

Skills International

On-job training in New Zealand - meeting industry needs

Jenny Gibbs

Skills International Limited

sil@skillsinternational.co.nz

Abstract

This paper presents an overview of on-job training in New Zealand – that is, training for work and employment typically undertaken by people currently in a role, as opposed to training for people before they take up a role in an enterprise. Key elements of on-job training, including how training is delivered, competence is assessed, quality assurance undertaken, are described. The funding, benefits to enterprises and employees, economic benefits, challenges and case studies are also described.

How this definition meets industry needs is covered. The implementation of how on-job training is carried out and Industry Training Organisations' (ITOs) role in the model is described.

The model of on-job training will be demonstrated by two case studies from Skills International Limited.

Note the word 'enterprise' used in this paper in the New Zealand context refers to businesses that employ trainees and is used interchangeably with the word 'employer'.

Keywords: Industry Training; Industry Training Organisation; On-Job Training.

Overview/ Introduction

This paper discusses on-job training – workplace learning that takes place in a trainees' workplace- in the context of New Zealand's industry training system. Industry training is a form of vocational education and training: education which aims to equip people with knowledge, know-how, skills and/or competencies required in occupations or, more broadly, on the labour market. Vocational training can take place in off-job (for example, at a technical college block course or night school) or in on-job locations, or a combination of the two depending on what best meets the needs of the industry and the trainee. It can also apply to work placements (where it is sometimes known as 'work-integrated-learning') - and programmes in place with schools, that, for example, enable young people to become work-ready.

This paper focuses on one aspect of industry training - on-job training – learning that takes place in the trainees' workplace.

The on-job model of training

Training

On-job training is education and training that occurs while a person is employed by an enterprise and that takes place in that enterprise. It involves a set of key players working in a community of practice and can utilise a range of pedagogies (see Fuller 2002 for a discussion of these). The training is vocational, that is, for work, whilst a person is in work.

Trainees learn by 'doing' in their workplace. The workplace-based training model is embedded; it makes learning and assessment a part of everyday workplace practice – it treats the workplace as the centre of learning and assessment (Ryan, (2009, page 14). On-job training combines theoretical learning and practical training – it is hands-on and action-orientated learning.

The model of learning is student-centred. It is self-paced, and often involves supervision and/or mentoring from other experienced staff members (Baker, 2008, page 6). The teaching model is often project-based. ITOs provide workbooks and guides to the trainee; particular learning tools are used by trainees to produce their case studies which may include the trainees' logbook, follow-up interviews and supported by group discussions.

Trainers and coaches employed in, or contracted to, the workplace facilitate and guide learning and may have a role along with specialist assessors in assessing learners' competence. Competence is assessed against evidence requirements/performance criteria in the particular qualification which, in turn, has been influenced and agreed by industry.

Trainees practically apply what they have learned in the workplace. The teaching 'activates' the trainees' current knowledge and links this knowledge to the new learning. Learning is highly relevant to the trainees' work being carried out on a daily basis (Vaughan, 2011, page 22).

It's important to note that trainees not only master practical skills, but also develop other competencies such as the ability to communicate well, problem-solving, processing information effectively, thinking logically and learning to adapt to future changes.

The skills trainees obtain are also transferable – for example, a person's contact centre qualification is a national qualification and he/she can go work for any enterprise in the same industry. This transferability is a key component in benefiting the national economy and labour market, the enterprises themselves, as well as improving trainees' employment outcomes and career aspirations (Tertiary Education Strategy 2014, page 10).

As the training takes place in the workplace, the model needs enterprises' commitment and co-operation to allow the trainee to achieve - for example, to allow them to be assessed during work time in the workplace.

Assessing on-job training – valid, relevant, current, authentic

An assessor is allocated to the trainee in the workplace to assess the trainees' work.

As with other aspects of workplace learning there are variations of the assessment model to accommodate the different on-job learning and industry contexts. Assessors may be employed by

the enterprise and be accredited supervisors or be contracted in externally. Workplace assessors are trained and registered by ITOs and must participate in annual professional development.

Assessment may take place one-on-one or in a group situation. Interestingly, in the workplace training model, the assessors are not necessarily the same people as trainers.

Assessors match the assessment results against the skills described in the qualification and find the trainee 'competent' or 'not yet competent'.

Vaughan (2009) puts it well when she states "*assessment in the workplace allows workers to demonstrate their achievements directly rather than being inferred from other 'performances' (for example, they can wire an electrical outlet, rather than drawing a diagram of the wiring and listing tools they would use).*"

Similarly, research has found that ambulance workers felt scenario-based (indoor examination-style) assessments were of lesser value than assessments 'in the field', i.e. "on-the-job" (Hoy-Mack, 2005, page 42).

However flexible the on-job training is, (and industry-training generally) it must however match the relevant qualifications' components – ultimately the trainee needs to be found competent (or not yet competent) as measured against the approved qualifications and programmes in the New Zealand's National Qualifications Framework which contains the approved qualifications and programmes.

