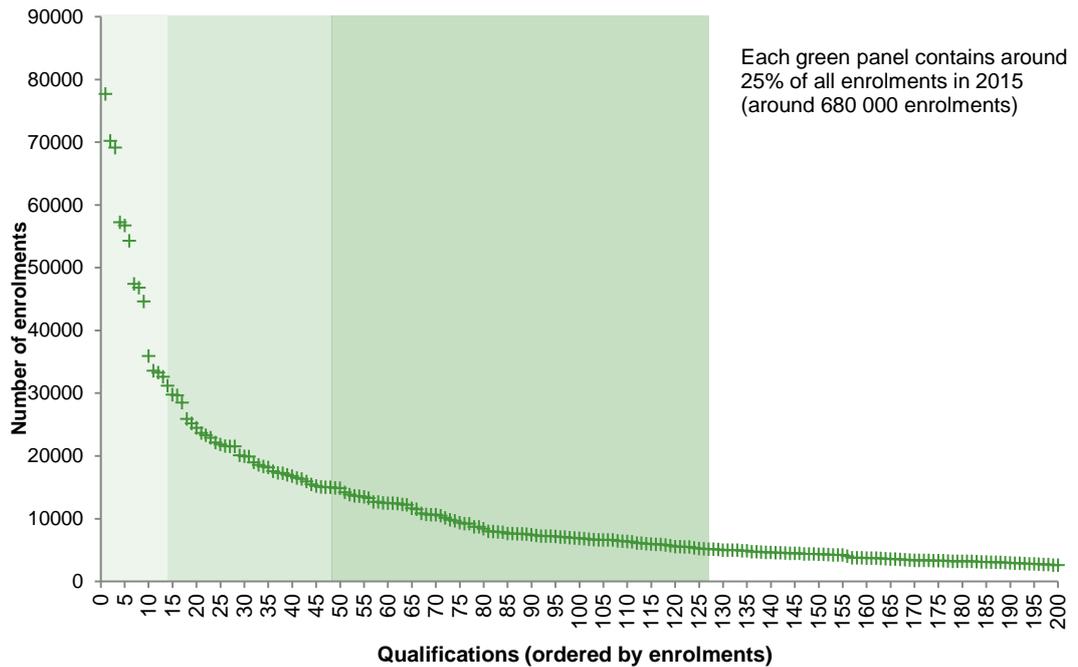


Figure 4 Number of enrolments in each qualification, 2015

Source: Authors' analysis based on data request from the Australian Department of Education and Training and NCVET collections.

Figure 4 divides the qualifications into two boxes: one box with the first 200 qualifications, while the other box contains the remaining 1444 qualifications. These groups are shown in more detail in figures 5 and 6, respectively. In 2015, 200 qualifications supported 2 329 405 enrolments (accounting for 85% of all enrolments) and the remaining 15% of enrolments were spread across the remaining 1444 qualifications (that is, 88% of qualifications).

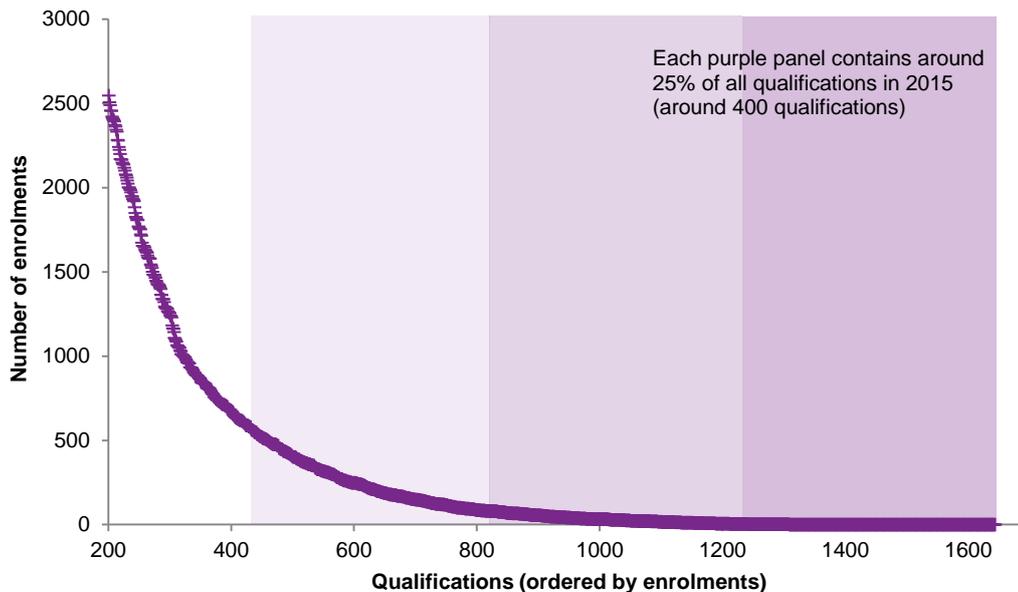
Figure 5 Number of enrolments in the first 200 qualifications, 2015



Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVER collections.

Dividing all enrolments into quartiles (around 680 000 enrolments) shows how many qualifications were in each quartile. The first quartile of enrolments was covered by 14 qualifications, the second quartile was covered by 34 qualifications and the third quartile was covered by 80 qualifications. The fourth quartile was covered by 1516 qualifications. This demonstrates the extent to which enrolments are concentrated in the first 100 or so qualifications.

Figure 6 Number of enrolments in the remaining qualifications, 2015



Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVER collections.

Qualifications can also be divided into quartiles (around 400 qualifications). The fourth quartile of qualifications had only 110 enrolments, the third quartile had 13 063 enrolments

Qualifications with low enrolments are of particular interest when considering the agreed reforms as there are many potential reasons for these low enrolments.

and the second quartile had 110 145 enrolments. In contrast, the first quartile had 2 605 188 enrolments – over 20 times as many as the other three quartiles combined.

