

Competency progression and completion: how is the policy being enacted in three trades?

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About the research

Competency progression and completion: how is the policy being enacted in three trades?

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This paper examines how competency progression and completion is implemented in practice in three trades. In particular, it focuses on: interactions between teachers and/or assessors and workplace supervisors; the different approaches used to integrate on- and off-the job training; assessment and sign-off practices; and the ways by which workplace supervisors and teachers and/or assessors ensure the outcomes meet the standards outlined in the respective training packages.

In addition to a literature review and situational analysis, the research method includes interviews with 26 TAFE teacher–assessors teaching Certificate III in Commercial Cookery, Carpentry, and Engineering – Metal Fabrication. Twenty-one workplace supervisors in the cookery, engineering, and building and construction industries were also interviewed.

The concepts of competency-based progression and completion are aligned with the notion that progression through training should be based on the skills attained rather than on the time served. The authors show that competency progression and completion is not a new phenomenon and was an early feature of competency-based approaches to vocational education and training (VET) in Australia. Indeed, trends in the data from the National Centre for Vocational Education Research (NCVER) show that over the past decade there has been a gradual increase in the number of apprentices and trainees across all trades completing their qualifications in shorter periods of time. This report investigates some of the interrelated factors that affect progression and completion and shows that a gap remains between the policy construct and real practice, where the time-based approach to apprentice training is still dominant.

Key messages

- Some of the barriers to competency progression include a lack of flexibility in training providers and employer attitudes to allowing apprentices to complete early.
- Variations to training generally occur through informal negotiations and are not always recognised in the apprentice’s training plan, suggesting that the training plans are not necessarily the dynamic document they are intended to be.
- The most important enabler for competency progression and completion is good communication and information flow between teacher–assessors/and workplace supervisors. However, teacher–assessors are more likely than workplace supervisors to claim that communication between the two is adequate.
- While assessment and validation are generally the collective responsibility of teachers–assessors and workplace supervisors, there is now greater involvement of apprentices in their own assessment through collecting evidence and making decisions about whether they are ready to progress.

Dr Craig Fowler
Managing Director, NCVER

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Executive summary

The successful implementation of competency progression and completion policy is affected by a complex set of interrelated factors.

In 2006 a Council of Australian Governments (COAG) policy sought to remove any ‘artificial time construct’ as a pivotal feature in apprenticeship progression and completion, the aim being to allow apprentices to work as qualified tradesmen and tradeswomen as soon as they had demonstrated competency to industry standards.

The research presented in this report was designed to identify and describe the impacts of the COAG policy on assessment, assessors and workplace supervisors in three trade qualifications: commercial cookery, engineering – metal fabrication and carpentry.

The study examined the approaches being used to integrate training on and off the job and the ways by which teacher–assessors and workplace supervisors were ensuring that the outcomes being achieved met the standards set out in the respective training packages. Four research questions formed the basis of the research. These focused on: the extent and quality of communication between teacher–assessors and workplace supervisors; the integration of apprentice training and assessment; the methods of assessment used to determine competence; and, finally, the processes used to validate assessment.

The research involved a context and situational analysis (including a review of relevant literature), a pre-interview questionnaire and a total of 47 semi-structured interviews. These were undertaken with 26 teacher–assessors in seven TAFE (technical and further education) institutes spread across three states and one territory and 21 workplace supervisors who were directly responsible for providing the work-based learning component for one or more of the apprentices being trained and assessed by the participating teacher–assessors.

The context and situational analysis showed that competency progression and completion is, in reality, not a new phenomenon and was an early feature of competency-based approaches to vocational education and training (VET). Trends in data show that across all trades there has been a gradual increase in the number of apprentices and trainees completing their qualifications in shorter periods of time. While there is a range of reasons for these increases, this report explores one component – competency-based progression and completion. The report investigates the key factors which affect progression and competency in small number of cases and shows that there remains a gap between the policy construct and the lived reality, which has preserved, largely intact, a time-based approach to apprentice training.

The analysis also shows that the key factors affecting the uptake of competency-based progression include employer attitudes and a lack of provider flexibility in adopting the administrative, teaching and assessment approaches that facilitate progression and completion. Assessment is identified as critical to successful apprentice progression and completion, and the literature highlights industry concerns over assessment practices and quality. The quality of the relationship between providers and individual employers is identified as another critical factor.

This study has found that the successful implementation of competency progression and completion policy is affected by a complex set of interrelated factors. The first of these is the uneven level of support for the policy from employers and workplace supervisors. This is caused in large part by concerns about the financial implications of apprentices attaining

Training plans can be useful but tend in practice not to be the 'living', dynamic documents envisaged in policy and guidelines.

qualified tradesperson status before employers have gained full value from a reasonably skilled worker at a relatively low cost. Also influential is the view many workplace supervisors hold that apprentices must develop a breadth of experience and demonstrate a level of maturity prior to being signed off. These attributes, they suggest, can only be attained over time and with more opportunities to build their expertise, perhaps to higher and broader levels. Linked to this is the view of supervisors that apprentices on completion are only 'work-ready' rather than being competent tradespersons, with full competence taking further time to develop. Finally, the research found that the traditional 'time served' remains the standard against which an apprenticeship is measured by many supervisors of apprentices.

A major factor raised by participants is the impact of TAFE funding on the organisations' ability to provide the flexibilities required to facilitate the progression of apprentices through the off-job components of their training. Indeed, the study highlights the challenges to assessment of the broader conception of the particular trades studied and their often more narrow workplace reality. Finally, the evidence suggests that information about competency progression and completion has not been effectively disseminated to teacher—assessors, workplace supervisors and apprentices. As a result, awareness of the policy and its practice is distinctly lacking.

In relation to communication between teacher—assessors and workplace supervisors, the research found that a variety of media are used and that the frequency of communication met mandated requirements, but more was undertaken, according to need. Teacher—assessors felt that communication processes worked well. Workplace supervisors were more circumspect, with some reporting that the processes, expectations and provision of information about training and assessment were not well communicated to them. The 'VET language' and the overall 'busyness' of the work environment hindered good communication, and it was particularly problematic in carpentry, where the workplace supervisors and apprentices work on a variety of sites. Communication helped the teacher—assessors establish the training that could be covered at the workplace and where the workplace could be used effectively as a source of assessment evidence. Knowledge of the employer's business is critical here, but complicated for providers by the large number of small employers with whom they often have to deal. In this case, providers are well served if there are administrative staff focused on record keeping to advise about the units of competency completed and yet to be attained and to help support the training and assessment process.

Training plans can be useful but tend in practice not to be the 'living', dynamic documents envisaged in policy and guidelines. Rather, our informants generally saw them as more static, providing a basis for planning training and assessment. Variations tended to be negotiated more informally but not all supervisors realised that negotiation was a possibility and just accepted what the provider proposed. In other cases, mainly larger organisations, a training plan existed, but its influence tended to be subsumed by their own in-house learning and development plans.

Assessment is essential in promoting progression and judging when completion has been achieved. Practices in theory-based assessment do not seem to have changed markedly with the introduction of competency-based progression and completion, but an increase in online assessment is enabling more continuous access to assessment opportunities. Practical assessment continues to rely on the traditional approaches of observation and oral

questioning, checklists, logbooks and portfolios, but these are being enhanced by the use of technology. While authenticated photographs of completed work are valued in both carpentry and metal fabrication, this is less so in cookery, where more concrete evidence is more highly valued. Photographic evidence, however, could be problematic where there was sensitivity at the work site about the work being photographed. What was very clear, however, was that apprentices now need to take considerable responsibility for collecting assessment evidence. Workplace supervisors varied in the role they played in the assessment process and some, especially those in larger companies, were very active, as they themselves were qualified assessors and trainers. The key role for all workplace supervisors was to provide opportunities for the apprentice to practise skills and prepare for and undertake on-the-job assessment. At the very least, supervisors sign off on all of the competencies, including those undertaken only in TAFE. This required a knowledge of, and trust in, TAFE's training and assessment processes on the part of workplace supervisors, particularly where they could only offer a more limited range of training and work experiences.

Both teacher–assessors and workplace supervisors were highly confident in their assessment decision-making. Assessment was validated through internal and external processes, most often involving panels of teachers with occasional involvement by industry, although their busyness could prevent this even if they were willing. In relation to the final decision regarding competency completion, both on- and off-job evidence was drawn upon, but informants varied on whether one or the other was privileged. In the view of teacher–assessors, the quality of the evidence and the benchmarks and performance levels expected of apprentices by workplaces were more important, but this potentially opened the door to debate about what 'the standard' was. Context in competency completion was critical, particularly to workplace supervisors. In making their decisions with confidence they drew both on their own considerable experience as a tradesperson and what they had witnessed of the apprentice's performance over the duration of their apprenticeship. They also looked for not only tangible trade skills in reaching their final decision, but also for more intangible attitudinal and other attributes.

Signing an apprentice off early was supported by over half of the workplace supervisors. Of the remainder, a number preferred to offer additional opportunities to broaden or deepen the apprentices' skills rather than participate in early sign-off. When they did agree to early sign-off, the prime candidates were the gifted or more mature apprentices, and these tended to be in the minority. Most apprentices were seen as needing to run the full course of the apprenticeship, or close to it. Others required extra time, often because of learning and other difficulties.

While it is not possible to generalise the findings of this study, there are some important aspects that are worthy of further consideration by those involved in apprentice training, as well as for VET policy-makers who are interested in policy outcomes. Firstly, successful competency progression and completion is dependent upon the broad dissemination of quality information and employer support, together with flexibility in teaching, resourcing, monitoring and the management of apprentice progression. Good working relationships and communication between training providers, individual workplaces and apprentices are essential.

Secondly, for apprentices to progress and complete in a timely way, assessment needs to be viewed as a collective responsibility, with teacher–assessors, workplace supervisors and

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This research reaffirms that neither competency progression nor early sign-off are appropriate for any but the most gifted apprentices or those who are mature-aged and come with prior work experience.

apprentices acknowledging the important roles that each plays in it. Understandings of assessment requirements and what constitutes competence and acceptable workplace performance must be agreed so that wherever the evidence is gathered each stakeholder knows their role in the process. Online assessment, project-based collaborative assessment activities and 'just-in-time' assessment approaches are essential for apprentices seeking to progress more rapidly through their training. Also important is the monitoring of apprentice progress and the validation of the assessment tools and decisions when the determination of competence is made.

Thirdly, as apprentices are increasingly being required to act as evidence gatherers of their own performance in the workplace, they need to be able to self-assess and decide whether they are ready to progress. These abilities do not necessarily reside in all apprentices. Therefore, it is important that teacher–assessors and workplace supervisors provide apprentices with guidance on what constitutes quality evidence, what benchmarks for performance apply, how knowledge as well as skills are to be demonstrated, and how readiness for assessment can be determined.

Competency progression and early completion are viewed as a means of moving the most able of apprentices through their training in a shorter period of time than the stated duration of a contract of training. This research reaffirms that neither competency progression nor early sign-off are appropriate for any but the most gifted apprentices or those who are mature-aged and come with prior work experience. The findings also make clear that, for competency progression and completion to be successfully implemented, there needs to be support, close cooperation and commitment on the part of employers and training providers for the apprentices they serve.

Introduction

Assessment in vocational education and training is a highly complex task, particularly where training and assessment is occurring in both off- and on-job environments, as is the case with apprentices. Not only do such assessments involve a wide range of assessors with diverse skills, they also draw on evidence gathered from a diversity of contexts and require assessors to exercise considerable professional judgment. There have been major concerns in recent years that the tasks and processes in the assessment of apprentice learning have been poorly designed and do not, collectively, validly establish that competence has been attained. Part of the answer, it is suggested, lies in the extent of the understanding that teacher–assessors and the apprentices’ workplace supervisors have of what constitutes valid, reliable, flexible and fair assessment. The other part lies in the quality of the relationship and the levels of collaboration between the teacher–assessors based in providers and workplace supervisors.

In 2006, the assessment of apprentices became even more challenging with the introduction of the Council of Australian Governments policy on competency progression and completion. Once this policy was implemented, the time-served approach, formerly seen as a key feature in apprenticeship completion, was deemed redundant. Under the new arrangements an apprentice’s progression is now based on the skills attained and the quality of work performance, rather than on the time they have served as an apprentice. As a result the policy is intended to enable them to move through their training at a pace that suits their individual abilities. In addition, employers can potentially gain fully qualified and productive tradespeople in a shorter timeframe. While these are significant benefits, in practice there are also risks associated with the policy, and assessments that follow accepted rules of evidence become even more crucial to judging successful apprentice progression and completion.

The significance of the COAG policy was to require all jurisdictions to actively implement it and use it to progress and sign off apprentices in a timely manner. This not only led to a reassessment of teaching, learning and assessment processes, but also, and perhaps more importantly, adjustments to industrial relations agreements and regulations to enable wage progression in recognition of competencies gained. This adjustment process took some time to implement, however, and the changed arrangements were often not publicised effectively, so that employers and providers alike were not informed of their new obligations. This research is an attempt to determine the extent to which the policy of apprentice progression and completion is being implemented in three traditional trades.