On occasions, tension can arise in workplaces where a trainee's job does not allow that person to demonstrate their specific skills and knowledge required to complete a qualification – for example, if a person requires minute-taking experience for a business administration qualification but in fact does not have exposure to such a task in their day-to-day job then they cannot complete the required task. Enterprises (and ITOs) have a role to assist trainees remove any barriers to a trainees' successful completion of a qualification or programme.

In New Zealand evidence for assessment is collected through a person's normal work – documents can include emails, meeting notes, and PowerPoints for example. Gaps in the evidence may be filled by assessors or trainers providing a coaching role helping the trainee identify what evidence is required.

The workplace learning model allows for a 'portfolio' method of supplying evidence which is sophisticated enough to address all learning outcomes.

Verifiers

Learning is assessed by specialist assessors but where performance cannot be assessed in a single visit or session or where it is impractical to do so, verifiers may be used. Verifiers are typically a trainees' supervisor or manager who observe and confirm that the trainee has carried out the required task(s). Note however, that the assessor still retains the overall responsibility to find the trainee competent (or not).

Monitoring quality

In industry training, there is a systemised method of checks and balances in place called ‘moderation’ which monitors the quality of the workplace learning model. This occurs at the government level and at the ITO level.

Funding for workplace learning

So, who funds workplace learning?

Industry training is funded by government, industry, ITOs, enterprises and trainees.

ITOs utilise the funding they receive from the government to develop industry relevant skill standards and qualifications, to develop learning and assessment materials for on-job learning, and to subsidise the cost of off-job learning. ITOs are, generally, non-profit making organisations.

Importantly for ITOs, their source of funding from the government became performance-linked in 2012. This means that up to 5% of an ITOs’ government funding is ‘at risk’ and allocated on the basis of qualification achievement. Consequently, ITOs have increased their focus on pastoral care of their trainees to ensure any barriers to completion of trainees’ qualifications are removed.

In 2015, Government funding for industry training in New Zealand was NZ in excess of \$188 million¹.

Why do we apply the on-job training model in New Zealand?

Economic benefits

Cost effectiveness – ITOs in New Zealand are funded at 25 – 33% the rate that institutes of technology are for the equivalent qualifications. Efficiencies arise particularly from on-job training, which utilises company resources rather than requiring the duplication of training facilities, equipment and supervisors that are required at entirely off-job training facilities.

Industry training is a tertiary education pedagogy which has been identified as desirable by the current (and previous) New Zealand governments.

“(New Zealand’s) Tertiary Education Strategy focuses on ensuring that we have an outward-facing and engaged tertiary education system with strong links to industry, community and the global economy. Skilled people are essential to the success of businesses and other organisations.”

.... The priority is to ensure that the skills people develop in tertiary education are well matched to labour market needs. It is not enough for students simply to gain a qualification – the time and money industry invests in skills’ development means that those qualifications must match labour market demands. Skills gaps in particular sectors such as information and communication technology

¹<https://ndhadeliver.natlib.govt.nz/webarchive/wayback/20170401071557/http://pr2015.publications.tec.govt.nz/uploads/TEC-Sector-at-a-Glance-2015.pdf>

(ICT) (Steven Joyce, then the Minister of Tertiary Education, Skills and Employment, for the Tertiary Education Strategy 2014 - 2019).

Benefits to enterprises

Enterprises benefit from their engagement and investment in industry training by productivity improvement (qualified and trained staff lead to costs reduction and increase the quality of work) as well as having a direct influence on the shape of the qualifications and therefore their relevance to industry.

Returns accrue to enterprises and the broader economy (The Skills-Productivity Nexus, 2008). It should be noted that trained and qualified employees are also more valuable to competing employers. A robust industry training system means a deeper labour market to obtain skilled resources from and gives choices about whether to train new staff or acquire already skilled employees.

Recent research carried out in one sector – telecommunications – found that investment returns to enterprises are relatively modest from industry training in the first few years and achieve 1.4% however achieve a 7.53% after five years (Draper, 2013).

Benefits to employees

Individuals are motivated to enter industry training because they achieve a repertoire of skills: literacy and numeracy gains, industry skill standards and national qualifications - as well of course as benefits like job security, job satisfaction and career progression (The Skills-Productivity Nexus, 2008). Perhaps one of the biggest benefits to trainees is the fact they earn while they learn: industry trainees are not burdened by high fees and student loans precisely because they are able to earn while they learn (Industry Training Federation, 2010). However, it should be noted that there are only modest wage gains in the first few years (The Skills -Productivity Nexus, 2008).

Regulated industries, ranging from electricians and plumbers to real estate agents, require licenses to operate, which are entirely or largely achieved through the relevant industry training qualification. Operating in such industries therefore requires industry training as a pre-requisite.