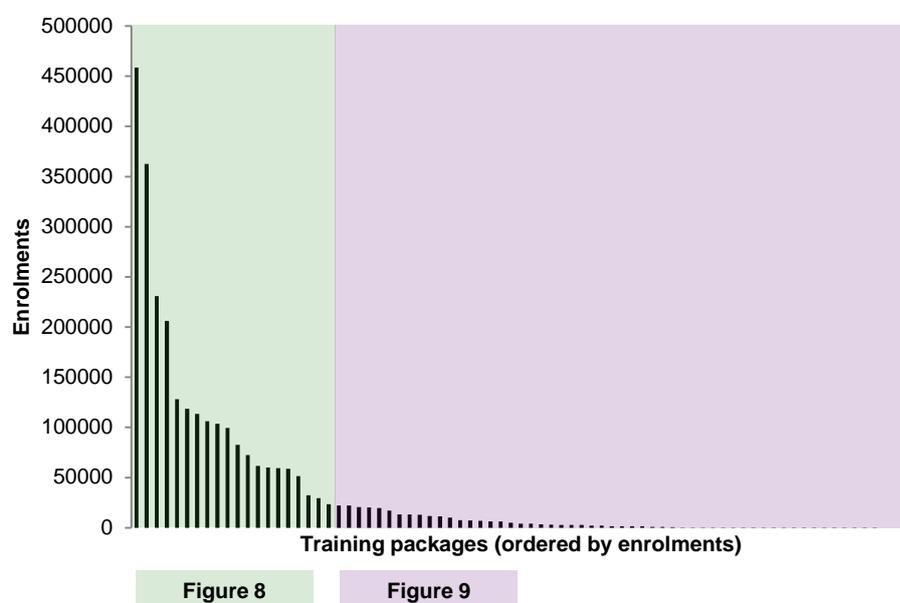
The qualifications with low enrolments are of particular interest when considering the agreed reforms. Various questions arise regarding these qualifications:

- Why do these qualifications have low enrolments?
- Are these qualifications only important for some niche occupations with a low number of employed people or low turnover?
- Alternatively, are they obsolete or superfluous qualifications that should be removed or consolidated into other qualifications?
- Is it because they no longer meet the needs of industry, employers or students?
- Are the training needs covered by these qualifications being met elsewhere (for example, by non-accredited training or by locally or nationally recognised courses)?
- Although unlikely, is there some bias in the collection and reporting of TVA?

Identifying these low enrolment qualifications is just the first step. Further investigations will be needed to implement the required reforms to these qualifications, specifically to ensure measured and appropriate change.

A similar picture is shown if the qualifications are grouped within their respective training packages. Figure 7 plots training packages from most to least enrolments and divides them into two boxes: one with the first 20 training packages and the other box containing the remainder. These groups are shown in more detail in figures 8 and 9, respectively.

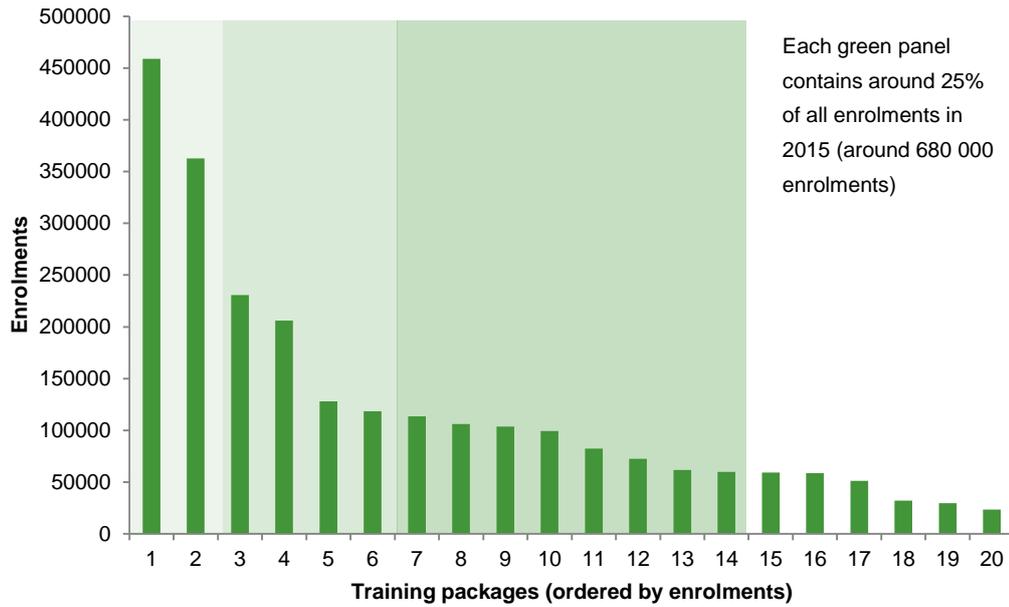
Figure 7 Number of enrolments in each training package, 2015



Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVET collections.

In 2015, 20 training packages had 2 458 980 enrolments (90% of all enrolments) and the remaining 10% of enrolments were spread across the rest of the training packages (accounting for 44% of qualifications).

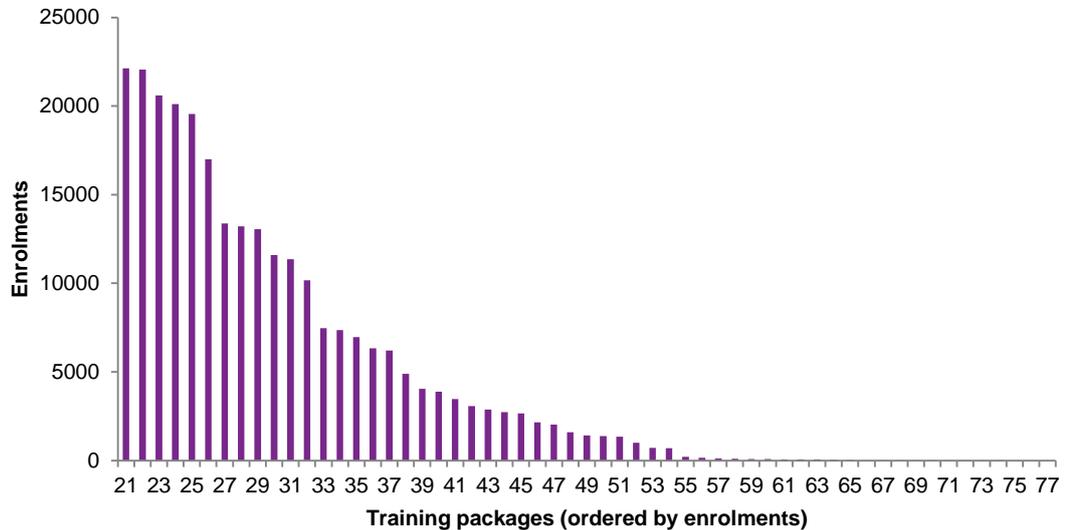
Figure 8 Number of enrolments in the first 20 training packages, 2015



Note: The first two training packages actually account for around 30% of enrolments.
 Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVER collections.