Research purpose and questions

The aim of this research was to provide teacher–assessors and training providers in vocational education and training with an enhanced understanding of apprentice assessment in a competency progression and completion environment. The purpose of the research was to examine the impacts that the 2006 COAG policy has had on assessment, assessors and workplace supervisors training apprentices undertaking three traditional trade qualifications; namely, the Certificate III in Commercial Cookery (SIT30812), the Certificate III in Engineering – Metal Fabrication (MEM30305) and the Certificate III in Carpentry (CPC32011).

Employers can potentially gain fully qualified and productive tradespeople in a shorter timeframe.

The research was designed to examine, first of all, the approaches being used to integrate institution-based training with that taking place in workplaces and, secondly, the ways in which teacher–assessors and workplace supervisors were ensuring that the outcomes being achieved met the standards set out in the respective training packages.

The study was framed around the following research questions:

- How and to what extent are teacher–assessors and workplace supervisors communicating with each other about their roles and responsibilities in the assessment process for apprentices?
- To what extent and in what ways is off-job training and assessment being integrated with learning in the workplace to ensure that the rules of evidence for assessment are met?
- What assessment methods are used to collect evidence of apprentice performance from the workplace and how is apprentice competence being determined and validated?
- What views do teacher–assessors and workplace supervisors hold about the assessment of the apprentices with whom they are engaged and how might assessment practices be improved?

Research methods and procedures

As this study sought to explore the experiences and perceptions of participants in relation to various aspects of apprentice training and assessment as well as the impacts of competency progression and completion, a predominantly qualitative research approach was adopted. Through the collection of both qualitative and a small amount of quantitative data researchers are able to:

participate in a dialogue about multiple ways of seeing and hearing, multiple ways of making sense of the social world, and multiple standpoints on what is important and to be valued and cherished. (Greene 2007, p.20)

To illuminate the multiple standpoints and ways of seeing of those participating in this study, the research methods used were a context and situational analysis, including a review of relevant literature and policy documents, a pre-interview questionnaire composed of forced-response items, followed by semi-structured interviews comprising open-ended questions. A copy of the context and situational analysis, pre-interview questionnaire and the interview questions are contained in the support document that accompanies this report.

Sample details

A purposive sample was used to identify and invite seven TAFE institutes across three states and one territory to participate in the research. The selection of providers was made on the basis that their course profiles contained the target qualifications and that they were willing to participate in the research. The focus on TAFE providers alone was adopted because they are large organisations and they maintain significant infrastructure to deliver off-job training and assessment for high numbers of apprentices employed by a wide range of employers in the commercial cookery, carpentry and metal fabrication trades. Given these circumstances, the training and assessment processes for them are, arguably, much more challenging than those of smaller providers who have smaller numbers of apprentices.

The latter also tend to have closer relationships with a more limited range of employer clients and often operate by providing training solely on the job. The particular trade areas and qualifications were selected because chefs, carpenters and metal fabricators are occupations identified on the National Skills Needs List, and training of apprentices in these areas is acknowledged as a priority in each of the industry sectors.

The process of inviting participation was facilitated by the recruitment of a liaison person in each TAFE institute. The liaison person was nominated by the chief executive and their role was to disseminate invitations and project information to participants and to assist in establishing suitable times and locations for interviews.

The first group of participants was made up of 26 TAFE teacher–assessors who taught and assessed the designated trades. Nine of the teacher–assessors were involved with the Certificate III in Commercial Cookery, nine with the Certificate III in Carpentry and eight with the Certificate III in Engineering – Metal Fabrication. All TAFE-based informants indicated that they fulfilled the role of both teacher and assessor and the majority were teaching and assessing across a wide range of units of competency. Teacher–assessors were involved in the training of between 70 and 350 apprentices, all of whom were at various stages of their apprenticeships programs. The apprentices were employees of a large number of quite diverse enterprises across the three trades.

The second group of participants consisted of 21 workplace supervisors¹ drawn from commercial cookery, building and construction and engineering enterprises. The supervisors were those who were directly responsible for providing the work-based learning component for one or more of the apprentices being trained and assessed by the participating teacher–assessors. All had direct responsibility for managing the training of apprentices in the workplace and more than half had more than ten years experience supervising apprentices. Only two were new to the task. Supervisors were employed in enterprises ranging in size from a sole operator with one carpentry apprentice, to niche businesses with small numbers of apprentices, through to large companies, mainly in the engineering industry, where apprentice numbers were as high as 130, 135 and 150. Over half of the companies from which the workplace supervisors were drawn had more than a ten-year history of employing apprentices.

Data collection and analysis

Interview protocols and schedules were developed to ensure that information was gathered in a consistent way, given that the data were being collected by a team of researchers located in different states. A total of 47 face-to-face interviews were undertaken in TAFE colleges and in workplaces. The interview questions for each of the participant groups were clustered around the following topics:

- integration of on- and off-job training and assessment
- assessment methods and evidence
- assessment decision-making and validation
- implementation of competency progression and completion policy in practice.

¹ Workplace supervisor is used in this research as a generic term. It encapsulates a range of roles in the participating enterprises including HR manager, employer, trainer, trainer–assessor.

Teacher–assessors were involved in the training of between 70 and 350 apprentices, all of whom were at various stages of their apprenticeships programs.

Pre-interview questionnaires collected demographic data and included questions about communication between teacher–assessors and workplace supervisors on issues related to training and assessment, and their individual roles and responsibilities in the training and assessment of apprentices.

Interviews were electronically recorded, backed up by hand-written notes and transcribed. Both pre-interview questionnaires and interview transcriptions were analysed by hand, and major themes relating to the research questions as well as illustrative quotes and vignettes were identified. A cross-analysis of these data was carried out to identify consistencies, variations and interrelationships between responses from within the teacher–assessor group and the group of workplace supervisors, within each of the trade groups and across all informants. To maintain confidentiality, in this report all participants and the organisations for which they work have been de-identified.

National and state and territory policy, regulations and guidance on competency progression and completion were also examined via a summative content analysis using keywords as a frame (Stemler 2001). These are outlined in the accompanying support document.

Limitations of the study

In developing the sample, researchers were very dependent upon TAFE institutes, nominated liaison people, teacher–assessors and workplace supervisors being willing to participate in the study. To gain access to workplace supervisors, invitations had to be extended by teacher–assessors. The intent was to conduct ‘paired’ interviews; that is, individual interviews with teacher–assessors and workplace supervisors who were together directly engaged in training a single apprentice or group of apprentices. Unfortunately, in the setting-up of interviews, this direct relationship was not always achieved and in four cases, the relationship between teacher–assessor and workplace supervisor was somewhat more distant. Further, the mode of recruitment for both informant groups meant that the sample achieved was likely to be biased towards the better examples of teacher–supervisor relationships within each provider.

While the original intention was to capture and analyse provider-based assessment documentation, this was deemed to be too difficult and the information relating to assessment is that provided through interviews alone.

Finally, the sample size of each of the participating groups is not large and thus the findings might only be seen as representing an indicative snapshot of what is occurring in relation to competency progression and completion (and the related training and assessment issues) in the three trades. This potentially throws doubt on the study’s ability to make wide-scale and generalisable claims. However, given that the teacher–assessors and workplace supervisors generally had considerable experience in delivering and supporting trades training, it might be argued that it is likely that the findings have a much broader applicability.



Insights from our context and situational analysis

This section provides a brief overview of our analysis of the limited research literature as well as jurisdictional and other documentation. It has been drawn from a more extensive examination of literature and policy documents relevant to competency-based progression and completion and its practice. Both sources have helped us to shape this study. Research and good practice literature on competency-based assessment was also surveyed. A copy of this full analysis is included in the support document accompanying the report. We recommend it be read to expand the snapshot provided here.

Evolution of competency-based progression and completion

Competency-based progression and completion has arguably been a feature of VET practice since the introduction of competency-based training (CBT) in the late 1980s and early 1990s. It was one of a number of national and industry-based initiatives designed to improve the flexibility and responsiveness of the VET system (Dawkins 1989). One of the features with which competency-based training was first 'sold' was the opportunity to free some of those being trained from a rigid time-served system and to shorten the training time. Thus training time and the length of an apprentice's indenture, potentially, became variable. However, there was what the Workplace Research Centre (2012, p.6) has described as a policy 'breach', which represents 'a gap, or chasm between the policy construct and the lived workplace reality'. A time-served apprenticeship system has effectively remained in place for the great majority of apprentices since that time.

Competency completion was given a strong and renewed impetus in the Council of Australian Governments' communique of 10 February 2006, which stated (p.14):

By December 2006 all governments will have put in place arrangements that allow apprentices and trainees to work as qualified tradesmen and tradeswomen as soon as they have demonstrated competency to industry standards, without having to wait out a set time period or make special application.

Defining competency-based progression and completion

Competency-based progression discounts the 'artificial time construct' as a pivotal feature in apprenticeship completion, places emphasis on the skills and work performance and recognises the apprentice's achievements and contributions, not the time served (Dickie, McDonald & Pedic 2011). Competency-based wage progression '... permits access to wage increases as skill milestones are achieved, assessed and verified' (Workplace Research Centre 2012, p.5).

Competency completion is about the final judgment made by the employer, the registered training organisation (RTO) and the apprentice (NCVER 2011). It is the administrative process which formally concludes the apprentice's contract of training and completes their indenture. A valid process of assessment, supported by appropriate documentation, is fundamental to the final sign-off process. This involves a holistic and final judgment of

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The implementation of competency-based progression and completion is a challenge for those on the ground who are charged with making the policy a 'practical and operational reality'.

competence and consists of evidence gathered through a variety of methods by a range of parties who have observed and tested the knowledge, skills and personal attributes of the apprentice in both the workplace and off-site environments.

Taken collectively, competency-based progression and completion is often conceived in terms of producing qualified tradespeople more quickly: it allows completion at or before the contract of training has reached its nominated finish date and at the point at which the apprentice is deemed fully competent. Equally, therefore, full competence for some might only be finally achieved beyond that time if there are factors impeding competency attainment.

The training plan and its role

According to the Victorian Department of Education and Early Childhood Development website, the training plan outlines who will deliver the training, and when and where the apprentice needs to go to receive the structured component of their training. The training plan is seen as a working document; it should be flexible and be used as a basis for discussion between employers and registered training organisations at any stage during the training. It is based on, and advised by, both the business needs of the employer and the learning needs of the apprentice. Regular contact between the employer and registered training organisation is expected and during these contacts the apprentice's progress should be reported and discussed. The support document provides a more detailed examination of training plans and their content and also describes jurisdictional approaches to progression and completion.

Competency-based progression and completion: some issues

In their final report (Commonwealth of Australia 2011) the Apprenticeships for the 21st Century Expert Panel outlined the advantages they saw for a competency-based training progression system. Nevertheless, the panel acknowledged the low take-up of competency-based progression and completion and believed a major reason for this was resistance by trainers to embrace the competency-based methodologies of workplace evidence-gathering and workplace assessment, along with a prevailing culture of resistance to competency-based progression and completion by many employers. Critically, competency-based progression is also dependent on providers having implemented the training arrangements that make it possible for apprentices to undertake their training in a flexible way and progress through their apprenticeship at varying rates.

The implementation of competency-based progression and completion is a challenge for those on the ground who are charged with making the policy a 'practical and operational reality' (Workplace Research Centre 2012, p.26). This reality is dependent in large measure on the quality of the relationship between individual employers and the registered training organisation providing the off-job training (see, for example, Precision Consulting 2008).

The Australian Industry Group (AiG; 2013) believes that the fundamental impediments to successful implementation are due to jurisdictions continuing to manage apprenticeships as if they were time-based, while the administrative and teaching practices of registered training organisations lack the flexibility required to facilitate effective progression and completion. Other factors identified by the Workplace Research Centre (2012) as impacting on successful

implementation of the policy include employers signing apprentices off early to 'get them off the books', employers disregarding the need for the comprehensive skill formation required of the apprenticeship, and employers delaying sign-off to avoid paying qualified tradesperson wages. In addition, employers have a preference for the time-served approach because they experienced it themselves, while others are concerned that early completers are not competent or do not have the experience required (NCVER 2011). In reality, and dependent on circumstance, the poor rates of competency progression may be attributed to the attitudes and practices of employers or providers or a combination of both.

Competence is also context-dependent, and the competencies that individuals display or that individual employers value vary in these different contexts.

The issue of competence and what it is

Competence seems on the surface to be a simple concept. However, Guthrie (2009) argues that this apparent simplicity masks something which is conceptually far more complex. He also suggests that the attainment of competence is actually a journey, not an end point, and competencies go beyond formal education and training and experience. They are developed through the integration of all that has been learnt or experienced formally and informally, and in some cases relate to capacities which have been developed over a life span.