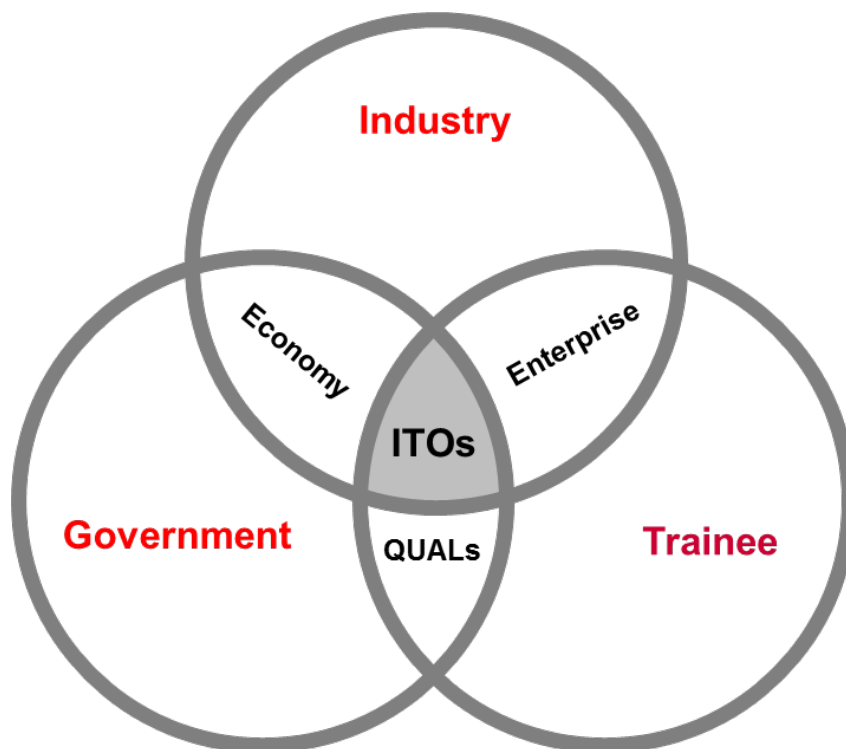
Trainees' nationally recognised qualifications are also often recognised overseas meaning trainees can take their skills, knowledge and competency outside of New Zealand (Nana, 2010).

Implementing on-job training in New Zealand - how do ITOs fit in?

ITOs facilitate the delivery and assessment of on-job training through the development of training programs, materials and training on-job assessors.

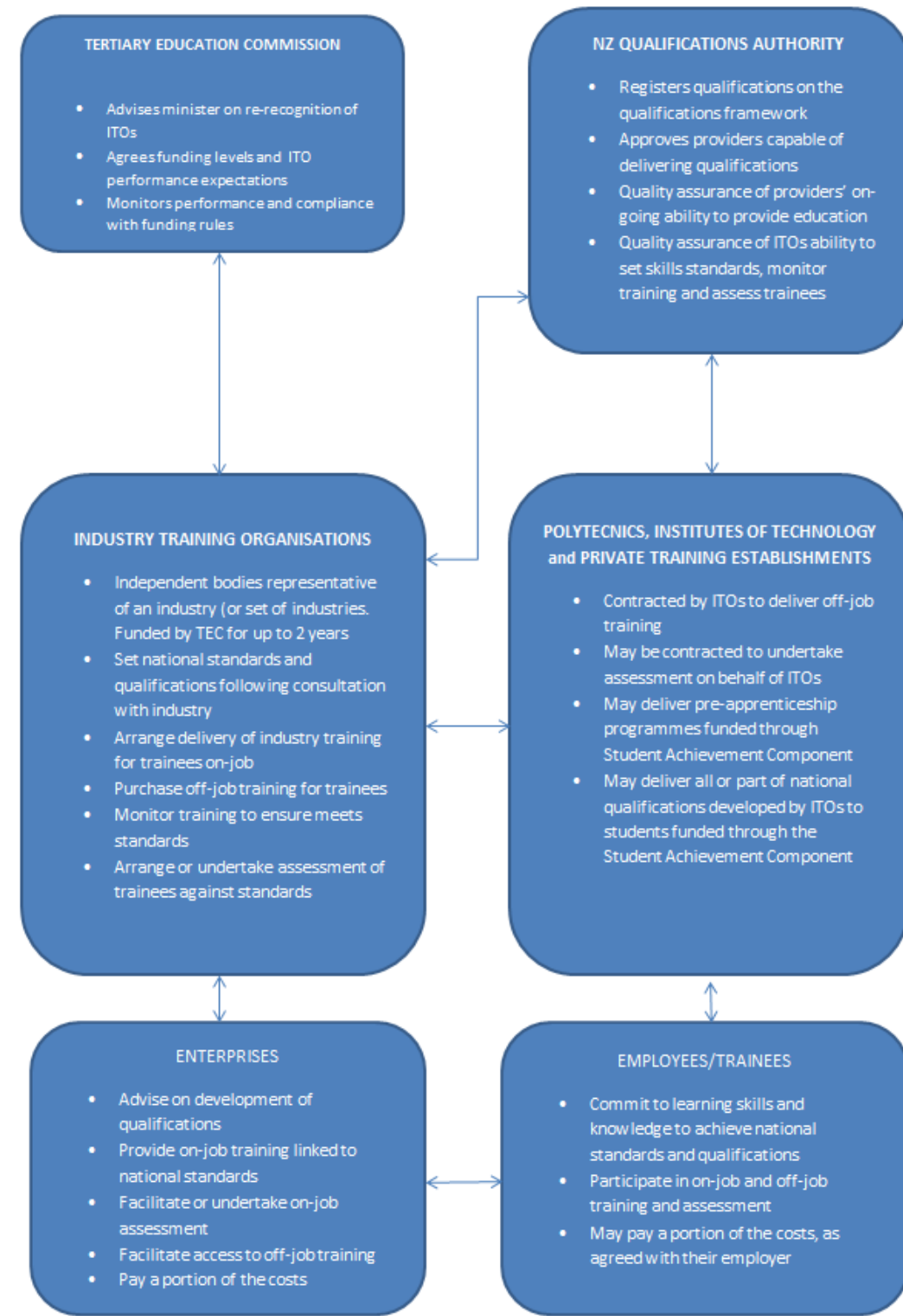
Figure 1 below shows the role of ITOs in on-job training.