When enrolments are divided into quartiles, there are around 680 000 enrolments per quartile. The top quartile accounts for two training packages, the second quartile accounts for four training packages, the third quartile accounts for eight training packages, with the remaining 63 training packages in the last quartile.

Figure 9 Number of enrolments in the remaining training packages, 2015



Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVER collections.

Some of the low-enrolment training packages are associated with superseded qualifications that still had recorded enrolments. These training packages have been superseded by newer training packages.

Table 3 provides a list of the 14 training packages in the top three quartiles.

Table 3 First three quartiles of training packages by enrolments, 2015

Quartile	Code	Training package
First	BSB	Business Services
	CHC	Community Services
Second	SIT	Tourism, Travel and Hospitality
	CPC	Construction, Plumbing and Services
	SIS	Sport, Fitness and Recreation
	TLI	Transport and Logistics
Third	HLT	Health
	RII	Resources and Infrastructure Industry
	FNS	Financial Services
	ICT	Information and Communications Technology
	CPP	Property Services
	AHC	Agriculture, Horticulture and Conservation and Land Management
	TAE	Training and Education
	MEM	Manufacturing and Engineering

Note: The largest two training packages account for around 30% of enrolments.

Source: Authors' analysis based on data request from Australian Department of Education and Training and NCVER collections.

The Business Services and Community Services training packages had the most enrolments in 2015 (around 30% of all enrolments).

At the other end of the scale, 26 packages had fewer than 1000 enrolments and 19 packages had fewer than 100 enrolments.

While some consolidation of the training packages might be desired, it would be more difficult than consolidating qualifications. Training packages are closely linked to defined industries and the training packages rely on the involvement and feedback of their respective industries to determine and develop the available training products (qualifications, skill sets and units of competency).

Any changes to the system would have to ensure that these industries still had an adequate voice and were appropriately accommodated by the qualifications on offer. It may be more effective to consolidate some of the common or similar units of training between packages, as proposed in the agreed reforms.

There were 283 qualifications which had no enrolments over two years (2014-15).



Identifying qualifications with zero enrolments

The Review of Training Packages and Accredited Courses of 2014 (Department of Industry 2014) recommended 'removing obsolete and superfluous qualifications from the training system to make it easier for consumers to find the training relevant to their needs'. To assist in the identification of those that may be deemed obsolete and superfluous, this section examines the extent and nature of qualifications with zero enrolments.

In turning our attention more closely to this issue, we note the approaches taken by other VET systems in addressing this question. For example, the New Zealand Qualifications Authority, the Scottish Qualifications Authority, and the Skills Funding Agency of the Department of Business, Innovation and Skills (2014) of the United Kingdom have implemented a process to flag qualifications receiving no enrolments for a period of two years, the aim being to identify those that could be removed from the system (see the appendix).⁴ Once these qualifications have been identified, a systematic consultation process with key stakeholders occurs to make final decisions about the qualifications flagged for removal.

Qualifications with zero enrolments

In 2015, 336 qualifications had no recorded enrolments, even after taking into account any enrolments in qualifications they supersede. There are a number of possible reasons for this.

In part, it could be that these are new qualifications (not directly related to previous qualifications); alternatively, they could be qualifications that have fallen out of use. It is possible that the qualifications, or more particularly content drawn from them, are used in industry, but are not reported. For example, an enterprise may use publicly available units from a training package qualification as part of non-accredited training, but this might not be reported.

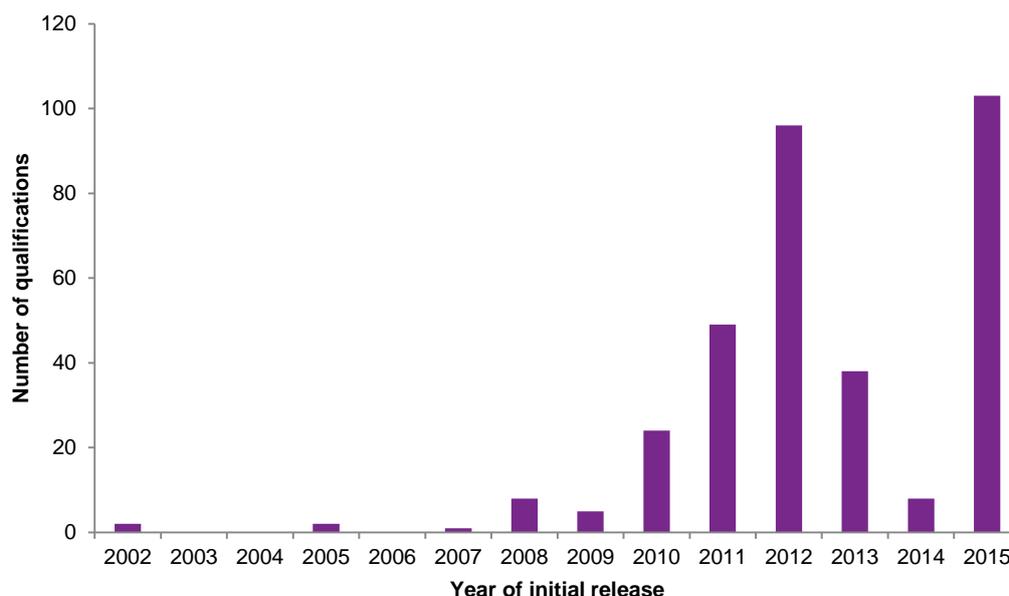
We can also examine the extent of qualifications with no enrolments in 2014 and 2015; that is, qualifications that would be flagged for review in New Zealand, Scotland and the United Kingdom. After incorporating superseded qualifications with the qualifications current on 31 December 2014, 283 qualifications were found to have no recorded enrolments over the period 2014–15. This represents 17% of the 1666 current or in use qualifications. These 283 qualifications were spread over 49 training packages.⁵

There were 103 qualifications that were released in 2015 with no enrolments, presumably because they were either new qualifications (and did not supersede an existing qualification) or the qualifications they superseded also had no enrolments. Figure 10 shows the high number of qualifications released in 2012 with no enrolments in 2015. This requires further investigation, but it may be that these qualifications are in need of updating or replacement.