Competence can be conceptualised in two broad ways. One takes a view that competence is a personal construct, while the other grounds competence in the context of an occupation and even a particular workplace. In determining competence, and progression towards it, a balance needs to be struck between these two constructs. This is a potential dilemma for assessment processes and their design.

At an individual level the notion of competence stresses work performance and outcomes which are observable, measurable and assessable. However, performance is also underpinned by other constituents of competence: personally held skills, knowledge and abilities which collectively underpin and enable performance.

Competence is also context-dependent, and the competencies that individuals display or that individual employers value vary in these different contexts. The competencies an employer requires of their apprentice may be broad or narrow and depend on the nature of their business. Therefore, while broad descriptions of competence such as those described in a training package may hold up, the relative emphasis put on their component parts will vary across workplaces and for particular individuals, given the pool of skills and other attributes deemed to be required by a particular employer. Thus, while there are competency standards, they are not necessarily uniformly or universally applied, and their various components have different emphases, dependent upon circumstance (Guthrie 2009).

Assessment

An extensive number of reports have raised concerns about the quality of assessment in the VET sector (National Skills Standards Council 2013). For example, the National Quality Council commissioned research because of reports of concerns on the part of industry and regulators about the quality and integrity of registered training organisation assessments (for example, Australian Chamber of Commerce and Industry 2008). In particular there was concern among these parties that learners were being deemed competent inappropriately (Precision Consulting 2008). Work by the Workplace Research Centre in 2012 for Group Training Australia also identified 'ensuring quality in competency-based assessment practice' as a key challenge.

Skills Australia (2010) noted that confidence in VET qualifications is undermined if assessment practices are considered weak and lack independent scrutiny. In a similar vein, Precision Consulting (2008) reported that industry confidence in assessment decisions was high if the employer worked hard to locate a registered training organisation that was responsive to their business needs and with which they developed a close working relationship.

While some employers do not want to become more involved than they already are in the assessment process, others are willing to do so. Suggestions for increased involvement in assessment included employer input into final competency assessments and more scope for supervisor feedback and observation of competence (Halliday-Wynes & Misko 2013). Maintaining open and effective lines of communication with registered training organisations and informing employers regularly of the progress of its employees were felt to be important (Precision Consulting 2008). In essence, the effectiveness of the assessment process is dependent on the quality of the relationship between employers and registered training organisations.

In summary

In relation to this study, the literature review and situational analysis has led us to conclude that:

- While the construct of competency progression and completion is enshrined in national policy, its successful implementation is dependent on VET providers and the individual employers with which they work. The success or failure of the policy is locally based and depends on their collective practices and attitudes.
- Training contracts and training plans are important parts of an apprenticeship. The training plan is seen as a living document, but critical to its effectiveness is whether the training arrangements are merely broadly guided by it or more closely controlled and the extent to which the plan, once formulated and signed, is actually formally changed.
- The concept of competence is difficult to define and even when enshrined in competency standards it is subject to local interpretation and contextual issues. Likewise, where and how competence can be assessed is very much dependent on the nature of the work apprentices undertake and the opportunities they have to demonstrate their competence to the (often variable) standards expected by their respective workplaces.
- A wide range of assessment approaches are possible, and the choice of them is key to ensuring that competence is validly assessed, both in assessing progression and making the final judgments about completion and sign-off. Both the workplace supervisor and the teacher—assessors have a key role to play. Also important is the nature and extent of the relationship between the registered training organisation and the apprentice's workplace.

Findings

This section sets out the findings from the analysis of the pre-interview questionnaires and semi-structured interviews completed by the 47 participants in this study. The aspects covered in the following pages include the modes and effectiveness of communication, the integration of the on- and off-job training of apprentices and the impact of competency progression and completion on teaching, assessment and the overall decision about apprentice competence. Finally, participant views on the implementation of competency progression and completion are highlighted, with a particular focus on how the policy plays out in practice.

Communication between providers and the workplace

As previously noted, the literature emphasises the criticality of close working relationships and good communication between the teachers managing the provider-based training for apprentices and those who have responsibility for the workplace component of the training (Commonwealth of Australia 2011). Given the importance placed on the quality of the relationships, communication was a focus of both the pre-interview questionnaire and interviews. In particular, participants were asked to describe the modes and frequency of their communication with each other and the major reasons for doing so. They were also asked to rate the effectiveness of the communication in which they were engaged.

Modes and reasons for communicating

Teacher–assessor contact with apprentices tended to be weekly during the off-job component of training, but once apprentices returned to their workplaces communication dropped back to once every couple of months. Most teacher–assessors used a combination of face-to-face, telephone, email and text messaging to keep in touch with apprentices, while two teacher–assessors met regularly with apprentices in their workplaces. Teacher interactions with workplace supervisors were mostly via telephone and email, with face-to-face site visits occurring four times a year (as mandated) or more if the need arose. Confirming that email and telephone were the regular means of communication between themselves and the TAFE providers, workplace supervisors noted that workplace visits generally occurred quarterly. A few supervisors suggested that, when there was an issue with an apprentice, this contact with TAFE teachers could be more frequent.

In the pre-interview questionnaire, both groups of participants were provided with four reasons considered likely to generate some form of communication between teachers and the workplace. These reasons were related to the negotiation of the training plan; its re-negotiation; assessment of the apprentice on the job; and confirmation of apprentice competency prior to sign-off. Participants were asked to rank each of the statements from 1 to 4, with 1 being the reason accorded the greatest focus and those which were less commonly the focus ranked 2 through to 4. In a number of cases, a full set of rankings was not provided because the informants did not have a role that involved them in such communications. The responses for each of the participant groups are set out in table 1.

The provider-based participants were in strong agreement that sound policies and processes were in place for communicating with apprentices and workplace supervisors.

Table 1 Ranked reasons for communicating: teacher–assessors and workplace supervisors

Reason	Ranking							
	Teacher–assessors (n = 26)				Workplace supervisors (n = 20) ²			
	1	2	3	4	1	2	3	4
Negotiation of the training plan	8	2	6	3	3	4	5	4
Re-negotiation of the training plan	0	0	7	13	0	1	6	8
Assessment of the apprentice	9	8	5	1	14	2	2	0
Confirming competency of apprentice	7	12	2	1	3	11	2	3

Note: Rank 1 = most common reason for communicating, rank 4 = least commonly used reason for communicating. Not all participants provided a full set of responses.

As table 1 shows, assessment and discussions relating to the confirmation of apprentice competency prior to sign-off were given as the major reasons for communication between the two. Other reasons identified by teacher–assessors were issues relating to non-attendance at TAFE, apprentice progress (or lack of it) and attitudinal issues. What was of particular interest in these responses was the low rating of the training plan as a reason for teacher–assessors to be talking to workplace supervisors. This was largely due to the fact that the initial discussions about training plans were sometimes undertaken by business development personnel rather than the teachers themselves.

Effectiveness of communication processes

Teacher–assessors were also asked to comment on the extent to which they agreed or disagreed with a set of statements about the effectiveness of their organisation’s policies and procedures for supporting their communication with workplaces about apprentices’ training and assessment. A similar set of questions was asked of workplace supervisors. The provider-based participants were in strong agreement that sound policies and processes were in place for communicating with apprentices and workplace supervisors. Further, they strongly agreed that the communication processes worked well and they believed that information about apprentice training and assessment was well communicated to workplace supervisors. The responses from workplace supervisors, however, were somewhat different. While they agreed or strongly agreed that they understood what training would occur in TAFE and that communication with apprentices worked well in their own organisation, six of the 20 respondents disagreed that the processes, expectations and provision of information about training and assessment for apprentices was well communicated by teachers or the training provider. A summary of the ratings from both groups of participants on organisational communication policies and processes is set out in tables 2 and 3.

² One of the 21 workplace supervisors elected not to complete a pre-interview questionnaire.

Table 2 Teacher–assessor views on organisational communication policies and processes

Statement	Ranking				
	SD	D	A	SA	U
1 Policies and processes are in place in our RTO for communicating with apprentices about their training and assessment on the job.	0	1	13	10	2
2 Policies and processes are in place in our RTO for communicating with workplace supervisors about the training and assessment of apprentices on the job.	0	1	12	11	2
3 Policies and processes are in place in our RTO for communicating with workplace supervisors about the training of apprentices off the job.	0	1	17	6	2
4 Communications with apprentices about their training and assessment works well in our organisation.	0	1	18	7	0
5 Communication with workplace supervisors about training and assessment of apprentices works well in our organisation.	0	0	19	5	2
6 The processes, expectations and provision of information about training and assessment for our apprentices is well communicated to our workplace supervisors.	0	1	21	4	0

Key: SD = strongly disagree, D = disagree, A = agree, SA = strongly agree, U = unable to rate. N = 26.

Table 3 Workplace supervisor views on communication policies and processes

Statement	Ranking				
	SD	D	A	SA	U
1 Clear processes are in place for teachers to communicate with me about the on-the-job training and assessment of my apprentice(s).	1	2	9	4	4
2 I understand what training and assessment of my apprentice(s) is to occur off the job.	0	1	11	7	1
3 Communication with apprentices about their training and assessment works well in our workplace.	0	1	13	6	0
4 Communication with teachers about the training and assessment of our apprentices works well in our workplace.	0	3	10	4	3
5 The processes, expectations and provision of information about training and assessment for apprentices is well communicated by teachers and the RTO.	0	6	10	4	0

Key: SD = strongly disagree, D = disagree, A = agree, SA = strongly agree, U = unable to rate. N = 20.

During interview, both participant groups were asked about impediments to good communication between themselves and their contacts in the workplace or TAFE. While many participants agreed that communication was good, a number of workplace supervisors suggested that the ‘VET language’ was sometimes a barrier to their understanding of what was expected. From the workplace side, a supervising chef acknowledged that good communication was not necessarily something that chefs did, explaining ‘that’s why they are out back and not out front’. Therefore, it was important that teacher–assessors were very clear in the way they interacted with workplaces. Moreover, to maintain good connections, workplace supervisors wanted to be able to engage with the people who knew what they were doing and who were prepared to be flexible in order to meet their business needs.

The ultimate communication challenge for every workplace supervisor and teacher–assessor across the three trades was succinctly summed up by one participant who stated:

While busyness was perceived as a barrier to communication at times, there was general agreement that apprentices played a critical role in keeping the lines of communication open.

Everyone's so busy and difficult to get hold of. Everyone wants to communicate by a different method. Some people you can email and they're straight back to you while some people never ever reply ... people in business just don't have time. Time is money, too busy.
(Cookery teacher)

While busyness was perceived as a barrier to communication at times, there was general agreement that apprentices played a critical role in keeping the lines of communication open. Apprentices acted as conduits by sharing what was happening in each sphere. Through this process teachers and supervisors were able to make the most of learning and assessment opportunities as they arose.

Getting it together: integration of training and assessment

The training plan outlines the key details of the apprentice's training and assessment. Developed prior to the commencement of any structured training, the plan takes into account the learning needs of the apprentice as well as the business needs of the employer. Generally in template form, a training plan sets out the competencies to be completed, the timeframe for completion, the training to be undertaken, when and where it is to occur, the modes in which the training is to be delivered and the arrangements for assessment. Initial discussions between training providers and workplaces and apprentices about training plans are therefore a critical starting point in ensuring that the training and assessment for apprentices are well integrated.

Negotiating the training plan

As noted earlier, these early discussions were not always carried out by the teacher– assessors participating in this study. Rather, the registered training organisation personnel whose specific role was to meet with employers to discuss roles, responsibilities and expectations were involved in negotiating agreement of a training plan. Where teacher– assessors were involved in the training plan's development, the majority considered it was relatively easy to achieve good integration between training in the workplace and the structured training off the job. This was seen to be particularly true in cases where long-term relationships existed between provider and employer and where employer and teachers had a good understanding of the nature of the businesses with which they were dealing. One metal fabrication teacher, for example, suggested that his team had built a strong rapport with most of the businesses with which they dealt and both TAFE and the enterprises were very familiar with how each other operated. This understanding ensured that the provider-based training could be well aligned to what was occurring in the apprentices' workplaces. The same teacher, however, offered a proviso:

It is the initial conversation that guides the training. We have a standard training plan, but the real key is not about the competencies, it is how they want it delivered. Although they [employers] all have the chance to negotiate on the training plan, not all take that opportunity.

With newer workplaces, discussions between teachers and workplace supervisors centred on the nature of the business and the current work being undertaken. From this, decisions were made about what training and assessment for an apprentice would occur in the workplace and what would need to happen in TAFE. A cookery teacher explained: 'it's just a matter of talking through each of the competencies and questioning what they do and how much they

do'. She indicated that integration was easier to explain and achieve if the units of competency were clustered so that apprentices and employers could see the connections with the tasks they were performing in the workplace. In a similar vein, several metal fabrication teachers emphasised the importance of walking through the workshop to determine what equipment was used and the frequency of that use. The most important thing was to determine that a workplace was in a position to offer the broadest range of competencies and provide sufficient opportunity for the competencies to be effectively learned on the job. 'After all, it is critical that the off-job training can be reinforced in the workplace.'