Figure1: Role of ITOs



ITOs sit between the government, industry and employees for the purposes of industry training. ITOs are 'owned' by the industries they represent. As such, industry has a key role as a stakeholder in advising on and influencing the development of the qualifications and programmes identified as being required for their respective industry sectors. The framework diagram below illustrates how the various stakeholders fit into the New Zealand industry training system.

Figure 2: Organisational arrangements of the current industry training system (Ministry of Education)



It's interesting to note that in New Zealand one ITO can engage with many industries – for example, The Skills Organisation is responsible for the industry training arrangements for 21 industry sectors - from electricians to public servants: plumbers to real estate agents.

Historically, workplace-related training in the 1990s in New Zealand was - other than in professional areas such as law, medicine and teaching - limited to only the traditional trades, industries lacked co-ordination and the number of enterprises participating in training was in decline. To expand training beyond the traditional trades and link it to the New Zealand education qualifications framework, and ensure that qualifications developed were relevant to industries' needs, the industries training system was created based around the principle of industry fully engaging with and leading the development of their training arrangements (Green et al,2003).

New Zealand's Industry Training Organisations were established in 1992 with the aim of meeting industry needs, raising workforce skill levels and increasing New Zealand's economic responsiveness and growth.

The formation of ITOs dramatically increased industries' ability to influence training by placing them in charge of determining what courses and programmes needed to be delivered and who would deliver them. Prior to large-scale deregulation of the labour market, enterprises had input into training systems through employer and employee representation on apprenticeship committees, but the industry training system represented direct control over these systems. This influence is underpinned through ownership and governance processes, as industry training organisations are owned by the industries they serve.

Since 1992 ITOs have evolved and developed in response to the changing needs of New Zealand industry – they were, and still are, the conduits between industry, enterprises and the labour market, the tertiary education system including tertiary education providers, and the government (Nana, G. et al BERL, 2011).

ITOs now provide services to more than 35,000 enterprises and 135,000 individual employees every year. It's clear ITOs play an important role in industry-related vocational education and training in New Zealand.

In 2014, following a comprehensive review exercise to audit the effectiveness of industry training, the guiding legislation was reviewed and subsequently amended. The Industry Training and Apprenticeships Act 1992 as amended sets out ITOs obligations and provides that:

11B Obligations of industry training organisations

- (1) An industry training organisation must—
 - (a) carry out 1 or both of the following core activities (whether or not it receives funding for those activities via a plan):
 - (i) developing and maintaining skill standards to be listed on the Directory of Assessment Standards and used in the assessment of trainees:
 - (ii) developing and maintaining arrangements for the delivery of industry training that will enable trainees to achieve the relevant skill standards

ITOs are established by their particular industries or industry groups to carry out a range of activities, principally involving the development and arrangement of industry-related education and training. In practice, what this means is that ITOs equip learners who are already in the workforce with relevant, work-focused skills (Nana et al, BERL Economics, 2011).

ITOs do not provide training directly but arrange for training to take place through training agreements between a worker, their employer, and the ITO (Baker, 2008).

At the time of writing, there are 11 ITOs² covering industries from the traditional trades to local and central government, the non-regulated health sector, and service sectors.

On-job training in action

Our ITO

The Skills Organisation is an industry training organisation serving 21 industry sectors (including government, local government, telecommunications, security and prison services), and we arrange on-job and off-job training. Skills International is a wholly-owned subsidiary that enables project teams and resources to be drawn from the wider organisation for bespoke project solutions.

Off-job training, such as in block courses or at night school is delivered in New Zealand by Polytechnic Institutes, or, in the cases of some large government agencies (such as the NZ Police or the NZ Defence Forces), by their own training establishments. We maintain excellent relationships and partner with these training establishments. We facilitate the delivery and assessment of on-job training through the development of training programmes, materials and training on-job assessors.

Course design that meets industry needs

The government's priority is to ensure that the skills people develop in tertiary education are well-matched to the labour market needs (Tertiary Education Strategy 2014-2019). For that to occur, it is critical that industry is part of, and engaged in, the process of industry training.

Government – through the New Zealand Qualifications Authority (NZQA) - centrally controls the accreditation of qualifications and the curricula. ITOs consult with industry experts to review current and develop new qualifications to ensure they are fit for enterprises and are of good quality. This arrangement means that training both meets an externally assured education quality standard and is relevant to the actual skills and capabilities required by employees in a given industry.