⁴ The appendix also reports on approaches taken in other European states and the approach taken by the United Kingdom Vocational Reform (UKVQR) program.

⁵ This includes qualifications for which activity may not be reported, such as qualifications in the Defence Training Package.

Figure 10 Number of qualifications with zero enrolments in 2015 by year of initial release



Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVER collections.

We find that the percentage of qualifications with zero enrolments across levels is fairly consistent, meaning that the issue is not concentrated at particular qualification levels (table 4).

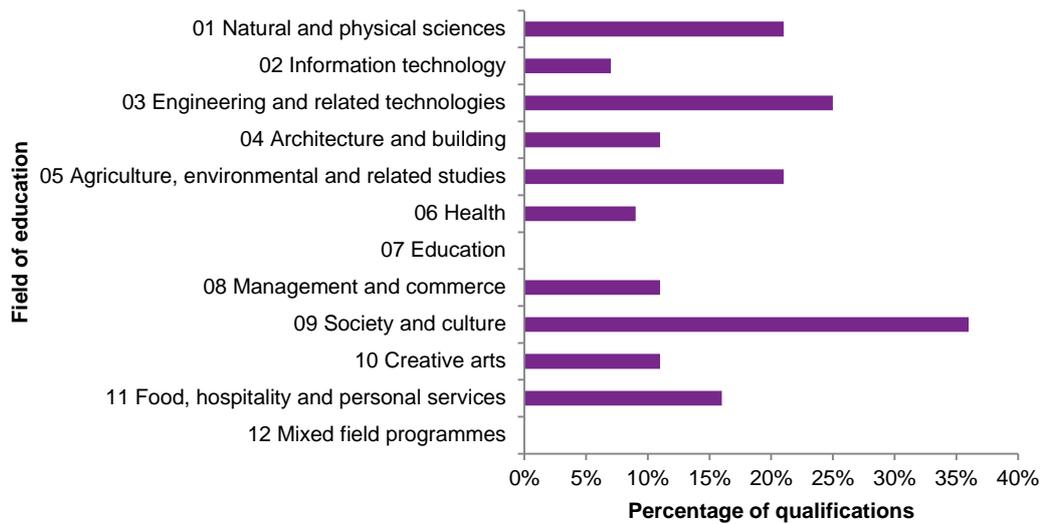
Table 4 Number of qualifications with zero enrolments by qualification level, 2015

Qualification level	Number of qualifications	Percentage of qualifications (at that level)
Certificate I	10	1%
Certificate II	45	3%
Certificate III	60	4%
Certificate IV	79	5%
Diploma	75	5%
Advanced diploma	41	2%
Bachelor degree	8	<1%
Graduate diploma/certificate	18	1%

Source: Authors' analysis based on data request from Australian Department of Education and Training and NCVER collections.

Qualifications with zero enrolments are observed across the different fields of education, with all reporting zero enrolments with the exception of 'Education' and 'Mixed field programmes', as shown in figure 11. The proportion of zero enrolments was highest in 'Society and culture', 'Engineering and related technologies', 'Natural and physical sciences' and 'Agriculture, environmental and related studies'. It is not clear why these fields of education report the highest percentage of qualifications with zero enrolments and this issue too is worthy of further investigation.

Figure 11 Percentage of qualifications with zero enrolments by field of education, 2015

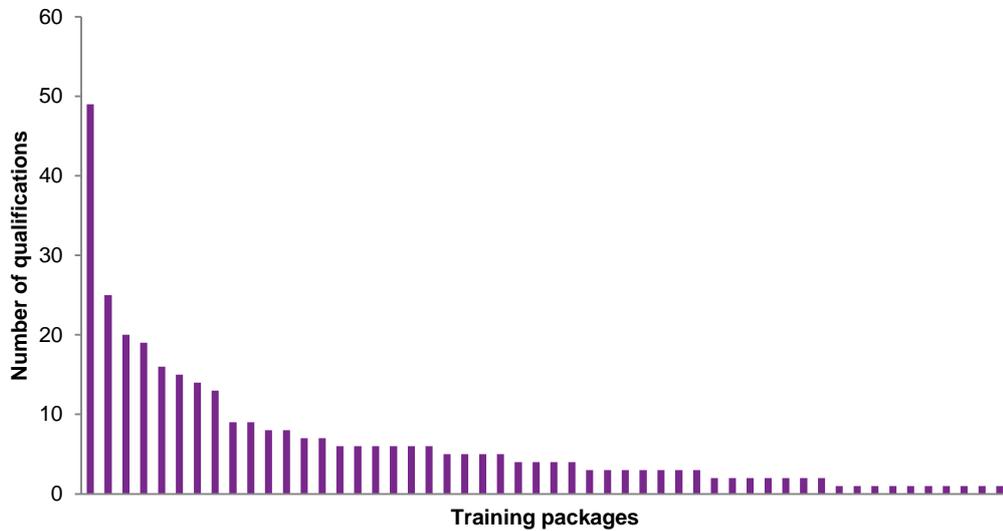


Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVER collections.

Training packages with zero enrolments

There were 52 training packages (of a total of 77 training packages on the training.gov.au register) containing at least some qualifications with zero enrolments in 2015; fewer than 10 qualifications in most training packages recorded zero enrolments, as shown in figure 12.

Figure 12 Number of qualifications with zero enrolments by training package, 2015



Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVER collections.

Part of the explanation for this may be that, among the 77 training packages on training.gov.au, a small group is exempt from reporting to the national VET collections. They may appear to have qualifications with zero enrolments, although this may not be the case (for example, the Defence Training Package and various enterprise training packages that are listed as having confidential status on www.training.gov.au).