In contrast, the interviews revealed that discussions with employers and workplace supervisors in the building and construction industry were viewed as problematic by all but a few teacher–assessors. One suggested that, despite using various means to keep in contact, communication with employers working in the domestic housing sector was nearly impossible for a number of reasons:

It is difficult to get out on site when you have 200 students. It is really hard because we have no real idea about what each of the employers is doing. In this industry people work all over the place and change from day to day, so being on site is difficult. Besides, some employers don't want us on site.

As a consequence, teachers relied on emails to transmit generic information about the training and assessment of apprentices to employers or workplace supervisors. But, as one teacher noted, this was not necessarily considered satisfactory because it did not have what he called 'the personal connection' with an employer, which he considered essential for effective integration of training. The majority of carpentry teacher–assessors were of the view that they had no other choice but to adopt a standard training plan for every apprentice and to use a fairly traditional approach to the way they delivered the training. Moreover, they were relying on apprentices letting them know what work was or was not happening in their workplaces. Armed with this information, they were sometimes able to connect some facets of learning in one environment to the training occurring in the other.

Ensuring all units of competency are covered

Despite some suggesting that integration was reasonably easy, there was general agreement among all participating teacher–assessors that it was a rare workplace that could provide apprentices with the opportunity to practise all the competencies required for a full trade qualification. The type of work undertaken in businesses varied markedly and many were quite narrow in focus. Reflecting the views of a number of teacher–assessors, one participant suggested that about 80 per cent of the competencies for metal fabrication apprentices were covered in TAFE and 20 per cent in the workplace. Some companies – usually the larger ones – could move the apprentice to another work site or production line but generally the employers supported gap training off the job. Workplace supervisors in the larger engineering firms confirmed this viewpoint, but suggested that in fact all but a few competencies could be taught and practised in the workplace.

Like their counterparts in metal fabrication, cookery supervisors agreed that they were able to provide apprentices with experience in most of the competencies by rotating the apprentices through the various sections in the restaurant; namely, cold larder, entrees, mains and then pastries and desserts. Carpentry apprentices, on the other hand, were less likely to be able to get experience in all of the competencies in the qualification unless they

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The majority of teacher-assessors indicated they used standard plans, and that these were rarely revisited and almost never physically changed.

were employed by a large company, which meant they could access different construction sites. As a consequence, the majority of apprentices in this trade covered all their competencies at TAFE. This was particularly the case for the apprentice employed by a sole trader engaged in domestic renovations and maintenance. This meant that the breadth of experiences available to this apprentice depended upon the range of work his employer took on.

In responding to a question about how gap training was managed in practice, responses varied. It was seen not to present any difficulties for those teacher-assessors delivering in lock-step mode; however, for those who had implemented fully flexible strategies to facilitate competency progression, such training needed to be closely monitored to ensure that every apprentice picked up the required elements of their program in a timely way. In three institutes, administrative staff were employed to track apprentice progress and to alert teachers and employers when apprentices needed to attend TAFE to complete a particular unit or cluster of competencies. This information was also valuable if teacher-assessors undertook workplace-based training and assessment.

To ensure that all competencies were covered, cookery apprentices were encouraged by some of the teachers and their workplace supervisors to complete units of competency in workplaces other than their own.

They [the employers] either ask the student to go there on their days off and get paid from the other place or they let them go during work hours. It depends how well the chefs know each other from the businesses. (Cookery teacher)

It was suggested that some employers were very supportive of this approach, although it was acknowledged that there were insurance implications. Also, as apprentices were considered to be a critical part of the business, they were always needed on the job and release to other businesses was therefore problematic.

Training plans: a 'living' document?

Both groups of participants were asked about the extent to which an apprentice's training plan was adapted to suit changes that might occur in the workplace. Responses to this question were highly consistent, with the majority of teacher-assessors indicating they used standard plans, and that these were rarely revisited and almost never physically changed. This was despite the suggestion in the policy governing training plans that they were meant to be a dynamic and changeable 'living' document. In fact, the mere suggestion that training plans be modified in some way immediately raised the issue of work overload and the problems associated with inflexible institute policies and complex management systems. This view was most vociferously expressed by those teacher-assessors with 200 to 300 apprentices to train, monitor and assess.

It was suggested, however, that if changes did occur in the nature of the work being undertaken in the workplace, a conversation would occur between the workplace supervisor and teacher, and agreement would be reached informally about how to address the variation in training demanded by the change.

There is an expectation that the training plan is reviewed during the time of the apprenticeship, but in actual fact that tends not to occur. If an employer wants to

‘tweak’ what is happening, the schedules can be changed, but not the plan itself.

(Metal fabrication teacher)

Similarly, an engineering company’s workplace supervisor agreed that the registered training organisation was happy to make modifications to the training plan should changes arise; however, this tended to be change in the way delivery occurred rather than any real change to the plan (for example, when there was a shift change for an apprentice).

A number of teacher–assessors emphasised that the majority of the workplaces they were dealing with were reasonably stable in terms of work and the likelihood of minor changes would be just part of the normal day-to-day communication between the teacher and the workplace supervisor. In the case of carpentry, there appeared to be no negotiation on the training plan at all. Given that most of the carpentry businesses in this study were engaged in domestic house construction and renovation and that the employer pool from which the apprentices were drawn was extensive, this lack of negotiation around training plans was understandable. The view amongst teachers across metal fabrication and carpentry was that, while training plans were generic, they were sufficiently broad to cover all types of companies and all types of work.

Confirming this viewpoint, a majority of the workplace supervisors suggested that the fact that TAFE covered skills in a different order from that in the workplace was not an issue. They could see no value in making changes to training plans, as the competencies could be covered another time or revisited during the period of the apprenticeship. There were, however, divergent views expressed by some of the cookery supervisors. While several suggested that plans had been modified to meet the needs of their businesses, one commented that the plan had not been tailored to suit what was needed in his establishment and another declared that he did not realise that he had any say in what was included in the training plan for his apprentice.

By way of contrast, the workplace supervisors in large engineering enterprises noted that training plans played a somewhat lesser role than the learning and development plans they developed specifically to suit the work undertaken in their companies. While the apprenticeship mandated the development of a standard training plan, teacher–assessors had little or no involvement in the actual training plan the company put together for each of their own apprentices. On occasions, TAFE teachers may have been asked to provide specific training for individual apprentices to address particular skill needs. But beyond those occasions, there was a clear separation between what was learned in the workplace and what was occurring in the off-job training. The justification for adopting this approach generally centred on TAFE not having the required equipment or not having teacher–assessors with the skills, knowledge or experience to train in what were niche areas of the industry. As a consequence, the needs of the current workplace took precedence over what was set out in an apprentice’s official training plan.

Even where this lack of integration existed, it was acknowledged by many of the workplace supervisors that apprentices had to learn the foundation skills of their trade and that this learning was best done at TAFE. The off-job training was seen to provide the essential theory and skills that gave apprentices a good understanding of how to do things ‘the right way’ and how to do them in different contexts. For example, TAFE often delivered clusters of competencies that formed an induction to the trade. Apart from TAFE instilling the trade

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fundamentals in a disciplined way, one chef suggested that apprentices at TAFE also learned about the industry through mixing with their peers, many of whom were undergoing different experiences in often quite varied settings from their own.

Despite these positive comments, a number of workplace supervisors questioned the breadth of the competencies that apprentices were required to learn off the job. For example, one engineering company supervisor suggested that many of the competencies apprentices were required to achieve were irrelevant and ‘a waste of time when they are not going to use these things in their current work’. This view was reiterated by several of the carpentry supervisors who were involved in narrow areas of the domestic building industry such as framing. In their opinion, apprentices would be better off back in the workplace rather than ‘being bored at Tech’.

Competency progression: the impact on teaching

As competency progression means that apprentices can be undertaking training across a broad range of units of competency and be at various stages in their programs, teacher–assessors were asked what impact this had had on the way they taught. The responses to this question proved to be markedly different across the three trades.

Most metal fabrication teacher–assessors, who had been working within a competency progression and completion framework for the longest period of time, were generally teaching and assessing in a highly flexible manner. In one TAFE engineering department, for example, the attendance patterns available to employers and to apprentices in any stage included block release, one day a week, and ‘any time or any day’. To address the complexities that this approach inevitably brought to the teaching process, classrooms and workshops were co-located and the teaching completely integrated. A bank of computers was set within the workshop, and apprentices at various stages were being taught by one teacher in the classroom and another in the workshop. At various times, maths and computer-aided design (CAD) support were also present in the same teaching and learning space. Apprentices were using a combination of computer-enabled learning and assessments, and paper-based workbooks. They undertook online research, completed online quizzes and moved freely between the classroom and the workshop area, where they carried out individual and collaborative practical projects. While the majority of apprentices were engaged in individual activities, time was also available for intensive teaching in small groups. All of these options were freely available over extended hours and e-learning was available 24/7. Such flexibility did have its drawbacks, as one teacher–assessor explained:

Tuesday is the hardest for me. Stage 1, 2 and 3 apprentices are in on the one day. Sometimes it gets so hard it might mean requesting an apprentice come in on a different day for say nine weeks.

Somewhat similar approaches were adopted by teachers in two of the other TAFE institutes offering the Certificate III in Engineering – Metal Fabrication. The apprentices were generally mixed so that stages 1, 2 and 3 were often working together in the workshop, each at their own pace and on their own projects. The training was a blend of small-group or one-on-one activities. The apprentices worked through their workbooks and were assessed when they considered they were ready. The value of the approach was that it was seen as providing employers with flexibility, which was particularly important if they

employed more than one apprentice. This was strongly reinforced by one workplace supervisor who commented, ‘we need the flexible delivery options because we do shift work. The old block release and you deliver apprentices to tech on a Tuesday doesn’t cut it with us’.

An additional advantage of having apprentices learn in a self-paced mode, one teacher suggested, was that there was not the high demand for use of the same equipment at the one time. Moreover, online learning allowed the more motivated apprentices to do nearly all of their theory through a workbook at home, or at work when their supervisor gave them time to do so. Thus, when they attended TAFE they were doing mostly the practical elements of their competencies.

Only one metal fabrication teaching department was still operating in the traditional lock-step mode. Keeping all of the apprentices at the same stage was considered to make teaching and assessing much more straightforward. Any integration of apprentices in different stages was seen as problematic because teachers would be ‘spread too thin’. This viewpoint was reiterated by the majority of carpentry teacher–assessors, where the teaching mode continued to be lock-step, and delivered through block release or one day per week attendance. Acknowledging that the way they delivered was ‘pretty traditional’, a number of the teacher–assessors suggested that, because of the nature of the industry, block release was preferred by the majority of employers. Questioning how it could be done differently, one carpentry teacher commented:

If I had to progress stage 1 apprentices into stage 2 early, it would be a nightmare. How would you deliver it? How would you get it [the skills and knowledge] across? How would you monitor every individual student? You would have to have individual training plans!

Despite this contention, one institute did provide an alternative to the traditional mode of operation by offering what was called an ‘anyone, doing anything, at any time’ approach for carpentry apprentices. Some of the training was one-on-one in both the theory and the practical aspects of an apprentice’s training off the job. The rest was very much dependent on the apprentice being highly motivated and self-directed as well as savvy with e-learning and prepared to work in small groups to complete assessment tasks. As in the metal fabrication examples, the workshop and classroom were co-located, and learning was supported by online resources and collaborative learning.

Cookery teacher–assessors suggested that they had always used an integrated approach in the delivery of the Certificate III in Commercial Cookery, whereby apprentices in stages 1, 2 and 3 were together in the practical teaching spaces. However, while they were working together, they also remained in the stage groups to undertake their allocated tasks. This was largely because of the nature of the skills being learned and the hierarchical nature of the work roles in traditional kitchens. Also, collaborative learning and coaching of the less experienced apprentices by the more experienced was also practised.

Assessment: a critical factor in facilitating progression

Effective implementation of competency progression and completion must to a large extent be dependent upon apprentices having ready access to assessment at the point at which they consider they are able to demonstrate not only competent performance but a clear

Any integration of apprentices in different stages was seen as problematic because teachers would be ‘spread too thin’.

Increasing access to e-technology was viewed by the majority of teacher-assessors as the means by which they could provide the greater flexibility demanded by competency progression.

understanding of the theory underpinning that performance. Interviews with teacher-assessors and workplace supervisors, therefore, focused on the assessment methods being used to gather evidence of apprentice performance both off the job and in the workplace.

Assessment of theory off the job

In every case provider-based assessment of the theoretical underpinnings of each of the trade programs appeared not to have changed markedly with the introduction of competency progression and completion. Teacher-assessors consistently registered that they were using traditional assessment methods, including a mix of short-answer written questions, multiple-choice quizzes, workbooks and oral questioning. Several teacher-assessors also used the term 'exams' in reference to summative written tests.