The Skills Organisation sets up and manages industry advisory groups comprising of subject matter experts who advise on the curricula and qualifications. This approach avoids industry fragmentation and provides a clear and representative industry focus. The qualifications and programmes are reviewed regularly to ensure they continue to meet the industry's current and foreseeable needs.

As already noted, ITOs do not provide training directly but arrange for training to take place through training agreements between a worker, their employer (the enterprise) and the ITO (Baker, 2008).

² <https://www.tec.govt.nz/teo/working-with-teos/itos/directory/>

Industry training combines theoretical learning and practical training. Theoretical training can take place at institutes of technology, polytechnics or private training establishments (institute(s)) but the practical training takes place 'on-the-job' – not in the classroom. More on on-job training later.

Progress and the attainment of qualifications are assessed by our registered assessors (on-job training) or through courses delivered by tertiary institutes - (off-job training).

Training in the traditional sense is complemented by a more holistic approach. The delivery of training is one part of a complex answer to meeting current industry needs. Therefore, course delivery is flexible and industry-specific – off-job training, for example, can be classroom-based learning in classrooms, block courses, night school, or online at an institute, or a privately-owned training organisation. On-job training can be self-paced, but often involves supervision or mentoring from other experienced staff members (Baker, 2008).

Most ITO training programmes involve a mix of on-job and off-job components, although a significant number involve only on-job training.

Support is given to the trainee before and during their training – e.g. literacy and numeracy testing take place before training starts – to make sure any barriers to success are removed.

Assessment

Our assessors are registered with The Skills Organisation and report trainee results through The Skills Organisation to the New Zealand Qualifications Authority.

There are two types of assessment for our programmes – workplace assessment and assessment of prior learning (APL).

Workplace assessment

The Skills Organisation works with our industries to develop assessment material based on a collection of evidence model. To gain credits for a unit standard, trainees have to demonstrate they are competent.

Assessment involves the collection and recording of evidence demonstrating a person's competence in each unit standard for which they are seeking credit. This evidence can be gathered by observing normal day-to-day work, from the organisation's records, team leader's/manager's verification, completing workbooks, and verbal discussions.

When a trainee feels that they are competent and they have collected the required evidence outlined in the unit standards, they can then be assessed by a Skills Organisation registered assessor and the qualification or programme can be awarded if they have met the required standard.

Assessment of Prior Learning (APL)

APL is a good option for people with considerable experience in the appropriate industry. APL is a process of gathering several forms of evidence from work and tasks a person has previously done rather than a person's current work and tasks.

It is up to the trainee to provide sufficient evidence to satisfy the assessor that they currently hold the relevant skills and knowledge. In determining whether they have presented sufficient evidence, the assessor must be satisfied that the evidence of prior learning is:

- Relevant - the items of evidence are relevant to the unit requirements
- Valid - the evidence addresses all aspects of the unit requirement, particularly the performance requirement
- Current - the evidence reflects the trainee's current competence
- Authentic - the evidence can be independently verified

If the evidence does not meet all the requirements the trainee will be asked to supply further evidence.

Achievement

Trainees are judged competent when they have supplied the appropriate evidence to meet the requirements of the unit standards they are seeking formal recognition for. A qualification is made up of a number of different components called unit standards detailing the particular skill required.

The assessor will decide whether the trainee is competent or not yet competent.

If the trainee is found competent, The Skills Organisation will add the results to the trainee's NZQA Record of Achievement (ROA). When all unit standards for a particular qualification have been completed, the trainee will be awarded the qualification.

Workplace assessors

The Skills Organisation's assessors are central to workplace training - they play a key role in supporting trainees throughout the training and assessment process. To become a registered assessor, they need to hold the qualification they will be assessing or have specific skills and experience. They also have to be trained as an assessor, and achieved the assessing unit standard 4098, 'Use standards to assess candidate performance'.

Workplace assessors assess learners' skills, knowledge and competence in the workplace against the requirements of unit standards from the New Zealand Qualifications Framework (NZQF). They are also responsible for:

- providing guidance and assistance
- judging competency
- marking assessments as required
- providing marked worksheets to The Skills Organisation for moderation.

Workplace assessors:

- plan assessment with learners and others involved in the assessment process
- guide learners on how best to collect evidence of their competence
- assess learners' evidence against unit standard requirements
- provide feedback and advise on results and arrange for re-assessment if necessary
- report results to The Skills Organisation
- maintain records of assessment activities and results
- participate in moderation activities.

Becoming an assessor

The Skills Organisation's Assessor course is a two-day training workshop designed so that the trainee assessor can achieve the 4098-unit standard 'Use standards to assess candidate performance'. The focus is to provide trainee assessors with practical application in the art of assessment.

Course content includes an introduction to The Skills Organisation, NZQA, New Zealand Qualifications Framework, unit standards, evidence and assessment in general. Also covered is the assessment process: preparing, carrying out and reviewing an assessment; post-assessment procedures. Trainee assessors are also given the opportunity to go through the assessment process. Upon successful completion of the 4098 course, 4098 trainees will be able to register as a workplace assessor.

Assessment support

The Skills Organisation offers a wide range of resources, tools and dedicated staff to advise and support assessors and the management of assessment.