Vocational scope of qualifications

The Certificate III in Individual Support has multiple specialisations covering different jobs.

Tracking the uptake of qualifications provides us with information on the extent to which students choose the qualifications on offer or, more pertinently, the qualifications that providers offer to students; however, it does not tell us much about the utility of qualifications, especially in terms of how they prepare people for current and future labour markets.

Two of the reform directions noted above target this issue, these being 'ensuring the training system better supports individuals to move easily from one related occupation to another' and 'improving the efficiency of the training system by creating units that can be owned and used by multiple industry sectors'.

One way to consider the utility of qualifications is to use a different, and broader, organising framework, one that recognises the need to provide students with skills and knowledge that can be easily transferred to existing and emerging job requirements.

The Australian Government's Review of Training Packages and Accredited Courses (Department of Industry 2014) also noted that it was important to the economy that the Australian workforce was both 'geographically and occupationally mobile'. To this end, it identified the need for a different approach to designing training package qualifications to enable easier transition between related qualifications.

A practical example of this can be found in training in the area of caring and human services. The Community Services Training Package has a qualification (Certificate III in Individual Support) that has been designed along these lines. This qualification has a core set of units, with specialised units for different streams of community services. The structure of this qualification (and elective units within it) makes it possible to change or add on a different specialisation, which eliminates the need to undertake a whole new certificate for working in aged care, disability or home or community support.

The published research pertinent to this line of thinking is considerable and recent. The concept of broader qualifications has been investigated by Wheelahan, Buchanan and Yu (2015), who believe that the current way we think about qualifications does not provide a suitable or realistic analysis of how they are used in the labour market. Noting that 'qualifications are only one aspect of workforce development', they report that it makes more sense to think about vocations and vocational streams as organising frameworks, coupled with concepts of capabilities or general skills, which enable individuals to work productively in the labour market.

Both of these concepts are based on common or shared sets of practice, skills, knowledge and attributes. A vocation looks at domains of common practices, while a vocational stream looks at the structure and the linking of occupations. For example, aged care and disability care can be grouped under one vocation (for example, care work), while the way by which occupations are structured and linked can be used to describe pathways like vocational streams. In both cases, qualifications would prepare individuals for broad areas of work rather than narrow job roles. A vocational stream would reflect occupational structures that can either be vertically or laterally related; the vertical structure would signify increased specialisation within a particular field.

This type of thinking has been adopted as policy by the UK Government in its Post-16 Skills Plan, released in July 2016 (Department for Business, Innovation & Skills & Department for Education 2016). This plan aims to organise the Post-16 education and training system into two main options: the academic and the technical options, and to improve the status of the technical option. The technical option will prepare individuals with the skills required for work; it will give employers a leadership role in the establishment of standards; and it will focus on college-based education and apprenticeships (that is, employment-based training).

Another focus of the Post-16 Skills Plan is to create 15 new *technical routes*. These routes (akin to the *vocational streams* concept) are based on the number employed in each of the occupations that have been grouped together. The proposed routes are described in table 5.

Table 5 The proposed United Kingdom Post-16 Skills Plan technical routes

Proposed routes	Typical job roles
Agriculture, environmental and animal care	Conservationist, park ranger, farmer, horticulturalist, agricultural manager, agricultural technician
Business and administrative	Human resources officer, office manager, administrative officer, housing officer
Catering and hospitality	Chef, butcher, baker, catering manager, events manager
Childcare and education	Nursery assistant, early years officer, teaching assistant, youth worker
Construction	Bricklayer/mason, electrician, building/civil engineering technician, carpenter/joiner, construction supervisor
Creative and design	Arts producer, graphic designer, audio-visual technician, journalist, product/clothing designer, upholsterer, tailor, furniture maker
Digital	IT business analyst/systems designer, programmer, software developer, IT technician, web designer, network administrator
Engineering and manufacturing	Engineering technician, vehicle mechanic, aircraft fitter, printer, process technician, energy plant operative
Hair and beauty	Hairdresser, barber, beauty therapist
Health and science	Nursing assistant, pharmaceutical technician, sports therapist, laboratory technician, dental nurse, food technician
Legal, finance and accounting	Accounting technician, paralegal, financial account manager, payroll manager, finance officer, legal secretary
Protective services (mostly apprenticeship training)	Police officer, fire service officer, non-commissioned officer (NCO), maritime operations officer (coastguard)
Sales marketing and procurement (mostly apprenticeship training)	Buyer, procurement officer, sales account manager, market research analyst, estate agent
Social care (mostly apprenticeship training)	Care worker, residential warden, home carer, probation officer, welfare counsellor
Transport and logistics (mostly apprenticeship training)	Ship's officer, railway signalling technician, HGV driver

Source: Department for Business, Innovation & Skills & Department for Education (2016).

Applying this broad approach to the Australian context

By way of initial modelling only, we apply this concept of broader technical routes or streams to the Australian situation by using enrolment information against groups of occupations. We use ANZSCO to identify the number of enrolments at major group (1-digit level), sub-major group (2-digit level), minor group (3-digit level), unit group (4-digit level) and occupation group (6-digit level) classifications.

Most training package qualifications are assigned to an intended ANZSCO occupation (at the 6-digit level) in the national VET collections. However, multiple qualifications may link to

one occupation (often related qualifications at different AQF levels), so this may be used as a guide for any further rationalisation of qualifications.

The analysis that follows is a one-model approach to the greater rationalisation of qualifications.

Starting again with the 1644 qualifications on the 'consolidated' list of training package qualifications, 1631 of these have been *assigned* to an ANZSCO group. The remaining 13 qualifications are either not assigned to an ANZSCO group or classified as general education. As shown in table 6, the distribution of these qualifications ranges from 48 in '6 Sales workers' to 549 in '3 Technicians and trades workers'.

Related qualifications can be identified by looking at their intended occupations.