What was noticeable was a strong reliance on online assessment. Online quizzes, online item banks and research assessment activities that required apprentices to use the internet to search out information were common, with Moodle and Blackboard, the commercial e-learning platforms, most often mentioned. Highlighting the extent to which e-assessment was in use, cookery theory assessments were being undertaken using the Didasko resources developed specifically for the hospitality industry, while carpentry teachers in one institute had moved all of the calculation and design exercises and assessments online. Importantly, increasing access to e-technology was viewed by the majority of teacher-assessors as the means by which they could provide the greater flexibility demanded by competency progression, whereby apprentices needed to be assessed in different units of competency, at different times and at different stages in their trade programs. While not true in all cases, training and assessment was commonly identified by informants as 'self-paced' and specifically designed to better meet the needs of apprentices and their workplaces. Online assessment enabled apprentices to undertake assessment at college, work or home 24/7.

Assessment of practical tasks: off the job

Within each trade, the assessment of practical performance was conducted through observation of apprentices completing specific work tasks. Generally accompanied by checklists or assessment sheets, observation focused on specific elements of the competencies as well as on planning and set-up, product quality (as per the relevant training package or Australian Standard requirements) and problem-solving, teamwork and communication skills. These assessment activities also utilised oral questioning that was designed to evaluate understanding of the processes undertaken to complete various tasks, including any problems that the apprentice might have encountered and the means by which the problems were overcome. In carpentry and cookery, considerable focus was placed upon ensuring the highest level of simulation that could be achieved for practical assessments. For example, one carpentry teacher noted the abandonment of the building of small-scale models as assessment tasks because they were 'not true to the reality of the workplace'. Moreover, 'small-scale models were completed by individuals and did not afford opportunities for group work like large-scale models. That's where they [the apprentices] get to grips with it'.

Similarly, clusters of cookery competencies were assessed in kitchens and training restaurants made 'live' by the presence and pressure of real customers expecting quality products on their plates and presented in a timely manner.

Given that in many instances apprentices were at different stages and were learning often divergent sets of competencies, much assessment of performance was individual in nature. This individualised approach was described by a metal fabrication teacher as ‘just in time’ and ‘just for me’. Apprentices carried out three or four skill practices for a single unit of competency or a cluster of competencies before undertaking a project-based assessment activity. In cookery, competency sheets set out the tasks to be undertaken and usually two dishes were completed each day. There appeared to be no restrictions on reassessment attempts or any real concern expressed about the resources being expended when multiple reassessments occurred. Confirming this view, a carpentry teacher commented:

We just give them the off-cuts and tell them to try again. They might produce something a bit smaller than required, but as long as they get the process right and the tolerances are acceptable, that’s good enough.

While there was general agreement amongst the teacher–assessors that apprentices could be given as many opportunities as they needed for their assessment, a number of them commented that it was very much dependent upon their employer allowing them to attend TAFE to do the additional work that was required.

We don’t tie them to a timeframe ... this may upset the employers. Employers want to know why things are taking more time, why things are going a bit slower. We have to have regular contact with their employers. (Carpentry teacher)

Finally, there was a single case where it was stated that the student management system required a result to be entered by a set date otherwise the apprentice was required to re-enrol in the unit of competency they were having difficulty with. This structural impediment to completion, however, was a rare example.

In parallel with individualised assessment, almost all cookery, carpentry and metal fabrication teacher–assessors commented that they were increasingly using quite extensive group-assessment activities. These were specifically designed to assess clustered units of competency, whereby apprentices were required to work on a holistic set of work tasks, reflecting more authentically what occurred in the workplace. By way of example, groups of metal fabrication apprentices were asked to work together to develop a project plan, produce a full set of drawings from a set of specifications, document the work flow, estimate the materials required and build a product. Teamwork and communication were critical to this task and, to underpin the work, apprentices were required to undertake research using text-based and online resources. A similar approach was adopted for the assessment of groups of carpentry apprentices.

The role of the apprentice in gathering evidence of their own performance

Through the use of technology such as Smart phones, i-Pads, e-portfolios, SMS and email, a great deal of responsibility was being placed upon apprentices to collect evidence of their own performance in the workplace and to some extent off the job as well. The standard approach to gathering evidence on the job continued to be the maintenance of a logbook, which required apprentices to self-assess and to obtain workplace supervisor verification that tasks were performed to the standard required in that particular workplace. An examination of a logbook revealed to the teacher–assessor not only the type of tasks undertaken at work, but also the number of times they were performed. There was, however, one instance where a logbook was not used and that was in the carpentry area.

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The use of photographs always required workplace supervisors to provide some form of confirmation that the work was that of the apprentice.

The teacher–assessor indicated that logbooks had been abandoned because they were unwieldy and impractical in the workplace and apprentices ‘did not follow through with them anyway’. As all assessment for apprentices in this TAFE was conducted off the job, this issue was not seen to be a concern.

Both e-portfolios and paper-based portfolios were in use in metal fabrication and, to a lesser extent, in cookery. In both trades, photographs were an important source of evidence for tasks requiring the production of an artefact of some description. Photographs taken by apprentices (and also workplace supervisors) were variously emailed directly to teacher–assessors, deposited in online file-sharing and storage systems such as Dropbox or directly into e-portfolios. A metal fabrication teacher outlined the process he employed in the following way:

They take images of jobs from the start [setting up], the middle processes and the finished product. So usually there are three images for each competency. When the images are uploaded, the apprentice writes in under each image a brief explanation of what they had done. Then, the workplace supervisor verifies that the work was completed as per the images and the written description. The employers like it and so do the apprentices. They are proud to show others their work and these are often a focus for class discussion, which offers an opportunity for more learning.

Regardless of the mode of their delivery, the use of photographs always required workplace supervisors to provide some form of confirmation that the work was that of the apprentice and that they had witnessed both the process of production and the final product.

Although the vast majority of teacher–assessors indicated that they were using the photographs provided by apprentices as evidence of their workplace performance, some questioned the use of them in certain circumstances. The first concern related to the issue of authenticity. One cookery informant, for example, noted that photographs could be tampered with; another suggested that they had to be ‘taken by the teacher’, while a third in the same trade commented that photographs were considered to be ‘only a minor part of the evidence’. In marked contrast to their metal fabrication and carpentry colleagues, therefore, cookery teacher–assessors placed much greater faith in concrete artefacts such as recipe cards, food orders, work-flow plans, recipe books, peer or customer feedback, ordering procedures and logbook entries accompanied by supervisor reports than in photographic evidence.

The second concern about photographs was raised by a number of teacher–assessors and workplace supervisors in the metal fabrication area, where projects being undertaken in workplaces were deemed highly sensitive in nature. In settings where the production of prototypes or defence equipment occurred, the use of cameras in every case was precluded. A third, equally important concern related to some workplaces banning the use of mobile phones by apprentices because they were seen to be a distraction, with the potential to disrupt workplace productivity. These concerns were neutralised in some cases because teachers or supervisors were prepared to take photographs for apprentices. One large engineering company avoided the mobile phone issue by purchasing cameras specifically for assessment purposes.

For other apprentices, the situation was considerably more difficult, for they could neither gather photographic evidence nor access readily available online learning resources using

their mobile devices. The reasons for banning such use were generally related to concerns about the potential for distraction, time-wasting or unauthorised release of sensitive material. This situation is one worthy of further investigation, particularly given that the majority of training providers are placing great faith in the development and uploading of more and more learning resources. There would appear to be a need for discussions between workplace supervisors, teacher–assessors and apprentices about what is allowable and under what circumstances.

In carpentry, there was greater variation in what was required of apprentices in gathering evidence. In some cases, logbooks and photographs were in common use, as explained above. For others, the process appeared much more complex. For example, one teacher–assessor explained that the apprentice had responsibility for taking photographs of the tasks undertaken on various jobs and to provide the TAFE assessor with details of the job locations. The assessor then visited the sites to inspect the outcomes of the tasks, questioned the apprentice about the processes, gained verification from the supervisor, and then, if all was well, signed off the competency or competencies. In other instances, the assessment of carpentry competencies was undertaken in the college, because to accomplish it any other way was seen to be ‘too difficult and too time-consuming when you have so many apprentices’. This left the apprentice with only one role in the assessment and that was to simply undertake assessment tasks.

An apprentice’s understanding of the need to present good-quality evidence (and their ability to do so) would appear to be paramount in a competency progression and completion environment. During the interviews there was some suggestion that apprentices were not necessarily made ready for this important role of evidence gatherer. Early on in their programs they needed constant reminders of what was required of them. Only two of the 26 teacher–assessors, however, mentioned that they spent time preparing their students for this critical task.

We give them an assignment sheet and we will sit in class and take 10 to 15 minutes to go through what we expect from them. Some of the guys do not have the skill sets and struggle; others, the good ones go over the top in collecting evidence.

(Carpentry teacher)

Of the teacher–assessors providing information to this study, approximately one-third were visiting workplaces to undertake assessment of apprentices. There were a number of teacher–assessors visiting building sites, but only one cookery teacher spent time almost fully in workplaces as a dedicated teacher–assessor in the workplace. Apart from assessing apprentices, he also taught apprentices in their workplaces when there was an obvious need for revisiting what an apprentice had learned at TAFE, filling training gaps.

The role of the workplace supervisor in the assessment process

In most, but not all, cases the major role for workplace supervisors in the assessment process was to sign off logbooks as the apprentices progressed through their apprenticeship. Teacher–assessors emphasised how important it was for workplace supervisors to be vigilant in signing off logbooks/third-party checklists. Some teacher–assessors indicated that workplace supervisors did need reminding that the training plan was ‘in play’ and when an apprentice was not getting the breadth of required experience at work, it was the teacher’s role to remind supervisors of the need for their apprentices to have as broad a workplace

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The teacher– assessors indicated that the system was based on trusting that workplace supervisors would do the right thing.

experience as possible. From the teachers' perspective, the extent of workplace supervisor involvement in the assessment process varied. For example, a metal fabrication teacher commented, 'some support the collection of evidence, some don't – they are a bit like apprentices really'. In several of the larger companies, workplace supervisors were also qualified trainers and assessors who generally took a much more active role in collecting or encouraging apprentices to assemble evidence of workplace performance. Others were less interested. At least half of the teacher–assessors indicated that the system was based on trusting that workplace supervisors would do the right thing.

Workplace supervisors agreed that a key role for them was the signing-off of competencies and work tasks as they were completed on the job. A number indicated that they worked through logbooks with apprentices to ensure that they were filling them in correctly. They also discussed processes, problems and solutions with apprentices when they had the time to do so. A number of supervising chefs emphasised the importance of apprentices taking ownership of their training and this meant accepting responsibility for evidence-gathering and logbook sign-offs.

Another critical role played by the workplace assessor was to provide apprentices with the opportunity to practise the skills they were learning in TAFE in the workplace. Without additional practice it would be unlikely that even the best of apprentices could progress and complete in a timely way. When asked about how frequently they were able to provide practice time, all of the workplace supervisors claimed that there were regular opportunities. However, responses were often qualified by a statement such as that given by a chef: 'we are a business and we have to remain profitable. We don't give them something on the side to practise', or as a supervisor of carpentry apprentices commented: 'that's what TAFE is for'. Others suggested that there was a blurring between what was practice and what was routine work and a number of them simply commented that they preferred such activities to occur as a natural part of the apprentice's daily job.

There were, however, a number of more deliberate approaches to the issue of practice. Rotation through various stages of a production line or a range of work sites was a common strategy in the larger engineering and building and construction companies. Another strategy was to actively encourage (and even expect) apprentices to practise during lunch breaks, work-flow breaks or down time. A more structured approach was adopted by a workplace supervisor in a niche metal fabrication business, whereby, to compensate for the narrow cluster of competencies on the job, on a Friday afternoon he gave apprentices access to the workshop and the materials to build skills in the competencies they were unable to use on the job. A different strategy was used by one supervising chef, who ordered 100 chickens so that his apprentice could practise the skill of breaking them down; this was despite the fact that he normally purchased chicken portions.

In the larger companies, mentors and coaches had responsibility for ensuring that the apprentices were ready to be assessed. In some cases, projects in the workplace would fall into line with what was happening at TAFE, so apprentices could get experience in the tasks they were undertaking in college. On occasions special projects that could be completed after hours were developed by supervisors. Chefs gave consistent responses, suggesting that the training in the kitchen was daily, hands-on and constant. Thus, apprentices were constantly being monitored and assessed.

Meeting the rules of evidence

In interview, teacher–assessors and workplace supervisors were asked about how confident they were that sufficient evidence was being gathered upon which to make a valid judgment about apprentice competence and that the evidence was current and authentic.