Quality

Quality assurance is about effective monitoring systems and processes to make sure assessments against the unit standards are fair, valid, and consistent while meeting industry and NZQA standards. To ensure this confidence Skills has a robust quality assurance system, which is made up of industry-developed standards and qualifications which only approved providers can use.

The Skills Organisation quality checks the assessment materials pre-assessment to ensure that assessments are in accordance with the qualifications' outcomes. Annually, the government and the ITO check trainees' materials post-assessment for consistency with the qualification and with other assessments. This can be carried out in group moderation meetings or by the submission of samples of a trainees' assessed work.

These systems are important because the ITO:

- is accountable to our industries, trainees and funding bodies
- needs to ensure obligations are met under the Industry Training Act 1992, and the requirements of NZQA's quality assurance standard for ITOs.

Industry training challenges

However, the apparent success of industry training does not mean the model is free from challenges. These challenges are a good way of analysing industry training and workplace learning effectiveness.

For example, as government-funded bodies, ITOs are susceptible to government and policy change. An implication of the desire to more closely link ITO funding to performance outcomes has been on-going change in the policy and funding framework, which in turn has created challenges for ITOs business planning processes.

Another challenge is the perception that vocational training is held in. Academic qualifications are often associated with higher wage premia than vocational qualifications, although in reality, this is not always the case. Qualifications from universities have a certain status: vocational and industry qualifications, however, can be seen as not being of an equivalent standard or status - there can be a stigmatisation attached to vocational qualifications.

A less obvious, but potentially more damaging challenge is the over-reliance on competency standardisation = in the actual qualifications or programmes, whereas the power of competency-based education lies in its embeddedness (Mulder, Concept of Competence, page 20) as well as its focus on being specific to industry needs.

An additional issue impacting on the success of the industry training system has been highlighted by Metro Group, comprising of New Zealand's six major metropolitan institutes of technology who state that the Vocational Education Training (VET) system is not fully integrated and should align

more comprehensively to economic and business outcomes (ITP and Metro Group paper, 2014). As a component of the VET system, ITOs, engaged with and owned by industry, are a key method to redress this alignment.

Learning can, and often does come second to other imperatives in a business – i.e. making products and services (Vaughan, 2009). Some writers (Billett, 2001; Unwin, 2004) have been critical of employers' commitment to workplace learning for this reason. Other researchers have noted training and assessment processes (and accordingly trainees) will fail unless employers receive accurate information about their obligations and advice and support about fulfilling these obligations (Misko, Patterson, & Markotie, 2000). ITOs, of course, have a key role to play in ensuring that employers are 'on board' and aware of their commitments and progress.

Further, uncommitted enterprises, generally, can also affect the success of the system, and uncommitted trainees /trainee motivation is a recognised barrier to the successful completion of their qualifications (Moses, 2010).

At a more micro-level, assessors are critical to workplace learning and on-job assessment, to be valid and relevant, is dependent on the content knowledge and assessment skills of the assessor (Vaughan, (2010). There is some research (ETITO, 2006; Pells, 2006) that questions the adequacy of assessor training. The assessors training is brief to minimise the imposition of additional costs and time requirements on enterprises – currently, it generally comprises a short one- or two-day course and often no further training is provided. Also, assessors are often drawn from the enterprises' workforce and may not necessarily even have the requisite skills to be an assessor (Misko et al, 2000 - page 23) found that assessors are typically the trainee's supervisor or boss. Potentially assessing colleagues could theoretically pose problems (Clayton, Roy, Booth, & House, 2004) which in turn may impact adversely on the integrity of the assessor's judgements.

CASE STUDIES

The two case studies below use the Success Case Study methodology developed by Brinkerhoff (2002) which, in essence, is 'story-telling'.

Case Study One - Connecting employers and apprentices

A unique partnership between Vodafone New Zealand and the Skills Organisation which expanded the pool of telecommunications workers in 2013.

The two companies created the Vodafone Technology Apprenticeships scheme, establishing a vital link between school and business. More than 100 students who had completed Year 13 applied for the positions. A rigorous recruitment process led to 10 apprentices (five male, five female) being selected.

The programme, which results in apprentices gaining a National Certificate in Telecommunications (Level 3), offers permanent employment and a competitive salary from day one. The Skills Organisation was involved from the marketing and recruitment through to supporting the delivery of the programme - including sourcing industry funding and the provision of pastoral care and learning advisory services. The 2012 Vodafone Technology Apprenticeships were so successful that another

ten were selected in 2013, with plans for another ten in 2014. Vodafone Learning and Capability Development Partner Anton Pienaar said the “symbiotic” relationship with Skills allowed Vodafone to engage more successfully in education.

“It is part of our commitment to New Zealand and industry to bring young people into the business,” Pienaar says.

“We also address the aging workforce and expand the pool of New Zealanders who have the option and awareness of working in the technology field – particularly telecommunications.”

He said The Skills Organisation was the only ITO Vodafone chose to engage directly with. “This is due to the good functionality the Skills team offers, the high level of trust that now exists and the cementing of relationships that can only occur over time,” Pienaar said.

The programme reflects the diversity of New Zealand’s cultural landscape. As such, a strong representation of women and non-European apprentices feature. “Our apprentices bring creativity and innovation into the workplace and are able to challenge traditional ideas and process. “It’s because of this that we will continue, with the assistance of The Skill Organisation, to employ and invest in young people.”