Table 6 Number of qualifications after grouping by ANZSCO levels by ANZSCO major group, 2015

ANZSCO major group	Consolidated list	Occupation grouping (6-digit level)	Unit grouping (4-digit level)	Minor grouping (3-digit level)	Sub-major grouping (2-digit level)
1 Managers	112	47	30	13	4
2 Professionals	184	72	43	19	7
3 Technicians and trades workers	549	155	73	23	7
4 Community and personal service workers	261	60	34	10	5
5 Clerical and administrative workers	167	42	25	12	7
6 Sales workers	48	16	11	4	3
7 Machinery operators and drivers	105	40	19	7	4
8 Labourers	205	68	37	9	6
Total	1631	500	272	97	43

Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVET collections.

If the qualifications are grouped by occupation (that is, at the ANZSCO 6-digit level), we have 500 unique groups. If we follow this process for the different ANZSCO group levels, we find that there are 272 groups at the 4-digit level, 97 groups at the 3-digit level, 43 groups at the 2-digit level and eight groups at the 1-digit level (the eight major groups listed in table 6).

If qualifications were to be rationalised in this way, a possible ideal would be somewhere between grouping by occupation (500 groups at the 6-digit level) and grouping by sub-major groups (43 groups at the 2-digit level).

Importantly, not all qualifications need be grouped at the same level. Where there was sufficient demand or need, qualifications could be grouped just at the occupation level. Other less utilised or less specific occupations could be grouped at a higher level, such as at the minor group level.

One metric for rationalising qualifications using ANZSCO groups could be the mean number of enrolments in each group. If the mean number of enrolments were below some target number, that would indicate that those groups needed to be rationalised.

As shown in table 7, in the consolidated list of qualifications the mean number of enrolments ranges from 947 for '3 Technicians and trades workers' through to 2883 for '4 Community and personal service workers'. At the occupation grouping level, the mean ranges from 3124 for '2 Professionals' to 12 541 for '4 Community and personal service workers'.

Table 7 Mean enrolments per group after grouping by ANZSCO levels by ANZSCO major group, 2015

ANZSCO major group	Consolidated list	Occupation grouping (6-digit level)	Unit grouping (4-digit level)	Minor grouping (3-digit level)	Sub-major grouping (2-digit level)
1 Managers	1 899	4 525	7 089	16 360	53 171
2 Professionals	1 223	3 124	5 232	11 840	32 137
3 Technicians and trades workers	947	3 355	7 123	22 607	74 281
4 Community and personal service workers	2 883	12 541	22 130	75 243	150 486
5 Clerical and administrative workers	2 549	10 134	17 025	35 469	60 803
6 Sales workers	1 996	5 989	8 711	23 956	31 941
7 Machinery operators and drivers	1 689	4 433	9 332	25 331	44 329
8 Labourers	1 459	4 399	8 084	33 234	49 851
Total mean	1 660	5 435	9 958	34 052	60 633

Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVER collections.

Suppose a hypothetical target was set mandating that qualifications should have at least 2500 enrolments per year on average to keep them viable. This target would not be met by the adjusted list (with an average of 1660 enrolments per qualification), but it would be met by grouping by occupation (as the average is 5435). This approach could also be applied selectively, by not rationalising qualifications within '4 Community and personal service workers' or '5 Clerical and administrative workers' as they already meet the target of greater than 2500 enrolments on average.

Another possible metric to guide the rationalisation of qualifications is the number of qualifications with zero enrolments. Across the major groups in the adjusted list, the number of qualifications with zero enrolments ranges from seven in '6 Sales workers' to 115 in '3 Technicians and trades workers'.

Table 8 Number of groups with zero enrolments after grouping by ANZSCO levels by ANZSCO major group, 2015

ANZSCO major group	Consolidated list	Occupation grouping (6-digit level)	Unit grouping (4-digit level)	Minor grouping (3-digit level)	Sub-major grouping (2-digit level)
1 Managers	19	5	1	1	0
2 Professionals	26	6	5	0	0
3 Technicians and trades workers	115	10	1	0	0
4 Community and personal service workers	73	2	1	0	0
5 Clerical and administrative workers	23	1	0	0	0
6 Sales workers	7	0	0	0	0
7 Machinery operators and drivers	23	4	0	0	0
8 Labourers	40	4	1	0	0
Total	326	32	9	1	0

Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVET collections.

Rationalising qualifications at the occupation level reduces the number of qualifications with zero enrolments from 326 to 32. Again, this could be applied selectively to reduce the number of qualifications with zero enrolments in '3 Technicians and trades workers' and '4 Community and personal service workers'.

The rationalisation of qualifications by ANZSCO groups could be undertaken in conjunction with the increased use of specialisations and streams within qualifications, such as the example above in the Certificate III in Individual Support. For example, the certificate III has been assigned the 6-digit ANZSCO occupation of 423313, but there are other related occupations it could potentially cover, as demonstrated in table 9.

Table 9 ANZSCO occupations within the minor group '423 Personal carers and assistants'

ANZSCO code (6-digit)	Occupation title
423000	Personal carers and assistants nfd
423111	Aged or disabled carer
423211	Dental assistant
423300	Nursing support and personal care workers nfd
423311	Hospital orderly
423312	Nursing support worker
423313	Personal care assistant
423314	Therapy aide
423400	Special care workers nfd
423411	Child or youth residential care assistant
423412	Hostel parent
423413	Refuge worker

Note: nfd = not further defined.

Source: Authors' analysis based on data from the Australian Department of Education and Training and NCVET collections.

These occupations are not necessarily so similar that they could be covered by the same qualification, but it seems there is scope within the certificate III to cover many occupations within the group '423 Personal carers and assistants'. Currently, there are 10 separate

qualifications under that group, comprising 129 466 enrolments (according to the consolidated list). The qualifications and their enrolments are shown in table 10.

Table 10 Qualifications within minor group '423 Personal carers and assistants'

Qualification code	Qualification title	ANZSCO code	Enrolments
CHC33015	Certificate III in Individual Support	423313	77 678
CHC43015	Certificate IV in Ageing Support	423111	10 680
CHC43315	Certificate IV in Disability	423111	5 452
HLT23215	Certificate II in Health Support Services	423312	2 773
HLT33015	Certificate III in Allied Health Assistance	423314	4 346
HLT33115	Certificate III in Health Services Assistance	423311	15 169
HLT33215	Certificate III in Health Support Services	423312	2 280
HLT35015	Certificate III in Dental Assisting	423211	4 187
HLT43015	Certificate IV in Allied Health Assistance	423314	6 065
HLT45015	Certificate IV in Dental Assisting	423211	836

Source: Authors' analysis based on data from the Department of Education and Training and NCVET collections.