On the whole, teacher–assessors were confident that they were meeting the requirements for sufficiency of evidence. In cases where all of the assessment was being undertaken in the college, the responses expressed tended to be ‘very confident’. These were backed up by comments about teacher–assessors being in a position to observe apprentices throughout the off-job component of their training and being in a position to witness them completing both theory and practical assessments. Where evidence was gathered from worksites, responses were similarly positive. Through logbook verification, third-party reports and ‘competency conversations’ with workplace supervisors and apprentices, many of the teacher–assessors considered they were in a good position to make confident decisions about apprentice competence.

There were, however, several teacher–assessors who were somewhat more reserved in their responses about this issue. A metal fabrication teacher, for example, commented that where workplace training was narrow in focus and financial constraints on TAFE meant a reduction in contact hours for teaching, there was some question about the sufficiency of evidence. This was a particular issue where an apprentice might be struggling with the training. He backed up his ‘reasonably confident’ response with the remark: ‘You have to be in so much contact with them [the apprentice] to be sure that they are confident and competent’. While a few teacher–assessors noted that they had set up ‘drop-in’ classes to help apprentices who might be having difficulties, employers were not always willing to send apprentices to TAFE for these additional learning opportunities. The impact of this was that some apprentices were deemed to be competent, based on less evidence than a teacher–assessor would have liked.

In relation to the currency and authenticity of the evidence being provided by apprentices, the levels of confidence registered were also high. Third-party reports, employer verification of tasks, and on-site visits were viewed as highly effective checking strategies. Photographs, supported by oral questioning, ensured the quality of the evidence provided. In one case, carpentry apprentices were required to complete a disclaimer that the work was theirs when logging onto the system to submit evidence. ‘If they don’t tick the disclaimer, they can’t go any further’ in the submission process. Further, close relationships with apprentices throughout their training meant teacher–assessors developed an understanding of what their students could do and what they could not.

Teacher–assessors’ confidence in the sufficiency, validity, currency and authenticity of their assessment was in some measure an outcome of their having established formal strategies for validating assessment with their peers and industry.

Validation of the off-the-job assessment

When asked whether they validated assessment, most teacher–assessors indicated that they undertook both internal and external validation. A consensus model was commonly used, which involved a panel of teachers coming together to check all aspects of the assessment tools, including the information to learners, the assessment instruments, evidence of student performance, the marking guide and the assessment decision. Where they were

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able, they obtained input from industry, although this was viewed by most teachers as problematic. A metal fabrication teacher explained:

We engage our IRG [Industry Reference Group] in it. That's Institute policy. We try and get at least one or two employers in. We have a [validation] calendar and every 12 months we allocate certain subjects that we go through with certain teachers. If a particular teacher has designed the subject, they're not allowed to validate it.

Some assessment tools had been validated through industry processes, for example, cookery. In carpentry several teachers commented that they had engaged in a validation process via a moderation network established by carpentry teachers in Victoria. Teachers from other states were able to participate in this network.

Significantly, several metal fabrication and cookery teachers had been involved in the Commonwealth Government-funded Independent Validation Pilot Project, which examined a range of validation models. A third teacher of metal fabrication had been part of another national project investigating the possibilities of e-validation. All were very familiar with national demands for improved assessment practice and the need to improve both the quality and credibility of training outcomes.

In the pilot project, industry had taken a proactive role. Project participants examined student work to ascertain whether the outcomes met the required standards. One panel reviewed the worst and best of student assessments and through this process industry was able to see the range of outcomes achieved in off-job training. From this, a cookery teacher concluded 'employers learned a good deal about what they might expect from apprentices, particularly given the requirements of the training package'.

Importantly, participants in these projects stated that industry did want some ownership of the validation process and were willing to participate, a fact reinforced by a workplace supervisor who had been involved in one of the validation projects. The majority of teachers interviewed across all three trades, however, emphasised just how difficult it was to get sustained industry input and involvement in validation. Summing up this general view, a carpentry teacher suggested that industry was simply too busy to become involved.

Making the decision about overall competence

The point at which a final decision is to be made about the overall competence of an apprentice lies at the heart of competency progression and completion. The first step in this process is the assessment decision made by those responsible for the institution-based training.

Evidence: sources and importance

When asked on what basis they made an overall judgment of apprentice performance, teacher-assessors acknowledged that such decisions had to take into account a range of evidence drawn from both off and on the job. Needless to say, there were some contrasting views about what evidence should be privileged over the other. At least a third of teacher-assessors stated that they relied almost totally upon evidence from the workplace as it was the most valid. It was about being able to do the job. Another third suggested that the evidence gathered from provider-based training should have priority. The reasoning was that it was the evidence over which the teacher-assessors had most control. The remaining

teacher–assessors proposed that a combination of workplace and provider-based evidence worked best.

By way of qualification, a few teacher–assessors commented that which evidence was given greatest assessment weight was very much dependent upon how long an apprentice spent in the workplace building up the skills and knowledge relevant to the competencies being assessed. If they were in the workplace for long periods, then the evidence from there should have greater weight. If the apprentice spent a significant amount of time in off-job training, then evidence from there was likely to be the more powerful. Making a decision about overall competence, however, was not merely concerned with where evidence was gathered. It was also about the quality of that evidence and understanding the importance of making a credible assessment decision in the eyes of stakeholders. For example, a small number of teacher–assessors registered concern about making overall judgments in situations where apprentices were employed in businesses covering only a narrow set of competencies. Explaining his concern, a metal fabrication teacher explained:

Both [on- and off-job evidence] are equally important. But I suppose having the confidence to sign somebody off to something that they don't do at work is probably pretty important. There is a risk there, and we are open to criticism if we get it wrong.

In a similar vein, a cookery teacher–assessor suggested that there were times when they needed to be 'adaptive' and willing to construct assessment opportunities for a particular apprentice because they were working in a niche area in an industry with a narrow focus. The view was that it was important to take into account the needs of employers and the benchmarks expected in the workplaces with which they were dealing. These benchmarks had the potential to differ markedly from workplace to workplace and also to be different from those set in training packages. This situation had created a dilemma for teacher–assessors (and probably apprentices) in the final decision-making process and established a context for expressions of concern to be raised about consistency of assessment within industry.

With the ultimate say on whether an apprentice is competent, workplace supervisors need to be confident about making this important decision. In interview, supervisors were asked how comfortable they felt in making a decision about an apprentice's competency, with all indicating that they felt 'very comfortable' undertaking the task. Justifying this stance, they invariably suggested that they could call upon years of experience in industry and understood what the benchmark for competent performance looked like for their own business. Interestingly, supervising chefs were very vocal about the differing standards between high-end restaurants, 'run-of-the-mill' cafes and nursing homes. What they expected from their apprentices was the standard that they demanded of themselves and no apprentice would be signed off unless that benchmark was achieved.

Workplace supervisors overseeing metal fabrication and carpentry apprentices were also quick to suggest that the overall decision 'was not a one-off event'. They had witnessed apprentice performance over the duration of the apprenticeship. Moreover, apprentices were closely monitored to ensure that the company's standards were being met, and if they were not, then the sign-off would be delayed until they were.

Finally, in the view of many of the workplace supervisors and teacher–assessors interviewed, and across all trades, being judged competent involved not only sign-off against units of competency but also an overall assessment of more intangible attitudinal

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There was a consensus amongst teacher–assessors that it was their responsibility to alert workplace supervisors when an apprentice had completed the off-job component of the apprenticeship.

and other attributes. If these things were missing, in their view the apprentice’s competence was compromised.

Sign-off processes

There was a consensus amongst teacher–assessors that it was their responsibility to alert workplace supervisors when an apprentice had completed the off-job component of the apprenticeship. A discussion would then take place between the teacher–assessor, the workplace supervisor and the apprentice, the focus of which was the performance of the apprentice in the workplace. If this was deemed to be satisfactory, the workplace supervisor could then sign off the apprentice as having completed. If not, the workplace supervisor could indicate that further training was required. While in this study jurisdictional processes varied slightly, this general approach was followed by all participants. There were some cross-border issues for teacher–assessors in two institutes because jurisdictional requirements varied, but they were aware of the minor variations and alert to the impact these had on institutional processes, apprentices and workplace supervisors.

Competency completion: perceptions, influences and issues

To obtain some initial insights into participant perceptions of competency progression and completion and their role in it, the pre-interview questionnaire asked teacher–assessors to respond to a set of statements relating to their roles and responsibilities in the training and assessment of apprentices. They were asked to rate the extent of their agreement or disagreement with each statement. Table 4 highlights teacher–assessors’ ratings on some of the critical aspects of the training and assessment of apprentices and on competency progression and completion.

Table 4 Teacher–assessor views on roles and responsibilities in training and assessment of apprentices

Statement	Rating				
	SD	D	A	SA	U
1 I understand the role of the workplace supervisor in the assessment of apprentices.	0	2	14	10	-
2 I have a clear understanding of what competency progression means for apprentices.	0	1	11	14	-
3 I work with workplace supervisors to help them understand what competency progression means for apprentices.	0	5	13	6	2
4 Workplace supervisors jointly sign off on the assessment of apprentices.	0	2	12	9	3
5 I understand the trigger points at which an apprentice can move through the stages of their apprenticeship.	0	2	13	9	3
6 Workplace supervisors support the completion of an apprentice before the nominated time period – once they have demonstrated competence.	0	6	11	7	3
7 There are implications for businesses associated with allowing apprentices to finish earlier.	0	1	13	10	2

Key: SD = strongly disagree, D = disagree, A = agree, SA = strongly agree, U = unable to rate. N = 26.

While teacher–assessors generally agreed with the statements on roles and responsibilities, five of the 26 disagreed that it was their role to work with supervisors to help them understand what competency progression means for apprentices. (This may, however,

indicate that teacher–assessors believed employers understood the policy.) A further six disagreed that workplace supervisors even supported early apprentice completion.

As can be seen from table 5, workplace supervisors offered somewhat different views about the roles that teacher–assessors took in the process of setting up training arrangements with them. Nine of the 20 noted that they had not gone through a process of mapping the work undertaken in their business with the units of competency in a training package (although it is possible that this ‘mapping’ may not have been obvious to workplace supervisors if TAFE personnel had not translated the ‘VET speak’ of the training packages and plans into terms and tasks more commonly used in the workplace).

Negative views were also expressed in relation to registered training organisation assistance in understanding competency progression and sign-off. The ‘unable to rate’ responses, when combined with the ‘disagree’ responses to statements, highlight an interesting point, particularly as the greater percentage of negative responses came from those in the engineering companies rather than those in the other two trade areas. Given that competency progression and completion has been operating in that sector longer than in any other, this was a somewhat surprising outcome. However, it may also be a reflection of the fact that the larger engineering companies had adopted a high degree of independence in the training of their apprentices, resulting in TAFE teacher–assessors having a lesser role in the process.

Table 5 Workplace supervisor views on roles and responsibilities in training and assessment of apprentices

Statement	Ranking				
	SD	D	A	SA	U
1 I understand my role in the training of the apprentice(s) in my workplace.	0	1	8	11	0
2 I understand my role in the assessment of the apprentice(s) in my workplace.	0	1	11	9	0
3 I am clear about the role of the teacher/RTO in the training and assessment of apprentices.	0	2	10	8	0
4 The RTO people we work with spend an appropriate amount of time planning the training and assessment of our apprentice(s).	0	2	13	3	2
5 I work with the teacher to take workplace tasks and map them back to the competencies.	0	9	4	3	4
6 I have a clear understanding of what competency progression means for apprentices.	0	1	10	9	0
7 The RTO has assisted me to understand what competency progression means for apprentices.	0	4	9	4	3
8 I jointly sign off on the assessment of the apprentice(s) with the RTO.	0	4	9	4	3

Key: SD = strongly disagree, D = disagree, A = agree, SA = strongly agree, U = unable to rate. N = 20.

In interviews with both participant groups, these and other issues associated with the acceptance and implications of competency progression and completion were further explored.

When questioned about how many apprentices were moving through their training at a pace faster than the norm, the responses from both participant groups varied across the trades. One metal fabrication teacher, for example, suggested that, of a class of 27 apprentices starting together, only four were early sign-offs. Another gave an example of a mature-age

While there were some differing views, much of the commentary questioned the existing benchmarks for competent performance set by their training packages.

apprentice who had been a labourer in a company for years who was offered early sign-off as an incentive for him to complete. In fact, mature-age apprentices were nominated by the majority of teacher–assessors and workplace supervisors as the perfect candidates for competency progression and completion. It was suggested that they came into an apprenticeship with some life and work experience behind them and the motivation to complete as quickly as they were able.

Among the workplace supervisors, more than half of them indicated that apprentices were signed off earlier than the official end date of their contract of training. The extent of reduction ranged from between three months and one year. The length of the apprenticeship for metal fabrication is four years; however, one metal fabrication supervisor in a company that promoted early sign-off indicated that the majority of his apprentices completed in around three years. Another stated that the fastest time an apprentice had progressed through his program was 24 months, with six months at TAFE. Yet another suggested that the earliest would be three-and-a-half years. Supervising chefs were of a like mind in suggesting that the maximum early release would be around six months. Carpentry supervisors, in contrast, tended not to sign individuals off until the designated end date of their indenture.