19-year-old Ash Thompson was part of the original intake. He was considering university to study engineering post-school when he spotted a poster advertising the apprenticeship scheme. “I chose to apply because of the chance to get a telecommunications qualification, which is where I wanted to go with engineering,” Ash says. “Plus, I am spending two years getting paid to learn - that really was an important factor, too.”

He says his time at Vodafone has all been smooth sailing, thanks to the supportive nature of his colleagues throughout the business. “The most enjoyable, aside from the learning itself, is the on-job side of things. I’ve got to mix with all of the teams and gain exposure to all areas of the business.”

He also paid tribute to his fellow apprentices. “We constantly help each other out,” he says. “We all come from different backgrounds and have different strengths.”

The future for Ash and his fellow apprentices is now incredibly bright, thanks to this unique partnership between Vodafone and The Skills Organisation. “I developed a good idea of where I’m headed in future,” he says. “The big thing is that I have options... options everywhere. It’s a great position to be in.”

Case Study Two - Developing Competency Frameworks and Career/Learning Pathways in the public sector.

The Skills Organisation works in collaboration with various organisations to support the identification of the required competencies for each of the agreed job role areas.

The term 'competency' reflects the required behaviour within a job role and is more commonly understood as performance excellence. A Competency Framework should, therefore, identify a standard level of expected behaviour and competence with the aim of supporting excellence.

These competencies need to be relevant to each identified core role to ensure each individual has the competence and capability to deliver on their core business activities. The competencies

identified throughout each workshop are then implemented into a Competency Framework. This framework may continue to be built upon for other departmental areas of the organisation as the competencies are analysed, defined and agreed.

Competency Frameworks also provide a Career/Learning Pathway outline, demonstrating a line of progression within each business unit. The Pathway is greatly beneficial for succession planning.

The Pathway also assists employees and managers in identifying competencies at not only the current employment level but equivalent (across) and above, as well. This is particularly useful for developing employees who aspire to or demonstrate the potential for progressing into other roles along the Career Pathway. Already, this approach is being utilised by the State Services Commission (SSC).

The SSC and The Skills Organisation have worked to develop a shared understanding of a pathway to support the Commission's Better Leaders: Better Services drive. A Pathway has been aligned to SSC's Leadership Success Profile. The move has allowed Skills to operate in a consultancy role, brokering programmes of learning from tertiary institutions in New Zealand and abroad.

Overview of industry satisfaction

In addition to the proven higher productivity gains, in New Zealand in 2016³ 142,175 trainees obtained qualifications at an average completion rate of 74%, giving them high quality, transferable, technical skills and career prospects.

Some research states confidently that, through industry training, the government and enterprises receive a skilled workforce and increased productivity. Further, that should the level of industry training funding be reduced then the research indicates that there would be a resulting loss over the long term in GDP to between 2.9% and 6% (Nana et al, BERL 2011, page 20 and 25).

While the contribution ITOs make to the New Zealand economy may be significant, identifying the precise returns specifically from industry training is difficult.

The Office of the Prime Minister noted that learning which is incorporated into workplaces 'is a positive contributor to economic development, not a constraint on the ability to grow'. The research also shows that productivity gains appear to be highest in workplaces with cultures that support and promote learning (Vaughan, 2009).

While there is a clear connection between higher skills and higher productivity the link is not clear cut – some research identifies that training is an 'enabler' rather than a direct link to productivity. The link is 'not so much a direct one with training generating productivity improvements, but rather one of training being an enabler: enabling flexibility, the deployment and effective operation of new machines and processes (The Skills-Productivity Nexus, 2008).

Research has found that competitiveness challenges and productivity issues have led to growing demand from enterprises for external support in improving workplace productivity and performance. (Skills Productivity Nexus, 2008). ITOs, with their direct and regular engagement with industry, are well placed to respond to this by reviewing and developing relevant qualifications and programmes and maintaining and improving the robustness of activities such as providing training material, selection of trainers and training delivery systems. For example, innovations such as online training and assessment are becoming increasingly more important.

Summary

On-job training is a method of training whereby a person carries out training and they are assessed on their skills and knowledge in the workplace. The required competencies are demonstrated by the trainees from the tasks they have to carry out on a daily basis in their job.

From the case studies, the benefits of industry training have been illustrated, including trainees getting a chance to obtain a nationally recognised qualification while they earn; those qualifications are transferable – enabling trainees to move from enterprise to enterprise with their skills, and enterprises obtain a skilled, knowledgeable workforce which aligns with government's overall education strategy.