Any practical application of such a model would necessarily involve extensive industry and user negotiations, especially in cases where the qualifications may come from different training packages.

The 'vocational streams' approach may however be more suited to more conceptual and theory-driven qualifications (more typically in higher-level AQF qualifications) rather than to qualifications linked to regulated or licensed occupations with highly specific technical requirements.



Conclusions

In this report, we analysed the uptake and availability of training package qualifications by linking NCVER data on total VET activity to information on current and superseded qualifications on the training.gov.au register. Our aims were to make available to the sector the quantum and nature of training activity in training packages and to inform the ongoing reform directions in the national VET system.

Our focus was on enrolments in training package qualifications, these being a substantial proportion of the training activity in the sector. In 2015, there were 2.7 million enrolments in training package qualifications, representing over 77% of the 3.5 million program enrolments overall.

The spread of these 2.7 million enrolments across the approximately 1600 'in use' qualifications in training packages, however, is not even. A majority of enrolments are concentrated in relatively few of the qualifications and training packages.

Twenty training packages supported 90% of the enrolments, with the remaining enrolments spread across approximately 60 other training packages, while 128 qualifications accounted for 75% of the enrolments, with the remaining enrolments spread across more than 1500 other qualifications.

At the other extreme, 19 training packages supported fewer than 100 enrolments and 26 training packages fewer than 1000 enrolments. Seventy-five per cent of qualifications had a combined total of fewer than 125 000 enrolments – more than 20 times fewer than the 25% of qualifications carrying the bulk of the enrolments; 25% of qualifications only had 116 enrolments.

With regard to the utility of qualifications, the data available (2014 and 2015) limit the conclusions that can be made, although further years of collecting information on TVA will enable us to track the total enrolments in qualifications across their life cycle, thus providing further insight into which qualifications are being used and which sections of the labour market make most use of them.

While this report identified the extent of enrolments with low qualifications, further research is needed to investigate the reasons for these enrolment patterns. For example, these qualifications may no longer meet the needs of students and employers – their training needs may be being met outside the formal training system. A further explanation might be that these qualifications are valued formal qualifications for a very small proportion of the labour force.

One of the reforms identified by the review of training packages and accredited courses (Department of Industry 2014) is the removal of obsolete or superfluous qualifications, the aim being to make it easier for students and employers to engage with the system. The analysis given in this report addresses this reform through its investigation of superseded qualifications and the extent of qualifications with low or zero enrolments.

Our findings show that, although (in 2015) superseded qualifications attracted a substantial percentage of enrolments (around 40%), almost all of these enrolments are in qualifications related to a current qualification. This means that the number of 'genuinely' superseded

Further years of total VET activity data will allow more comprehensive analysis of qualifications over their whole life.

Students will need to be transitioned quickly if qualifications are updated more frequently.

qualifications in use is comparatively low. Nevertheless, the apparent enrolments in qualifications that have been superseded more than once, according to information on the national register, warrants further investigation.

The distribution and prevalence of qualifications with zero enrolments indicates that, although most of the training packages have qualifications with zero enrolments, the incidence is quite low, with many having fewer than 10 qualifications with zero enrolments. The zero enrolment rule could be utilised to identify qualifications for rationalisation or removal, but final decisions on the fate of these qualifications need to be made in collaboration with industry, as well as with the custodians of particular training packages. This approach would borrow concepts from the way in which the United Kingdom, New Zealand and Scotland deal with the issue.

At the request of the National Training Product Reform Working Group (commissioned by the Australian Industry and Skills Committee and the Skills Senior Officials Network), NCVER ran the Training Products Reform Symposium to canvass ideas from VET thought leaders. One suggestion arising from the symposium was that the process of updating qualifications needs to be shortened, from two or three years to six months, to better meet industry needs, a recommendation made by Sara Caplan, CEO of PricewaterhouseCooper's Skills for Australia, in her symposium essay. Since our analysis revealed that around 40% of enrolments were in superseded qualifications, any reform in this area will need to make provisions for the fast transitioning of students to the updated qualifications.

Alternative viewpoints on the findings in this report might suggest, for example, that there are too many discrete training package qualifications, that training providers only market and teach narrow qualification offerings, or that this distribution reflects labour market needs. Nevertheless, it is widely agreed that the system is complex and difficult to access. This complexity imposes burdens on providers, students, regulators and funders, all at significant administrative cost.

There is also a drive to ensure that education and training meet industry, employer and student needs. One way to help achieve this is by targeting funded training lists to qualifications that lead to increased productivity for industry and employers and job opportunities for learners.⁶

A further suggested direction for reform is for the transition between different, but related, occupations to be simplified, with substantial policy interest in Australia and internationally in developing a broader set of qualifications to make it easier for individuals to move within and across occupations as the job market changes.

In the United Kingdom, 15 technical routes have been developed to guide the provision of training. The need to broaden the nature of qualification pathways has also been proposed for the Australian context, with researchers suggesting the use of vocational streams to enable individuals to move laterally between occupations or become more specialised by

⁶ For example, the Victorian Government removing public funding from certain courses: <<http://www.abc.net.au/news/2016-08-26/vic-government-moves-to-overhaul-scandal-plagued-tafe-system/7790380>> and the Australian Government proposing to restrict student loans to courses on skills needs list <<http://ministers.education.gov.au/birmingham/new-vet-student-loans-course-list-focussed-employment-outcomes>>.

moving vertically through different components of occupations. The concept of skills clustering has also gained traction. Here the focus is on clustering the units of competency to implement a more holistic approach to the development and assessment of competence. Some industry sectors (such as the community services sector) have already redesigned the qualifications on offer in related fields into core units and elective units, with elective units used to enable individuals to concentrate on preferred specialisations.

In this research, we modelled an approach to broaden the qualifications (in cases in which it makes sense to do so). We used the intended occupation assigned to qualifications and ANZSCO groupings and levels to suggest a method for how this can be achieved. There may be some merit to applying such a tool (or variations of it), particularly in cases with low enrolments across all of the related qualifications.