While early sign-off was a possibility for some, at least half of the teacher–assessors and quite a number of the workplace supervisors commented that many apprentices were much slower in completing the provider-based training because they had difficulties with mathematics and/or language and literacy. As a consequence, rather than being signed off early, those apprentices needed to have their apprenticeships extended.

While making the case that early sign-off was not appropriate for all but a few apprentices, teacher–assessors expressed some concern that competency progression and completion had the potential to be abused. There were suggestions that some apprentices who were not performing well were signed off early to ‘get rid of them’, while others were held back because employers did not want to pay them the additional wages due to them as a qualified tradesperson. Similar examples were also provided by workplace supervisors across the three trades. On the other hand, there were cases where workplace supervisors indicated that they supported their ‘slower’ apprentices to complete, often with assistance from TAFE.

Competent or work-ready?

Invariably in responding to questions about early sign-off, participants in both groups raised the issue of apprentice competence on completion. While there were some differing views, much of the commentary questioned the existing benchmarks for competent performance set by their training packages. The section above entitled ‘Insights from our context and situational analysis’ and the support document for this project on which it is based contain a more extensive discussion of the issues surrounding competence, and where competence is best demonstrated.

Teacher–assessors’ views on competence

A considerable number of teacher–assessors agreed that apprentices could only be considered work-ready rather than ‘competent’ when they finished. Those expressing this view justified it by variously suggesting there was too much to include in the training, given

the short amount of time available; that some competencies were assessed only once due to time and funding constraints; and that some of the more complex competencies could not be validly assessed in provider-based settings. A further suggestion was that apprentices were not fully competent because they were likely to be still working with guidance and under supervision. Competence, therefore, could not be achieved until they were able to work confidently and autonomously. Summing up this perspective, a metal fabrication teacher contended:

They are not going to be 100 per cent given the time we have for training. They will not exactly understand the job they need to do straight away. But they are going to have the knowledge and understanding to progress through and have the right sequence and logical order to get the job done eventually.

For some teacher–assessors, the problem was that workplaces were so diverse, while employer expectations of what apprentices could achieve in the time available for training varied greatly.

There is no benchmark and their expectations differ. Some people think the apprentice should know everything – then they are qualified. And some people think, well okay, you’re starting at the bottom of the kitchen. Now you are going to learn more.

(Cookery teacher)

Workplace supervisors’ views on competence

The issue of apprentice competence also generated much debate among workplace supervisors, with only two considering that an apprentice was competent on completion of an apprenticeship. They agreed that completion meant that apprentices were ‘qualified’ and ‘work-ready’, but it would take the passage of time, ongoing learning and increasing experience before they attained competency in their trade. It was suggested that competency could be demonstrated in a number of ways; namely, by ‘not only doing the job, but doing the job in a professional and timely manner’ and ‘being able to do it on their own’. Others responded that it was about understanding the business and the cost implications of getting it wrong and being able to teach and coach others. And, for one supervisor, competence was about building skills through ongoing experience:

Being competent in a task is one thing. Being experienced in it is a whole new level. It needs to become second nature. Just because you can do it doesn’t mean that you are second-nature competent ... it requires much more time and experience.

(Metal fabrication supervisor)

There was a general sense that the experience required to become competent was between three and four years after completion of an apprenticeship. In fact a number of supervisors suggested that a tradesperson’s learning only really started when they were signed off and entered ‘the real world’.

Competency progression and completion in practice

During the interviews, a number of interviewees gave some indication of the extent of early sign-off by apprentices in their trade. One carpentry teacher, for example, considered that at least 50 per cent of employers would probably support early sign-off, but suggested that apprentices needed to be really confident they were competent if they were asking to be signed off early. If not, it was not fair on themselves or their employers.

The issue of apprentice competence also generated much debate among workplace supervisors, with only two considering that an apprentice was competent on completion of an apprenticeship.

Teacher–assessors consistently highlighted the lack of support by employers as a major barrier to apprentices completing apprenticeships more rapidly.

In expressing support for competency completion, a cookery teacher stated that some 20 per cent of apprentices in his institute finished around six months prior to their designated completion date. In another institute, the figure for early sign-off for cookery apprentices was as high as 50 per cent. In almost every case, those initiating early sign-off were the very best apprentices working in top-end restaurants with supportive employers who were already paying them over-award wages. Importantly, cookery teacher–assessors were also of the view that not all apprentices wished to reduce their apprenticeship time. In fact, some stayed on in training despite having finished their units of competency. They stayed because they wanted to continue gaining experience and consolidating their skills and knowledge.

Challenges to successful implementation of competency completion policy

Many of the participants in this study acknowledged that competency progression and completion had a number of benefits for apprentices and the companies that employed them. Particular weight was given to the fact that high-achieving apprentices were able to move forward through their programs at their own pace without having to remain in step with other less able learners. Competency completion also allowed better apprentices to spend less time in provider-based training and more time engaged in critical learning in the workplace. A major benefit for companies was that they gained tradespersons who were motivated and well trained sooner. Early sign-off was also viewed as an incentive, particularly for self-directed and highly motivated mature apprentices who entered an apprenticeship with previous experience. Despite these positive outcomes, a number of factors were identified by participants as impeding successful implementation of the policy. The factors, many of which were raised in the literature (Commonwealth of Australia 2011; Workplace Research Centre 2012), are discussed below.

Lack of employer support

Teacher–assessors consistently highlighted the lack of support by employers as a major barrier to apprentices completing apprenticeships more rapidly. A number of reasons were identified for this lack of support. The first related to the costs involved for employers. Reflecting a common response, a cookery teacher–assessor contended that ‘some employers simply want them as an apprentice for as long as they can because of the wages’. In metal fabrication, where employers should have understood that progression led to wage rises, at least a quarter of the teacher–assessors suggested that it was not unusual for some employers to balk at signing an apprentice off as having completed simply to avoid paying higher wages. This was particularly the case in carpentry, where employers did not fully comprehend the implications of competency completion when initially signing up an apprentice. Some employers, it was suggested, signed off units of competencies not realising that the apprentice would become fully qualified earlier and would need to be paid in line with the terms in the current industrial award. Several teacher–assessors noted that it was not unusual for employers to be shocked when made aware of the situation and they then complained bitterly about TAFE and the apprenticeship system. While making these comments, a high percentage of the teacher–assessors acknowledged that, in many of the small businesses which employed apprentices, money was a significant issue and they understood how critical it was for employers to understand the financial arrangements associated with competency completion when taking on an apprentice.

Workplace supervisors in small businesses made it very clear that the employment of apprentices was crucial to their survival.

A small number of both workplace supervisors and teacher–assessors suggested that apprentices were viewed by some employers as relatively low-priced labour and as a result they deliberately held apprentices back to slow the process of sign-off. This idea was refuted by one chef from a high-end establishment, who suggested that apprentices ‘were far from cheap’. He explained that he paid his apprentices above-award wages and saw this as a long-term investment in his business and the industry more broadly.

Although there were many participants who presented apprentice wages as a key barrier to the ready acceptance of competency progression by employers, other factors were seen to be influential. Workplace supervisors in small businesses, for example, made it very clear that the employment of apprentices was crucial to their survival. It was important that they were able to gain as much value out of them as they could through the length of the apprenticeship. Any abbreviation of the apprenticeship meant that employers did not have maximum use of apprentices at the point when they were most skilled – the last stage of their training. A number of workplace supervisors suggested it is not necessarily about wages. Rather, when the apprentice is close to completion, this is the time at which the company gains the most value from the training effort they have put in. In addition, some companies are actually paying above-award wages at this stage and may also be providing enriching training and other experiences in order to retain the apprentice after they have completed, or to increase their value as an employee. For the supervising chefs, having apprentices at various stages in their apprenticeships meant that they could run a profitable kitchen. More importantly, allowing apprentices to progress more quickly from one training stage to the next had the potential to upset the balance of a kitchen; that is, it would lead to a breakdown in the hierarchical skills-acquisition procedures and work flow so traditional in this trade.

Demand for something more than competence

A common theme raised by almost all workplace supervisors was concern about apprentices being able to perform at the level required by the workplace. Linked to views on competence versus work-readiness were the strong views held by several supervisors in the metal fabrication area relating to the high standards of performance that were expected in the work they did. Emphasising this point, one supervisor suggested that it was hard enough to train anyone in the four years to do the highly skilled tasks associated with the specialist field of aluminium fabrication; it was not likely therefore that they would be signed off early unless they could consistently undertake the work to the level of quality demanded. It took considerable time and ongoing practice to reach the required level of expertise.

A similar view was expressed by the supervisor of a number of carpentry apprentices. He indicated that he was strongly against early sign-off because apprentices needed the full four years to learn properly. Furthermore, he acknowledged that he ‘held the apprentice’s last subject back to ensure they get the training they need’.

The influence of tradition in trade training

Another perceived obstacle to the ready acceptance of competency progression expressed by both teacher–assessors and workplace supervisors was the belief that the ‘time-served approach’ should prevail. This was expressed by a metal fabrication teacher, who commented that employers kept apprentices on for the full four years ‘because it was the way it used to be’. Another teacher–assessor delivering the Certificate III in Carpentry

Participants in both categories believed competency progression and completion was highly appropriate for mature-age apprentices, who brought with them experience and attitudes relevant to the workplace.

acknowledged that the majority of employers he was dealing with did not understand competency completion because:

they think and dream in their own apprenticeship world and their experience of that. They have yet to really come to terms with what competency completion is about. They think if it was good enough for them to serve the full time in their own apprenticeship, it is good enough for their apprentice.

Several workplace supervisors also confirmed this viewpoint, making comments like ‘it was good enough for me, so it should be good enough for them’. Almost all of the workplace supervisors placed great emphasis on the importance of the time-served approach because they believed there was so much to learn in their particular trade and the majority of apprentices needed ‘to grow up’.

The perceived need for maturity and experience

Both teacher–assessors and workplace supervisors raised ‘maturity’ and ‘experience’ as important determinants in apprentices being ready to be signed off. Where an apprentice was unable to exhibit the level of maturity or had not developed the experience required for them to be ‘trusted’ in the workplace, then the view was that sign-off should not occur until they did. Commonly, participants in both categories believed competency progression and completion was highly appropriate for mature-age apprentices, who brought with them experience and attitudes relevant to the workplace. By way of example, several teacher–assessors spoke of how important it was to progress carpentry apprentices who had previously been employed as labourers in the construction industry because they were older and brought pre-existing skills into an apprenticeship. For 15 to 16-year-olds employed in the same industry, however, there was agreement that they really needed the full four years to complete the apprenticeship and ‘mature’. A carpentry supervisor who acknowledged he would not finish an apprentice early stated:

There shouldn’t be short cuts for anyone. They have to show they are committed and do four years, besides the government provides subsidies for the whole four years. Finishing early can make them cocky.

Similar views were expressed by all of the supervising chefs, who were as one in stating that commercial cookery was not like other apprenticeships: ‘it is a lifestyle not just cooking’. Encapsulating the views of the majority, one chef stated that if individuals were too young and they were given too much responsibility too soon, there was significant potential for them to ‘burn out’ in a very short period of time. This was one of the reasons given by several of the chefs for the shortage of skilled chefs in the industry.

TAFE funding: impacts on providers and the workplace

Other issues that arose as impediments to competency completion by both teacher–assessors and workplace supervisors were those associated with funding. For teachers, reductions in the length of the apprenticeship (cookery) and the reduction in face-to-face contact time imposed by funding constraints in all jurisdictions (and all trades) meant that many apprentices struggled to complete the off-job component of their training. This situation was exacerbated where apprentices lacked the essential language, literacy or numeracy skills. The impact of reduced provider-based training was that workplace supervisors had to commit more time to the training of their apprentices. This was time the majority of the

workplace supervisors suggested they did not have. Under these circumstances, many of the participants in the study considered that the expectation of a significant proportion of apprentices completing early was probably unrealistic or even unreasonable.

Competency progression and completion was also seen to be difficult where workplaces did not train apprentices in areas not related to their businesses or, alternatively, where employers requested that TAFE to do all of the training. To ensure completion of all competencies, delivery needed to be lock-step, and viable class sizes were essential for training to be financially possible for the training provider. Added to this, TAFE funding was significantly affected when the off-job component of the training for apprentices was completed and employers elected to defer sign-off. This meant a delay in final payments to institutes, which in turn impacted upon the budgets of TAFE teaching departments. While a number of workplace supervisors indicated that they understood this situation, they considered it should not influence their decision to sign off an apprentice or keep them on for a longer period.