³ <https://www.tec.govt.nz/funding/funding-and-performance/performance/teo/itos/>

References

- Baker, J. (2008). Paper presented at the APEC Forum on Human Resources Development, Chiba, November 2008: *The Role of TVET Providers in Training for Employees*. (pp. 6, 8). Wellington, New Zealand. Industry Training Federation.
- Billett, S. (2001). Making learning visible: Workplace affordances and individual engagement. *Journal of Workplace Learning*, 13(5). In Vaughan, K. (2009) *Assessment of Learning: In the Workplace*. (p3). Wellington, New Zealand: Industry Training Federation.
- Brinkerhoff, R.O. (2006) *Telling Training's Story*. Berrett-Koehler Publishers: New York.
- Clayton, B., Roy, S., Booth, R., & House, R. (2004) Maximising confidence in assessment decision-making. Current approaches and future strategies for quality assurance. Adelaide: Australian National Training Authority and National Centre for Vocational Education Research. In Vaughan K, Cameron M, (2009). *Assessment of Learning in the Workplace: A Background Paper* (p.16). Wellington, New Zealand: Industry Training Federation.
- Deloitte Business NZ 2014 *Election Survey, Part 5, Skills and Human Capital*. Wellington, New Zealand.
- Draper, M. Neild, J., Kimberly, J. (2013) *Identifying and reporting Value Added from Vocational training – Telecommunications Sector*. (p8). Internal publication for the Skills Organisation. Auckland, New Zealand
- ETITO. (2006) Industrial Measurement and control Research Findings. Auckland: ETITO. In Vaughan K, Cameron M, (2009). *Assessment of Learning in the Workplace: A Background Paper* (page 3, 50). Wellington, New Zealand: Industry Training Federation.
- Fuller, A., & Unwin, L. (2002). Developing pedagogies for the contemporary workplace. In Vaughan K, Cameron M, (2009) *Assessment of Learning in the Workplace: A Background Paper* (page 3). Wellington, New Zealand: Industry Training Federation.
- Green, N., Hipkins, C., Williams, P., and Murdoch, C. (2002). *A Brief History of Government Funding for Industry Training 1989-2002*. (p 4). Wellington New Zealand. Industry Training Federation.
- Harvey, O., and Harris, P. (2008) *The Skills Productivity Nexus: Connecting Industry Training and Business Performance*. (pp. 9-11, 13) Wellington, New Zealand: Industry Training Federation.
- Hoy-Mack, (M.2005) Workplace Assessment in New Zealand: Stated intentions and realisations. *International Journal of Training Research*, 3(1). In Vaughan K, Cameron M, (2009). *Assessment of Learning in the Workplace: A Background Paper* (page 3). Wellington, New Zealand: Industry Training Federation.
- Industry Training Federation (2010). *Delivering Value: The Contribution of ITOs to New Zealand's vocational education and training*. Wellington, New Zealand.
- Industry Training Federation and the Department of Labour (2008). *The Skills-Productivity Nexus: Connecting Industry Training and Business Performance*. (pp.10, 11, 13).

ITP Metro Group (2014). *A New Direction for NZ's VET: A Manifesto for Change*. New Zealand. Paper presented at the ITF Research Conference Wellington, New Zealand.

Mahoney, P. (2014) Ministry of Education for the Industry Training Federation. Wellington New Zealand.

Minister of Education, & Minister of Business, Innovation and Employment (2014). Joyce, Stephen, Minister of Tertiary Education, Skills and Employment: *Tertiary Education Strategy 2014-2019. (pp.9, 10 and 20)*. Wellington, New Zealand.

Misko, J. Patterson, J., & Markotic, R. (2000). Effectiveness of workplace training and assessment practices in on the job traineeships. Paper presented at the AVETRA conference, Future Research, Research Futures, Canberra. In Vaughan K, Cameron M, (2009). *Assessment of Learning in the Workplace: A Background Paper* (page 3). Wellington, New Zealand: Industry Training Federation.

Moses, K (2010) *Key Factors affecting Learner Motivation to Successfully Completing Qualifications Through Workplace Learning*. (p14). Wellington, New Zealand: Industry Training Federation. Mulder. M., Weigel, T. & Collins, K (2006). *The concept of competence concept in the development of vocational education and training in selected EU member states. A critical analysis*, Journal of Vocational Education and Training, 59, 1 65085. (p.20).

Nana, G, Sanderson, K., Stokes, F., Dixon, H., Molano, W., and Duslow, K. BERL Economics (2011). (pp. 3, 7, 21), *The Economic costs and benefits of industry training*. Wellington, New Zealand.

Ryan, R. (2009) Improving workforce development and organisational performance Benefits gained by embedding workplace-based training in the New Zealand health and disability sector. Christchurch, New Zealand. In Vaughan, K., Cameron, M. (2010). *ITO Workplace Assessment Structures and Systems: Survey and Focus Group Findings* (pp. 10 and 13). Wellington, New Zealand.

The Office of the Prime Minister, (2002) New Zealand. In Vaughan K, Cameron M, (2009). *Assessment of Learning in the Workplace: A Background Paper* (p. 5). Wellington, New Zealand: Industry Training Federation.

Vaughan K, Cameron M, (2009). *Assessment of Learning in the Workplace: A Background Paper* (page 3, 5, 50). Wellington, New Zealand: Industry Training Federation.

Vaughan, K., Cameron, M. (2010). *ITO Workplace Assessment Structures and Systems: Survey and Focus Group Findings*. Wellington, New Zealand.

Vaughan, K., O'Neil, P., and Cameron, M. (2011) *Successful Workplace Learning: How learning happens at work*. Wellington, New Zealand.