The application of the concepts of vocational streams, technical routes, core and elective units in the redesign of the qualification pathways may have merit in the Australian system, especially in the preparation of individuals for current and emerging labour markets. In this way individuals would be prepared with heightened employability skills and technological (including digital) and other technical capabilities to enable them to prosper in an increasingly uncertain labour market.

Nevertheless, this strong focus on 'transferable skills' must be tempered by the requirement to provide individuals with specialised skills, which can be consolidated and expanded as job requirements change. Clearly, some occupations require very strict attention to competency standards, especially those explicitly leading to licensed trades. However, there may be other occupations where these broader qualification concepts are more suited; for example, at the intersection of AQF levels 5 and 6 to link vocational diplomas and associate degrees.

Any consolidation of qualifications according to occupational groupings would involve multiple industry sectors. In the same broad ANZSCO group as the Certificate III in Individual Support, the related occupations are covered by both the Health and Community Services training packages, so any consolidation would have to involve stakeholders from both groups. Future research could consider the spread of units across qualifications, including the number of units that generally make up occupations, the number of qualifications that share units and the sharing of units across qualifications and packages.

This report has not addressed all of the Ministers' agreed reforms, in particular the greater recognition of skill sets and the role of accredited courses. However, this report does have some relevance to those reforms and suggests directions for further research.

While comparing TVA data for 2014 and 2015 had significant limitations (given 2014 was the initial year and with allowed exemptions), the preliminary data indicate that the number of skill sets in use increased by 195% between 2014 and 2015 (from 643 to 1894).

Nationally recognised courses are the second largest group of courses by program enrolments, after training package qualifications. They are intended to fulfil industry needs on a short-term basis in cases where no relevant training package qualification exists. Further research, similar to this analysis of training package qualifications, needs to be undertaken on the quantum and nature of enrolments in these courses and whether there are any overlaps with training package qualifications.

This report focuses on training package qualifications, while the previous reports, *Making sense of total VET activity: an initial market analysis* (Anlezark & Foley 2016) and *VET provider market structures: history, growth and change* (Korbel & Misko 2016), examined some of the key areas of the VET sector – government-funded and fee-for-service training, the diversity of providers and the use of qualifications.

Future reports will analyse more closely the use of training products by provider type, examining the differences between providers offering comprehensive and specialised ranges of courses. This will include examining the role and nature of enterprise and community education providers. The objective of all of these reports will be to inform policy and the ongoing reforms of the sector by making the best use of the data that are now becoming available.



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Appendix – Overseas approaches to the removal of qualifications

Vocational education and training systems at home and overseas want to ensure that they deliver relevant and credible qualifications for individuals, for workplaces and for society in general. There is a desire across domestic (Department of Education and Training 2015a) and overseas jurisdictions to contain the number of qualifications that duplicate the content of other qualifications or are either no longer required or relevant for current environments (CEDEFOP 2010). 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. The removal or retiring of qualifications is especially an issue for systems where there is a proliferation of available qualifications. New Zealand and the United Kingdom (including Scotland) have implemented systematic review processes, which target for removal from relevant registers further education qualifications that have experienced zero or very low uptake over a specified period of time (usually two years).

In other European member states (CEDEFOP 2010, 2012a, 2014) a system of review is often undertaken at the time the qualification comes up for renewal (that is, at the expiry of its life cycle, usually four to five years). This system of general reviews is based on consultations with key stakeholders (including social partners, educational institutions, professional associations, industry groups and in some cases students). Government agencies may also have responsibility for informing systems about the types of qualifications that are required or are no longer in demand. For example, the Labour Market Council, which is attached to the National Agency for Higher Vocational Education in Sweden, analyses labour market trends to make such decisions (CEDEFOP 2012b).

The Department of Business, Innovation and Skills (2014) of the United Kingdom used the zero or low uptake for two years rule to address the proliferation of qualifications on public funding lists administered by the Skills Funding Agency. In 2014, there were 15 800 qualifications in the adult vocational education sector (under the Qualifications and Credit Framework), with 11 000 eligible for public funding. These 11 000 included many qualifications that had not been used. To streamline the public funding list, the Skills Funding Agency removed 3000 qualifications, with the intention of removing a further 5000 qualifications over the next year. The aim was also to review and rationalise those areas that have traditionally been developed as qualifications for accreditation in order to access funding (for example, activities like work experience, résumé writing, or developing interview skills).

A more consultative approach was taken in the United Kingdom Vocational Qualification Reform Program (UKVQR): Strand 4 of the UKVQR Programme (led by the Federation of Awarding Bodies and the Joint Council for Qualifications). The program aimed to investigate areas where qualifications could be removed, and to consult with and gain approval from industry about the areas where such qualifications could be removed. The first list of suggestions made by the UKVQR Strand 4 group 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 National Vocational Qualifications (NVQs) put to sector skills councils, just seven (6.7%) 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 were necessary for progression to other qualifications.

A closer look at the New Zealand and Scottish systems

New Zealand

The retiring or removal of qualification on the New Zealand Qualifications Authority's (NZQA) register of qualifications is embedded in a system of regular and nationally mandated reviews. These reviews have been driven by concerns that the system was fragmented and confusing (for example, there were around 6000 qualifications). These reviews map existing qualifications to current and future workforce needs and roles, and to the skills required for those roles. This means that all qualifications have been and are being reviewed to remove duplicated qualifications, unused qualifications, and qualifications that are not fit for purpose. All qualifications have a mandatory review timeline (generally every five years); however, the NZQA can demand a review if the qualification has not been used for two years. The qualification developer is responsible for managing the review and the NZQA for oversight of the review. The qualification developer will develop a review plan and begin by identifying: the demand for the qualifications; duplication of qualifications; and alignment of qualifications with current and future workforce needs and roles. Information on current and future roles in the sector is to be confirmed in consultations with relevant stakeholders. This information is then used to develop and 'scope' the suite of qualifications required. 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. 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.

Scotland

The Scottish Qualifications Authority's Accreditation Committee reviews registration and certifications each quarter and identifies those accredited qualifications with no candidate uptake for a period of two consecutive years. 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 that takes all of 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 the decision is made 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.



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