Dearth of information and levels of awareness

Another barrier emphasised by teacher–assessors and workplace supervisors was the lack of information and understanding that teachers and employers had about the way by which the competency progression and completion policy was meant to work in practice. Participants in both groups attributed the responsibility for raising awareness of competency progression and completions to the Australian Apprenticeship Centres, which signed up apprentices, and all agreed it was not being done well. Teacher–assessors also admitted they lacked basic knowledge about the policy and the impact it had on them. For example, a number of carpentry teachers indicated that they were surprised by the introduction of wage progression under a new industrial award in early 2014 as they had been given very little information about it or what it entailed. Even in situations where apprentices were progressing rapidly in the trades, workplace supervisors also agreed that they were unclear about when apprentices should be getting paid at the next level.

A further complicating factor was the degree of confusion over the role that teacher–assessors should play in providing information to apprentices in relation to wages. In one jurisdiction, the teachers were not allowed to provide any wage-related advice other than to direct apprentices to *PayCheck Plus* on the Australian Government’s Fair Work Ombudsmen website. In another, it was an officially stated expectation that teachers would provide as much information to apprentices as they needed. Given these circumstances, it was not surprising to hear comments from several teacher–assessors that apprentices did not necessarily understand their rights relating to competency progression. In only one metal fabrication case did teachers agree that apprentices understood the options they had with regard to early sign-off and understood if they wished to progress more rapidly, they could negotiate with their employer to do so.

Further training or greater responsibility

Finally, although it can hardly be called a barrier to competency completion, it was noted that some employers preferred to support apprentices while they undertook further training rather than to sign them off early. This was also an approach supported by carpentry teacher–assessors. Explaining the rationale behind his reason for directing apprentices to

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complete certificate IV units of competency rather than seek to be signed off, one carpenter said:

They still have to do the two-and-a-half years in Tech. We are not going to sign them off early because they are not ready. We cannot advance them faster in the actual apprenticeship but we can get them to the building licence quicker.

An alternative approach adopted by some employers was to offer the best of their apprentices the option of doing more demanding work rather than being signed off early. This was a challenge that good apprentices rarely passed up as it provided them with new learning opportunities, higher pay, a broadening or deepening of their experience and greater diversity in their world of work.

Both further training and more demanding work were seen by workplace supervisors to provide the value-added component that many companies sought from the apprenticeship system, for they were strategies that produced the highly skilled and productive tradespersons they urgently needed. These were also seen as a key labour-retention and wage-management strategies.



Conclusions and implications

In formulating the purpose and questions for this research, several assumptions were made. The first of these was that, since competency progression and completion policy had been in place since 2006 and progressively built into industrial awards, the concept would be well understood and broadly implemented. Further, if this was the case, assessment (and teaching practice) would have altered to some degree to facilitate apprentice progression and early sign-off. What this study has found is not so much about the effect the policy has had on assessment, assessors and workplace supervisors, but rather it has revealed the converse: the impact that assessment, assessors and workplace supervisors have had on competency progression and completion as it has played out in practice. This is not to suggest that the original research questions were neglected. In fact, a wealth of information and insights has been gathered from participants in the study, all of which highlight how a seemingly simple policy can have complex implications and consequences for those endeavouring to implement it.

The research questions focused on the extent and quality of the communication between teacher–assessors and workplace supervisors, the integration of apprentice training and assessment, the methods of assessment used to determine competence and the processes employed to validate training and assessment outcomes. Each of these research questions is now revisited and a summary response given before concluding with the implications of the findings for policy and practice.

Communication between teacher–assessors and workplace supervisors

The importance of regular and open communication between those with responsibilities for the training and assessment of apprentices was strongly affirmed by participants in this study. Where rapport is strong between teacher–assessors and workplace supervisors, conversations about competence, progression and completion are more likely to be effective. Critically, teacher–assessors need effective negotiation skills and the ability to talk comfortably with their counterparts in industry in a language suited to the workplace. At the same time, the findings reinforce the point commonly made that communication is often hampered by the size, number and dispersed nature of businesses, the busyness of day-to-day work and the reduced time available for such discussions. This applies to both teachers and supervisors. Using a range of ways to communicate would seem to go some way to assisting in the maintenance of good connections between providers and workplaces.

Integration of training and assessment on and off the job

In theory, training plans are an important tool for fostering the integration of provider-based and workplace training. Plans are designed to be ‘living’ documents and their development requires teacher–assessors to have a thorough understanding of the relevant training package and a reasonable understanding of each employer’s business and their training needs. In practice, this research shows that training plans are far from the dynamic document envisaged. Rather, they remain largely static, and integration is more likely to be achieved through informal and ongoing negotiations between teachers and supervisors. This

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should not be viewed as an adverse finding, as these more informal interactions are likely to mean training and assessment are being adjusted in response to employer and apprentice needs without recourse to documentary change. It is also in these informal discussions that the issue of apprentice readiness for progression or completion tends to be raised.

The nature of work and workplaces is also highly influential in determining the potential for competency progression and completion. Some of the workplaces studied are able to offer broad-ranging training experiences for their apprentices; others are much narrower in focus. With fewer competencies covered on the job, an apprentice's capacity to progress may be limited by the remaining training having to be undertaken away from the workplace. As identified by participants in this study, TAFE institutes invariably deliver gap training for many apprentices, who represent an extensive and diverse pool of businesses. As a result, TAFE institutes have very little choice but to offer the full complement of competencies in a program via block release or one day per week attendance and only with financially viable class sizes. As this research also highlights, this approach can result in employers viewing TAFE as inflexible and the training it offers as not being directly relevant to their needs. Lock-step delivery approaches also have the potential to hold back gifted or mature-aged apprentices, who might, under more flexible delivery models, advance at a pace more suited to their abilities and/or prior experiences.

This research, however, does reveal a number of examples of training that is well integrated and tailored to meet the needs of individual apprentices who might elect to progress more rapidly. In these cases, attendance is flexible; learning is a blend of face-to-face and technology-enabled sessions; and theoretical learning and assessment is seamlessly incorporated with the development and assessment of practical skills both on and off the job.

Assessment and validation

The importance of assessment to successful competency progression and completion cannot be underestimated. In this research, approaches to assessment remained relatively traditional, although there was a marked shift to project-based group assessment because it better reflects real work in real-life workplaces. Further, much greater responsibility was being placed on apprentices as evidence gatherers, while online assessment, available at college, work or home 24/7, was in common use. Teacher—assessors and workplace supervisors were confident that quality evidence was being gathered of apprentice performance both on and off the job and that it met the rules of evidence. While there was some disagreement about where the most valid and reliable evidence was gathered — off the job or in the workplace — the overall determination of competence, they agreed, was a decision made jointly by workplace supervisors, teacher—assessors and apprentices. In the majority of cases these decisions were being confirmed through internal and external validation.

Teacher—assessors acknowledged that, for those apprentices wishing to progress more rapidly, assessment tools and assessment opportunities needed to be readily available during off-job training, in the workplace and online. In light of this, most had moved some components of their learning resources and assessment online. At the same time, participants consistently highlighted the importance of apprentices taking responsibility for the assessment of their own performance and for managing their evidence collection.

Although this was seen as critical, it seemed that only a few apprentices were being adequately prepared for the task prior to undertaking it.

Major improvements in assessment practice were seen to be an outcome of greater involvement by industry, particularly in the validation and benchmarking of apprentice performance. In addition, an increase in online learning and assessment was a goal for the majority of teacher–assessors involved in this study. To some extent, this transition to e-learning and assessment was being driven by demands for greater flexibility and cost saving.

One important area that requires further attention is the development of guidelines for the collection of photographic evidence in workplaces. At the very least, teacher–assessors need to confirm with workplace supervisors that mobile devices can be employed to record assessable performance or products. Within workplaces, there is a need to develop protocols for gathering evidence in this manner and in both on- and off-job environments. Apprentices need to be made aware of what is appropriate and what is not.

Major improvements in assessment practice were seen to be an outcome of greater involvement by industry, particularly in the validation and benchmarking of apprentice performance.

Competency progression and completion: implications for policy and practice

What is clear from this research is that competency progression and completion depends on the relationships between employers and their local training providers as well as on the attitudes, skills and commitment of the workplace supervisors and teacher–assessors who come together in support of apprentice training and successful completion. It is also affected by TAFE funding constraints and the inevitable delays to completion that arise when apprentices lack essential foundation skills.

Although the number of informants to this study was fairly small, collectively they had responsibility for several hundreds of apprentices in three well-established trades. As such, the findings have relevance for all involved in the training and assessment of apprentices in a competency progression and completion environment. The research highlights a number of aspects that require serious consideration by those charged with the responsibility for making this policy work in practice.

Firstly, more extensive implementation of competency progression and completion policy would appear to be very much dependent upon:

- quality information being made available to teacher–assessors, workplace supervisors and apprentices at the point of sign-up and revisited when apprentices demonstrate the potential to progress more rapidly through their apprenticeship
- training provider structures and systems which can manage multiple flexibilities in attendance, staffing, resourcing, learning spaces and record keeping
- flexible approaches to teaching which allow apprentices to learn at their own pace, in their own way and be assessed when they deem they are ready
- workplace supervisors seeing value in the concept and providing the support an apprentice requires when aiming for, and gaining, early sign-off from their contract of training
- high-quality relationships between training providers and employers being built and sustained over time.

Secondly, in relation to assessment practice, the evidence from this study suggests that competency progression is best facilitated when assessment is:

- accepted as a collective responsibility by teacher–assessors, workplace supervisors and apprentices
- technology-enabled and accessible 24/7
- undertaken by teacher–assessors who are skilled in the development of assessment tools and confident they are making valid assessment decisions based on sufficient, current and authentic evidence
- both serendipitous (when an opportunity arises naturally as part of day-to-day work) and planned (where an apprentice or teacher–assessor is forewarned of an upcoming assessment opportunity)
- constantly monitored by individuals and systems focused on supporting and managing apprentice progression
- informed by an agreed understanding of what constitutes competence
- validated by teacher–assessors and, where possible, by workplace supervisors and/or other interested industry parties.

Thirdly, as apprentices are increasingly taking responsibility for the collection of evidence of their own workplace performance, they are in a position to determine whether they are ready to progress. Therefore teacher–assessors, together with workplace supervisors, need to:

- ensure apprentices are provided with guidance on how to undertake the role of evidence gatherers, including where and how they might gather photographic evidence
- provide apprentices with a clear explanation of what constitutes quality evidence in its various forms
- clarify benchmarks for workplace performance
- develop in apprentices the skills of self-assessment so that they can realistically judge when they are ready to be assessed
- use oral questioning to authenticate evidence of processes and products and enhanced apprentice knowledge and understanding.

Finally, it is acknowledged that the missing voice in this study is that of the apprentice. The impact of competency progression and completion on apprentices could be an extremely fertile field for further study.



References

- Australian Chamber of Commerce and Industry 2008, *ACCI policy review*, issue no.2, ACCI, Canberra.
- Australian Industry Group 2013, *Apprenticeships: achieving excellence*, AiG, Melbourne.
- Commonwealth of Australia 2011, *A shared responsibility: apprenticeships for the 21st century: final report of the expert panel*, Australian Government, Canberra.
- Council of Australian Governments (COAG) 2006, *Communiqué 10 February 2006*, Canberra, viewed 20 July 2014, <http://archive.coag.gov.au/coag_meeting_outcomes/2006-02-10/docs/coag100206.pdf>.
- Dawkins, J 1989, *Improving Australia's training system*, Australian Government Publishing Service, Canberra.
- Dickie, M, McDonald, R & Pedic, F 2011, *A fair deal: apprentices and their employers in NSW*, NSW Board of Vocational Education and Training, Sydney.
- Greene, J 2007, *Mixed methods in social inquiry*, Jossey-Bass, San Francisco.
- Guthrie, H 2009, *Competence and competency-based training: what the literature says*, NCVER, Adelaide.
- Halliday-Wynes, S & Misko, J 2013, *Assessment issues in VET: minimising the level of risk*, NCVER, Adelaide.
- National Skills Standards Council 2013, *NSSC standards policy framework – improving vocational education and training: the Australian vocational qualification system*, NSSC, Melbourne.
- NCVER (National Centre for Vocational Education Research) 2011, *Report 2: Overview of apprenticeship and traineeship institutional structures*, Expert Panel on Apprenticeships for the 21st century, Canberra, Australian Government, viewed 10 August 2013, <<http://www.australianapprenticeships.gov.au/about/expert-panel>>.
- Precision Consulting 2008, *Investigation into industry expectations of vocational education and training assessment: final report*, National Quality Council, Canberra.
- Stemler, S 2001, 'An overview of content analysis', *Practical Assessment, Research & Evaluation*, vol.7, no.17, viewed 8 May 2014, <<http://pareonline.net/getvn.asp?v=7&n=17>>.
- Skills Australia 2010, *Australian workforce futures: a national workforce development strategy*, Canberra, Skills Australia.
- Workplace Research Centre 2012, *A step into the breach: group training initiatives and innovations using competency-based progression*, Workplace Research Centre, University of Sydney, viewed 18 August 2014, <http://www.grouptraining.com.au/_literature_124969/2012_Competency_based_training_and_assessment_report>.

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